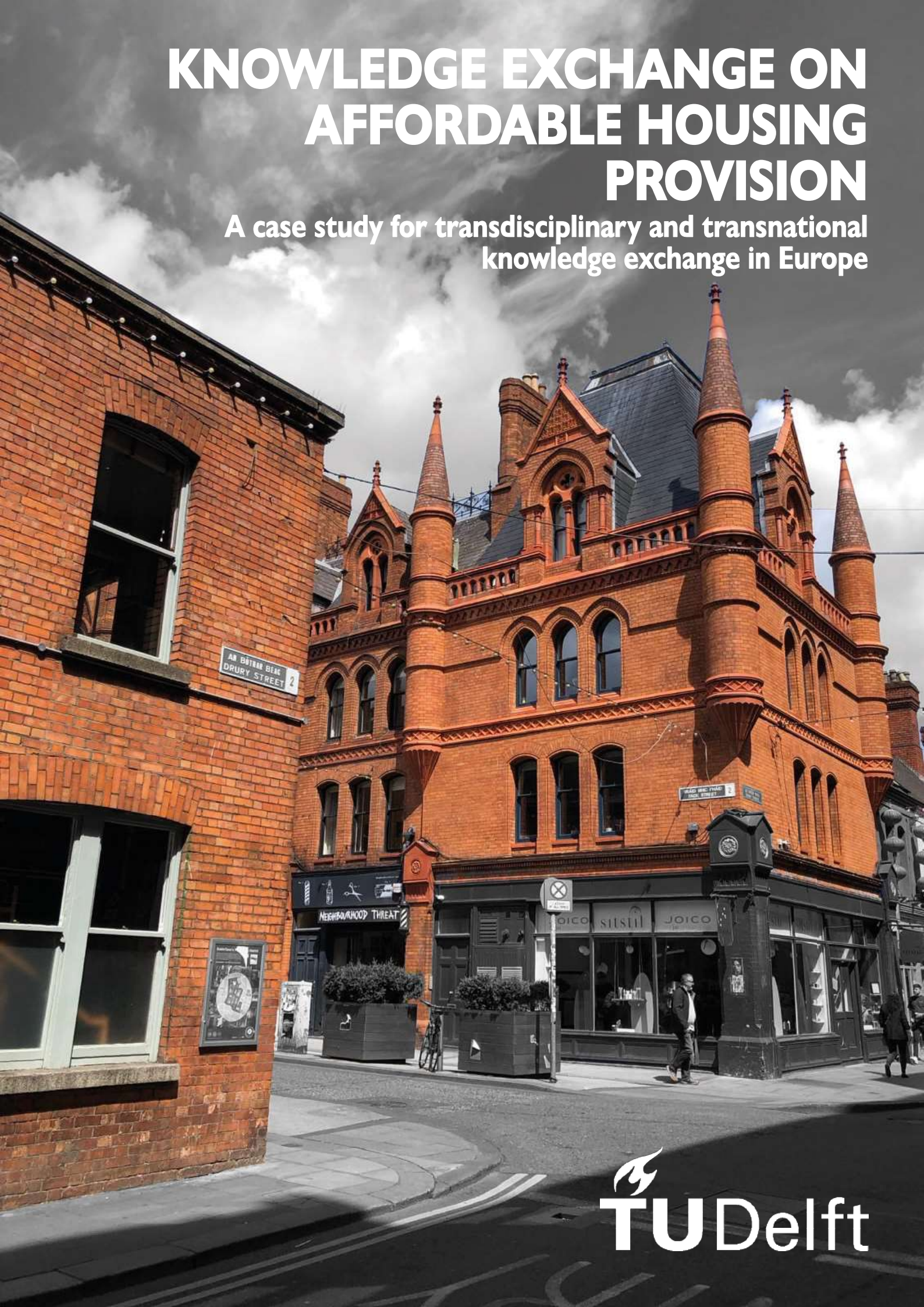
KNOWLEDGE EXCHANGE ON AFFORDABLE HOUSING PROVISION

A case study for transdisciplinary and transnational knowledge exchange in Europe



TU Delft

Knowledge exchange on affordable housing provision

A case study for transdisciplinary and transnational knowledge exchange in Europe

by

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ABSTRACT - The global housing affordability crisis sees European countries searching for solutions, paving the way for transnational knowledge exchange. The efforts to fulfill this potential within the housing sector and transnationally are, however, unexplored in relation to the affordable housing crisis. The goal of this thesis is to deliver lessons-learned for transdisciplinary and transnational knowledge exchange with specifically affordable housing provision in Europe. A case study will be performed on 'cost rental housing', a current measure to improve housing affordability which benefited from transnational knowledge exchange, in Ireland. Stakeholders are interviewed about practical insights, the barriers and enablers of knowledge exchange, their incentives and the methods used to facilitate it. With insights from both practice and literature, lessons-learned are established from both the introduction of cost rental housing itself and the transdisciplinary and transnational knowledge exchange efforts. Combined, the research ultimately delivers seven key lessons for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.

KEYWORDS - Knowledge exchange, housing affordability, Europe, transnational, transdisciplinary, cost rental housing

EXECUTIVE SUMMARY

Housing affordability has emerged as a critical issue across advanced economies, with Europe experiencing a significant crisis that has only intensified over time. In this context, transnational knowledge exchange presents a valuable opportunity to address the crisis collaboratively. However, current knowledge exchange efforts are often conducted in an ad-hoc manner, lacking the necessary theoretical, methodological, and empirical foundations. This thesis aims to bridge these gaps by providing a comprehensive examination of transdisciplinary and transnational knowledge exchange efforts, particularly in the context of affordable housing, with a focus on the implementation of cost rental housing in Ireland. The research offers valuable lessons for the development as well as application of knowledge exchange efforts and cost rental housing, ultimately contributing to the broader challenge of enhancing housing affordability in Europe.

The research employs a two-phase case study design, beginning with a literature review that established the theoretical foundation for understanding housing affordability challenges and state-of-the-art knowledge exchange methods. This was followed by an in-depth case study analysis of the introduction of cost rental housing in Ireland. Data was collected through a combination of literature review, semi-structured interviews with key stakeholders, and document analysis, ensuring a comprehensive examination of both theoretical and practical perspectives. This methodology allowed for a comprehensive understanding of the ways in which transdisciplinary and transnational knowledge exchange can be leveraged to address the pressing issue of affordable housing in Europe. The findings from this research provide valuable insights and lessons that are both theoretically grounded and practically applicable.

First, the research reveals that **housing affordability** across Europe is increasingly under pressure due to a combination of rising housing costs, stagnant or declining real incomes, and inadequate housing supply. These factors, compounded by economic crises and urbanization trends, have made affordable housing provision a critical issue for policymakers. The findings highlight that while the concept of housing affordability is complex and varies across different European contexts, common challenges such as income inequality and insufficient policy responses are prevalent. Addressing these challenges requires not only a robust understanding of the local contexts but also innovative, collaborative approaches facilitated through effective knowledge exchange across national borders as well as between practitioners and academics.

Second, the research identified a diverse range of **state-of-the-art methods** for transdisciplinary and transnational knowledge exchange, specifically on affordable housing provision in Europe. These methods are organized into several strategies, including the organization of knowledge exchange activities, the use of knowledge brokerage, the provision of web-based information, and the dissemination of knowledge. The findings highlight that while knowledge exchange efforts in this field are often applied without much deliberation, a more structured and intentional approach can significantly enhance their effectiveness. Additionally, the study reveals differences between theory and practice. Methods used by intermediary organizations, such as webinars, best practices, and symposia, are either underrepresented or entirely absent in the theoretical literature. This underscores the need for ongoing research to better align theoretical frameworks with the practical realities of knowledge exchange in affordable housing. The research also emphasizes the importance of combining and sequencing different methods to maximize their impact. A state-of-the-art approach could involve a central tool like a conference, supported by activities such as action learning sets, boundary organizations for knowledge brokerage, and both passive and active dissemination strategies.

Third, the **introduction of cost rental housing in Ireland** offers several key lessons for both Ireland and other countries considering similar models. Despite Ireland's deeply ingrained culture of homeownership, the successful implementation of cost rental housing demonstrates that alternative housing models can be established with strong political will and strategic sectoral consensus. However, Ireland's approach differs from more universal models in Europe, as it specifically targets middle-income households, raising concerns about inclusivity and long-term sustainability. The research identifies seven significant challenges faced during implementation, including high costs, geographical concentration, public unawareness, and competition between providers. Additionally, the Irish model's reliance on public funding, with minimal private equity involvement, further complicates its sustainability. Looking forward, the research highlights several considerations for the future, such as maintaining political consensus, increasing private investment, and educating the public about the benefits of cost rental housing. Importantly, Ireland's experience underscores the critical role of transnational knowledge exchange in shaping its cost rental model, drawing valuable insights from other European countries.

Fourth, the research into **transdisciplinary and transnational knowledge exchange** on cost rental housing in Ireland yielded several key lessons that are critical for enhancing knowledge exchange efforts across Europe. First, the research underscores the importance of tailoring knowledge exchange methods to the specific needs of both academic and practitioner communities, highlighting the value of context-specific, tangible knowledge that stakeholders can directly apply. Secondly, informal exchanges emerged as a powerful enabler, often surpassing formal methods in effectiveness by fostering trust and deeper understanding among participants. However, the study also identified significant barriers, including differences in national contexts and the limited availability of resources, which complicate the transferability and scalability of knowledge across borders. Finally, the role of intermediary organizations and external financial support was found to be vital in sustaining these efforts, providing the necessary infrastructure and resources to facilitate continuous learning and adaptation. These lessons not only inform the future of cost rental housing in Ireland but also offer a blueprint for more effective knowledge exchange practices across Europe, directly addressing the ongoing challenges of housing affordability.

The final analysis of this research distills **seven key lessons for transdisciplinary and transnational knowledge exchange on providing affordable housing in Europe**. First, the success of cost rental housing in Ireland demonstrates that, with strong political and sectoral consensus, even countries with a strong tradition of homeownership can successfully adopt alternative housing models. Second, Ireland's unique approach to cost rental housing, characterized by strict eligibility criteria and heavy reliance on public funding, reveals both the potential and limitations of such models, emphasizing the need for sustainable financial strategies. Third, the research advocates for more deliberate and structured knowledge exchange efforts, incorporating a wide range of strategies and methods to maximize impact. Fourth, it highlights the critical role of informal interactions, individual knowledge brokers, and actionable knowledge in making knowledge exchange more effective and sustainable. Fifth, despite the differences in national contexts and knowledge needs, expanding both transdisciplinary and transnational knowledge exchange is essential for addressing Europe’s shared housing challenges. Sixth, the inclusion of financial institutions in knowledge exchange efforts is crucial, as their expertise and resources are central to tackling housing affordability issues across the continent. Lastly, the emerging European consensus on housing affordability should be seized to enhance transnational knowledge exchange, creating unified approaches to address housing challenges across Europe. These lessons provide a robust framework for improving knowledge exchange practices and addressing the complex issue of housing affordability in Europe.

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PREFACE

"*He who knows only his own side of the case, knows little of that*"
- John Stuart Mill.

It is my firm personal belief that ideas become stronger when we open ourselves up to other perspectives, even those that contrast our own the most. It's easy and comfortable to get caught up in our own views, but real growth happens when we really listen to others. I believe in starting every conversation with the thought that the other person might know something you don't. That openness, that willingness to learn, can transform not just your work but maybe even your life. Each dismissal of others without hearing them out is in my view a missed opportunity. So, be open. Listen deeply. You might be surprised by how much you can learn from those who see the world differently than yourself.

" They can then put it through their own prism and their own filter of their culture, their country, their laws, their planning, their rules etc., but you can save 50% of the mistakes maybe from listening and learning..." - Interviewee 'P7'

This belief in the power of learning from one another is at the heart of why I chose to write this master thesis. The quote above, shared by an interviewee during the research, captures the essence of what drives my study: missed opportunities of learning from each other. By embracing knowledge exchange across European countries, we can not only avoid repeating the same mistakes but also build on each other's successes. This thesis is a reflection of the potential we unlock when we take time out of our day to truly listen and learn from each other.

"*So my opinion of it would be like today, like cost rental is probably like the most important policy intervention in housing in the last decade or so, it's the only thing that really has potential to, like significantly kind of, you know, shift the dial or change the kind of game with it."* - Interviewee 'P6'

The urgency of knowledge exchange may be most evident with the current housing affordability crisis across Europe. Therefore, this research not only aims to enhance how we exchange knowledge but also to directly address the most pressing issue of affordable housing for all. The quote above reflects the critical importance of policies like cost rental in making real, impactful change. The ultimate focus on knowledge exchange on housing affordability specifically adds the, for me, critical dimension of aiming to contribute meaningfully to positive societal change.

I would also like to take this opportunity to express my gratitude to Marja Elsinga and Gerard van Bortel as my guides through this intense journey. They allowed me to express myself through my research, while at the same time slowing me down and helping me pivot the research when this was most needed. Additionally, a thankful message to all interviewees from Ireland for their welcoming hospitality and allowing me to benefit from their rich expertise. More importantly, a special thanks to my parents for supporting me and creating a space to blow off some steam. Lastly, to Jip, for the great coffees, lunches, walks, and for keeping an eye out for me during the writing of this thesis.

Chapter 1 Introduction and research context

Housing affordability is one of the most urgent challenges facing advanced economies today, with Europe at the center of this crisis (OECD, 2023; Wetzstein, 2017). As housing costs outpace incomes, millions are left struggling to find stable, affordable homes. Europe's housing affordability crisis is not just a financial dilemma but a multidimensional issue that touches nearly every aspect of urban life. It reflects diverse social, economic, and policy-driven factors that vary across borders (Housing Europe, 2023). Each country faces unique pressures, yet addressing housing affordability has become so complex that isolated national efforts can fall short. The need for a collective response—a cross-border effort to learn and adapt—is more pressing than ever (Stephen Ezennia & Hoskara, 2019).

Despite this, countries often work independently, approaching the crisis within their own contexts. This fragmented approach means that, while some countries may find solutions that work locally, they miss out on valuable lessons that could benefit others (Aalbers, 2022; De Jong & Edelenbos, 2007). Although knowledge exchange has the potential to bridge these gaps, current practices in this area are often unstructured, lacking the frameworks that could turn knowledge into action (Fazey et al., 2013; Mitton et al., 2007). Housing stakeholders are often left knowing what needs to be done but without guidance on how to build effective, collaborative solutions (Perry & May, 2010). This ad-hoc nature of knowledge exchange limits its impact and highlights a clear need for structured, deliberate approaches to make these exchanges meaningful (Cvitanovic et al., 2016; Reed et al., 2014).

This thesis takes up the challenge of addressing this gap. By examining how transdisciplinary and transnational knowledge exchange can create more deliberate, impactful approaches, it offers a framework for sharing insights across Europe. Transdisciplinary exchange brings together diverse expertise, while transnational exchange enables countries to learn from one another, sharing successful practices and lessons learned from failures (Karvonen et al., 2021; Seo, 2022). While these approaches hold significant potential, they are not without barriers, and it is these barriers and benefits that this research aims to clarify.

Through exploring the broader context of housing affordability, analyzing existing knowledge exchange practices, and learning from an in-depth case study, this thesis provides practical, evidence-based recommendations for stakeholders committed to making housing more affordable across Europe. The insights gathered here seek to reduce the reliance on trial and error, creating a foundation for sustainable, effective solutions. Ultimately, this work contributes to a stronger, more unified approach to housing affordability, empowering European countries to collaboratively address this urgent crisis with greater resilience and impact.

Part 1.1 Problem statement

Europe has both a need and urge to tackle today's housing affordability crisis (Norris & Lawson, 2023; Wetzstein, 2017; Wijburg, 2021). In this pursuit, there is a clear argument to be made for knowledge exchange as a mechanism to battle the European branch of the global housing affordability crisis (Aalbers, 2022; Dickey et al., 2022; EIPA, 2022; Galster & Lee, 2021; Haffner et al., 2010; Perry & May, 2010). Despite advances in understanding knowledge exchange (KE), there remains a significant gap in practical guidance for researchers and decision-makers on how to effectively design and implement KE efforts (Cvitanovic et al., 2015; Fazey et al., 2013; Perry & May, 2010; Reed et al., 2014). As a result, KE efforts in the context of housing affordability are frequently conducted on an ad-hoc basis, lacking a theoretical, methodological, or empirical basis (Cvitanovic et al., 2016; Reed et al., 2014). However, a more deliberate and context-sensitive

approach to KE, developed with input from both researchers and practitioners, is recommended (Contandriopoulos et al., 2010; Stevenson & Baborska-Narozny, 2018; Ward et al., 2009; Cvitanovic et al., 2016; Reed et al., 2014; Dobbins et al., 2009; Jansson et al., 2010; Mitton et al., 2007; World Bank, 2013; Yamey et al., 2016). In other words, transdisciplinary and transnational knowledge exchange suffers from unfulfilled potential. The main research problem of this research proposal is thus: Transdisciplinary and transnational knowledge exchange on affordable housing in Europe shows promise, but efforts are conducted in an ad-hoc manner, without a solid theoretical, methodological, or empirical basis. This research therefore aims to identify lessons learned from both theory and practice for specifically transdisciplinary and transnational knowledge exchange concerned with affordable housing provision in Europe.

Part 1.2 Research purpose and goal

The purpose of this master thesis is to deliver valuable lessons for transdisciplinary and transnational knowledge exchange (KE) in the provision of affordable housing across Europe, while also contributing directly to addressing housing affordability issues through the implementation of cost rental housing. By addressing the urgent need to combat the housing affordability crisis, this research aims to study the theoretical understanding and practical application of KE efforts. Despite the recognized potential of KE, current efforts remain largely ad-hoc, lacking a robust theoretical, methodological, or empirical foundation. Through an in-depth exploration of both theoretical insights and a practical case study, particularly focusing on cost rental housing in Ireland, this thesis seeks to identify insights for more deliberate implementation of KE. The ultimate goal is therefore to provide actionable lessons to enhance transdisciplinary and transnational KE efforts as well as housing affordability itself, thereby contributing directly and indirectly to the broader challenge of providing affordable housing in Europe.

Part 1.3 Research Questions

To tackle the problem statement and achieve the goals of the thesis, research questions are established to guide the study. Chapter 3 about the methodology will make explicit the way in which these questions are answered. The main research question of this master thesis is:

What are **lessons-learned** for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?

There are four subquestions which help answer the main research question stated above:
(SQ1) What is **housing affordability** and what are contemporary challenges with providing affordable housing in Europe?
(SQ2) What are **state-of-the-art methods**, its enablers and barriers, for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?
(SQ3) What are lessons-learned from the introduction of **cost rental housing** in Ireland?
(SQ4) What are lessons-learned from the **transdisciplinary and transnational knowledge exchange** with the introduction of cost rental housing in Ireland?

Chapter 2 Theoretical framework

Chapter 2 plays a critical role in establishing the theoretical foundation for this research by addressing the first subquestion: "What is housing affordability, and what are the contemporary challenges with providing affordable housing in Europe?". This chapter delves into the definitions, measurements, and multifaceted challenges associated with housing affordability, setting the stage for understanding the complexities of affordable housing provision. By exploring these theoretical aspects, the chapter provides the essential context needed to evaluate knowledge exchange efforts and the potential solutions, such as cost rental housing, that will be discussed in subsequent chapters 5 and 6.

Part 2.1 Affordable Housing

Housing is a central aspect of well-being and therefore prescribed as a basic human need (Bone, 2014; Bonnstetter, 2017; OECD, 2021a). No wonder that the right to “adequate” housing was recognized in the 1948 Universal Declaration of Human Rights and in the 1966 International Covenant on Economic, Social and Cultural Rights. Plus, the Geneva UN Charter outlines four principles of sustainable housing: (1) environmental protection; (2) economic effectiveness; (3) social inclusion and participation; and (4) cultural adequacy. In this, affordable housing is a requirement for achieving social inclusion (UNECE & Housing Europe, 2021) and integral to housing rights (Kenna, 2021). Adequate housing is therefore also important for achieving Sustainable Development Goals or SDGs. Specifically, Sustainable Development Goals 1 (Poverty eradication) and 11 (Inclusive, safe, resilient and sustainable cities and human settlements) are unachievable without adequate housing (Kenna, 2021; UNECE & Housing Europe, 2021). More practically, the importance of adequate housing, where affordability factors in, is shown by the impact it has on other aspects of human life. Adequate housing betters social, environmental and economic well-being. It improves communities and as a consequence attracts investments and skilled workers (OECD, 2021a). It is therefore no shock that insecurities with being able to afford housing majorly affects personal (mental) well-being of people. It has direct negative psychological effects. Contrastingly, when housing insecurity is solved people’s wellbeing, health and education improve (Arku, 2006; Bone, 2014; Egan et al., 2016; Routhier, 2019). Improving housing affordability thus not only lowers growing numbers of housing insecurities (Routhier, 2019; UNECE & Housing Europe, 2021) but indirectly improves human life.

Despite being a basic human right, named in prominent declarations and a part of the SDG’s, supply of housing is catastrophically failing to keep up with demand across the globe (EIPA, 2022; Housing Europe, 2023; OECD, 2023; Wetzstein, 2017). This makes housing affordability one of the most important challenges in contemporary advanced economies (Housing Europe, 2023; OECD, 2023; Ryan-Collins, 2021; Wetzstein, 2017). Which is regrettably expected to remain a long-standing policy concern, mainly for the West (Lee et al., 2022). We can state that delivering affordable housing is getting increasingly complex and harder to achieve all over Europe (Galster & Lee, 2021; Krapp et al., 2022). All things considered, the OECD[1] therefore states affordable housing is one of the most pressing matters today (OECD, 2023). This global affordability crisis[2], as proclaimed by Wetzstein (2017), urgently asks for solutions. However, before solutions are reviewed the definition, measurement and contemporary challenges of housing affordability are discussed.

[1] OECD stands for ‘Organisation for Economic Co-operation and Development’ and is an intergovernmental organization with 38 member countries (OECD 2021a; 2023);

[2] ‘The state of housing in Europe 2023’ speaks of a ‘cost-of-living-crisis’ (Housing Europe, 2023).

Part 2.1.1 Definition and measurement of housing affordability

Housing affordability as a concept has always been a source for debate. Originally, one of the triggers for the establishment of "affordability" as a concept has been the absence of access to housing for young households in the 1980s. Prices were at an unreasonable high in relation to their income. Homeownership, let alone outright ownership, was off the table for this target group. The origins of the term portrays the focus on the financial situation of households in defining affordability (Haffner & Hulse, 2021). Since then, the aspects that need to be taken into account have been heavily debated. When the aspect of housing quality was integrated into the definition of housing affordability in 1990, Maclennan & Williams (1990) introduced the following definition: "*"Affordability" is concerned with securing some given standards of housing (or different standards) at a price or rent which does not impose, in the eyes of some third party (usually government) an unreasonable burden on households*" (Haffner & Hulse, 2021). The definition is applied consistently throughout the remainder of this thesis. Apart from this definition, Stephen Ezennia & Hoskara (2019), found eleven key definitions of housing affordability. Establishing one unambiguous definition has been proven to be a hard task.

Despite this, in order to estimate how affordable housing is, authors debated how 'some given standard of housing' should be determined. A crucial, fundamental given here is the causal relationship between the overall distributions of household annual income and annual dwelling unit occupancy prices based on quality within a metropolitan area. This way, housing affordability is influenced not solely by the metropolitan housing market but also by the labor market (Galster & Lee, 2021). In the end, two approaches have been at the forefront of measuring housing affordability: (1) The rent-to-income ratio, in which the share of household' rent is measured against their income and; (2) The residual income metric, which evaluates post-housing income relative to the benchmark for essential non-housing needs (Lee et al., 2022; Stephen Ezennia & Hoskara, 2019). When simplified, Housing Europe defines housing affordability as: "*...producing homes that are aligned with the financial means of the people in need*" (Housing Europe, 2023).

However, only comparing rent or net expenses to the income of individual households is too shortsighted for depicting (un)affordable housing. Aspects that need to be factored in are housing allowances or forms of tax relief for owner-occupiers. Both affect the payments of households and thus are a factor in determining affordability. Additionally, other costs related to the state of the dwelling can not be ignored. Examples of those costs are local duties related to the dwelling, energy expenses, property taxation and maintenance costs for owner-occupiers (EIPA, 2022). As a consequence of the many factors to take into account, as shown in figure 1, housing affordability proves to be hard to conceptualize and consequently hard to measure. Appendix 1 lists the most commonly used metrics for assessment of housing affordability by the OECD and European countries. Critically, each of the five types of measure do contain two or more limitations highlighting the difficulties with measuring housing affordability.

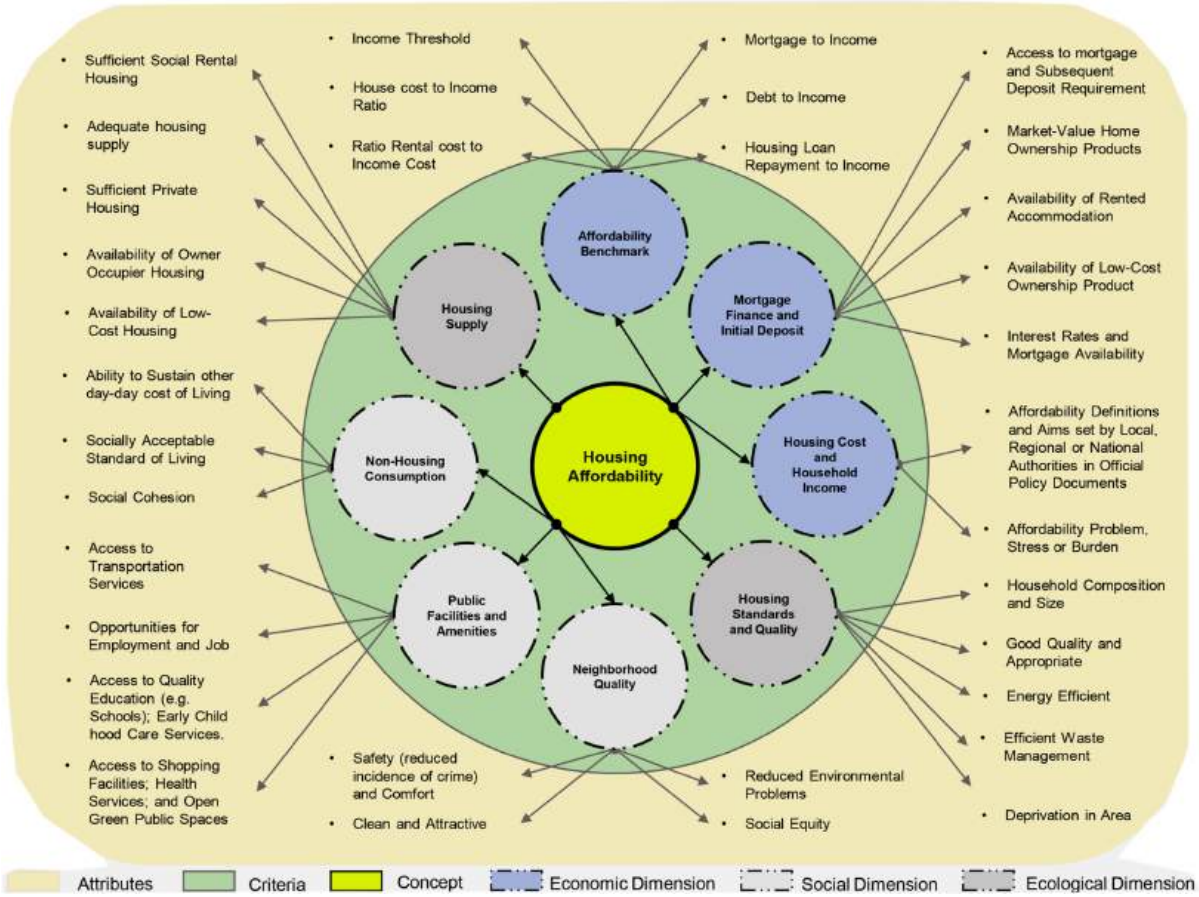

Figure 1: Aspects of the concept of housing affordability (Stephen Ezennia & Hoskara, 2019).

The ongoing debate about which factors need to be taken into account when defining affordability has resulted in the multidimensional concept it is today (Haffner & Hulse, 2021; Mulliner & Maliene, 2014; Stephen Ezennia & Hoskara, 2019; Wetzstein, 2017). "*Therefore, an ideal HA*[3] *metric must take into consideration a range of social, environmental and economic criteria; which borders on broader concept of housing appropriateness covering accessibility, affordability, amenity and adequacy, that impact on residents' quality of life.*" (Stephen Ezennia & Hoskara, 2019). It could even be argued that a decrease in housing affordability, because of its multiple factors, says a great deal about the social and urban context of an area (Haffner & Hulse, 2021). Central here is that affordability should be measured from other attributes than just finances. Housing quality, location and access to services including facilities also factor in the measurement of affordability (Mulliner & Maliene, 2014). Where housing affordability was originally only part of poverty studies, it has now evolved to an urban issue affecting lower as well as middle-income households (Haffner & Hulse, 2021; Wetzstein, 2022). Contemporary issues with housing affordability thus also stem from geographical and other urban issues. A striking example is the attractiveness of housing in a certain area, which pushes up prices (OECD, 2023). Because of the multidimensional nature of housing affordability, effective policies for affordable housing prove challenging due to the origins of many root causes in the labor market or urbanization processes (Galster & Lee, 2021).

Affordable housing being an urban issue, combined with the growing numbers of metropoles in the world, and the subsequent urbanization struggles makes for an apparent global 'crisis of housing affordability' (Wetzstein, 2017), or cost-of-living crisis (Housing Europe,

[3] HA here stands for Housing Affordability.

2023). Difficulties with defining, conceptualizing and measuring housing affordability in combination with its multidimensional nature makes for numerous approaches and related interventions to tackle the crisis (Galster & Lee, 2021). This complexity is apparent in the contemporary challenges with housing affordability faced today. The next part provides an overview of those challenges.

Part 2.1.2 Contemporary challenges of housing affordability in advanced economies

A literature review of the contemporary challenges of housing affordability in advanced economies established four overarchical challenges. These are: (1) Financialization of housing; (2) Supply and demand imbalance; (3) Strict land use and zoning regulations; (4) Economic inequality; and (5) Government policy and public funding.

Challenge of Financialization of housing

The first challenge of housing affordability is all about the financialization of housing, which is considered one of the main drivers of the global crisis (Aalbers, 2008; Haffner & Hulse, 2021; Norris & Lawson, 2023; Wetzstein, 2017; Wijburg, 2021). Aalbers defines financialization as "*...the increasing dominance of financial actors, markets, practices, measurements and narratives, at various scales, resulting in a structural transformation of economies, firms (including financial institutions), states and households.*" (Aalbers, 2017). To be more concrete, financialization leads to an increased focus on financial growth that benefits not the real economy but investors. Markets shifted from producer or consumer markets to markets designed simply for financial profits. Residential housing transitioned from a secondary role in capital circulation to a central position, with rising prices driven more by the availability of money rather than land and construction costs (Aalbers, 2008; Haffner & Hulse, 2021; Wetzstein, 2017; Wetzstein, 2022). According to Aalbers (2008), Wetszstein (2017) and Wijburg (2021), the central position of residential housing in the global relationship between real estate and finances directly leads to problems with affordability in housing. Where housing should stand for ensuring or supporting crucial societal realms, the gains have been privatized through financialization of housing, and at the same time the losses have been socialized. Housing has in other words shifted from being a place of shelter to an investment asset (Bone, 2014; Wetzstein, 2017; Wetzstein, 2022). In conclusion, Wetzstein (2022) names four potential challenges resulting from increased financialization in figure 2.

POTENTIAL CONSEQUENCES OF FINANCIALIZATION OF HOUSING BY WETZSTEIN (2022)			
1	Structural Supply-Demand Gaps	3	Decoupling Housing Demand from Human Need
2	Financialization's Impact on Housing Dynamics	4	Systemic Urban Housing System Failure

Figure 2: Potential consequences of increased financialization (own work, based on Wetzstein (2022)).

Challenge of Supply and demand imbalance

In line with figure 2, a more practical challenge of contemporary housing affordability issues is concerned with the supply of housing unable to keep up with growing demands (Been et al., 2019; EIPA, 2022; Housing Europe, 2023; Kenna, 2021; Lee et al., 2022; OECD, 2023; Wetzstein, 2017). Fundamentally, supply tends to be less responsive compared to demand, as it requires time for planning and constructing new buildings (OECD, 2021a). In 2023, the anticipated shortfall in affordable housing supply, in combination with growing demand, is expected to exceed all predictions. The main drivers of the lagging supply are rising costs for construction, renovation and financing (Housing Europe, 2023). To be more specific, costs have risen because of higher prices of borrowing (Housing Europe, 2023), raw materials, machinery and labor (OECD, 2023). In addition, prices of existing homes tend to go up in line with the costs of building new

homes, assuming building houses is perfectly elastic in the earliest stage. So, if it costs more to build new residents, the prices of existing houses also tend to rise, and vice versa (Galster & Lee, 2021; OECD, 2021a). Rising costs with the supply of, especially rental (Kenna, 2021), housing therefore already resulted in many new construction and renovation projects in Europe being put on hold (OECD, 2023). These delays are expected to directly worsen the scarcity of accessible affordable housing (Housing Europe, 2023). Furthermore, problems are enhanced by increased standards of energy-efficiency which drive up development costs and lead to rising numbers of energy poverty directly undermining affordability (OECD, 2023). Importantly, difficulties and limitations of housing supply significantly impact affordability when demand rises (Lee et al., 2022; OECD, 2021a).

From this demand side, population growth (EIPA, 2022) and the formation of households directly influence housing demand, thus playing a crucial role in determining housing prices. The impact of population growth is mainly fueled by cohort effects as a consequence of a 'generational housing bubble' (Lee et al., 2022). This bubble is created by both the influx of baby boomers, living significantly longer, into the housing market since 1970 as well as by millennials, being the largest generation yet. Despite the slowdown in population growth across most advanced economies, postponement of household formation and the trend toward smaller household sizes have been magnifying the housing demand among young adults (Lee et al., 2022; OECD, 2021a). Amongst others, the quantity of individuals on social housing waiting lists has reached unprecedented levels in 2023, largely due to the market's inability to provide affordable housing. High demand, such as job-rich (OECD, 2021a), urban areas are especially victim of current developments in affordable housing (Housing Europe, 2023). The divergence of household income levels and housing prices is also a key factor in demand (Anacker, 2019; Housing Europe, 2023; Lee et al., 2022; OECD, 2021a), which is covered later in this part. Crucially, imbalances between supply and demand also originate from geographical limitations and regulatory constraints in numerous cities, including land use and zoning regulations (OECD, 2021a).

Challenge of Land use regulations and zoning laws

It is argued that a multitude of restrictions, such as housing quality standards, land-use regulations, exclusionary zoning laws and development fees, have inflated the cost of housing and decreased flexibility of housing supply in metropolitan areas (Anacker, 2019; Been et al., 2019; Galster & Lee, 2021; Lee et al., 2022; OECD, 2021a; UNECE & Housing Europe, 2021). The influence of land use regulations restricts the availability of land for housing and limits the number of units that can be constructed on it (Lee et al., 2022; OECD, 2021a). While regulations significantly increased the quality of housing, implemented public policies unintentionally contributed to some aspects of the housing affordability crisis (Anacker, 2019; Been et al., 2019; Galster & Lee, 2021). Both Galster & Lee (2021) and the OECD (2021a) therefore propose more flexible land use regulations. More specifically, flexible land-use policies play a pivotal role in boosting housing supply and consequently accommodating the enduring shifts in real estate demand resulting from the COVID-19 crisis. Such flexibility mitigates the risk of structural demand changes, such as a preference for larger, more remote homes, leading to price surges and speculative bubbles, which could further solidify restrictive land-use regulations (Galster & Lee, 2021; OECD, 2021a). Despite this, increased ease or flexibility of regulations is a trade-off against housing quality and sustainability efforts. The same dilemma applies for engaging in inclusionary zoning laws.

Exclusionary or strict zoning practices, closely linked to land value (Been et al., 2022), are said to lead to high rent burdens and potential issues like displacement and homelessness

(Anacker, 2019; Bonnstetter, 2017; Galster & Lee, 2021; OECD, 2021a; UNECE & Housing Europe, 2021). Concretely, inclusionary zoning is accomplished through either mandatory or voluntary inclusion of certain types of affordable housing as a prerequisite for planning approval in new housing developments (Lee et al., 2022; UNECE & Housing Europe, 2021). Despite recent consensus in research about added-value for mandatory inclusionary zoning programmes as a complementary measurement (Been et al., 2019) to increasing housing supply, evidence is limited and diminished profitability leading to decreasing supply are clear concerns (Galster & Lee, 2021). Interestingly, elasticity of housing supply varies notably among advanced economies as a consequence of varying land-use and zoning regulations (Been et al., 2019). This way, with the addition of geographical limitations, make for an abundance of a blueprint solution package. In conclusion, despite being depicted as drivers or challenges of housing affordability, relaxation of land use regulations and integration of mandatory inclusionary zones provide potential solutions.

Challenge of Economic inequality

Another fundamental challenge of housing affordability is household income being outpaced by growth in housing prices (Anacker, 2019; Galster & Lee, 2021; Haffner & Hulse, 2021; Housing Europe 2023; Lee et al., 2022; OECD, 2021a; UNECE & Housing Europe, 2021). Between 2010 and the fourth quarter of 2022, average rents in the EU rose by 19% and house prices increased by 47%, consistently exceeding income growth (Eurostat, 2023; Housing Europe, 2023). The main reasons for a divergence between house/rent prices and household incomes are shown in figure 3. Also, income distributions in most advanced nations and their metropolitan areas are becoming increasingly unequal, with only those at the upper end of the distribution experiencing significant real income gains. Even if housing inflation does not exceed the inflation rate of other goods and services, it still poses affordability challenges for households whose incomes have not increased at a similar pace as housing prices (Galster & Lee, 2021; Lee et al., 2022; Wetzstein, 2017). Consequently, purchasing a first home stays out of reach for many people (Anacker, 2019; Galster & Lee, 2021; Haffner & Hulse, 2021; Housing Europe, 2023; Lee et al., 2022; OECD, 2021a; Wetzstein, 2017). The groups affected most by unaffordable housing now extend from the most vulnerable people in single parents, homeless, young and elderly to middle income households (Anacker, 2019; Haffner & Hulse, 2021; UNECE & Housing Europe, 2021).

REASONS FOR DIVERGENCE BETWEEN HOUSE/RENT PRICES AND HOUSEHOLD INCOMES BY ANACKER (2019)		
	INCREASE IN HOUSE/RENT PRICES	LAGGING HOUSEHOLD INCOMES
1	Less easily available land for development.	Technology has provided efficiencies, resulting in a stubborn productivity-pay gap.
2	Developers have faced increasingly tight planning regulations and increasing costs for construction materials over time.	Increased access to credit because of risk-based pricing compensated many households for lagging household incomes.
3	Filtering and moving chains have not worked in practice.	Decrease in unionisation and union membership, resulting in reduced negotiating power.
4	Many national, state, and local Governments have retrenched from social policies or pursued austerity.	Many Western countries reduced regulations due to demands and pressures by businesses and their lobbyists as well as concerns about their global competitors.

Figure 3: Drivers of a divergence between house/rent prices and household incomes (own work, based on OECD (2021a)).

Additionally, in 2023 people increasingly spend more than 40 percent of their income on housing expenses (Haffner & Hulse, 2021; Kenna, 2021; OECD, 2023; UNECE & Housing Europe, 2021). In total the UNECE-region now hosts 100 million people with these so-called overburdened housing costs (UNECE & Housing Europe, 2021). Especially low-income households suffer from the 'overburdened' housing costs due to rising costs related to housing in 2022 (Lee et al., 2022; OECD, 2023). This is because lower income households usually spend the biggest percentage of

their income on housing (EIPA, 2022; OECD, 2021a; Housing Europe, 2023). Figure 4 shows this increase is even becoming significantly visible with middle-incomes households (OECD, 2021a). Regrettably, the combination of inflation, rising interest rates and growth in demand in 2023 is even exacerbating the existing gap between housing plus other living costs and household income (Housing Europe, 2023). The phasing out of temporary support acts as part of the Covid pandemic will also not help either. EIPA (2022) and Wetzstein (2022) already found increased risks of housing eviction and thus homelessness as a consequence of removed support measures.

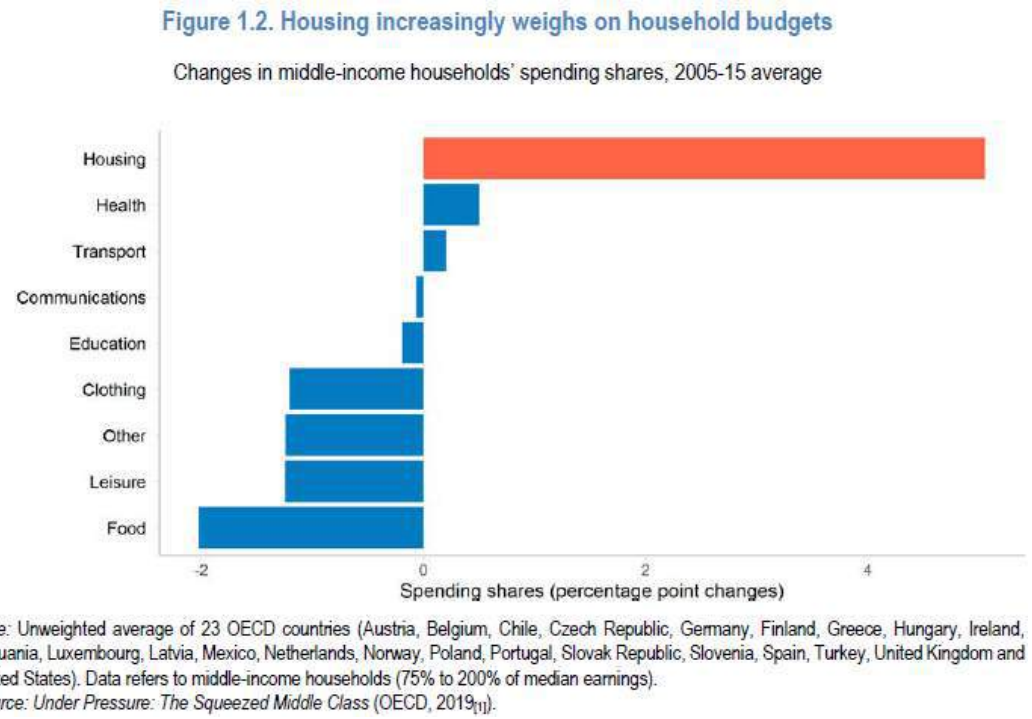

Figure 4: Middle income households increasingly spend higher percentages of their income on housing related costs (OECD, 2021a).

Challenge of Government policy and public funding

Many advanced economies in the last decade have been undergoing welfare state retrenchment and transitioning toward a more market-driven housing system (Bone, 2014; Lee et al., 2022; Wetzstein, 2017). While affordable housing, particularly for lower income groups, has historically relied on some form of state subsidy, housing shifted from direct provision to a more indirect role (Housing Europe, 2023; Wetzstein, 2017). Many countries are influenced by this neoliberal paradigm and consequently government intervention faces significant challenges (Galster & Lee, 2021). There has been, on average across OECD countries, a decline in public investment in housing development from 0.17% of GDP in 2001 to 0.06% of GDP in 2018 (OECD, 2021a; OECD, 2023). Since 2001 government spending on housing in OECD-countries has been cut in half (OECD, 2021a), which is argued to have contributed to high rent burdens and displacement and homelessness (Anacker, 2019; Lee et al., 2022; Norris & Lawson, 2023).

Here, welfare regimes still play a crucial role in shaping housing outcomes, including housing cost burden, and in mitigating the adverse effects of these outcomes. In other words, governmental intervention is justified if it can effectively address market failures, even including redistribution of wealth, through cost-effective policy measures (Galster & Lee, 2021; Lee et al., 2022). However, current issues with housing affordability and a consequent urge for state

initiated action (EIPA, 2022; Wijburg, 2021), focussed specifically on vulnerable and marginalized people (Galster & Lee, 2021), have only resulted in relatively modest and fragmented policy responses (Norris & Lawson, 2023). This is partly disputed by EIPA (2022), which identifies a 'return of the state' with tackling increased housing affordability. When taking action, it is crucial to realize the decentralization of integrating housing policy to local authorities of two-third of the OECD countries (OECD, 2021a).

All in all, this part concludes that drivers of housing unaffordability and related challenges "*...are multi-faceted, complex, and deep-seated. They encompass demographic, economic, and financial dimensions that go well beyond the confines of housing policy and make the crisis difficult to solve.*" (Lee et al., 2022). Challenges range from financialization of housing to imbalances between supply and demand, and from strict land use to economic inequality and public funding. Despite the challenges, in line with the return of the state, European governments or decentralized agencies are considering and implementing a host of interventions. Currently proposed actions are discussed in the following part of the theoretical framework.

Part 2.1.3 Current action

It is clear that the global housing affordability crisis is urging European actors to provide solutions. Over time and in various places, many different policies have been put in place to help fix the drivers and problems caused by the lack of affordable housing. Galster & Lee (2021) distinguish five different policy types or categories with their specific subtypes applied in the United States. These are listed in figure 5 and discussed further below, while acknowledging the differences with European states.

POLICY TYPES BY GALSTER & LEE (2021)			
SUPPLY-SIDE INTERVENTION		DEMAND-SIDE INTERVENTION	
1	Direct housing provision	1	Capital grant
2	Grants to housing produce	2	Allowance
3	Land provision (discount) to housing producer	3	Saving scheme
4	Tax credit to housing producer	4	Tax deduction
5	Reducing regulatory barriers	ANTI-SPECULATION	
6	Technological innovations that reduce construction costs	1	Purchase restrictions
RENT/PRICE CONTROL		MULTIPLE POLICIES	
1	Rent control	1	Stamp duty/capital gains tax

Figure 5: Types of policies to improve affordability in housing (own work, based on Galster & Lee (2021)).

The first policy type mentioned is measurements on the supply-side to decrease occupancy prices. Subtypes range from targeted provision of housing to technological advancements. Despite these efforts, households with very low incomes may still find these homes unaffordable if their incomes do not rise as quickly as the prices for occupancy. The proposed actions on the demand-side are suitable to counter those issues head-on. Alternative options are measures related to anti-speculation, rent/price control and other forms of taxations (Galster & Lee, 2021).

Supply-side interventions range from public housing provision to subsidizing production cost for the private sector and from regulatory land use planning to inclusionary housing programmes (Been et al., 2019; Galster & Lee, 2021). According to the 'Housing Policies in the EU' report of Krapp et al. (2022) and the OECD (2021a), increased investment in social and affordable housing leads to safeguarding low-income or vulnerable households and simultaneously expanding the housing stock, consequently easing the rise of house prices over time. Compared to the United States, European governments are more directly involved and in general on a

bigger scale when it comes to public housing investments (Krapp et al., 2022). Despite this, both public housing and subsidies to the private sector through low-cost loans, land provisions, subsidies, or tax credits are said to raise concerns regarding welfare due to potential inefficiencies and reduced cost-effectiveness. Another mentioned disadvantage is the crowding-out effects resulting from various forms of place-based subsidized housing. Subsidizing private developers has however been favored by developing countries over housing allowances or public housing because of their lower upfront costs (Galster & Lee, 2021). Next, reforms in land-use policies as a supply-side intervention can eliminate barriers to expand the supply, addressing demand pressures and this way assist in mitigating rising house prices (OECD, 2021a). Restrictive land use and building regulations is widely accepted as limiting the supply of affordable housing. Additionally, a general consensus exists for mandatory inclusionary housing (zoning) programs effectively increasing the supply as well (Been et al., 2019; Galster & Lee, 2021). The report 'Housing Policies in the EU' shows a widespread application of inclusionary zones by European states, while it faces a lot of opposition in the United States (Krapp et al., 2022).

Rental subsidies on the demand-side, such as allowances, generally lead to greater consumption efficiency, cost-effectiveness, transparency, and minimal market distortion. Housing allowances, specifically, are regarded as a beneficial policy for affordable housing, capable of achieving greater equity and effectiveness. It is stated that a rent subsidy program has a positive welfare impact on the specific population it targets (Krapp et al., 2022). However, in situations where housing supply is inflexible, raising housing allowances could unintentionally contribute to pushing up house prices and rents (Galster & Lee, 2021; OECD, 2021a). Furthermore, decreasing tax incentives for mortgage holders aids decreasing housing prices, fostering market efficiency, and promoting sustainable affordability (OECD, 2021a). Galster & Lee (2021) dispute this by stating that it tends to drive up housing prices, particularly in regions with limited flexibility in housing supply. Additionally, low-cost mortgage credit programs often target middle-class households capable of affording formal homeownership and mortgage credit, at the expense of low-income rental households (Galster & Lee, 2021; Krapp et al., 2022). In relation to apparent disadvantages the OECD (2021a) advises a gradual implementation of reforms.

There are three typologies of rent control, see figure 6, and numerous ways to apply it. In Europe, EIPA (2022), identified at least six in figure 7. The policy option is mainly applied in countries facing significant problems with affordable rental housing and significantly more applied in Europe as opposed to the US (Krapp et al., 2022). Results in the US show inconsistencies in welfare effects, only temporary reductions in initial rents and minor improvements for low-income renters. Other unintentional disadvantages are reduced production, misallocation of resources, inadequate maintenance, decreased residential mobility, the emergence of black markets, and discrimination within housing markets (Galster & Lee, 2021). Therefore, alternatively, greater flexibility in rent control can incentivize housing investment, mitigate supply-demand imbalances, and diminish obstacles to residential mobility (OECD, 2021a).

TYPOLOGIES OF RENT CONTROL BY ARNOTT (1995)	
1	Rent levels for all dwellings
2	Rent increases between new contracts
3	Rent increases within existing contracts

Figure 6: The different typologies of rent control (own work, based on Arnott (1995)).

RENT CONTROL MEASUREMENTS BY EIPA (2022)	
1	The installation of a 'Reference Rents Index' to follow and monitor average mortgage interest rates
2	Fixed term rental contracts, which obliges tenants and landlords to contractually agree on rent increases
3	Geographical, local mandatory reference rents
4	Restrictions of price adjustments to no more than 20% over a couple of years
5	A rent break for new contracts in high-demand areas
6	Rent Pressure zones, which are geographical areas where rents are at a comparatively high level as well as increasing rapidly. Both new and existing tenancies get capped here

Figure 7: List of possible rent control measurements (own work, based on EIPA (2022)).

The implementation of taxation on the buyer is also depicted as a strategic approach. However, only a small number of countries adopted it because there is abundant evidence indicating that taxation diminishes welfare and results in inefficient outcomes. These taxes are also recognized for their high level of distortion, as they significantly influence the timing of transactions, household choices regarding short-distance moves, and capitalization into house prices (Galster & Lee, 2021). The OECD (2021a) therefore suggests increasing the emphasis on annual taxes on immovable property, instead of housing transaction taxes. This supposedly would yield numerous advantages when combined with a shift from the value of structures to current land prices (OECD, 2021a). Lastly, the application of multiple policies have been researched and compared too little to draw significant conclusions.

To reiterate, it is important to note that Galster & Lee (2021) and OECD (2021a) have reviewed current actions from an American, or global, perspective. While named actions do also exist in Europe, four are depicted as reform trends: housing allowance, instruments for homebuyer and homeownership, subsidized housing and rent control (Krapp et al., 2022). Application of these reforms differ per European state, depending on the specific impact and prioritization of the problems.

Conclusion of part 2.1: Affordable Housing

In summary, housing affordability is a fundamental aspect of well-being, essential for social inclusion, human rights, and sustainable development goals. Defined as securing adequate housing without imposing unreasonable financial burdens, affordability includes not only income-related measures but also factors such as housing quality, location, and accessibility of services. Addressing subquestion 1, "*What is housing affordability and what are contemporary challenges with providing affordable housing in Europe?*", this section highlights that affordable housing provision in Europe faces complex, contemporary challenges. These challenges include financialization, supply-demand imbalances, strict regulatory constraints, economic inequality, and evolving government policy and funding. Together, these issues contribute to Europe's growing housing affordability crisis, indicating a pressing need for collaborative solutions.

While part 2.1.3 shows that various policy interventions offer promising pathways, they tend to depend heavily on market-driven approaches that often conflict with the goal of affordable housing provision. According to Wetzstein (2022), alternative models like Non Market Based Housing Supply (NMBHS) must be explored. One such model is cost rental housing, an approach gaining attention through transnational knowledge exchange for its potential to address affordability more sustainably. The concept of cost rental housing, central to this report and discussed in part 2.2, provides a foundation for answering the third subquestion and guiding the case study. Part 2.2 will elaborate on cost rental housing and its role in enhancing housing affordability across Europe, with figure 15 positioning cost rental housing as a focal point for knowledge exchange.

Part 2.2 Cost Rental Housing

The concept of cost rental housing is first and foremost a means of affordable housing provision (Healy & Goldrick-Kelly, 2018a; Kemeny, 1995; National Economic and Social Council, 2004). It is defined as rental housing, regardless of ownership, in which the rents are set to cover only the actual incurred costs of providing the dwelling, without generating additional profit (Kemeny, 1995; National Economic and Social Council, 2004). In essence, this implies that the rents set for such housing units are designed to be sustainable, meeting the essential expenses associated with their construction, maintenance, and operation without yielding additional profits. The "*...returns on the current capital values of property*" are explicitly excluded (Kemeny, 1993). This way, cost rent housing strives to ensure affordable rental accommodation (Healy & Goldrick-Kelly, 2018a; National Economic and Social Council, 2004). The concept also finds its core roots in the growing recognition that conventional rental markets and homeownership models were leaving a significant portion of the population underserved.

Dualist versus unitary or integrated rental markets

Therefore, cost rental housing is central in the ongoing debate surrounding dualist and unitary or integrated markets for housing. Dualist rental systems, argued by Kemeny (1995), consist of parallel public and private rental systems. They coexist as two distinct systems: an essentially unregulated private rental market and a public allocation system based on means-testing (Kemeny, 1995). The concept of housing market "duality" implies the separation of social housing from the broader housing market. Social housing is safeguarded and regulated to maintain low rents, and it is specifically directed, through means-testing, to the most vulnerable groups (Davidson, 1999). In contrast, integrating markets embodies the social market philosophy. The goal is to maintain the profit motive within rental markets but mitigate it by promoting nonprofit forms of rental housing as much as possible. The desired outcome is a blended market where both social and economic factors contribute to shaping the housing supply and demand (Kemeny, 1993; 1995). According to Kemeny (1995), the desired outcome of an integrated market is achieved by encouraging cost renting. Promoting cost renting entails enabling its continued growth and leveraging its advanced stage of development to compete with profit renting. This can result in reducing rent levels and potentially, over time, phasing out profit renting through competitive forces (Kemeny, 1993; 1995). These steps might ultimately realize the proposed integrated market.

In that unitary market, the private rental sector may be subject to regulations, allowing it to compete on an equal basis with the cost-renting in the social housing sector. In a dual market however, the private rental sector operates without regulations and is shielded from competition by a marginalized and stigmatized social rental sector (Hulse et al., 2010). According to Davidson (1999) this stigmatization of tenants was the main argument for Sweden to abandon their social sector. Besides that argument, the susceptibility to criticism from conservative governments is named (Davidson, 1999). This criticism might lead to conservative government reversing or rolling back previous improvements of the social sector. Introducing cost renting, not as a separate sector, but as a means to increase the affordability of all housing side steps these critiques while still realizing social benefits (Elsinga et al., 2008; Elsinga, 2020).

Cost renting in practice

The German road towards an integrated rental market in the 1990 shows an arguably successful evolution towards such a system. Initially, governmental subsidies are provided for the cost/non-profit rental sector to be able to compete with the for-profit sector. As the cost rental

sector expands and matures, subsidies can be gradually reduced. What follows is a period where the cost rental sector is heavily indebted. In this period, the German government established rent control in the for-profit sector which later shifted to demand-sensitive rent regulation as shortages diminished. This results in rental sectors that accommodate a diverse range of households and more importantly provide an appealing alternative to home ownership. Consequently, Germany was one of only two European countries where the rental sector surpassed the ownership sector in size at that time (Stephens, 2020).

Despite the earlier mentioned promise of the ultimate integrated system, it appears easier said than done. Stephens (2020), despite the initially promising signs, argued against Kemeny's theories. According to him, the distinctive "unitary" systems identified by Kemeny in Germany and Sweden are eroding due to economic challenges, which triggered reforms to broader welfare systems. Meanwhile, mature cost-rental sectors struggled to sustain supply without subsidies (Stephens, 2020). In other words, Kemeny's theory seems to be overoptimistic about the ability of the cost rental sector to secure funding for additional new construction and ongoing renovation through the maturation of its housing stock (Matznetter, 2020). Or: "*The failure to anticipate the necessity of subsidy in maintaining the new supply of cost-rental housing and instead to rely on maturation is perhaps the most significant factor in weakening the ability of the cost rental sector to influence and shape the rest of the housing system*" (Stephens, 2020). Even Kemeny (1981; 1995) himself admits the challenge of long-term commitment. He states that a cost-renting program typically requires approximately 20 years to reach a point where it becomes self-sustaining (Kemeny, 1981; 1995). A housing system such as in Vienna took a century to establish. The various entities like social landlords, the city, non-profit companies, and non-profit cooperatives all needed their maturation to sustain the contemporary system (Matznetter, 2020). All in all, the high initial financial commitments in combination with continuing investments for the duration of the maturation of the cost-rental sector is what makes the concept complex. Additionally, the success of the integrated system with a cost-rental sector in one country says little about the promise of applying it elsewhere. This leads to differentiation in states establishing a cost rental sector and countries who did not. Figure 8 below shows differences between European states. The proportion of residential housing categorized as social and affordable housing is provided in brackets.

RENT SETTING SYSTEMS IN EUROPE BY OECD (2022) & HOUSING EUROPE (2021)		
RENTAL SYSTEM	METHOD	EUROPEAN COUNTRIES
COST-BASED	Rent can be set at a level which allows the social provider to meet the costs of provision, e.g., repayment of loans/subsidies, maintenance, insurance.	Austria (24%), the Czech Republic (6%), Denmark (20%), Estonia (1%), Finland (13%), France (16%) and Slovenia (6%).
MARKET-BASED	Rents can be set relative to 'market' rents.	Czech Republic, Germany, Iceland, Ireland, Italy, Norway, Slovak Republic and England.
INOME-BASED	Rents can be set relative to the assessed means to pay of an individual household.	Bulgaria, France, Germany, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal and England.
UTILITY-BASED	Rent is set in relation to the characteristics of the home.	Iceland, Italy, Lithuania, Luxembourg, Malta, the Netherlands and Slovenia.

Figure 8: Rent setting systems in Europe (own work, based on OECD (2022) & Housing Europe (2021)).

If we zoom in on three cost-based rental models, in Austria, Denmark and Finland, significant differences and similarities stand out, as shown in figure 9. A particular similarity is their substantial contributions to the total housing stock, with Austria at 17%, Denmark at 20%, and Finland between 11% and 20%, depending on the definition used. This extensive housing stock allows these countries to benefit from the maturity of their cost rental models, which have become well-established and sustainable over time. All three countries adopt a universalist approach to eligibility, ensuring broad access across various income groups. Despite these similarities, differences exist in their funding structures. For example, Austria utilizes a diverse

mix of public and private financing, whereas Denmark heavily relies on loans with state guarantees, and Finland leans primarily on private loans backed by state guarantees. Additionally, Austria requires a down payment from tenants, a practice not observed in Finland, which maintains a cost-rent level at the social provider level (Housing Europe, 2022).

KEY DIFFERENCES OF COST RENTAL IN EUROPEAN COUNTRIES (OWN WORK, BASED ON (HOUSING EUROPE, 2022))			
	AUSTRIA	DENMARK	FINLAND
COST-BASED SOCIAL HOUSING (% OF NATIONAL HOUSING STOCK)	17%	20%	11% (narrow definition); c.20% (broad definition)
ELIGIBILITY	Universalist – *c.80% of households in practice*	Universalist – *but priority for most in need*	Universalist – *but local restrictions apply in practice*
FUNDING SOURCES	- Public loans – *subordinate* (30-40%); - Bank loans (30-40%); - Own equity (10-20%); - Tenant equity (~5-10%); - Public grant (~5%)	- Loan from a mortgage institution – *with state guarantee* (86-90%); - Municipal loans (8-12%); - Tenant equity (2%)	- Private loans – *with state guarantee* (95%); - Own equity (5%); - Public grant
DOWNPAYMENT REQUIRED FROM TENANTS?	Yes – *though not compulsory*	Yes	No
COST-RENT APPLIED AT...	Building/estate level	Building/estate level	Social provider level
POST REPAYMENT OF LOANS IS SET BY...	'Grundmiete' system – *fixed price per square metre*	Fixed nominal rent	Ceases to be officially 'social' – *rents in line with prior cost-rents*
MAIN STRENGTH	Long-term financial sustainability	Long-term financial sustainability	Long-term financial sustainability
MAIN AREA FOR IMPROVEMENT	Cost of new homes in areas with high land costs	Construction price cap in areas with high land costs	Depopulation in rural areas undermining cost-based principle

Figure 9: Differences between 3 European cost rental models (own work, based on Housing Europe (2022)).

In discussing housing models the above housing models, it's important to recognize that while countries may be categorized as having either cost-based or income-based systems, in practice, many models incorporate aspects of both approaches to address a broader range of policy objectives. For instance, a country might primarily employ a cost-based model, where rents are determined by the actual costs of housing provision, but still implement income-based elements to ensure affordability for lower-income groups. The Dutch housing system is a prime example of this hybrid approach. Although Dutch housing associations set rents based on the costs of construction and maintenance, the system also imposes rent caps and income-related rent adjustments within social housing to ensure accessibility for specific income cohorts. This blending of models allows countries to balance financial sustainability with social equity, demonstrating that housing models often operate on a spectrum rather than fitting neatly into a single category.

The dualist rental system is prevalent mainly in English-speaking countries, including Britain, Ireland, the US, Canada, Australia, and New Zealand (National Economic and Social Council, 2004). In general, the cost rental sector plays a marginal role in these states. Northern Ireland acts as an exception. Social rents in housing administered by the Northern Ireland Housing Executive (NIHE) are established through a points-based system, subject to an annual regulated inflation rate or uplift. This system is primarily based on the number of rooms in a given dwelling, without considering location or demand conditions (Healy & Goldrick-Kelly, 2018a). Cases with a clear, separate cost rental sector are Denmark and Austria. In these countries housing providers are legally required to ensure that rents cover the costs of provision

at the level of individual projects (Healy & Goldrick-Kelly, 2017). The rents are directly related to historic costs (Healy & Goldrick-Kelly, 2018a). Here, Finland and France providers have more freedom. They have the authority to balance costs across projects, ensuring that rents cover expenses collectively. This flexibility allows them to subsidize certain developments with higher rental income from elsewhere. Additionally, in Finland cost rental provisions are generally required to be in place for a set duration, typically around 45 years. After this period, the determination of rents can be influenced by prevailing market conditions or the option to sell the property (Healy & Goldrick-Kelly, 2017).

We can conclude that, although institutional and funding arrangements differ, the concept of full cost recovery is a common characteristic in European housing systems (Healy & Goldrick-Kelly, 2018b). Despite this, the dynamics between the cost rental and for-profit rental sectors significantly shape the overall character of the housing regime. Therefore, attempting to apply the model to countries in central and eastern Europe, for instance, where the relationship between cost and for-profit rental sectors is largely inconsequential due to the prevalence of outright home ownership, would be inappropriate. Similarly, in regions like China and parts of Latin America, subsidized housing programs are not conceptualized as cost rental systems, and subsidized home ownership holds a more prominent role (Stephens, 2016). It is crucial to take this into account when researching cost-rental initiatives transnationally. All in all, there is consensus that there is no universally "best" strategy for improving housing affordability (Galster & Lee, 2021). Additionally, barriers with comparing across interventions continents, cultures, national boundaries and languages exist (Aalbers, 2022; Lee et al., 2022). The commensurability of knowledge between various stakeholders and across national boundaries should therefore, in line with Galster & Lee (2021), be researched. The next part addresses this.

Part 2.3 Knowledge Exchange

The definition of Knowledge Exchange

The introduction of the concept of knowledge transfer, and later knowledge exchange, originates from the 1990s discussion about evidence-based decision making (Lavis et al., 2003). Specifically, in health care research the attention and need for transferring research into practice was growing due to failures impacting patients' lives (Ward et al., 2009). Knowledge transfer and exchange (KTE) then was defined as "*...an interactive interchange of knowledge between research users and researcher producers*." (Halliday et al., 2023; Kiefer et al., 2005; Mitton et al., 2007). The key objectives of KTE were to improve the probability of integrating research evidence into policy and practice decisions, as well as to empower researchers to identify research questions relevant for practice and policy (Mitton et al., 2007). Central is collaborative problem-solving of both decision makers as well as researchers through exchange and linkage (Graham et al., 2008). Apart from KTE, Fazey et al. (2013) names seven different terms used to describe processes of knowledge exchange. For the sake of this thesis, only knowledge transfer and knowledge exchange are differentiated as part of KTE.

Kiefer et al. (2005) define 'knowledge exchange' or KE as "*the interactive and iterative process of imparting meaningful knowledge between research users and producers, such that research users receive information that they perceive as relevant to them and in easily usable formats, and producers receive information about the research needs of the users*.". Compared to knowledge transfer (KT) there is a bi-directional interaction instead of a unidirectional one (Halliday et al., 2023; Kiefer et al., 2005; Perry & May, 2010). The knowledge is shared among various entities with the goal to improve connections and enhance practices beneficial to all involved (Graham et al., 2008; Perry & May, 2010). This way knowledge exchange does not have a distinct beginning

or ending, or other rigid boundaries between entities. Information is dynamically translated into intelligence tailored to the specific requirements and contexts of various groups such as policymakers, practitioners, researchers, and the general public (Perry & May, 2010). These distinct groups do have inherently separate cultures and perspectives on research and knowledge, while neither fully understanding the world of the other (Graham et al., 2008; Karvonen et al., 2021; van Bueren et al., 2002). Mutual comprehension and acknowledgment of these different cultures of 'enquiry' and 'reception' is therefore crucial (Perry & May, 2010; Stevenson & Baborska-Narozny, 2018; Young et al., 2016). Ultimately, knowledge exchange should serve as a communicative space or 'mediation sphere' (Nguyen et al., 2017) where various cultures of inquiry and reception can interact by utilizing different ways of exchanging knowledge (Perry & May, 2010). The critical role of transfer agents, experts operating in the communicative space, can not be understated here (De Jong, & Edelenbos, 2007; van Bueren et al., 2002). Figure 10 portrays this space as a framework.

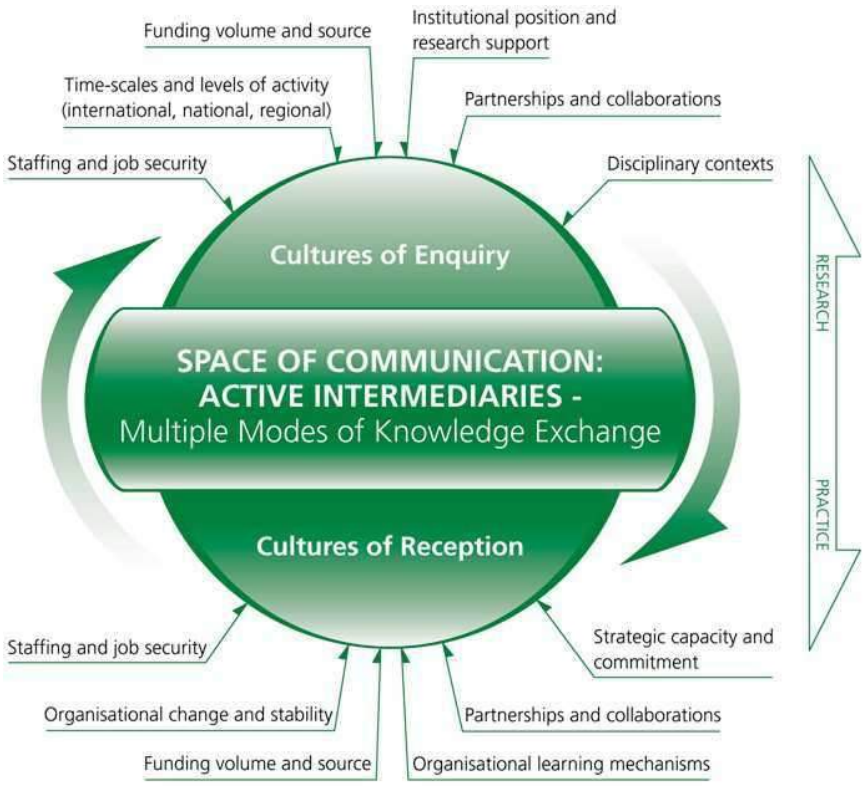

Figure 10: The SURF (Centre for Sustainable Urban and Regional Futures) framework for context-sensitive knowledge exchange (SURF, 2009).

The framework additionally draws attention to a common flaw when it comes to exchanging knowledge. Frequently, a shared comprehension of the necessity for knowledge exchange is missing. Active intermediation between research and various social interests is therefore essential, according to SURF (2009) and May et al. (2009). This requires an operational approach where knowledge is generated through interaction among involved parties, enabling practical expertise to contribute to the creation of knowledge intended for practical application (Perry & May, 2010). In other words, the effectiveness of KE is challenging to predict or generalize across varying contexts due to differences in user characteristics, provider dynamics, intervention specifics, and the organizational settings where these interventions are implemented (De Jong & Edelenbos, 2007; Graham et al., 2008; Karvonen et al., 2021; LaRocca et al., 2012). Generally, spaces of knowledge exchange are faced with four categories of boundaries: (1) Territorial; (2) Role-based; (3) Sectoral; (4) Project (Valkering et al., 2013). It can therefore also be concluded that

there indeed is no universally optimal method for applying knowledge exchange (Abu-Rumman, 2021; De Jong & Edelenbos, 2007; Grimshaw et al., 2006; Mitton et al., 2007; Nooteboom, 2000). However, despite this, in circumstances characterized by complexity, the demand and opportunities for knowledge exchange becomes even more pronounced (Karvonen et al., 2021; Nooteboom, 2000).

Therefore, crucially, to make sure a fitting approach is implemented, the inherent barriers and enablers of general knowledge exchanges have to be considered. Mitton et al. (2007) researched the explicit, main knowledge exchange barriers and enablers on the individual and organization level, and in relation to communication, time and timing. Those barriers and enablers are listed in figure 11 below. The knowledge exchange researched as part of the thesis will be transdisciplinary, crossing role-based boundaries, as well as transnational, crossing territorial boundaries (Valkering et al., 2013). Therefore, for this research, the barriers concerned with the transdisciplinary as well as transnational nature of the knowledge exchange have to also be contemplated. Figure 12 provides a first insight in those barriers, who are then discussed further below the figures.

MAIN KNOWLEGE EXCHANGE BARRIERS AND ENABLERS BY MITTON ET AL. (2007)	
BARRIERS	ENABLERS
INDIVIDUAL LEVEL	
Lack of experience and capacity for assessing evidence	Ongoing collaboration
Mutual mistrust	Values research
Negative attitude toward change	Networks
	Building of trust
	Clear roles and responsibilities
ORGANIZATIONAL LEVEL	
Unsupportive culture	Provision of support and training (capacity building)
Competing interests	Sufficient resources (money, technology)
Researcher incentive system	Authority to implement changes
Frequent staff turnover	Readiness for change
	Collaborative research partnerships
RELATED TO COMMUNICATION	
Poor choice of messenger	Face-to-face exchanges
Information overload	Involvement of decision makers in research planning and design
Traditional, academic language	Clear summaries with policy recommendations
No actionable messages (information on what needs to be done and the implications)	Tailored to specific audience
	Relevance of research
	Knowledge brokers
	Opinion leader or champion (expert, credible sources)
RELATED TO TIME AND TIMING	
Differences in decision makers' and researchers' time frames	Sufficient time to make decisions
Limited time to make decisions	Inclusion of short-term objectives to satisfy decision makers

Figure 11: List of the main knowledge exchange barriers and enablers (own work, based on (Mitton et al. (2007)).

TRANSDISCIPLINARY BARRIERS FROM LITERATURE
Need for a mode of operation (Jahn et al., 2012; May et al., 2009; Perry, B., & May, T., 2010).
Diverse worldviews and approaches to work (Hadorn et al, 2008; Karvonen et al., 2021).
Different temporalities (Goddard, J., & Vallance, P., 2013).
Different proffessional status (Jahn et al., 2012; May et al. 2009).
Lack of time (Abreu et al., 2009).
Obstacle of unshared information (Jones et al., 2019).
Challenge of accessibility to participate in knowledge exchange initiatives (Perry, B., & May, T., 2010).
TRANSNATIONAL BARRIERS FROM LITERATURE
Differences in language (Valkering et al., 2013; van Bueren et al., 2002).
Differences in culture (Valkering et al., 2013; van Bueren et al., 2002).
Differences in institutional context (Valkering et al., 2013; van Bueren et al., 2002).
Difficulties with comparing contextually bound statistics and information (EIPA, 2022), and definitions (Horsewood, N., 2011).

Figure 12: List of transdisciplinary and transnational barriers from literature (own work).

Transdisciplinary exchange with providing affordable housing

A transdisciplinary approach is critical when tackling a complex urban issue such as affordable housing provision (Dickey et al., 2022; Halliday et al., 2023; Karvonen et al., 2021; Seo, 2022; Tucker et al., 2023). Transdisciplinary refers to practices that extend beyond academia to collaborate with urban stakeholders in generating and exchanging knowledge together (Hope, 2016; Jahn et al., 2012; Karvonen et al., 2021; Polk, 2014). Partnerships are established "*…with academia, the private sector, and other institutions, such as international organizations and philanthropic foundations, to improve their data analysis and evidence-based decision-making capacity.*" (Dickey et al., 2022). With a transdisciplinary approach role-based boundaries, originating from differentiation in interests, resources and roles within the project and in society, are crossed (Valkering et al., 2013). It differs from interdisciplinary efforts, because the latter revolves around scientific practices that arise from only the collaboration of multiple disciplines themselves (Dickey et al., 2022; Karvonen et al., 2021; OECD, 1972; Perry & May, 2010). The current approach to practicing transdisciplinary urban science thus involves global networks that bring together a wide range of stakeholders to address the common issue (Dickey et al., 2022; Karvonen et al., 2021). Joining forces in the space of communication, established in figure 11, generates its tensions in both opportunities and challenges which have to be considered.

First and foremost, it is acknowledged that any form of cross-disciplinary endeavor inherently benefits the participants by pushing the boundaries of their knowledge, methods, and theories (Hagemeier-Klose et al., 2014; Jahn et al., 2012; Jones et al., 2019; Wlasak & Blais, 2016). With transdisciplinary knowledge exchange, as portrayed in the framework of figure 11, both research or know-how of practice and knowledge for practice benefits (Jahn et al., 2012). Engagement with a diverse group of stakeholders provides both access to broader resources throughout society as well as a more subjective alternative to the objective reality presented by indicators. Furthermore, two more long term benefits consist of knowledge exchange in the present resulting in increased pro-active networking and possible empowerment of local stakeholders in the future. There are also cases of improved decision-making due to proximity and inclusion of networks concerned with knowledge exchange efforts. All in all, the tension between participants should be seen as opportunities for learning, building trust, and developing a mutual understanding (Dickey et al., 2022). Apart from these opportunities, transdisciplinary knowledge exchange is faced with certain challenges.

In short, a mode of operation is needed in which knowledge is produced by interaction between parties, allowing the know-how of practice to inform the production of knowledge for practice (Jahn et al., 2012; May et al., 2009; Perry & May, 2010). This presents an inherent

challenge not only to research funders and practitioners but also to governments at various levels and to their policy making procedures (May et al., 2009). Fundamentally, this transdisciplinary approach poses significant challenges for all stakeholders because of their diverse worldviews and approaches to work. A focus on both how knowledge is exchanged and management of expectations is thus important (Hadorn et al., 2008; Karvonen et al., 2021). Mobjörk (2010) more specifically emphasizes the need to recognize the power dynamics among different participants, their capacity to actively engage, and the roles they assume in their interactions with researchers. Here, recognizing the context within which research is received is crucial for ensuring the practical application of knowledge (Koppenjan, & Klijn, 2004; May et al. 2009).

Moreover, during the collaborative efforts challenges in the organizational culture commonly arise due to differences in temporalities (Goddard & Vallance, 2013), professional status and consequent power imbalances (Jahn et al., 2012; May et al. 2009). The transdisciplinary discussions are also faced with inadequate time (Abreu et al., 2009) and opportunities to transition from individual knowledge to shared understanding. Time and space is needed to take in and reflect upon newly learned information. On top of that, the effectiveness of the knowledge exchange is faced with the obstacle of unshared information (Jones et al., 2019). Finally, the challenge of accessibility to participate in knowledge exchange initiatives exists. Because of differing capacities and capabilities of distinct contexts, a growing spatial divide and therefore potential exclusion of areas where improved affordability of housing is most urgent (Perry & May, 2010). All the above opportunities and challenges shine light on the transdisciplinary nature of the knowledge exchange concerned with affordable housing provision in this report. The same insights about the transnational aspect, concerned with crossing territorial boundaries (Valkering et al., 2013), need to be made explicit.

Transnational knowledge exchange with providing affordable housing in Europe

Potential benefits of transnational knowledge exchange on affordable housing provision are apparent (Galster & Lee, 2021), however frequently overlooked (De Jong, & Edelenbos, 2007; Dickey et al., 2022). The complex global problems of our time, such as the housing affordability crisis in Europe, asks for a transnational perspective while being aware of application in specific, local and regional contexts (Dickey et al., 2022; Perry & May, 2010). Due to increasing complexity, it is to be expected that collaborative efforts within international networks will become progressively vital (Hairstans & Smith, 2018). These networks act as active intermediaries, such as the Interreg programme (Valkering et al., 2013), and are faced with the difficulties that come with knowledge exchange across borders (Perry & May, 2010). An aim then could be to assemble a toolbox, containing potential methods and action-oriented tools for transplantation and implementation. Despite these promising aims in theory, practice proves to be more unruly (van Bueren et al., 2002). How come?

The fundamental challenge with transnational knowledge exchange in Europe lies with the inherent differences between countries and regions (De Jong & Edelenbos, 2007; Dickey et al., 2022; EIPA, 2022; Perry & May, 2010; Valkering et al., 2013). The EIPA-report (2022) highlights: "*The variation in national trajectories highlights that while countries face similar challenges, their starting points, environmental characteristics and thus opportunities for improvement differ significantly*." (EIPA, 2022). Boundaries originate from and prove most difficult to cross with differences in language, culture and institutional context (Valkering et al., 2013; van Bueren et al., 2002). From a purely contextual perspective, differences are of technological, economic, legal-political and cultural nature resulting in integration of knowledge which adheres to national, institutional contexts (De Jong & Edelenbos, 2007). Interestingly, these inherent

differences result in debates about incommensurability between distinct contexts in both exchanging as well as comparing knowledge transnationally. Aalbers (2022), in comparative housing studies, identifies four arguments for incommensurability: (1) theories from one location are inapplicable for any other location; (2) places are too different; (3) a certain theory should be totally dismissed once one flaw is identified and; (4) the nature of southern places differs fundamentally from northern areas (Aalbers, 2022). Additionally, difficulties with comparing contextually bound statistics and information (EIPA, 2022), and definitions (Horsewood, 2011) are hindering cross-national comparison and likewise the exchange of knowledge. It is, at the very least, concluded that taking into account the above-named contextual challenges is essential with transnational knowledge exchange (De Jong & Edelenbos, 2007; Dickey et al., 2022; Perry & May, 2010).

Together, the mentioned barriers form the basis for the 'particularistic' approach towards comparing and exchanging housing knowledge. According to that approach, international comparisons become unfeasible, as the very phenomena one aims to compare are inherently diverse in various European countries (Aalbers, 2022; Haffner et al., 2010; Kemeny & Lowe, 1998). It proclaims a divergence of housing system typologies (Kemeny & Lowe, 1998) towards less European harmonization (De Jong & Edelenbos, 2007). Opposed to the particularistic point of view is the 'universalistic' approach, which reasons for the application of similar concepts to all locations (Haffner et al., 2010; Hantrais, 2008; Kemeny & Lowe, 1998). According to that approach, there is sufficient commensurability for European comparability, which makes comparisons both valid and valuable (Aalbers, 2022; Haffner et al., 2010; Kemeny & Lowe, 1998). In contrast to the particularistic approach, a convergence perspective of comparative housing studies (Kemeny & Lowe, 1998) and therefore European integration is stated, which suggests increased levels and opportunities of cross-national knowledge exchange (De Jong & Edelenbos, 2007).

As a compromise to these two approaches, a middle-way approach is proposed by Haffner et al. (2010). This perspective neither emphasizes differences as well as similarities (Haffner et al., 2010; Kemeny & Lowe, 1998). Instead, housing affordability is positioned in its broader historical and cultural context from which differences or similarities are found to explore. This exploration is aimed at delivering sufficient commonalities across countries to serve as a suitable unit of comparison and exchange. In short, a middle-way approach that considers contexts, applies commensurability, and employs theory tailored to the specific purpose offers significant methodological advantages (Haffner et al., 2010). This way, some of the fundamental mechanisms responsible for both disparities and resemblances are shared and should be addressed accordingly (Aalbers, 2022).

In addition to the middle-way perspective, a 'relational' approach towards transnational knowledge exchange on housing is proposed by Hart (2018) and Ward (2010), and reiterated by Aalbers in 2022 who proposes: *"…a relational global housing studies that would focus on transnational actors, regulation and markets, as one route out of the dead-end of contrastive housing studies."* (Aalbers, 2022). Similar to the middle-way, the relational point of view strives to consider both disparities and shared trends between European countries. Consequently, differences are not dismissed based on the assumption that ideas or theories from one context are irrelevant in another (Aalbers, 2022; Hart, 2018; Ward, 2010). The other advantages mentioned by Hart (2018) of the relational approach relevant for this thesis are listed in figure 13 below.

ADVANTAGES OF THE RELATION APPROACH BY HART ET AL. (2018)		
ADVANTAGE		CONTRIBUTION
1	More depth	Instead of just comparing or exchanging between places, the relational perspective digs deeper. It explores how these places or situations are related to each other and to larger global processes.
2	Integrated Perspectives	Acknowledgement that while two places might be vastly different in appearance or culture, they may still be shaped by similar global forces or historical events.
3	Global-local interplay	Recognizes that what happens in one part of the world can affect what happens elsewhere, looking at how global trends play out differently in various local contexts.
4	Non-Linear Understanding of Change	It focuses on the complex processes that drive change and development, rather than viewing history as a linear progression towards a specific end.
5	Practical Engagements	It not only informs but also is informed by the real-world experiences of communities, making research more grounded and directly relevant to the challenges faced by people.
6	Political Relevance	It challenges dominant narratives and perspectives and seeks to highlight the ways inequality is distributed across the globe.

Figure 13: Advantages of the relational approach (own work, based on Hart (2018)).

Contemporary reports about studies of different policy decisionmaking all over Europe show opportunities for transnational knowledge exchange on housing affordability. An example is the benchmarking study by EIPA which enables researchers to examine a range of distinct policy measures, while policymakers can establish connections with other nations to acquire insights and share best practices. The components outlined in the report strive to encourage a more organized data collection process. It also concerns aspects typically omitted from the standard protocols of national statistical agencies. This may encompass the expenses associated with interventions and the perceived benefits and outcomes experienced by users (EIPA, 2022). Additionally, a report such as the '#Housing2030' by UNECE and Housing Europe (2021) offers a toolkit of policy approaches for tailoring solutions to address the specific challenges of and enhance access to affordable housing, rather than offering a one-size-fits-all blueprint. Here, individual countries are first advised to understand which are drivers of affordability and sustainability issues (UNECE & Housing Europe, 2021). The 'Brick-by-brick' report by OECD (2021a) also provides an online dashboard and snapshots of the national housing layout. This way, comparisons of outcome indicators and policy settings across countries are made easily accessible through the dashboard and snapshots. Given policy interventions and their ability to achieve set goals are made transparent for each country (OECD, 2021a). The specific methods and the networks that provide them are an intrinsic part of the thesis research.

To conclude this section, many authors emphasize that despite many fundamental challenges, the application of knowledge exchange on affordable housing transnationally has huge potential (Aalbers, 2022; De Jong & Edelenbos, 2007; Dickey et al., 2022; Galster & Lee, 2021; Haffner et al., 2010; Hairstans & Smith, 2018). This potential is fulfilled when the contextual barriers are actively considered (De Jong & Edelenbos, 2007; Dickey et al., 2022; Perry & May, 2010). This way, the mentioned territorial boundaries (Valkering et al., 2013) are crossed. Applying a middle-way approach, as proposed by Haffner et al. (2010), and relational approach, depicted by Ward (2010), Hart (2018), and Aalbers (2022) when crossing boundaries will then generate results. Explicitly, the application of the middle-way approach makes it feasible to create a typology of housing affordability that is sufficiently similar to facilitate comparisons across countries. A frequently utilized typology, as proposed by Kemeny (1995), categorizes various types of relationships between the private, profit-making rental sector and a non-profit, cost-rental sector. This approach serves as a foundation for empirical and conceptual exploration of rental systems, such as cost rental housing as presented in part 2.2, for affordable housing provision (Haffner et al., 2010). With these insights noted, subsequent research zooms in on which explicit method or tools can be applied by active intermediaries and others to exploit all the potential of transdisciplinary and transnational knowledge exchange with affordable

housing provision in Europe. The conceptual framework in the next part shows how the author will go about this.

Part 2.4 Conceptual Framework

Before conducting the research, it is advised to construct a conceptual framework (Algozzine & Hancock, 2017; Baxter & Jack, 2008; Punch, 2013). It is defined as follows: "*A conceptual framework explains, either graphically or in narrative form, the main things to be studied - the key factors, constructs or variables - and the presumed relationships among them*." (Miles & Huberman, 1994). In other words, the conceptual framework provides a clear idea about the main concepts that are researched. The central construct researched is a contemporary case study on affordable housing provision, where knowledge exchange plays and has played a pivotal role. The case study is about cost rental housing (see part 2.2) in Ireland and equals the space of communication where the actual knowledge exchange takes place, as explained in figure 10, and shown in figure 14 below here. That space of communication highlights the two main concepts that are studied as part of this thesis research: affordable housing and knowledge exchange. Both concepts have been extensively introduced in part 2.1 and 2.3 of this theoretical framework respectively. Subquestion 1 and 2, see part 1.4, have been dedicated to these main constructs, which is elaborated upon in the next chapter about the methodology of the research.

Figure 14: Space of communication of the conceptual framework of the thesis (own work).

The space of communication or case where knowledge exchange takes place consists of cultures of enquiry as well as cultures of reception, as previously explained by the framework of SURF (2009) in figure 10. It is therefore critical that both cultures are considered thoroughly when researching the main concepts of the research. To be explicit, the representation of these cultures is ensured by involving practitioners as recipients and academics as enquirers of knowledge on affordable housing. Importantly, the knowledge exchange researched in this thesis also considers mutual exchanges of knowledge within a culture, and explicitly zooms in on transdisciplinary as well as transnational exchanges as discussed in part 2.3. Crucially, the researched knowledge exchange efforts in the case study about cost rental housing in Ireland is faced with barriers and supported by enablers. These are repeatedly considered in the research and are therefore an important part of the conceptual framework in figure 15. To summarize, the conceptual framework shows the space of communication with the two main thesis constructs of affordable housing provision and knowledge exchange. Alongside the case, the cultures of enquiry and reception are represented. Where the enquirers of knowledge focus on research, the recipients apply it in practice. In their involvement with the knowledge exchanges they are both faced by culture specific barriers and enablers. By researching the main concepts as part of the case and all other features represented in the conceptual framework, the thesis will ultimately deliver lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.

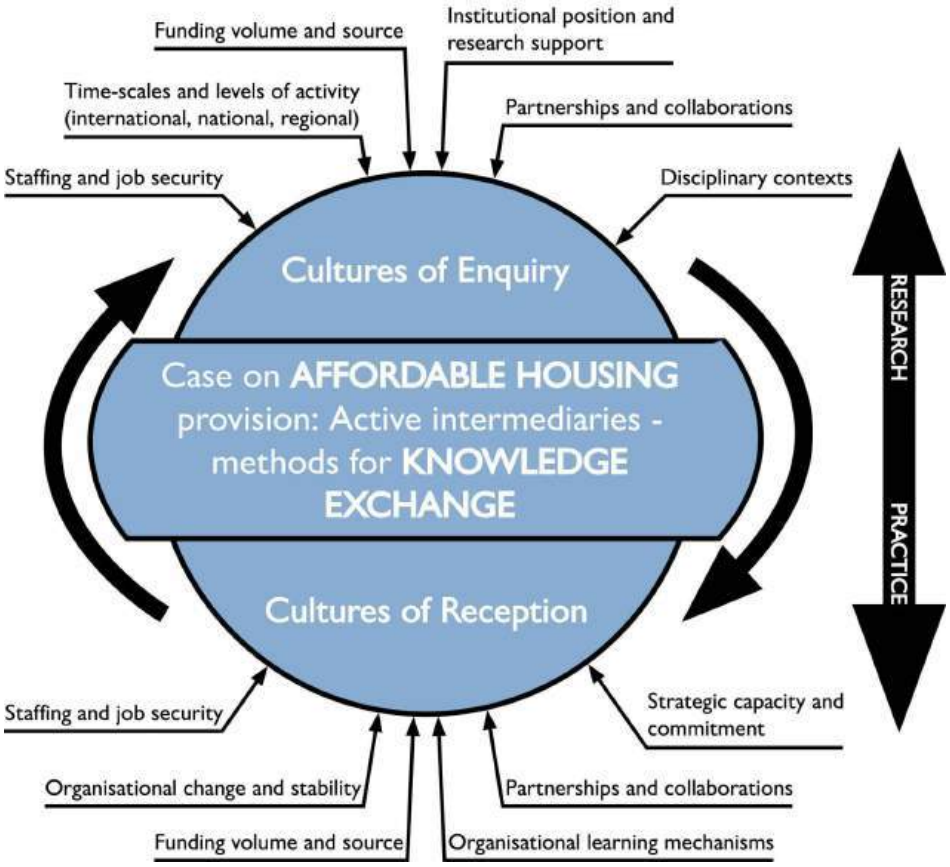

Figure 15: Conceptual framework of this thesis (own work, based on SURF (2009)).

Chapter 3 Methodology

Chapter 3 is crucial for outlining the research design and approach used to explore lessons learned for transdisciplinary and transnational knowledge exchange in the context of providing affordable housing in Europe. This chapter details the specific methods of data collection, analysis, and the overall research framework, including the case study of cost rental housing in Ireland. It establishes the procedures that ensure the research is systematic, rigorous, and aligned with the study's goals, particularly in answering the research subquestions and ultimately contributing to the main research question. Through a comprehensive explanation of the methodological choices, this chapter sets the foundation for the empirical analysis that follows, ensuring that the findings are grounded in a robust and well-structured research design.

Part 3.1 Research Design

Before conducting research, establishing a research design with the explicit procedures that are part of the research process is key (Algozzine & Hancock, 2017; Creswell & Creswell, 2017; Mason, 2002; Punch, 2013; Yin, 2003). The specific procedures addressed include data collection, data analysis, and report writing (Creswell & Creswell, 2017). All three procedures are elaborated upon later in the methodology. By making these steps of the research process explicit, a framework is established which connects the data to be gathered with the initial research questions (Mason, 2002; Yin, 2003). For this thesis, a case study research design is chosen to align with the research questions and goal of delivering lessons-learned for transdisciplinary and transnational knowledge exchange on housing affordability provision in Europe.

Case studies are a qualitative design in which the researcher delves deeply into a program, event, activity, process, or one or more individuals. The case or cases are characterized by specific timeframes and activities, and researchers gather extensive data through diverse data collection methods (Creswell & Creswell, 2017). This approach distinguishes itself from other methods through its holistic approach to information collection in natural settings and its utilization of purposive sampling techniques. Purposive sampling involves deliberately choosing participants based on specific traits, knowledge, experiences, or other relevant factors. (Algozzine & Hancock, 2017). The goal of case study research is to provide rich and detailed insights into complex phenomena and to generate new knowledge and understanding. Through the research, the objective is to gain a comprehensive understanding of the chosen case (Bryman, 2016), such as lessons-learned.

The case study will deliver these lessons by researching a case where both central concepts of the research (see figure 14 & 15) are inherently represented. In other words, the case involves a contemporary housing affordability challenge in which knowledge exchange has played and is playing a pivotal role. This way, the lessons will be as relevant as they can be for countries confronted with housing affordability issues as well as facilitators of knowledge exchange efforts. The complete research design is portrayed in figure 16 and elaborated upon below the figure.

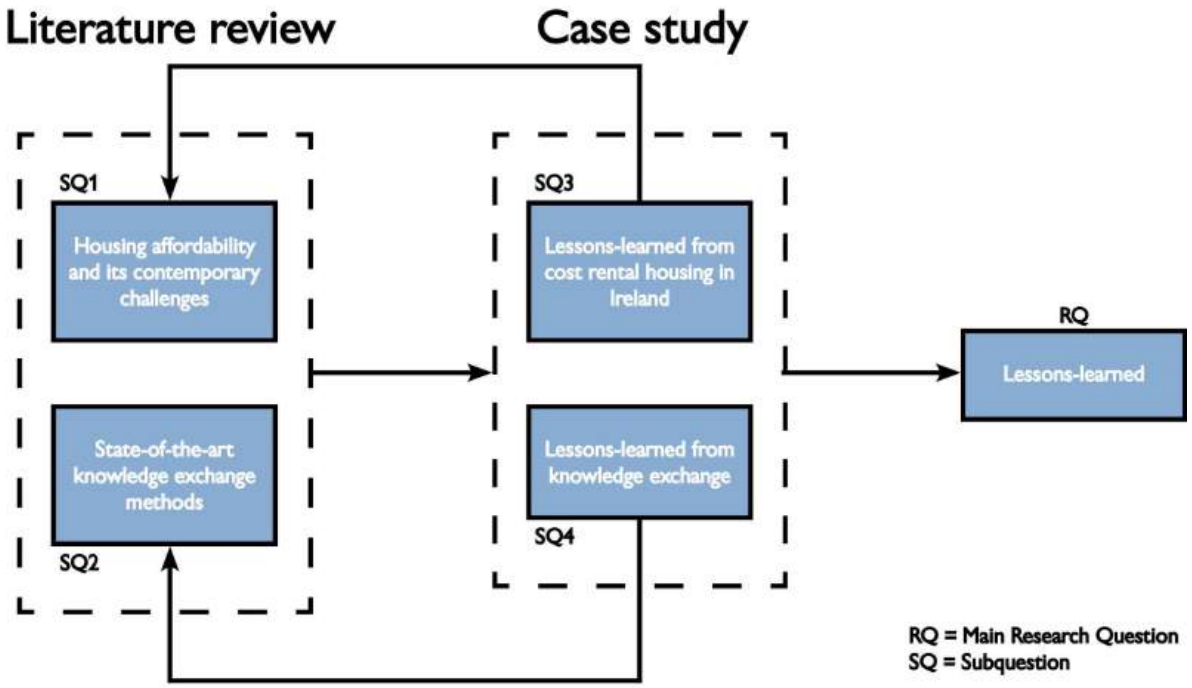

Figure 16: Case study research design of the thesis research (own work).

This research employs a two-phase case study design to explore lessons learned for transdisciplinary and transnational knowledge exchange in affordable housing provision in Europe. The first phase consists of a literature review, which addresses theoretical perspectives on housing affordability in Europe (SQ1) and state-of-the-art knowledge exchange methods (SQ2). This phase establishes a strong theoretical foundation for the research. The second phase involves a case study analysis of the introduction of cost rental housing in Ireland. This phase explores practical lessons through in-depth analysis of the case, amongst others mirroring the findings with the theoretical insights from the literature review. The case study addresses lessons-learned from both cost rental housing as a contemporary solution to housing affordability issues (SQ3) as well as the role of knowledge exchange efforts (SQ4) with all its applied methods, incentives, and experienced barriers and enablers. Ultimately, the combination of theory and empirical analysis from the case results in comprehensive lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe. The first phase of the case study research design about the literature review and the second phase about the case study analysis will be separately explained below.

Part 3.1.1 Phase 1: Literature review

The first phase of the case study research design consists of the literature review as shown in figure 17 underneath here. The review addresses two critical subquestions (SQ1 and SQ2) that guide the inquiry into the key concepts of affordable housing and knowledge exchange. The literature review explores these topics through relevant academic studies and policy reports, as will be further explained in part 3.2 about the data collection, setting the stage for the empirical findings in phase 2 about the case study analysis.

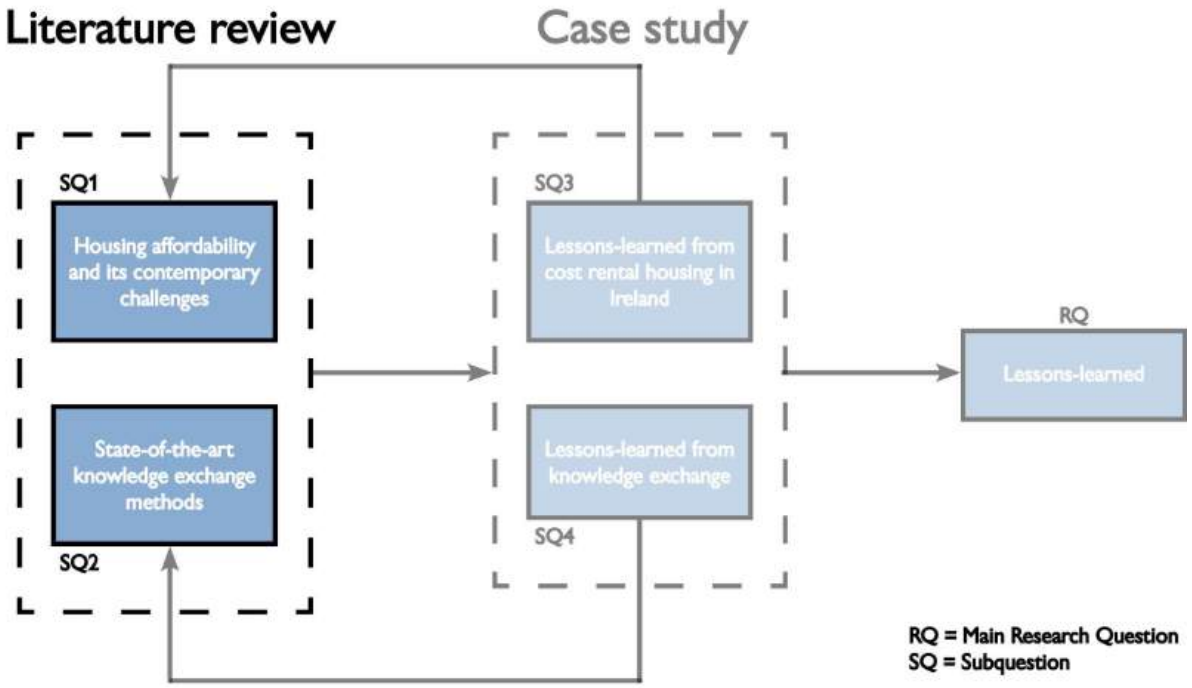

Figure 17: Literature review part of the case study research design (own work).

Subquestion 1 focuses on defining housing affordability and examining the contemporary challenges faced by European countries in providing affordable housing. The deliverable for this subquestion is a detailed description of what housing affordability entails and the current challenges in Europe. The purposes of this subquestion are threefold: (1) to establish a clear understanding of what constitutes housing affordability, (2) to identify the contemporary challenges of affordable housing provision in Europe, and (3) to build a theoretical foundation that will inform the lessons-learned from the introduction of cost rental housing in Ireland. By exploring this body of knowledge, the research provides a broad understanding of housing affordability, helping to position the case study within a wider European context.

Subquestion 2 examines the state-of-the-art methods for transdisciplinary and transnational knowledge exchange as they provide an overview of the current knowledge exchange concerned with housing affordability in theory and practice. The deliverable for this subquestion is a comprehensive description of these methods, along with an analysis of related knowledge exchange strategies. he purposes of this subquestion are: (1) to map the state-of-the-art knowledge exchange methods from both theory and practice, and (2) to build a theoretical foundation for the lessons-learned from the transdisciplinary and transnational knowledge exchange efforts in the Irish case study. In the end, this subquestion provides insights into the practical and theoretical approaches to knowledge exchange, offering a detailed understanding of the methods used to facilitate such exchanges across different actors and countries.

The literature review phase is therefore concluded by answering subquestion 1 about the central concept of housing affordability and subquestion 2 about the state-of-the-art knowledge exchange methods. Insights from the answers are essential for informing the case study analysis and mirroring the theoretical framework to the findings of the case study. This will amongst others reveal how closely the real-world case aligns with or diverges from the theories, ultimately leading to valuable lessons-learned. Figure 18 beneath here summarizes the explicit deliverables and purposes of both subquestions.

RESEARCH QUESTION	DELIVERABLE	PURPOSES
(SQ1) What is **housing affordability** and what are contemporary challenges with providing affordable housing in Europe?	Description of housing affordability and its challenges.	(1) To establish what housing affordability is; (2) To establish what the contemporary challenges of housing affordability in Europe are; (3) To build a theoretical foundation for the lessons-learned from cost rental housing in Ireland.
(SQ2) What are **state-of-the-art methods**, its barriers and opportunities, for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?	Description of state-of-the-art methods, with its enablers and barriers for transdisciplinary and transnational knowledge exchange.	(1) To map state-of-the-art methods for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe from theory, and (2) from practice; (3) To build a theoretical foundation for the lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland.

Figure 18: Deliverables and purposes of the subquestions answered in the literature review (own work).

Part 3.1.2 Phase 2: Case study analysis

The second phase of the research involves a detailed case study analysis of the introduction of cost rental housing in Ireland as highlighted in figure 19 below. This phase is designed to address two subquestions (SQ3 and SQ4) that focus on gathering lessons-learned from the practical implementation of cost rental housing and the associated knowledge exchange efforts. The ultimate outcome of this phase is the identification of lessons-learned, which will later be reflected upon and mirrored with the theoretical findings from the literature review in phase 1.

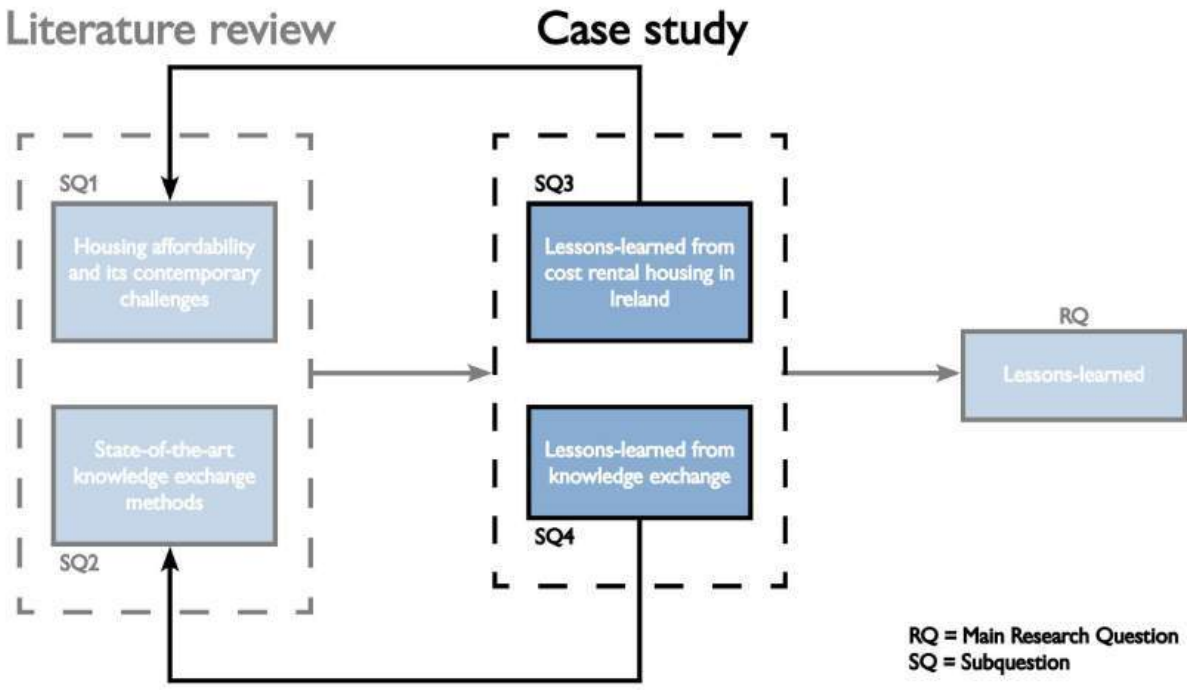

Figure 19: Case study analysis part of the case study research design (own work).

Subquestion 3 focuses on gathering lessons-learned from the introduction of cost rental housing in Ireland. The deliverable for this subquestion is a comprehensive set of lessons from the practical implementation of this housing model. The purposes of this subquestion are: (1) to gather key learnings from the Irish case as a notable example of addressing contemporary challenges in housing affordability, and (2) to mirror these lessons-learned from practice with the theoretical frameworks on affordable housing and cost rental models. These lessons-learned will

form a key outcome of phase 2 and contribute to a deeper understanding of how cost rental housing has been applied in Ireland and what lessons can be applied to other contexts facing similar challenges.

Subquestion 4 focuses on the transdisciplinary and transnational knowledge exchange efforts surrounding the introduction of cost rental housing in Ireland. The deliverable for this subquestion is a set of lessons-learned from the knowledge exchange methods applied, the barriers and enablers encountered, and the incentives driving participant involvement. The subquestion concerns four purposes: (1) to gather learnings from the methods applied in practice, (2) to identify the barriers and enablers experienced in the process, (3) to understand the incentives of participants in engaging with transdisciplinary and transnational knowledge exchange, and (4) to reflect upon the practical lessons in light of the theoretical knowledge exchange methods, barriers, and enablers explored in the literature review. The lessons-learned from this analysis will provide practical insights into how knowledge exchange efforts were applied in the Irish case, representing the second key outcome of this phase.

All in all, the case study analysis results in the identification of two sets of lessons-learned: (1) practical lessons from the implementation of cost rental housing (SQ3) and (2) lessons-learned from the knowledge exchange efforts (SQ4). These outcomes will be mirrored with the theoretical framework established in phase 1, revealing key alignments and divergences. The lessons-learned are the ultimate result of phase 2 and will contribute to answering the main research question. To briefly reiterate: the main research question is "*What are the lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?*". The deliverable for this question is a comprehensive set of lessons, which will provide valuable insights for both (1) the provision of affordable housing in Europe and (2) the methods, barriers, enablers, and incentives involved in transdisciplinary and transnational knowledge exchange on affordable housing provision. These lessons will be the ultimate contribution of this research, offering practical and theoretical guidance for future KE efforts in addressing housing affordability challenges across Europe. The deliverable and purposes of all research questions related to the case study analysis phase are summarized in figure 20 beneath here. With the two phases of the research design established, the following section outlines the specific case selection criteria for studying cost rental housing in Ireland as the to be analyzed case.

RESEARCH QUESTION	DELIVERABLE	PURPOSES
(SQ3) What are lessons-learned from the introduction of **cost rental housing** in Ireland?	Lessons-learned from the introduction of cost rental housing in Ireland.	(1) To gather learnings from the introduction of cost rental housing in Ireland as a striking example of tackling contemporary challenges on housing afforfability; (2) To be able to mirror lessons-learned from practice with affordable housing and cost rental housing theory.
(SQ4) What are lessons-learned from the **transdisciplinary and transnational knowledge exchange** with the introduction of cost rental housing in Ireland?	Lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland.	(1) To gather learnings from the methods applied in practice, (2) the barriers and enablers experienced, and (3) the incentives of participants to be involved with transdisciplinary and transnational knowledge exchange on cost rental housing in Ireland; (4) To be able to mirror lessons-learned from practice with knowledge exchange methods, barriers and enablers in theory.
(RQ) What are **lessons-learned** for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?	Lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.	To provide valuable lessons for (1) affordable housing provision in Europe and (2) transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.

Figure 20: Deliverables and purposes of the research questions answered in the case study analysis (own work).

Part 3.2 Case selection

The selection of the case study is a crucial component (Yin,, 2003) of the thesis research, as it determines the context in which the concepts of affordable housing and knowledge exchange are further explored. For this study, cost rental housing in Ireland was chosen based on four key criteria. First, the case needs to be highly relevant to the research questions, ensuring that it could address the goals of examining both affordable housing provision and knowledge exchange. Second, the context of the case requires active involvement in addressing affordable housing issues, ensuring that the case reflects contemporary initiatives. Third, it is important for the case to have a significant historical and current role in knowledge exchange, providing insights into the barriers and enablers that influence such efforts. Finally, accessibility to a diverse range of transdisciplinary stakeholders was crucial, as it allows for a comprehensive analysis of knowledge exchange across different fields and sectors. The detailed reasoning for why cost rental housing in Ireland was selected, based on the explained criteria, is presented in figure 21 directly underneath here.

CASE SELECTION CRITERIA AND REASONING FOR CHOOSING COST RENTAL HOUSING IN IRELAND		
CRITERIA		REASONING FOR CASE SELECTION
1	Relevant to research questions, purpose and goals	Cost rental housing in Ireland represents a contemporary and unique action to battle affordability chalenges. By focusing on this specific context, which is influenced by transnational knowledge exchange, the research is able to address critical gaps and challenges in the provision of affordable housing through transdisciplinary and transnational knowledge exchange.
2	Context with current action on affordable housing provision	Ireland has recently introduced initiatives aimed at expanding the provision of cost rental housing as a long-term, sustainable solution to housing affordability issues. The case study environment offers a rich context for examining the role of transdisciplinary and transnational approaches in shaping policy and practice related to affordable housing provision in Europe.
3	Historical and current, key role of knowledge exchange efforts	Transnational exchanges of knowledge on cost rental housing involving other European countries such as Austria, Denmark and Finland have played a pivotal role in the introduction of the cost rental model in Ireland. Transdisciplinary and transnational knowledge are and will be highly relevant for the Irish context, to the point to which Ireland is currently becoming a subject of transnational knowledge exchange itself.
4	Accessibility to transdisciplinary range of stakeholders	The cost rental housing sector in Ireland involves a transdisciplinary and diverse range of stakeholders, including the National Department of Housing, housing agencies, academics, practitioners, policy-makers and councils. This diversity provides an opportunity to explore different practices, experiences, and incentives related to knowledge exchange with affordable housing provision.

Figure 21: Criteria for case selection and reasons for selecting cost rental housing in Ireland (own work).

Part 3.3 Data collection

The data collection process for this research is designed to comprehensively address the subquestions (Blessing & Chakrabarti, 2009) and ultimately provide insights for answering the main research question. A completely qualitative approach is employed, combining literature study and case study methods to gather rich and detailed data. The data collection is organized into three key components. These components are integrated to gather data that captures both theoretical perspectives and empirical information.

The first data collection method involves an extensive literature study, which supports subquestions 1 and 2 by analyzing academic literature and policy reports. This phase establishes the theoretical foundation of the research, offering critical insights into housing affordability challenges and state-of-the-art knowledge exchange methods. Next, the research employs interviews as a key method to explore lessons from practice with subquestions 3 and 4. By engaging with all stakeholders involved in the implementation of cost rental housing in Ireland, the study gathers firsthand insights of the experiences related to cost rental housing and associated knowledge exchange efforts. Complementing the interviews, the third data collection method focuses on document analysis. This involves examining relevant documents such as policy papers, blogs and reports to assist the interview findings and provide a more robust

understanding of the case. Together, these data collection methods are put in place to ensure that the research thoroughly explores the central constructs of the study, providing a well-rounded analysis that bridges theory and practice. Figure 22 provides a comprehensive overview of all methods applied for the collection of data, in accordance with the case study research design parts of figure 16.

DATA COLLECTION METHODS					
		QUALITATIVE	QUALITATIVE	QUALITATIVE	QUALITATIVE
RESEARCH QUESTION	RESEARCH DESIGN PART	LITERATURE STUDY: ACADEMIC	LITERATURE STUDY: POLICY REPORTS	CASE STUDY: INTERVIEWS	CASE STUDY: DOCUMENTS
Main research question (RQ)	Outcome				
Subquestion 1 (SQ1)	Literature review	X	X		
Subquestion 2 (SQ3)	Literature review	X			
Subquestion 3 (SQ4)	Case study analysis		X	X	X
Subquestion 4 (SQ5)	Case study analysis			X	X

Figure 22: Sources of data collection for the research of each research question (own work).

Part 3.3.1 Literature study

The literature study forms the foundation of this research, addressing the first two subquestions related to housing affordability and state-of-the-art knowledge exchange (KE) methods. These two topics are central to the research, and the literature study is designed to provide a robust theoretical foundation by exploring existing knowledge on these subjects.

To address subquestion 1, the literature study focuses on defining and understanding the concept of housing affordability and the contemporary challenges associated with its provision in Europe. This involves a detailed review of both academic sources and current policy reports from European institutions, which provide valuable insights into the ongoing efforts and difficulties faced by different countries. For subquestion 2, the literature study shifts focus to the methods and strategies used in transdisciplinary and transnational knowledge exchange within the context of affordable housing. This includes an examination of theoretical frameworks as well as practical applications, as documented in academic literature and supported by data from relevant websites, reports from knowledge exchange networks, and blogs related to cost rental housing from interviewed parties.

The desktop study for the literature review was conducted using a systematic approach, with specific search terms tailored to each subquestion. For subquestion 1, search terms included various combinations of keywords such as “affordable”, “housing” and “challenges,” among others. These terms were combined using Boolean operators (AND, OR, NOT) to refine the search results and ensure comprehensive coverage of the topic. An example search query for this subquestion might therefore be: “affordable housing” AND “Europe” AND “challenges.” Similarly, for subquestion 2, search terms focused on methods and strategies related to knowledge exchange, using keywords like “method”, “strategy” and “knowledge exchange”. An example search query for the subquestion might be: “knowledge exchange” AND “methods” AND “housing.” A complete list of the search terms used for both subquestions is provided in figure 23 beneath here. By systematically exploring these topics through a well-structured literature review, this research establishes a comprehensive theoretical foundation. This foundation not only addresses the variables of housing affordability and state-of-the-art KE methods but also informs the subsequent case study analysis

SEARCH TERMS USED IN LITERATURE STUDY OF RESEARCH QUESTIONS	
RESEARCH QUESTION	SEARCH TERMS USED
Subquestion 1 (SQ1)	Different combinations of [AND, OR, NOT]: "*affordability*", "*affordable*", "*housing*", "*definition*", "*Europe*", "*provision*". "*providing*", "*challenges*", "*similar*", "*European*", "*actor*", "*knowledge exchange*", "*knowledge transfer*", "*knowledge sharing*", "*transdisciplinary*" & "*transnational*"
Subquestion 2 (SQ2)	Different combinations of [AND, OR, NOT]: "*method*", "*strategy*", "*theory*", "*approach*", "*mechanism*", "*mode*", "*activity*", "*instrument*", "*tool*", "*intermediary*", "*network*", "*broker*", "*dissemination*", "*barrier*", "*enabler*", "*facilitator*", "*knowledge exchange*", "*knowledge transfer*", "*knowledge sharing*", "*transdisciplinary*", "*transnational*", "*affordable*", "*affordability*", "*housing*" & "*Europe*".

Figure 23: Search terms used in the literature studies related to the subquestions (own work).

Part 3.3.2 Case study: Interviewing

In conducting case study research, evidence can be derived from multiple sources, including documents, archival records, interviews, direct observation, participant-observation, and physical artifacts (Yin, 2003). Among these, interviews are particularly valuable for gathering rich, personalized information, making them a key method in this research. Regardless of the source, it is essential to gather relevant data by spending time in the field and utilizing more than one source of information (Algozzine & Hancock, 2017; Creswell, 2012; Yin, 2003). For this case study, apart from documents (see part 3.3.3), a semi-structured interview approach is employed. Semi-structured interviews are well-suited for case study research as they allow the researcher to pose predetermined but adaptable questions. This method enables the author to obtain tentative answers while also allowing for flexibility in exploring topics that the interviewees themself introduce. This approach encourages interviewees to express themselves freely and articulate their perspectives, providing insights beyond the researcher's preconceived notions (Algozzine & Hancock, 2017; Mason, 2002), which seems especially beneficial because the context is new to the author.

The specific knowledge exchange aspects under study are directly linked to the conceptual framework shown in figure 15. Within the space of communication of the framework KE methods are applied, which are to be gathered from interviewees and subsequently analyzed. Additionally, the framework distinguishes between cultures of enquiry and reception, each with unique incentives for participation in knowledge exchange. These incentives, along with the distinct barriers and enablers faced by each culture, will also be collected from the interview data for analysis. The rationale for studying these elements is grounded in the literature: reviewing and learning from previous methods is crucial for designing effective knowledge exchange strategies (Cvitanovic et al., 2016; Reed et al., 2014). Moreover, understanding the incentives for engagement (Reed et al., 2014) and identifying barriers and enablers with input from both researchers and users (Cvitanovic et al., 2016; Reed et al., 2014) are essential for tailoring knowledge exchange interventions to the specific context of housing affordability.

To gather qualitative data effectively, detailed planning is crucial (Mason, 2002; Punch, 2013). Five key guidelines are followed in this process, as outlined in figure 24 below. The first step in identifying participants is purposive sampling, where individuals and locations are deliberately chosen to gain insights into the central phenomenon under study (Algozzine & Hancock, 2017; Creswell, 2012).

GUIDELINES FOR GATHERING QUALITATIVE DATA	
1.	Identify participants and sites for the study while using a sampling strategy that aligned with the central topic and research questions.
2.	Gain access to individuals and sites by obtaining necessary permissions.
3.	Consider the types of information that will best address the research questions once permissions are secured.
4.	Design protocols for collecting and recording information.
5.	Collect the data, while making sure to be extra careful about any ethical issues.

Figure 24: Guidelines for gathering qualitative data applied for this research (own work, based on Creswell (2012) and Algozzine & Hancock (2017)).

Participants are initially identified through Dutch contacts from which Irish contacts related to cost rental housing provision and research were able to enrich the list of interviews with more and different perspectives through snow-balling. This approach ensures a diverse range of perspectives, which is essential for exploring the transdisciplinary aspect of knowledge exchange with cost rental housing in Ireland. A complete but anonymized list of all interviewees involved in the case study research is provided in figure 25 underneath here.

LIST OF INTERVIEW TYPES, CULTURES, ORGANIZATIONS AND LOCATIONS					
	INTERVIEW TYPE	CULTURE	TYPE OF INTERVIEWEE	ORGANIZATION	LOCATION
1	Semi-structured	Enquiry	Academic	NUI (National University Ireland) Galway	Galway
2	Semi-structured	Reception	Provider	Respond Housing Association	Dublin
3	Semi-structured	Enquiry	Academic	University College Dublin (UCD)	Dublin
4	Semi-structured	Reception	Representative housing body	Irish Council for Social Housing (ICSH)	Dublin
5	Semi-structured	Reception	Provider	Clúid Housing Association	Dublin
6	Semi-structured	Enquiry	Academic	Trinity College Dublin	Dublin
7	Semi-structured	Reception	Housing agency & Provider	The Land Development Agency (LDA)	Dublin
8	Semi-structured	Reception	Provider	Tuath Housing	Dublin
9	Semi-structured	Reception	Provider	Circle Voluntary Housing Association	Dublin
10	Semi-structured	Enquiry & Reception	Governmental housing agency	The Housing Agency	Dublin

Figure 25: List of interviewees established for the case study analysis (own work).

The target group for the interviews therefore consists of actors actively involved with cost rental housing in Ireland and connected knowledge exchange efforts. Depending on whether the interviewee represents a culture of enquiry (research) or a culture of reception (practice), a tailored interview protocol is applied. This allows the research to capture real-life insights into both cost rental housing and the associated transdisciplinary and transnational knowledge exchange efforts. The sample size for the interviews is based on ensuring that all providers, academics, agencies, and representative housing bodies involved in cost rental housing in Ireland are interviewed, with a minimum target of ten interviews. This approach ultimately resulted in ten interviews (see figure 25), successfully fulfilling the requirement of including all relevant stakeholders, except for one academic who was unfortunately unavailable for an interview. The interviews were however conducted in Ireland, allowing for face-to-face interaction. This in-person approach offered significant benefits, particularly in terms of building trust and achieving a deeper level of understanding that is often difficult to attain through remote tools (Arevalo et al., 2023; Cvitanovic et al., 2021).

Figure 25 also shows that the five types of stakeholders involved in this study are providers, housing agencies, academics, national departments of housing, and representative housing bodies. Each of these stakeholders offers a unique perspective on the case, the knowledge exchanged, and the methods applied to achieve it. To ensure the best results and responsible processing of data, an interview protocol (detailed in Appendix 2) and a consent form (included in Appendix 3) are used. The interview questions are tailored to each stakeholder's position in the conceptual framework, considering whether they belong to the

culture of enquiry or reception and the specific barriers they face in knowledge exchange. Throughout the interview process, the researcher remains aware of potential human biases and reflexive tendencies (Yin, 2003) and takes precautions to avoid legal or ethical violations (Algozzine & Hancock, 2017; Mason, 2002). Further details on the interview process are provided in Part 3.4 on data analysis and Part 3.5 on ethical considerations).

Part 3.3.3 Case study: Documents

Integrating document analysis with interview data allows the researcher to build a richer and more comprehensive understanding of the case (Algozzine, B., & Hancock, D., 2017). While Yin (2003) emphasizes that documents primarily support and add context to evidence obtained from other sources, their inclusion is crucial for confirming interview findings and providing additional perspectives. Therefore, for the case study of cost rental housing in Ireland, the relevant documents include reports from organizations associated with the interviewees, policy reports on cost rental housing in Ireland like the Housing Europe (2022) report, and various blogs or reports authored by the interviewees themselves. As shown previously in figure 22, this document analysis does not include an academic literature review, as the theoretical foundation for housing affordability and state-of-the-art knowledge exchange methods is already established through the first two subquestions of the research.

While reports and other documents do play a central role in this case study, it is important to approach them critically. According to Yin (2003), documents should not be treated as absolute truths, especially considering that each document, particularly those like blog posts, is created with a specific purpose and audience in mind, often unrelated to the current research. Therefore, when using documents as a source, it is important to consider both the advantages and disadvantages outlined in figure 26. This approach helps reduce the risk of being misled by documentary evidence and enhances the ability to critically interpret the content. In conclusion, the systematic use of documents in this research enriches the overall data collection process and supports the evidence gathered from interviews. The subsequent section will elaborate on how the data gathered from all research questions is analyzed and interpreted.

ADVANTAGES AND DISADVANTAGES OF USING DOCUMENTS WITH CASE STUDY ANALYSIS BASED ON YIN (2003)		
	ADVANTAGES	DISADVANTAGES
1	Stable nature of the source	Low retrievability
2	Non-intrusive character	Biased selectivity when a collection of documents is incomplete
3	Exact nature of the source	Reflection bias when reporting about documents
4	Broad coverage of the source	Inaccesibility of certain sources

Figure 26: Listing of advantages and disadvantages of using documents with the case study (own work, based on Yin (2003)).

Part 3.4 Data analysis and interpretation

This part proposes how the data analysis and interpretation will be carried out. Based on the research questions and data collection methods, three types of data analysis and interpretation are distinguished. Those are data analysis of collected data from: the literature study, both the interviews and documents from the case study, and the interpretation of all findings. All three are shortly discussed after the introduction of this part. As figure 22 already depicted, this thesis research only makes use of qualitative research methods. However, a common mistake with analyzing qualitative studies is the absence of a clear strategy (Yin, 2003). The researcher will therefore follow a predetermined strategy including specific steps to be taken. Looking at the analysis process practically, zooming in on data analysis of the qualitative methods applied, six steps are identified (Creswell, 2012). All of these steps and their relationships are included in

figure 27. By following these guidelines for both the analysis of the data gathered from literature as well as the case study, the researcher ensures a clear and comprehensible analysis.

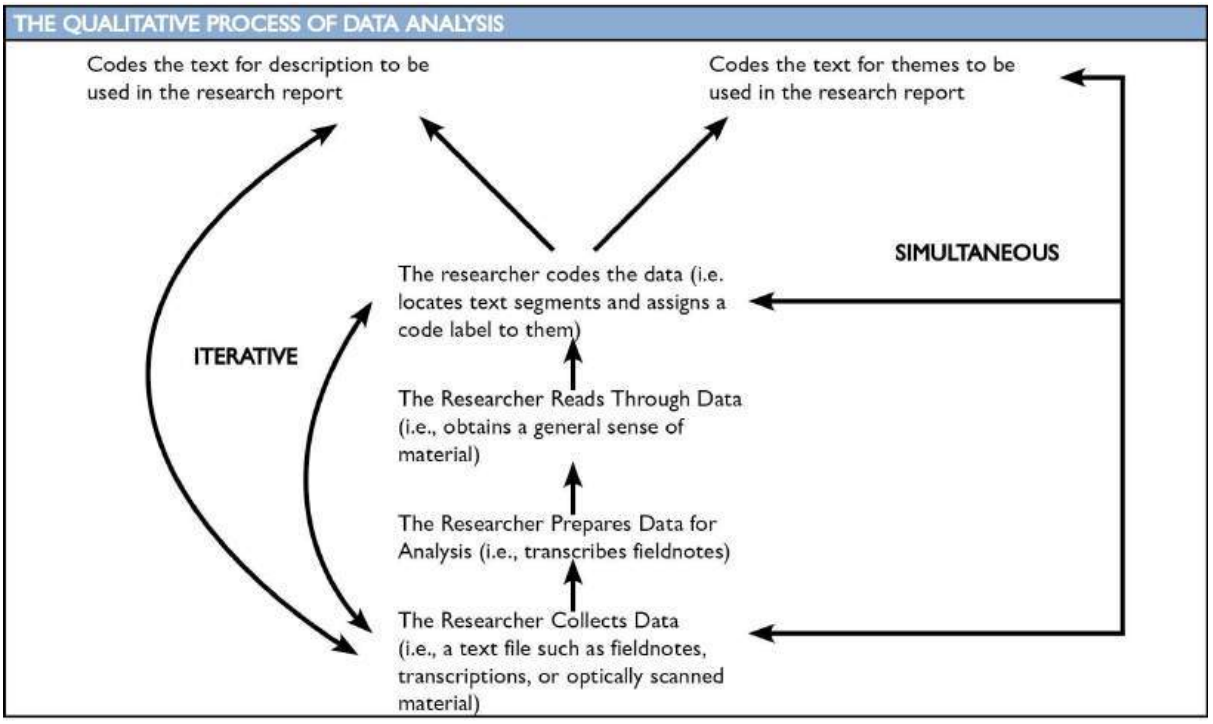

Figure 27: The qualitative process of data analysis (own work, based on Creswell (2012)).

To be able to classify the analysis as good social science research, the study complies with four principles established by Yin (2003). The analysis firstly shows consideration of every piece of evidence. Second, all important alternative interpretations are as far as possible addressed. Thirdly, the analysis focuses on the most significant aspects of the case study. Fourth, the previous expertise and knowledge of the researcher is applied. Next, the analysis of the data from the literature study, the interviews, documents and interpretation of all findings are discussed.

Part 3.4.1 Literature study

The data collected from the literature study directly addresses the first two subquestions of this research, focusing on cost rental housing as a measure for housing affordability and on state-of-the-art methods in transdisciplinary and transnational knowledge exchange for affordable housing in Europe. To analyze this data, the framework outlined in figure 27 is applied, guiding the organization of the collected literature and the identification of themes and patterns across the various sources.

To efficiently manage the substantial volume of literature, a structured database or reference management software is used. The analysis begins with thematic analysis, a common qualitative method that involves identifying and interpreting recurring themes, patterns, and relationships within the qualitative data (Algozzine & Hancock, 2017). This method, often utilized by novice researchers, is particularly effective for organizing and interpreting textual data, as demonstrated by Halliday et al. (2022) and Ward et al. (2009) in their research on knowledge exchange. The themes derived from this analysis will be closely aligned with the research questions, providing a structured basis for further investigation. Following the thematic analysis, a comparative analysis will be conducted, similar to the approach used by Dickey et al. (2022).

This step examines the similarities and differences among the identified themes across various studies and sources. By comparing these themes, the analysis will reveal variations in approaches, methodologies, and findings related to both housing affordability and its contemporary challenges as well as transdisciplinary and transnational knowledge exchange in affordable housing initiatives. The synthesized findings from both thematic and comparative analyses will be interpreted in relation to the research questions, aiming to uncover insights into both the state-of-the-art methods and the broader context of housing affordability in Europe.

In conclusion, the combined use of thematic and comparative analyses will provide meaningful insights into the dynamics of both housing affordability as well as transdisciplinary and transnational knowledge exchange in affordable housing initiatives across Europe. These insights will inform the subsequent stages of the research, guiding the development of a robust set of findings that will contribute to answering the later subquestions (SQ3 and SQ4) and the main research question.

Part 3.4.2 Case study: Interviews

In case study research, data interpretation is an ongoing process that often leads to preliminary conclusions, which may require adjustments to the research questions or conceptual framework (Algozzine & Hancock, 2017; Creswell, 2012). Researchers follow specific guidelines to summarize and interpret the information collected during the study, ensuring that the analysis remains systematic and coherent (Algozzine & Hancock, 2017; Yin, 2003). This approach is also applied in this research, with the framework depicted in figure 27 guiding the analysis of qualitative data from the interviews.

As described in part 3.3.2, interview data will be collected through semi-structured interviews (see Appendix 5 for the interview protocol) with key stakeholders involved in cost rental housing initiatives in Ireland. The first step in preparing the interview data for analysis (see figure 27) involves recording each interview using an audiotape, as this provides the most accurate representation of the conversation (Algozzine & Hancock, 2017; Creswell, 2012; Yin, 2003). The interviews will be recorded using a Dictaphone app on an iPhone, with backup notes taken during the interview, as recommended by Creswell (2012). These recordings will then be transcribed using an AI tool, with the researcher reviewing the transcripts for completeness and accuracy. This approach to transcription helps mitigate the time-consuming nature of manual transcription. Following transcription, thematic coding will be employed to analyze the data. Thematic coding involves assigning code labels to text segments, thereby reducing the data to meaningful descriptions and themes related to the research questions (Creswell, 2012). This process is iterative, involving constant comparison and refinement of codes and themes to ensure a robust analysis. Upon request, the transcripts of the interviews will be made available by the researcher.

As a follow up, a cross-case analysis (Miles & Huberman, 1994) will be conducted to compare and contrast the findings across different interview participants. This analysis will help identify both commonalities and differences in perspectives, experiences, and practices related to transdisciplinary and transnational knowledge exchange in cost rental housing initiatives. The cross-case analysis serves as the final step in the data analysis process, allowing for a deeper understanding of the diverse stakeholder perspectives.The findings from the interview analysis will be integrated with the literature findings from subquestions 1 and 2 to provide a comprehensive understanding of transdisciplinary and transnational knowledge exchange in affordable housing. This integration aims to highlight similarities and differences between the

theoretical claims and real-world practices. Only this way the added-value of the case studies is exploited as best as possible.

All in all, this section outlines a structured approach to analyzing specifically the interview data collected as part of the case study for subquestion 3 and 4. The application of thematic coding, cross-case analysis, and the integration with literature findings will lead to meaningful insights into cost rental housing itself as well as transdisciplinary and transnational knowledge exchange in cost rental housing initiatives in Ireland. This approach ensures that the objectives of both subquestions 3 and 4, as depicted in figure 20, are effectively achieved.

Part 3.4.3 Case study: Documents

The aims and applied framework for analyzing documents in the case study are consistent with those used for the interviews. Therefore, these details will not be reiterated here. Applying the same analytical framework to the documents ensures consistency in the analysis process and guides the systematic extraction of relevant data to address the research objectives. As outlined in Part 3.3.3, documents relevant to cost rental housing initiatives in Ireland will be collected from various sources, including government reports, blogs, and organizational publications. Some of these documents will be obtained directly from interviewees and their associated organizations. Once collected, all documents will be compiled and organized for systematic analysis. The data extraction process will involve identifying and categorizing relevant information based on predetermined themes, such as 'methods,' 'barriers,' 'enablers,' and 'incentives,' as aligned with the research questions and purposes. This information will be coded using a coding scheme developed to systematically categorize and interpret the key findings.

Similar to the interview analysis, the document analysis will involve thematic and comparative analysis. However, the findings from the document analysis will also be compared with those from the interview analysis. This cross-comparison helps to validate the findings, ensuring consistency and providing a more comprehensive understanding of transdisciplinary and transnational knowledge exchange in cost rental housing initiatives in Ireland. Additionally, the data extracted from the documents will be integrated with the literature findings from the earlier subquestions to enrich the analysis and provide a broader context for interpretation.

By employing document analysis techniques, alongside thematic and comparative analysis, and integrating the findings with those from the interviews and literature review, this research will establish meaningful insights. These insights will be synthesized in relation to the research questions and objectives, contributing to a robust understanding of the dynamics involved in transdisciplinary and transnational knowledge exchange in the context of cost rental housing.

Part 3.4.4 Integration of all findings

This section outlines the process of integrating the findings from the literature study and the case study to address the main research question. The integration of findings is a critical step in synthesizing the qualitative data collected from both the literature and the case study, providing a comprehensive understanding of transdisciplinary and transnational knowledge exchange in the context of affordable housing. To achieve this, a thematic analysis will be applied to organize and interpret all the gathered data systematically. Thematic analysis allows for the identification of overarching themes and patterns that emerge across different data sources, enabling the research to draw connections between theoretical insights from the literature and empirical

findings from the case study (Algozzine & Hancock, 2017). This synthesis is crucial for deriving meaningful lessons-learned that are relevant to the main research question.

However, it is important to acknowledge the subjective nature of interpretation inherent in thematic analysis. The integration of findings requires the researcher to exercise judgment and make interpretive decisions based on their understanding of the data. This subjectivity can influence the conclusions drawn from the research, and as such, it is vital to approach the analysis with transparency and reflexivity. The implications of this subjectivity, and the strategies to mitigate its impact, will be discussed in the following sections: part 3.5 on ethical considerations and part 3.6 on the data management plan.

Part 3.5 Ethical considerations

Throughout every stage of the research process, the researcher will show awareness for ethical practices. This stretches the complete lifecycle of the research process, from origins to conclusion and dissemination. Specifically, the phases of data collection, data reporting and data distribution are faced with ethical considerations (Creswell, 2012). This involves not just conducting data generation and analysis in a moral way but also planning research and framing questions in an ethical manner. The challenge of acting in an ethical manner during the research process revolves around the unavoidable influences of interests, even conflicting ones. Hence, the notion that there is a single ethical or moral path that is equally fair to everyone may seem appealing in theory but is challenging to implement in practice (Mason, 2002). In general there are three basic principles from which specific guidelines origin: "*...the beneficence of treatment of participants (maximizing good outcomes and minimizing risk), respect for participants (protecting autonomy and ensuring well-informed, voluntary participation), and justice (a fair distribution of risk and benefits)*" (Creswell, 2012). These principles and guidelines are followed throughout the research. In accordance with Creswell (2012), the ethical considerations of the researcher with collecting, reporting and distributing data are discussed below.

<u>Considerations with data collection</u>

The first significant moment to apply named principles is in the data collection phase. The specific issues in collecting the data are directly related to the type of research design (Creswell, 2012). Mason (2002) suggests that all the ethical considerations raised in connection with interviewing also apply in the context of documentation. Figure 28 provides a checklist established by Patton (2002), which lists the general ethical issues to take into consideration. The list will be applied and function as a guide for the researcher to follow and ensure an ethically sound study.

ETHICS CHECKLIST	SPECIFICS
1. EXPLAIN THE PURPOSE OF THE RESEARCH	- Accurate & understandable - Use lay language (no jargon) - Decide what should and should not be shared - How will the research contribute to society, their community, the world?
2. PROMISES AND REPROCITY	- Don't make promises you won't or can't keep - Why should the participant take part in the research? - What's the benefit to them?
3. RISK ASSESSMENT	- How will this put the participant(s) at risk? - Could there be legal implications? - Could the study cause psychological distress? - If you uncover controversial information, how should be shared? - How will you communicate potential risk and handle issues that arise?
4. CONFIDENTIALITY	- What are the commitments that can be honored? - Confidentiality - you know identity but will maintain confidentiality - Anonymity - you do not know the identity of participants - What information will be changed? - What information can you NOT promise to keep confidential - Data storage & maintenance (time and place)
5. INFORMED CONSENT	- Is it necessary? What kind will work for the situation? - IRB guidelines - what are they, how are they followed, and what needs to be submitted to them?
6. DATA ACCESS AND OWNERSHIP	- Who will have access and why? - Ownership of data - Who communicates this to the participant(s)? - Who (if anyone) can review findings/data/paper before release or publication?
7. INTERVIEWER MENTAL HEALTH	- Will interviewer(s) be negatively impacted by study? - Could there be a need to talk about the experience? Can this be done without breaching existing contracts? - How will interviewer(s) care for themselves?
8. ADVICE	- Who will be the go-to person or persons for the researcher during the study regarding ethics issues that may arise?
9. DATA COLLECTION BOUNDARIES	- To what extent will you press participants for data? - Where will you draw the line? - What if participants become uncomfortable?
10. ETHICAL VS. LEGAL	- Develop an ethic framework/philosophy - Go beyond what is required by the law - Will you have a professional or disciplinary code of ethics as a guide?

Figure 28: Ethics checklist applied in this research (own work, based on Patton (2002)).

While collecting data from interviews, the researcher strives to anticipate ethical dilemmas ahead of time where possible. The checklist in figure 28 will be applied before and during interviews. It is however clear that not every situation can be foreseen. Despite this, the researcher prepares himself by thinking through the types of ethical issues that might come up and considering how he might respond to them. This kind of preparation will help to think and act in an ethically principled way even when faced with the unexpected (Creswell, 2012). To be more concrete, an interview protocol (see appendix 2) is used and informed consent forms are filled in before the interview. The consent is confirmed by a recording of the interviewer asking the participants about their consent and if they still have any questions about the form. The recording itself only starts after the interviewees gave permission for it. Participants will be anonymized in the report and when this thesis report is finished, the recordings will directly be removed.

Considerations with data reporting and distribution

After the ethical issues in the data collection phase, the reporting of data is faced with ethical dilemmas as well. An important aspect is having respect for audiences who read and utilize information from the study. The data is thus reported truthfully. This is achieved by avoiding manipulation or alteration of findings to align with specific predictions of the author. Additionally, it is imperative not to plagiarize studies conducted by others, and proper credit is given for material quoted from other studies. This acknowledgment includes citing the authors, the publication date, and listing the publication in the reference section of the study. Moreover,

the research avoids complicated language and presents it in a way that is comprehensible to the participants and readers of the study. The researcher also commits to efforts of conveying the practical significance of the research to the community of researchers and practitioners. To conclude, what is researched will not remain unpublished and be openly shared among colleagues. Figure 29 below lists the explicit actions that the researcher takes to ensure ethical reporting in line with Creswell (2012).

ACTIONS	SPECIFICS
1. HONEST REPORTING	- Refrain from falsifying data - Refrain from omitting inconvenient results - Avoiding the fabrication of artificial data, figures, or tables - Refrain from creating or attributing inaccurate quotes to individuals
2. SHARING DATA	- Provide copies of reports to participants - Refrain from jargon - Do not leave research unpublished - Keep the raw data for minimal 5 years
3. REFRAIN FROM DUPLICATION AND FRAGMENTED PUBLICATION OF DATA	- Reflect the indepence of seperate research efforts - Do not submit previously published work
4. GIVE CREDIT TO WORK OF OTHERS	- Refrain from (self-)plagiarism - Do not claim words and ideas of other without quotations
5. QUESTION POSSIBLE CONFLICT OF INTERESTS	- Prevent bias through personal interests - Ask who will profit from the research - Sign forms which indicates no conflict of interest
6. TAKE CREDIT	- Establish credit for authorship early in a study - Assess and reassess student-faculty authorship for publications

Figure 29: Actions taken by the researcher to ensure ethical reporting (own work, based on Creswell (2012)).

Another crucial aspect of data reporting is the written language used in the study. The main objective for the researcher is to refrain from introducing bias. The researcher succeeds when demeaning attitudes, biased assumptions and uncomfortable phrasings that imply prejudice are avoided. Examples of the latter are biases suggested because of *gender*, *sexual orientation, racial* or *ethnic group, disability,* or *age* (Creswell, 2012). The research will be precise, free of stereotypical labels and attentive of participation of involved individuals in a study. Finally, standard research terms and accessible wording will be used in the report. These steps are based on advice from Creswell (2012). Also, the research will comply with the APA manual (2012). The overview of the data management plan in the next part will go into more depth about data security, storage, sharing and accessibility.

Part 3.6 Data Management Plan

The data management plan or DMP ensures that data is handled safely, legally, and ethically, with a focus on maintaining participant anonymity and data security throughout the research lifecycle. The crucial parts are briefly discussed below.

Data collection

There are first of all six general types of data that have to be made explicit in the data management plan. Qualitative text data, as part of the literature study, is collected from openly accessible written works such as journal publications and books, mainly through the use of Google Scholar. Besides this, the performed case study is the main source of sensitive data which is addressed in the plan. Participants' name and email addresses are Personally Identifiable Information (PII) which is collected with the sole purpose of consent and communicating with participants. Furthermore, the Personally Identifiable Research Data (PIRD) collected consists of audio-recordings and professional opinions captured from the interviews.

The transcriptions and the opinions included are anonymized, and participants are asked to review the transcriptions of their interview before the transcript is finalized. Lastly, the thesis itself serves as a record of the process as well as long-term documentation.

Data Storage and Security

The primary research data storage is OneDrive, which only the researcher and supervisor have access to. Interview data will be stored in separate folders, and within the interview folder, there are separate folders for audio-recordings and anonymous transcriptions. Informed consent forms (see appendix 3) and contact information are encrypted separately from research data to minimize risk of re-identification. The physical informed consent forms are also stored in a locked safe in a locked home. An external recording device is the only other, temporary storage location used for recorded on-site interviews. Interviews will be deleted from the device as soon as they are moved to OneDrive. To conclude, any personal data used will not be shared with individuals/organizations outside of the EEA (European Economic Area).

The anonymised research data, consisting of anonymised interview transcripts and anonymised coded datasets, will be used in the body of the thesis, but will not be shared in a data repository. Furthermore, audio-recordings of interviews are destroyed after completing the anonymised interview transcriptions. All other personal research data will be destroyed at the latest 2 years, under the responsibility of a supervisor, after the end of the project.

To conclude, several measures are implemented to mitigate risks associated with handling sensitive data. The critical measurements are informed consent, data anonymization, encryption and secure storage, and access control. Therefore, the DMP ensures the responsible management of data, with stringent measures to protect sensitive information and uphold ethical standards, thereby contributing to valuable research on affordable housing provision in Europe.

Chapter 4 State-of-the-art methods for knowledge exchange

Chapter 4 directly answers the second subquestion: "What are state-of-the-art methods, its enablers and barriers, for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?" This chapter thoroughly examines contemporary knowledge exchange methods and strategies applied in the context of housing affordability. By addressing this subquestion, the chapter provides crucial insights that inform the practical application of these methods in the context of affordable housing, setting the stage for the subsequent case study analysis. Ultimately, the chapter delivers a comprehensive overview of state-of-the-art methods for transdisciplinary and transnational knowledge exchange in Europe's affordable housing sector.

Part 4.1 Knowledge exchange methods from theory

First and foremost, although conceptual understanding of knowledge exchange (KE) has progressed, there has been a lack of guidance to aid scientists and decision-makers in designing and implementing methods (Cvitanovic et al., 2015; Fazey et al., 2013; Perry & May, 2010; Reed et al., 2014) that actively promote knowledge exchange. Consequently, knowledge exchange efforts are often carried out on an ad-hoc basis, lacking substantial theoretical, methodological, or empirical foundation (Cvitanovic et al., 2016; Reed et al., 2014). Designing a tailored-made knowledge exchange intervention, dictated by the specific context (Contandriopoulos et al., 2010; Stevenson & Baborska-Narozny, 2018; Ward et al., 2009) and with input from researchers and users (Cvitanovic et al., 2016; Reed et al., 2014), is therefore advised (Dobbins et al., 2009; Jansson et al., 2010; Mitton et al., 2007; World Bank, 2013; Yamey et al., 2016). This way knowledge exchange involves "*…processes that generate, share and/or use knowledge through various methods appropriate to the context, purpose, and participants involved.*" (Fazey et al., 2013). Designing and implementing strategies or methods that actively promote knowledge exchange can be accomplished by reviewing and learning from previous strategies and methods (Cvitanovic et al., 2016; Reed et al., 2014). Even though, as concluded in the theoretical framework of this research, there is no one-size-fits-all approach to implementing knowledge exchange (Abu-Rumman, 2021; Contandriopoulos et al., 2010; De Jong & Edelenbos, 2007; Fox, 2010; Grimshaw et al., 2006; Mitton et al., 2007; Nooteboom, 2000).

That given might explain the lack of research on knowledge exchange methods in general and absent research on methods concerned with housing, let alone housing affordability. Apart from general KE methods (Abu-Rumman, 2021; World Bank, 2013), the conducted research concerns knowledge exchange in the fields of health care (Dobbins et al., 2009; Mitton et al., 2007; Yamey et al., 2016; Zhao et al., 2020), environmental science and policy (Karcher et al., 2021), and more. Another possible explanation for low amounts of KE research could be the very broad number of 'instruments', 'tools', 'activities', 'modes' 'mechanisms', 'approaches', 'strategies' and 'theories' that can be regarded as a 'method'. The next part will therefore address all the possible sources where state-of-the-art methods for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe can be found.

As stated, research on knowledge exchange methods is vast and diverse, encompassing not only strategies and approaches but also theories, tools, instruments, and activities, reflecting the multifaceted nature of this field. A striking example is the consideration of a workshop as a strategy by Mitton et al. (2007), as an instrument by the World Bank (2013) and as a method by Abu-Rumman (2021). For the convenience of this research, the more comprehensive knowledge exchange approaches, strategies and theories and more explicit methods, instruments, tools,

activities and mechanisms are considered separately. A study by Reed et al. (2014) supports the division between strategies and methods by listing the identification of mechanisms, integration of activities and identification of communication modes as elements of knowledge exchange strategies. All elements of knowledge exchange strategies according to them are shown in figure 30 below.

	TYPICAL ELEMENTS OF KNOWLEDGE EXCHANGE STRATEGIES BY REED ET AL (2014)
1	Identifying KE mechanisms that could be used to achieve specific outcomes associated with each of the project's KE objectives.
2	Identifying ways of determining when these outcomes are achieved (e.g. using indicators).
3	Ensuring KE activities are appropriately resourced and integrated within project planning and management.
4	Including some form of stakeholder mapping and/or analysis.
5	Identifying communication modes/channels and approaches that are appropriate for different types of stakeholder.

Figure 30: List of typical elements of knowledge exchange strategies (own work, based on Reed et al (2014)).

Which mechanisms, activities or communication modes are applied in practice, depends on the chosen knowledge exchange strategy. The literature review of knowledge exchange methods delivers five different, comprehensive strategies. These are: (1) Organization of knowledge exchange activities; (2) Use of knowledge brokerage; (3) Provision of (web-based) information; (4) Application of knowledge exchange tools and instruments; (5) Dissemination of knowledge. The strategies are found by combining literature about knowledge exchange instruments, tools, activities, modes, mechanisms, approaches, strategies and theories. Each strategy and their related methods are depicted in figure 31 and elaborated upon below the figure. The methods are defined and discussed within the context of the given strategy. Ultimately, the found strategies also function as a categorization of the different types of methods. The complete list of methods and their description are also listed in appendix 4, in order of the six strategies. The list can be used throughout the reading of the report. Importantly, methods to exchange knowledge internally within an organization are excluded from the research, as they are unaligned with the characteristics for the transdisciplinary and transnational knowledge exchange in this thesis.

	KNOWLEDGE EXCHANGE STRATEGIES AND RELATED METHODS FROM LITERATURE	
	STRATEGY	METHODS
1	Organizing knowledge exchange activities	Action Planning (World Bank, 2013); Action Learning Sets; After-action review (Abu-Rumman, A., 2021); Brainstorming (World Bank, 2013); Coaching (Abu-Rumman, A., 2021); Demonstration; E-discussion (World Bank, 2013); Group discussion (World Bank, 2013); Knowledge fairs (Abu-Rumman, A., 2021); Learning collaboratives (Yamey et al., 2016); Meetings (Abu-Rumman, A., 2021; Mitton et al., 2007); Mentoring (Abu-Rumman, A., 2021); Panel of experts (World Bank, 2013); Peer assist (Abu-Rumman, A., 2021); Presentation (World Bank, 2013); Role play; Simulation (World Bank, 2013); Storytelling (Abu-Rumman, A., 2021); Survey (World Bank, 2013).
2	Application of knowledge exchange tools or instruments	Boundary material (Karcher et al., 2021); Conferences and fora (Abu-Rumman, A., 2021; World Bank, 2013); Deliberative- (Yamey et al., 2016) and global dialogues (World Bank, 2013); Expert visits (World Bank, 2013); Study tours (World Bank, 2013); SUPPORT-tools (Yamey et al., 2016); Training courses, seminars (Abu-Rumman, A., 2021); Twinning arrangements (World Bank, 2013); Workshop (Mitton et al., 2007; World Bank, 2013).
3	Use of knowledge brokerage	Boundary organizations (Karcher et al., 2021); Community of practice, network (Mitton et al., 2007; World Bank, 2013); Collective impact (Yamey et al., 2016); Intermediary organization (Zhao et al., 2020); Knowledge brokers (Dobbins et al., 2009; Karcher et al., 2021; Zhao et al., 2020); Social connections (Karcher et al., 2021); Steering committees (Mitton et al., 2007).
4	Provision of (web-based) information	Expertise Locator Systems (Abu-Rumman, A., 2021); One-stop-shops (Yamey et al., 2016); Social media platforms (Abu-Rumman, A., 2021).
5	Dissemination of knowledge	Evidence briefs; Rapid response units; Review-derived products (Yamey et al., 2016); Tailored and targeted messages (Dobbins et al., 2009; Zhao et al., 2020).

Figure 31: Identified knowledge exchange strategies and their related methods (own work).

Organizing knowledge exchange activities: The organization of knowledge exchange activities is the most tangible strategy with concrete methods ranging from action planning to group discussions and from learning collaboratives to surveys. Organizing activities is regarded as a key knowledge strategy, as it facilitates a two-way exchange of knowledge between those who

generate it and those who apply it (Zhao et al., 2020). Despite this, similarly as knowledge exchange methods, the activities have been under researched (Reed et al., 2014): "*Thus while a conceptual understanding of knowledge exchange has being developed, there is a distinct lack of quantitative empirical evidence to support these claims and guide future knowledge exchange activities.*" (Cvitanovic et al., 2015). Additionally, more careful consideration is demanded for the characteristics that impact the success and efficiency of knowledge exchange activities (Dobbins et al., 2009), and consequently the ways to evaluate those activities (Cvitanovic et al., 2015; Fazey et al., 2013; 2014; Karcher et al., 2021; Reed et al., 2014; World Bank, 2013). Research by the World Bank (2013), Yamey et al. (2016) and Abu-Rumman (2021) have contributed to the knowledge gap of knowledge exchange activities that can also be regarded as methods.

Following the first element of knowledge exchange strategies of Reed et al. (2014) in figure 30, the World Bank (2013) highlights the importance of selecting the most appropriate activities to achieve the learning objectives of the knowledge seekers. There is a wide range of activities available to select from, each with its own advantages and drawbacks. The ultimate choice of activity is influenced by factors such as budget, technological access, audience demographics, literacy levels, and language (World Bank, 2013). The ability to facilitate the transdisciplinary and transnational nature of the knowledge exchange are additional constraints as part of this research. Despite the explicit range of activities and constraints, inadequate planning during the design phase is recognized as a significant obstacle that weakens knowledge exchange activities (Cvitanovic et al., 2016). Cvitanovic et al. (2016) therefore highlight three key themes regarding the capacities and competencies required to facilitate knowledge exchange activities: individual, institutional, and financial capacities. The specific improvements of each capacity is shown in figure 32.

CAPACITIES REQUIRED TO SUPPORT AND FACILITATE KNOWLEDGE EXCHANGE ACTIVITIES BY CVITANOVIC ET AL. (2016)	
CAPACITIES	TO BE IMPROVED
Individual	(1) Understanding of both science and decisionmaking contexts; (2) Honest and credible; (3) Strong communication skills; (4) Highly motivated; (5) Ability to develop diverse and strong social networks.
Institutional	(1) Provide training for staff in knowledge exchange and stakeholder engagement; (2) Recognise and reward high performance in knowledge exchanged and stakeholder engagement; (3) Use intermediaries to support staff in knowledge exchange activities.
Financial	(1) Provide dedicated funding for knowledge exchange activities; (2) Ensure funding is available following the completion.

Figure 32: Core capacities to support and facilitate knowledge exchange activities (own work, based on Cvitanovic et al. (2016)).

Crucially, activities are frequently applied in a sequence as part of an overarching knowledge exchange instrument (World Bank, 2013). Here, instruments are structured mechanisms or platforms through which knowledge exchange occurs. Conversely, activities are rather standalone actions (Jost et al., 2021). Research by Rushmer et al. (2014) shows how different activities and dissemination strategies are integrated into a workshop as an instrument. The workshop consisted, in sequence, of 'precirculated research digests' as evidence briefs, presentations, discussions, action planning and informal networking. As depicted in both figure 31 and Appendix 4, presentations, group discussions (World Bank, 2013) and action planning (Abu-Rumman, 2021) are all activities that can be integrated into one knowledge exchange tool. Interestingly, the evaluation of the tool and its activities on the day demonstrated that predetermined goals were achieved. However, long-term assessments revealed that these gains were not sustained (Rushmer et al., 2014), highlighting the difficulties with choosing the most suitable method for your knowledge exchange effort. Appendix 4 provides a comprehensive list of possible knowledge exchange activities from literature to choose from. All these activities, and similarly all instruments, can be viewed in many ways based on their characteristics and form of implementation.

Firstly, activities and instruments as methods can be categorized as uni- or multidirectional (Fazey et al., 2013). Unidirectional knowledge sharing is a typically linear process in which knowledge is transmitted in a single direction and mostly involves explicit forms of knowledge (Halliday et al., 2023; Kiefer et al., 2005; Perry & May, 2010; Roux et al., 2006; World Bank, 2013). The explicit knowledge refers to information that can be formally (Russel et al., 2004) communicated between individuals, typically through structured methods (Hairstans, & Smith, 2018; Nonaka & Von Krogh, 2009; Seo, 2022). In a multidirectional process however, knowledge flows in all directions, often blurring the lines between those who provide knowledge and those who receive it. This approach facilitates the direct sharing of experiences, practices, and tacit knowledge among participants, fostering a richer and more collaborative learning environment (Fazey et al., 2013; World Bank, 2013). Tacit, in contrast to explicit knowledge, is characterized as informal and context-specific "know-how" that is derived from individuals' personal experiences, perceptions, and insights (Eraut, 2000; Russel et al., 2004; Seo, 2022).

Apart from uni- or multi-directionally, activities and instruments to exchange knowledge can be communicated synchronously or asynchronously (Jost et al., 2021; World Bank, 2013). Synchronous methods occur in real-time where conversations flow continuously (Baehr, 2012; Hou & Wu, 2011) and necessitate that both participants are available to communicate simultaneously (Khan, 2007; World Bank, 2013; Yadav et al., 2021). These methods support a high level of 'media naturalness' or 'media richness' (Thomas, 2013) because they closely mimic the conditions of in-person interactions, utilizing facial expressions, body language, and speech. When knowledge needs to be transformed for knowledge exchange, mediation by synchronous tools might therefore be indispensable (Peng & Sutanto, 2012). The asynchronous method however allows for interactive learning without the constraints of time (Baehr, 2012; Hou & Wu, 2011; Khan, 2007), place, or geography. This means that participants do not need to be present simultaneously (Yadav et al., 2021) and online application being most effective (Daniel, 2020). Benefits are more time for translation of knowledge (World Bank, 2013), flexibility to access materials at customized times and schedules (Daniel, 2020; Jesiek et al., 2018; Jost et al., 2021), room for extensive discussions (Hou & Wu, 2011; Khan, 2007), opportunities to engage larger and dispersed audiences (Baehr, 2012; World Bank, 2013), and therefore address diverse user needs, and promote greater inclusivity (Nguyen et al., 2021). Critically, asynchronous methods are unable to provide impactful in-person (Mitton et al., 2007) interactions and discussions often suffer regular unwanted interruptions (Hou & Wu, 2011).

Among the diverse range of knowledge exchange activities, several stand out for their distinct and unique approaches to fostering learning and collaboration. Action learning sets create structured, multidisciplinary environments where participants tackle complex problems through shared knowledge and ongoing practice. In contrast, after-action reviews focus on reflecting upon completed actions, transforming unconscious experiences into tangible learning and fostering trust within teams (Abu-Rumman, 2021). The use of role play offers a highly interactive experience, allowing participants to simulate real-world challenges and collaboratively explore solutions (World Bank, 2013). Lastly, knowledge fairs bring stakeholders together in person, offering a dynamic space for showcasing best practices, fostering face-to-face interactions, and encouraging the exchange of innovative ideas (Abu-Rumman, 2021). These activities illustrate the variety of methods used to enhance learning and knowledge sharing in different contexts.

Application of knowledge exchange tools or instruments: Knowledge exchange instruments are described by the World Bank (2013) as "*The main stand-alone building block of the knowledge exchange*.". More than one instrument can be included in a knowledge exchange effort and, as stated above, each individual tool is able to sequence multiple activities. Similarly as with

activities, each instrument has strengths and weaknesses (World Bank, 2013; Zhao et al., 2020), and can take different forms in direction, level of formality, space and synchronization. These possible different characteristics are extensively discussed with the activities and therefore not reiterated here.

In parallel with activities, several exclusive knowledge exchange instruments and tools play a critical role in facilitating collaboration and learning across diverse contexts. Boundary materials serve as adaptable objects that bridge differing perspectives, fostering understanding between groups with divergent viewpoints (Karcher et al., 2021). Conferences and fora usually aim to create a space for debates, serving as an accessible means to identify trends, continuously receive feedback from day-to-day experiences (Knorr-Siedow & Tosics, 2005), general sharing of knowledge, research and learning (Abu-Rumman, 2021; Hairstans & Smith, 2018; World Bank, 2013), to foster a communal focus on addressing urban issues or practical follow-up agreements (De Jong & Edelenbos, 2007). Expert visits offer a localized, in-depth transfer of expertise, allowing organizations to gain practical knowledge tailored to their specific challenges. Similarly, study tours enable key stakeholders to learn directly from peer organizations through hands-on experiences in different settings (World Bank, 2013). Tools like SUPPORT-tools help decision-makers apply evidence to inform policy, while twinning arrangements pair organizations to promote mutual learning (Yamey et al., 2016). Lastly, workshops offer smaller, more interactive environments focused on active exchange of information and collaboration (World Bank, 2013). These instruments demonstrate the wide range of tools available for effective knowledge exchange.

Use of knowledge brokerage: Knowledge brokerage is described as the full range of activities needed to connect decision-makers and researchers, which involves mediating their interactions to foster mutual understanding, facilitate knowledge exchange, build partnerships, and promote evidence-based decisions (Cvitanovic et al., 2017; Fazey et al., 2013; Karcher et al., 2021; Lomas, 2007). Executives are seen as knowledge brokers, who are tasked with aiding the exchange of research and other evidence between the scholars and practitioners (Cvitanovic et al., 2016; Dobbins et al., 2009; Fazey et al., 2013; Mitton et al., 2007; Mitton et al., 2010; Reed et al., 2014; Stone, 2004). Knowledge brokers are also depicted in literature as active intermediaries (Dickey, A et al., 2022; May et al., 2009; Perry & May, 2010; Washbourne et al., 2021; Zhao et al., 2020), transfer agents (De Jong & Edelenbos, 2007; Stone, 2004), Communities of Practice (CoP) (Abu-Rumman, 2021; Arevalo et al., 2023; Kiefer et al., 2005; LaRocca et al., 2012; Wenger, 1998; Wenger et al., 2002; World Bank, 2013), or boundary- spanners or organizations (Colavito et al., 2019; Guston, 2001; Karcher et al., 2021; Posner & Cvitanovic, 2019). The knowledge brokering can therefore be performed by an individual agent, individual organization or group of organizations. Their unique selling point is their specific training in knowledge exchange and dedication to this process (Cvitanovic et al., 2016; Dobbins et al., 2009; Mitton et al., 2007). Mitton et al. (2010) claims limited impact of individuals and argues for an organization like a Communities of Practice to fulfill this role, as they have more resources, standardized procedures and extensive network effects at their disposal. A variety of CoPs on housing affordability do already exist, as shown in figure 33 below here, to contribute to the earlier-discussed organization of activities and application of instruments.

COMMUNITIES OF PRACTICE CONCERNED WITH HOUSING AFFORDABILITY IN EUROPE		
COMMUNITY OF PRACTICE	DESCRIPTION	VISION/STRATEGY/ACTIVITIES
Housing Europe	The European Federation of Public, Cooperative and Social Housing, which brings together national and regional housing organizations to promote affordable housing solutions across Europe.	Aiming to provide affordable, quality housing for all by advocating for supportive policies, sharing best practices, and conducting research.
European Network for Housing Research (ENHR)	A network of researchers and practitioners focused on housing issues, including affordability, across Europe.	Focused on housing issues, including affordability, facilitating knowledge exchange, research co llaboration, and dissemination of findings across Europe.
URBACT	A European exchange and learning program promoting sustainable urban development, which includes affordable housing initiatives.	A European exchange and learning program promoting sustainable urban development, including affordable housing initiatives, through knowledge sharing, capacity building, and policy recommendations.
European Federation of National Organisations Working with the Homeless (FEANTSA)	A network of organizations working to prevent and alleviate homelessness in Europe, with a focus on housing affordability and accessibility.	Working to prevent and alleviate homelessness in Europe, focusing on housing affordability and accessibility through advocacy, research, and support for member organizations.
Habitat for Humanity International (Europe, Middle East, and Africa)	Part of the global nonprofit housing organization, focusing on building affordable housing and promoting housing policies across the region.	Focusing on building affordable housing, advocating for housing policies, and supporting community development initiatives across the region.
International Union of Tenants (IUT)	An international organization that represents tenant interests and advocates for affordable rental housing across Europe and globally.	Represents tenant interests globally, advocating for affordable rental housing and tenant rights through lobbying, research, and international cooperation.
Cities for Adequate Housing	A network of cities committed to promoting the right to housing through local policies and sharing best practices for affordable housing solutions.	Committed to promoting the right to housing by sharing local policies and best practices, and advocating for housing solutions at the city level.
Housing Rights Watch	A European network of housing rights advocates, lawyers, and researchers working to promote and protect the right to affordable housing.	Advocating for housing rights, conducting legal research, and promoting policies to ensure affordable and adequate housing for all.
Co-operative Housing International (CHI)	A network that supports cooperative housing organizations globally, with a strong presence in Europe, promoting affordable and sustainable housing solutions.	Supports cooperative housing organizations globally, with a strong presence in Europe, promoting affordable and sustainable housing solutions through knowledge exchange and advocacy.
European Housing Forum	A platform that brings together key stakeholders in the housing sector across Europe to discuss and address housing affordability and other housing-related issues.	A platform that brings together key stakeholders in the housing sector across Europe to discuss and address housing affordability and other housing-related issues through conferences, workshops, and collaborative projects.

Figure 33: Examples of Communities of Practice concerned with housing affordability in Europe (own work).

In general, knowledge brokers are said to act as a catalyst for systems change by establishing and nurturing connections between researchers and end users, facilitating learning, and promoting the exchange of knowledge (Cvitanovic et al., 2016; Dobbins et al., 2009; Fazey et al., 2013; Reed et al., 2014). Active intermediaries take on a host of different roles to realize this, which are listed in figure 34. In addition to crossing the barrier between researcher and practitioner, brokers are able to interact and exchange knowledge within various levels (regional, national, international) and across diverse disciplines (technical, commercial, legislative) (De Jong & Edelenbos, 2007; Stone, 2004). This potentially enables them to overcome the limitations of both transnational and transdisciplinary barriers. However, despite acknowledgement of their work, the most extensive and recent research by Bornbaum et al. (2015) on the effectiveness of knowledge brokers was concluded as inconclusive. Where research evidence is already a fundamental part of the process, brokerage is deemed ineffective. Additionally, brokers are faced by barriers such as the length of exchange processes (Dobbins et al., 2009), numerous competing information sources, the influence of polarization and politics, and information that is often not neutral or objective data (Contandriopoulos et al., 2010).

ROLES OF AN ACTIVE INTERMEDIARY BY MAY ET AL. (2009)	
1	Map existing work in different institutions in terms of types of research and involvement of different personnel
2	Act as a bridge between organisations, identifying gaps and strengths
3	Act as a broker and advisor deploying the personnel from the different organisations who understand the desired outcomes, but also the contexts in which personnel work
4	Take the need for staff mobility seriously in order to provide the necessary human resource for success. That means understanding and even challenging particular institutional incentives and career structures
5	Translate and disseminate the result of work according to the needs of different groups
6	Provide an integrative function to ensure that existing disparate information can be combined and re-used for creating intelligence
7	Provide knowledge arenas for different groups to understand, discuss and exchange ideas without concern for immediate consequence
8	Provide a resource for identifying research funding opportunities and submissions and add value by making conncections between different funding streams
9	Bring together otherwise disparate groups to work collaboratively for collective benefit within new partnerships by understanding the ways in which existing organisations work
10	Act, in partnership, as a resource for people in their daily practices and distinguish between information and knowledge - do not bombard people with information
11	Deploy intelligence to advise stakeholder organisations on policy and strategic directions to take best advantage of new and developing innovations.

Figure 34: Roles of an active intermediary (own work, based on May et al. (2009)).

Apart from intermediary organizations, CoPs, knowledge brokers and boundary organizations as performers of knowledge brokerage, three other ways to make use of knowledge brokerage are found. Collective impact brings diverse sectors together with a common agenda, shared metrics, and coordinated efforts (Yamey et al., 2016). Social connections provide informal networks where individuals and groups collaborate on specific topics, enhancing boundary work (Karcher et al., 2021). Steering committees offer structured guidance by gathering local experts and stakeholders to oversee research and knowledge exchange processes (Mitton et al., 2007). All these potential methods can ultimately be applied to ensure knowledge brokerage as part of knowledge exchange efforts.

Provision of (web-based) information: The provision of (web-based) information (Mitton et al., 2007) is all about an accessible and comprehensive place where knowledge can be stored and gathered. In other words, users are enabled to interact with knowledge, giving them partial or total control over data analysis and decision-making (Arevalo et al., 2023). Especially, as web services continue to advance and internet connectivity becomes more widespread (Pang et al., 2020), online platforms create new possibilities for more effective, user-friendly, and uninterrupted knowledge access and exchanging. The online platforms often feature information management systems, ranging from websites with content management systems to data portals that allow users to access, visualize, and upload available data. Additionally, a platform such as broad social networks provide opportunities for posting opinions and creating discussion groups among participants from diverse backgrounds to learn (Valkering et al., 2013). It is however stated that combining online interactions and face-to-face interactions might be preferred, as this approach can better support the interpretation and understanding of the accessed and shared knowledge (Arevalo et al., 2023).

The actual usage of provided information hinges on perceived usefulness, high satisfaction levels (Pang et al., 2020), the amount in which partner organizations or knowledge brokers promote the platform, and the amount to which the platform is tailored to the specific task and context of the exchanged knowledge (Arevalo et al., 2023). In practice, a website to inform about knowledge can be complemented by a learning area to actively exchange and engage with the knowledge (Valkering et al., 2013).

A general benefit of these platforms is that it acts as a repository for reusing datasets, models and reports. Specific advantages as perceived by users were large storage capacity,

support for multiple working environments, documentation capabilities, and long-term access (Arevalo et al., 2023; Hairstans & Smith, 2018). In the end, knowledge exchange through digital platforms enhances the utilization value of knowledge (Pang et al., 2020) and can "*…open up opportunities for transdisciplinary projects that otherwise might not be available…*" (Arevalo et al., 2023). Despite these benefits, web-based information platforms face several barriers, including challenges in development and maintenance, ensuring long-term discoverability, accessibility, and understandability for users, and sustaining active, loyal participation (Arevalo et al., 2023; Cvitanovic et al., 2016). Additionally, these platforms often struggle with the effective use and adoption of knowledge, particularly in transdisciplinary research. They may also amplify offline social issues, such as the polarization of discussions, and, without proper ethical regulation, can facilitate the spread of misinformation, leading to potential trust breakdowns. The extent of these challenges depends largely on the platform's setup and purpose (Arevalo et al., 2023).

Other explicit methods for provision of (web-based) information, as listed in figure 31 and Appendix 4, found are expertise locator systems, one-stop-shops and usage of social media platforms. Expertise locator systems organize knowledge by identifying experts through online directories or databases, making it easier to access specialized information (Abu-Rumman, 2021). One-stop-shops offer streamlined, systematically reviewed resources for quick and reliable access to relevant information (Lavis et al., 2006; Stone, 2004; Yamey et al., 2016). Social media platforms provide targeted networks for knowledge exchange, connecting users to expertise, advice, and relevant communities (Abu-Rumman, 2021; Fazey et al., 2013). The mentioned methods are, complementary (Jost et al., 2021) or not, all able to enhance the provision and therefore accessibility of knowledge.

Dissemination of knowledge: Zhao et al. (2020) highlights the application of dissemination strategies and supporting methods as critical. Dissemination is about distributing the findings to all relevant end-users in an accessible and comprehensible format (Cvitanovic et al., 2015), and is therefore where the process of exchange ends and the process of knowledge translation into practice starts (Dobbins et al., 2009). Dissemination differs from web-based information in that it is a form of active knowledge exchange (Contantriopoulos et al., 2010) and not a passive spread of knowledge, even though frequently complemented with active actions in the form of a post (Kiefer et al., 2005). To ensure translation, dissemination strategies should, instead of broadly spread (Cvitanovic et al., 2015), be tailored to particular target audiences, knowledge types or settings (Zhao et al., 2020). When dissemination is performed in this deliberate manner (Contantriopoulos et al., 2010), research of Yamey et al. (2016) shows enhanced availability, access to evidence-based information, and more effective dissemination of findings as the most common enabler of knowledge transfer and exchange. Conversely, the most identified barrier was limited availability and access to research, inadequate dissemination of information, and the budgetary costs associated with dissemination (Fazey et al., 2014; Reed et al., 2014; Yamey et al., 2016).

Because dissemination is frequently performed by knowledge brokers, it is heavily linked to knowledge brokerage. Social networks such as CoPs play a pivotal role with dissemination strategies, since they are recognized for enabling the creation, acquisition, and dissemination of various types of knowledge among different stakeholders (Dickey et al., 2022; Karcher et al., 2021; Posner & Cvitanovic, 2019). A participant of Mitton et al. (2010) their research even proposed the provision of a dedicated 'dissemination manager' to ensure the promotion and uptake of information. The task of disseminating knowledge can be taken on by a transfer agent in line with the fourth role of active intermediaries in figure 34 above. Implementation of such tasks is historically most frequently applied complementary to a knowledge exchange tool such as a conference or academic journals (Kiefer et al., 2005). In practice, dissemination frequently

takes place through informal exchanges like phone calls, mails or other physical interactions (Valkering et al., 2013), apart from formal sessions like conferences.

Effective dissemination of knowledge is supported by several methods. Tailored and targeted messages ensure research evidence reaches specific decision-makers, connecting knowledge to practical application (Dobbins et al., 2009; Grol & Grimshaw, 2003; Lavis et al., 2003; 2006; Russel et al., 2004; Suggs, 2006; Zhao et al., 2020). Dobbins et al. (2009) explains: "'*Tailored' implies that the message is focused on the specific scope of decision making authority of the intended user…*" and "*…'targeted' indicates that the content of the message is relevant and directly applicable to the decision currently faced by the intended audience.*". Furthermore, evidence briefs provide concise, accessible summaries of research and policy options tailored to local contexts. Rapid response units offer policymakers timely, evidence-based advice through written summaries or consultations. Review-derived products systematically deliver summaries of reviews and policy briefs, ensuring access to comprehensive, reliable information (Yamey et al., 2016). All in all, these methods offer ample options to promote and ensure the uptake of exchanged knowledge.

Part 4.2 Transdisciplinary aspect of the knowledge exchange

As outlined in part 2.3 of the theoretical framework, the knowledge exchange researched in this thesis takes on a transdisciplinary approach to tackle housing affordability issues. It involves practices that go beyond academic settings to engage with urban stakeholders knowledge exchange interactions (Dickey et al., 2022; Hope, 2016; Jahn et al., 2012; Karvonen et al., 2021; Polk, 2014). State-of-the-art methods in the case of this research need to be able to adhere to the cross-sectoral aspect of the knowledge exchange. Several knowledge exchange methods identified from the literature demonstrate a clear capacity to facilitate transdisciplinary knowledge exchange and are therefore explicitly, but briefly discussed here.

Methods such as conferences and fora provide opportunities for large groups of stakeholders to engage in discussions on specific topics, fostering high levels of interaction among participants from different sectors. These events enable a more comprehensive exchange of ideas, drawing from both practical and theoretical knowledge (Abu-Rumman, 2021; World Bank, 2013). Furthermore, another method with strong transdisciplinary potential is the use of action learning sets. These structured, problem-solving environments are often able to bring together members from a wide range of organizations and disciplines. The diversity within these groups ensures that knowledge is shared across sectoral boundaries, promoting a deeper understanding of complex issues and encouraging innovative solutions (Abu-Rumman, 2021).

Thirdly, boundary organizations can also play a pivotal role in transdisciplinary knowledge exchange. Positioned at the interface between science and policy, these organizations facilitate communication and collaboration between researchers and decision-makers. They link different forms of knowledge and ensure that research findings are not only understood but also applied in policy and practice (Karcher et al., 2021). Lastly, social connections, which are often less formalized than institutional partnerships, provide an additional avenue for transdisciplinary exchange. These connections allow individuals and groups from different backgrounds to engage in boundary work, focusing on specific issues and creating informal networks for knowledge exchange (Karcher et al., 2021). As will be discussed in the conclusion of this chapter, the different methods and their capacities can also be able to complement each other to fulfill its potentials for knowledge exchange on housing affordability.

Part 4.3 Transnational aspect of the knowledge exchange

As with transdisciplinary knowledge exchange, transnational efforts involve overcoming significant barriers, such as cultural differences, geographical distance, language difficulties, institutional contexts (Valkering et al., 2013; van Bueren et al., 2022) and contextually bound statistics, information (Baehr, 2012; EIPA, 2022) and definitions (Horsewood, 2011). Several methods have been found to facilitate the transnational knowledge exchange and are discussed below. The search for methods to overcome said barriers emphasizes consideration of digital spaces complementary to physical interactions and synchronous as well as asynchronous approaches. It is first of all clear that knowledge exchange methods often incorporate digital encounters to bridge the barriers as a consequence of transnational KE efforts.

Digital applications of methods are increasingly used for transnational knowledge exchange due to their ability to reduce travel costs, save time, lower carbon emissions (Abu-Rumman, 2021), and make participation more accessible, particularly for marginalized groups (Nguyen et al., 2021). Online formats also enable content recording for later access, enhancing the longevity and reach of shared knowledge (Abu-Rumman, 2021). However, these tools often lack the depth of learning and trust-building achieved through in-person, face-to-face interactions, especially when stakeholders have differing worldviews (Cvitanovic et al., 2021). Personal contact remains a key facilitator of effective knowledge exchange, as shown in studies where direct interactions, clear summaries, and quality research were the most effective in bridging gaps between researchers and decision-makers (Abu-Rumman, 2021; Fox, 2010; Lomas, 2007; Mitton et al., 2007). Therefore, while digital platforms offer practical advantages, combining virtual and in-person methods ensures more robust and trust-based exchanges especially when knowledge is exchanged transnationally (Cvitanovic et al., 2021). Nguyen et al. (2021) state: "*For example, a recent investigation of one of the world's oldest boundary organizations focused on improving KE at the interface of science and policy found that efforts to build trust between individuals and organizations is best achieved through a combination of formal and informal in-person, face-to face interactions, particularly among stakeholders that have differing worldviews*".

The other key consideration is about the role of synchronization on transnational efforts. Baehr (2012) notes that working with a global audience presents unique challenges, such as differences in technology, expertise, and time constraints. As a result, many transnational KE activities incorporate asynchronous methods, which allow participants to engage at their own pace and across different time zones. This asynchronous approach is often supplemented with synchronous methods, such as real-time discussions or webinars, to deepen and accelerate knowledge sharing. Combining both methods can create a more flexible and inclusive environment, ensuring that participants from diverse regions can collaborate effectively (Peng & Sutanto, 2012).

Some methods that are able to facilitate transnational knowledge exchange include action learning sets and expert visits. Virtual action learning sets allow geographically dispersed participants to collaborate and solve problems together, while expert visits enable subject matter experts to provide in-depth, localized knowledge to requesting countries or organizations (Abu-Rumman, 2021; World Bank, 2013). Similarly, study tours and twinning arrangements offer opportunities for cross-border learning, allowing stakeholders to visit other countries or pair organizations in different regions to share experiences and best practices (World Bank, 2013). Furthermore, intermediary organizations can also play a critical role in transnational knowledge exchange. These organizations facilitate the exchange of knowledge between countries and sectors, helping to solve complex, global challenges by incorporating international perspectives (Zhao et al., 2020). Additionally, methods such as peer learning foster reciprocal, two-way

exchanges between participants from different regions, allowing them to learn from each other's experiences and develop solutions together (Abu-Rumman, 2021).

Part 4.4 Knowledge exchange methods in practice

To reiterate, developing and applying strategies or methods to actively facilitate knowledge exchange can be achieved by analyzing and drawing lessons from past efforts (Cvitanovic et al., 2016; Reed et al., 2014). These efforts are found in theory (see part 4.1 above) as well as practice. Learning from practice is especially valuable for knowledge exchange methods on affordable housing provision, due to the clear absence of explicit literature. Practical applications of methods on affordable housing provision in Europe are found with dedicated intermediary organizations. Those organizations are gathered by performing an online search strategy, which includes accessing relevant databases and institutional websites as well as reviewing reports, publications, and discussions on housing affordability. The resulting list of organizations in figure 35 below includes both European and international actors, reflecting the diverse array of stakeholders involved in knowledge exchange efforts on housing affordability in Europe. Crucially, all intermediary organizations selected are involved with transnational and most with transdisciplinary knowledge exchange. Additionally, organizations like EFL, SHAPE-EU, the ENHR and UN-Habitat take on a broader role compared to specialized networks such as the Housing Rights Watch, FEANTSA, and the International Union of Tenants (IUT). By taking on such a comprehensive approach, the list incorporates various dimensions of housing affordability including social housing, tenant rights, and sustainable urban planning.

INTERMEDIARY ORGANIZATIONS INVOLVED WITH KNOWLEDGE EXCHANGE ON AFFORDABLE HOUSING IN EUROPE			
NR.	ORGANIZATION	NR.	ORGANIZATION
[1]	European Federation of Living (EFL)	[14]	Habitat for Humanity International (Europe, Middle East and Africa)
[2]	SHAPE-EU: European Affordable Housing Consortium	[15]	International Union of Tenants (IUT)
[3]	European Network for Housing Research (ENHR)	[16]	Co-operative Housing International (CHI)
[4]	Housing Plus	[17]	International Federation for Housing and Planning (IFHP)
[5]	Housing Studies Association	[18]	European Economic and Social Committee (EESC)
[6]	Urban Affairs Association	[19]	Housing Europe
[7]	European Urban Knowledge Network	[20]	Organization for Economic Cooperation and Development (OECD)
[8]	European Real Estate Society (ERES)	[21]	UN-Habitat
[9]	FEANTSA	[22]	Affordable Housing Initiative
[10]	Housing Rights Watch	[23]	European Institute of Public Administration (EIPA)
[11]	UNECE Committee on Urban Development, Housing and Land Management	[24]	Housing Solutions Platform
[12]	Housing First Europe Hub	[25]	Eurocities
[13]	URBACT		

Figure 35: List of intermediary organizations involved with knowledge exchange on affordable housing provision in Europe (own work).

As also depicted in Appendix 5, an extensive list of knowledge exchange methods are being applied by intermediary organizations engaged with affordable housing provision across Europe. These methods are used to facilitate transnational and, in most cases, transdisciplinary collaboration. Apart from the applied methods, figure 36 presents the number of intermediary organizations employing each method and which specific organizations are responsible for their application. What is particularly notable is the number of methods in practice compared to those found in theoretical knowledge exchange models, as explored earlier in part 4.1. When comparing theory and practice, the green-highlighted methods in figure 36 represent those methods that align with the literature on knowledge exchange methods as earlier discussed. The

yellow-highlighted methods are not literally named in theory, but are a variant of methods that did.

Interestingly, the majority of methods applied by intermediary organizations do not appear in the theory. There are several potential explanations for the gap between theory and practice. First of all, theoretical literature tends to concentrate on the most critical or "key" (Abu-Rumman, 2021; Mitton et al., 2007) knowledge exchange methods. In contrast, practice often includes more explicit and pragmatic approaches. Methods such as 'newsletters', 'research publications/articles', 'guides', and 'protocols/manuals' (highlighted in yellow) are typical examples of dissemination strategies frequently applied with knowledge exchange on affordable housing provision. While these methods might not be directly mentioned in pivotal academic work, they are often indirectly represented as part of essential dissemination strategies.

Knowledge exchange in the context of affordable housing can give rise to specific needs that influence the methods applied. For example, 'best / good practices / blueprints', '(pilot) project' and 'symposium' are methods particularly suited to making knowledge tangible and actionable. Symposia and the sharing of good practices provide concrete examples that facilitate understanding, which is particularly valuable in the realm of affordable housing provision, where practical, actionable or tacit knowledge is crucial (Eraut, 2000; Russel et al., 2004; Seo, 2022). The knowledge is deeply personal and challenging to formalize, which often makes it difficult to communicate and share with others (Roux et al., 2006). Therefore, tacit knowledge is communicated effectively only through direct, interactive engagement. This often involves hands-on participation by the recipient of knowledge, where mutual adjustments and corrections occur in real-time (Brown & Duguid, 1991; Nooteboom, 2000). The above-named examples give substance to this. The same could apply for the method of advocacy, which is underrepresented in literature but pivotal in knowledge exchange with housing affordability. The complexity of housing affordability provision in Europe, large number of actors involved and the impact of differences in ideologies to tackle it, might be a reason for the important role of advocacy.

Some of the knowledge exchange methods employed by intermediary organizations, such as 'webinars', 'boot camps', 'app / app game', and 'podcasts', are more recent innovations. These newer methods are often absent or underrepresented in the literature due to the evolving nature of the field. Outdated theoretical frameworks may not yet account for the increasing use of these digital and interactive tools, leading to a gap between theory and contemporary practice.

KNOWLEDGE EXCHANGE METHODS APPLIED IN PRACTICE BY INTERMEDIARY ORGANIZATIONS		
METHOD	ORGANIZATIONS	APPLIED BY (NR.)
Conference	17	[1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 17, 18, 19, 21, 25]
Webinar	12	[1, 2, 6, 9, 10, 11, 12, 13, 16, 17, 19, 24]
Newsletter	11	[1, 2, 7, 9, 10, 12, 13, 14, 15, 19, 24]
Workshop	11	[3, 5, 7, 9, 10, 12, 13, 15, 19, 24, 25]
Reports	11	[3, 9, 11, 12, 14, 15, 19, 20, 21, 23, 25]
Best- / Good practices / Blueprints	8	[1, 2, 13, 16, 21, 22, 24, 25]
Online- database / Platform / Library / Knowledge hub	8	[1, 8, 10, 13, 16, 17, 20, 24]
(Research) publications / Article / Paper / Press release	8	[6, 15, 17, 19, 20, 21, 23, 25]
Advocacy / Position paper / Manifesto	8	[12, 14, 15, 16, 19, 20, 21, 25]
Educational training	7	[2, 4, 10, 12, 15, 19, 24]
Seminar	7	[3, 4, 5, 8, 9, 10, 15]
Research / Analysis / Survey	7	[4, 10, 12, 14, 15, 20, 21]
Toolkit / Toolbox / Template / Brochure	6	[1, 2, 12, 13, 16, 17]
Working- group / Committee	6	[1, 3, 6, 12, 15, 19]
(Pilot) project	6	[1, 7, 14, 12, 19, 22]
Event	6	[2, 5, 10, 12, 17, 19]
Presentation	6	[3, 4, 6, 12, 16, 22]
Meetings	6	[4, 10, 11, 17, 19, 21]
Summer school	5	[1, 3, 4, 5, 8]
Symposium	5	[3, 5, 6, 12, 16]
Forum	5	[9, 11, 16, 21, 25]
Session	5	[10, 11, 13, 19, 21]
Summit	5	[17, 19, 21, 22, 25]
(Online) course	4	[1, 4, 13, 15]
Policy- / City- / Ideation lab	4	[2, 7, 13, 17]
(Mentoring) programme	4	[2, 9, 21, 22]
Guide	4	[4, 12, 13, 21]
Discussion / Debate / Global dialogue	4	[9, 16, 24, 25]
Site visit / Study visit / Field trip	4	[11, 12, 19, 24]
Protocol / Manual / Guidelines	3	[1, 4, 12]
Boot- / Tech camp	3	[2, 19, 22]
Roundtable talk	3	[6, 12, 19]
(Cooperative) network / Pool of experts	3	[8, 13, 16]
Online- learning environment / Academy	2	[1, 17]
Colloquium	2	[3, 6]
App / App game	2	[4, 8]
(Training) video	2	[4, 21]
Observatory	2	[9, 19]
Communities of Practice	2	[12, 24]
Podcast	2	[12, 16]
(City) festival	2	[13, 19]
Recommendations	2	[18, 19]
(General) assembly	2	[19, 21]
Employee exchange	1	[1]
Design challenges	1	[1]
Collecting statistics	1	[1]
One-stop shop / Helpdesk	1	[2]
Funding simulator	1	[2]
Urban review	1	[7]
Masterclass	1	[17]
Co-creation	1	[17]

Figure 36: List of methods applied by intermediary organizations involved with knowledge exchange on affordable housing provision in Europe (own work).

Part 4.5 Conclusion state-of-the-art methods for knowledge exchange

This research explored the state-of-the-art methods, enablers, and barriers for transdisciplinary and transnational knowledge exchange in the context of affordable housing in Europe. The findings amongst others reveal gaps in literature, extensive lists of methods from theory as well as practice, and insights for both the transdisciplinary and transnational nature of the knowledge exchange of the research. Ultimately, by answering the research question "*What are **state-of-the-art methods**, its enablers and barriers, for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?*" state-of-the-art methods are provided.

One recurring insight from literature is that knowledge exchange methods and strategies are often applied without much deliberation and are used interchangeably. This lack of consideration might leave potential of KE efforts unfulfilled, particularly in a complex context like affordable housing provision. Moreover, no dedicated literature exists on knowledge exchange methods for housing, let alone for affordable housing provision, which highlights a significant gap that this research contributes to but future research should address. Despite this, the list of knowledge exchange methods to profit from is rich and facilitates more deliberate KE efforts.

The insights from the research on the transdisciplinary and transnational aspect of the knowledge exchange, and the methods applied in practice deliver certain ingredients to consider. Effective methods for exchange on housing affordability must address the barriers posed by both transdisciplinary and transnational challenges. From the transdisciplinary perspective, methods should be designed to accommodate a diverse range of participants and their distinct worldviews, ensuring inclusivity and fostering collaboration. In transnational contexts, while face-to-face interactions are critical for sustaining meaningful and trust-based exchanges, digital spaces serve a practical and complementary role. Additionally, both synchronous and asynchronous methods should be considered. Insights from practice highlight the strength of conferences and fora as foundational tools for knowledge exchange. Additionally, facilitators of KE on housing affordability seek methods that make knowledge tangible and applicable, via methods like symposia, best practices, and pilot projects, which are less represented in the literature. However, they are potentially vital for the actual practical application of knowledge in affordable housing provision.

Next, the existence of specific knowledge exchange strategies with all their explicit roles and strengths highlights the power of combining or sequencing methods from each strategy to unleash all the possible beneficiaries of knowledge exchange in a comprehensive and powerful way. By allowing each method to complement the others no potential is left unfulfilled and through consideration of all strategies deliberation is maximized. In other words, organizations can leverage the strengths of various approaches to create a more cohesive and impactful knowledge-exchange process. This brings us to the proposition of a state-of-the-art method for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.

A proposed state-of-the-art method for knowledge exchange on affordable housing could involve a conference as the central knowledge tool, serving as the base for interaction and collaboration. This conference would be supported by carefully selected activities, such as action learning sets or peer learning, which foster multidirectional knowledge sharing and problem-solving across diverse participants and worldviews. A boundary organization would facilitate this event, performing essential knowledge brokerage by connecting stakeholders and ensuring that transdisciplinary and transnational barriers are addressed.

To complement this, the boundary organization would provide a passive web-based information platform, offering accessible resources like expertise locator systems and data repositories that participants can use before, during, and after the conference. This platform would also host asynchronous discussions to support continued engagement. Additionally, an active dissemination strategy, such as best practice sharing or evidence briefs, would ensure that the knowledge generated and exchanged at the conference is translated into practical, actionable insights. These dissemination methods would help to make the knowledge tangible, fostering its application in real-world affordable housing initiatives.

By combining these methods in sequence, starting with a strong knowledge tool and complemented with supporting activities, knowledge brokerage, and both passive and active dissemination, this approach ensures a comprehensive and deliberate knowledge exchange process.

Chapter 5 Lessons of the introduction of cost rental housing in Ireland

Chapter 5, Lessons of the Introduction of Cost Rental Housing in Ireland, answers the third subquestion: "What are lessons-learned from the introduction of cost rental housing in Ireland?" This chapter provides a comprehensive analysis of Ireland's experience in establishing cost rental housing, detailing the challenges, strategies, and outcomes encountered. Through interviews and extensive research, it identifies key lessons that can inform both ongoing developments in Ireland and the potential adoption of similar models in other European countries. The insights gained in this chapter are crucial for understanding how cost rental housing can be successfully implemented in diverse contexts, contributing to the broader discussion of knowledge exchange in affordable housing provision.

Figure 37: Complete timeline of the introduction of cost rental housing in Ireland (own work).

The chapter is mainly based on insights from interviewees complemented by relevant papers, articles, blogs and reports. Participants of the interviews are referred to as P1, P2,... P10. The timeline of figure 37 is run through to consider all phases, and therefore all learnings, of the introduction of cost rental housing in Ireland. The first step is to point out the original mechanisms that put cost rental housing on the map in Ireland. As a follow-up, the establishment of policies, acts and regulations by the state to integrate cost rental is discussed. The resulting implementation and facing of early challenges are considered next, followed by ongoing developments and observations. To conclude, future considerations for cost rental housing in Ireland are depicted.

Part 5.1 Early knowledge and exposure

Figure 38: 'Early knowledge and exposure' of cost rental in Ireland as part of the timeline (own work).

The journey toward the establishment of cost rental housing in Ireland can be traced back to early efforts of transnational knowledge exchange, advocacy, reports, plans and a pilot. This model, although new in its modern form, builds upon earlier approaches to affordable housing in the 1930s (Norris, 2019; McCord, 2011). However, for nearly a century, Ireland's housing policies were predominantly shaped by market forces, with a strong emphasis on promoting homeownership (P3; P6; P7). This focus came at the expense of investment in public housing (Springler & Wöhl, 2020), and housing assistance compared to other European nations (Healy & Goldrick-Kelly, 2018b).

The dominance of homeownership as the cultural ideal (P3; P4; P6; P7; P8; P10) shaped how the rental sector developed. This cultural bias resulted in a stigmatized rental sector (P4; P6), where accommodations were often of poor quality (P10). Renting was often seen as a temporary arrangement, particularly for young people or single individuals (P10). As one interviewee (P4) noted, renting was "*...for people for a year or two... and then they get married, and then they buy the house.*" This deeply embedded cultural preference for homeownership fostered a rental market that lacked professionalism and long-term security (P8), which further discouraged individuals from considering renting as a viable long-term option.

A key turning point came after the Global Financial Crisis (P6), when mortgage reregulation reshaped the housing landscape. Yet, by 2014, a growing cohort of people still found themselves unable to access either social housing or mortgages, prompting discussions on alternative housing models, such as cost rental housing. These discussions gained traction through transnational exchanges, particularly in national and European networks. Visits to Vienna's Karl Marx Hof (P1; P6), a renowned example of cost rental housing, played a key role in bringing these ideas back to Ireland (P5) and helped inspire discussions around how this model could be adapted to fit the Irish context.

These early discussions led to the development of draft reports (P10), the initiation of academic research[4] on cost rental (P3), and increased advocacy efforts (P5), particularly from the Approved Housing Bodies (AHBs)[5]. To build consensus and improve the effectiveness of their advocacy (P4; P5; P10), the AHBs formed the 'Housing Alliance[6]'. All those efforts helped secure the inclusion of cost rental housing in the 'Rebuilding Ireland; Action Plan for Housing and Homelessness'[7] (P4) as an "*Affordable Rental Scheme*". However, despite this progress, some critics argued that the plan lacked sufficient focus on affordable housing (P10), highlighting the need for continued advocacy. Reports[8] from the Nevin Economic Research Institute (NERI) also played a significant role in sustaining momentum for cost rental housing (P3).

One major challenge emerged in 2018, when the European Union reclassified AHBs as part of state spending (P3). This reclassification complicated the establishment of sustainable funding schemes for cost rental housing in Ireland. Despite these financial obstacles, advocacy and practical efforts continued. A pilot project in Dublin, which involved transforming former social housing into cost rental units, marked a key milestone in putting the cost rental model into practice, even though the full transformation is still underway (P4; P6). To further advance the provision of affordable housing, the Irish government established the Land Development Agency (LDA)[9] (P7), which signaled a significant commitment to increasing the housing stock, including cost rental units.

Public attention to cost rental reached new heights in 2019 with a two week exhibition on the Vienna model[10], held in three locations across Dublin (P4; P6). This event featured many seminars (P10) organized by a transdisciplinary coalition that included the Housing Agency[11], academics, and Dublin City Council. Austrian and Irish practitioners were able to directly exchange knowledge (P3), further reinforcing the relevance of transnational cooperation in shaping Ireland's approach to cost rental housing.

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[4] For example by Norris & Byrne (2018; 2021);
[5] Approved Housing Bodies (AHB's) are the, by government approved, not-for-profit housing associations in Ireland. More information is found here;
[6] The Housing Alliance is an ensemble of the 7 largest AHB's In Ireland. More information is found here;
[7] The 'Rebuilding Ireland; Action Plan For Housing and Homelessness' is found here;
[8] For example by Healy (2017) and Healy & Goldrick-Kelly (2017; 2018a; b);
[9] The Land Development Agency is a semi-state body which was established to buy and redevelop public land that has been vacant or used ineffectively. Since last year, they have developed 400 cost rental units. More information on their cost rental schemes can be found here;
[10] A programme of all daily activities of the 'Vienna model' exhibition is found here;
[11] The Housing Agency is a government body concerned with the funding and financing, the provision of advisory support, collaborating with stakeholders and implementing policies on cost rental housing amongst others. More information is found here.

Part 5.2 Formation of government policies

Figure 39: 'Early knowledge and exposure' of cost rental in Ireland as part of the timeline (own work).

One of the most significant milestones in realizing cost rental housing in Ireland was its inclusion in the 2020 'Programme for Government; Our Shared Future'[12] (P3). A clear commitment to developing a cost rental model was outlined: "*Develop a cost rental model for the delivery of housing that creates affordability for tenants and a sustainable model for the construction and management of homes. In doing this, we will be informed by international experience of the delivery of cost rental, such as the 'Vienna Model*". The admission of the Green Party into the coalition government played a crucial role in advancing this agenda, as they had long been advocates of cost rental housing both at the European and national levels (P1; P4; P5). For the center-right coalition partners, this proposal represented a compromise (P1), primarily because it addressed the growing housing crisis while focusing on the middle-income population, a demographic that was becoming increasingly squeezed out of both homeownership and social housing.

Cost rental ambitions were further formalized in the 2021 'Affordable Housing Act'[13] (P2), which provided key legal specifications on what constitutes 'costs' in the cost rental model (Byrne, 2024), as depicted in figure 40. However, one of the most significant challenges in establishing the act was ensuring compliance with EU state aid rules. As one participant (P1) highlighted, "*...powerful property companies in Ireland kept a close eye on state aid rules.*", forcing public servants to carefully craft legislation to avoid creating illegal state aid by favoring specific groups.

WHAT CONSTITUTES THE 'COSTS' IN COST RENTAL IN IRELAND BY BYRNE, M., 2024	
1	Costs associated with making the dwelling available for rent including any capital development or acquisition costs involved;
2	Financing costs associated with making the dwelling available for rent including debt finance costs, interest charges and limited equity returns;
3	Necessary and appropriate management costs associated with the dwelling, including costs of letting the dwelling;
4	Costs associated with necessary and appropriate maintenance of the dwelling during the cost calculation period;
5	Costs of maintaining a prudent contingency surplus in addition to a sinking fund created to meet projected maintenance costs associated with the dwelling during the cost calculation period.

Figure 40: Elements of what constitutes the 'costs' in Irish cost rental (own work, based on Byrne, 2024).

Insights from Kenna (2021) helped to navigate these regulatory challenges, outlining a structure that would comply with EU rules while theoretically (P4) allowing private companies to participate in cost rental housing (P1). Yet, despite the launch of a dedicated scheme for private providers in August 2023[14], no private entities have bid for the funding schemes (P10). The main reasons include low profit margins due to targeted rents set 25% below market rates (P6-8) as well as strict terms of conditions and eligibility rules (McManus & Doyle, 2023).

Further details regarding the implementation of cost rental housing were laid out in the 'Housing for All' plan[15] (P2; P4; P9; P10). This plan explicitly targets the middle-income cohort (P3; P5; P6; P8) or "*squeezed middle*" (Byrne, 2022c), a demographic above the social housing income limits but unable to afford homeownership. Cost rental homes under this plan are projected to

[12] The programme is found here;
[13] The Irish Housing Affordable Act 2021 is found here;
[14] More information on this Secure Tenancy Affordable Rental investment scheme (STAR) is found here;
[15] The Housing for All plan is found here.

offer rents at least 25% below the market rate, with an average of 2,000 homes per year planned during the program's lifetime. Eligibility criteria include households with an annual net income below €66,000 in Dublin and €59,000 in the rest of Ireland (Affordable Homes Ireland, n.d.). This targeted approach, while addressing a specific housing need, has sparked debate over the inclusiveness of the model. One interviewee (P3) argued that "*It's not really cost rental because the income cohort is quite narrow...*", pointing out that the strict eligibility criteria (figure 41) exclude low-income individuals, which runs counter to the more universalist cost rental models found in countries like Austria, Denmark, and Finland (Housing Europe, 2022). Furthermore, the percentage of cost-based housing in Ireland's total housing stock remains notably low. By April 2024, cost-based housing is projected to account for only 0.1% of the total housing stock, a much smaller percentage than in countries like Austria and Denmark, where cost rental housing is a more established part of the housing system. Figure 42 highlights all international comparisons.

ELIGIBILITY CRITERIA FOR COST RENTAL HOUSING IN IRELAND BY AFFORDABLE HOUSING IRELAND, N.D.	
1	Your net household income is below €66,000 per annum for Dublin and €59,000 for elsewhere in the country. Applicants will have to prove how they have calculated their net household income.
2	You are not in receipt of any social housing supports (including Rent Supplement or Housing Assistance Payments).
3	You do not own a property in Ireland or elsewhere.
4	Your household size matches the size of the property advertised (All members of the household must be living in Ireland at time of applying.
5	You can afford to pay the cost rent for the home.
6	Your household has only entered one application for a specific cost rental property.

Figure 41: Eligibility criteria of Irish cost rental (own work, based on Affordable Housing Ireland, n.d.).

Moreover, Ireland's reliance on public funding (P9; Byrne, 2024) raises concerns about the long-term sustainability of its cost rental model (P4). While Austria and Denmark have managed to balance public and private investment, Ireland’s model currently depends almost entirely on public loans (80%) and grants (20%), with private equity remaining largely absent (as shown in figure 43). This heavy reliance on public resources has led some to question the model's viability, especially given the competing demands on public finances for healthcare and childcare (P4).

KEY DIFFERENCES OF COST RENTAL IN EUROPEAN COUNTRIES (OWN WORK, BASED ON (HOUSING EUROPE, 2022))				
	IRELAND	AUSTRIA	DENMARK	FINLAND
COST-BASED SOCIAL HOUSING (% OF NATIONAL HOUSING STOCK)	~0,1%* - *April 2024*	17%	20%	11% (narrow definition); c.20% (broad definition)
ELIGIBILITY	Selective** - *only middle income households*	Universalist – *c.80% of households in practice*	Universalist – *but priority for most in need*	Universalist – *but local restrictions apply in practice*
FUNDING SOURCES	- Public loans (~80%); - Public grant (~20%). ***	- Public loans – *subordinate* (30-40%); - Bank loans (30-40%); - Own equity (10-20%); - Tenant equity (~5-10%); - Public grant (~5%)	- Loan from a mortgage institution – *with state guarantee* (86-90%); - Municipal loans (8-12%); - Tenant equity (2%)	- Private loans – *with state guarantee* (95%); - Own equity (5%); - Public grant
DOWNPAYMENT REQUIRED FROM TENANTS?	No	Yes – *though not compulsory*	Yes	No
COST-RENT APPLIED AT...	Building/estate level	Building/estate level	Building/estate level	Social provider level
POST REPAYMENT OF LOANS IS SET BY...	Cost-based rent setting continues – *with regulated increases to ensure long-term affordability*	'Grundmiete' system – *fixed price per square metre*	Fixed nominal rent	Ceases to be officially 'social' – *rents in line with prior cost-rents*
MAIN STRENGTH	Long-term financial sustainability	Long-term financial sustainability	Long-term financial sustainability	Long-term financial sustainability
MAIN AREA FOR IMPROVEMENT	Total cost rental housing stock and private equity	Cost of new homes in areas with high land costs	Construction price cap in areas with high land costs	Depopulation in rural areas undermining cost-based principle

Figure 42: Key differences of cost rental housing in Ireland compared to other European nations (own work, based on (Housing Europe, 2022)). *[16] and ***[17] are provided in footnotes below, ** refers to figure 43.

FUNDING SOURCES OF COST RENTAL HOUSING IN IRELAND				
	FUNDING SOURCE	TYPE OF SOURCE	AVAILABLE SINCE...	AMOUNT APPROVED
1	Cost Rental Equity Loan (CREL)	Public loan	2021	Over €730 million
2	Affordable Housing Fund (AHF)	Public grant	December 2022	€369 million (*mainly for affordable purchase delivery*
3	Cost Rental Tenant in Situ (CRTiS)	Public grant	April 2023	*unknown*
4	Secure Tenancy Affordable Rental (STAR) Investment Scheme	Public loan	August 2023	€750 million

Figure 43: Elements of what constitutes the 'costs' in Irish cost rental (own work, based on Byrne, 2022c).

Despite these concerns, public grants were essential in getting cost rental housing off the ground. Initially, cost rental housing provision in Ireland was entirely debt-financed via public loans, which made it unsustainable for providers (P5; P6). The integration of public grants helped alleviate some of this financial pressure. The theory is that as the cost rental housing stock

[16] The approximation is based on the following rough calculation: (1,600 cost rental homes / 2,112,121 total housing units in Ireland) * 100% = 0.076%, rounded to ~0.1%;

[17] The funding breakdown is based on data from April 2024. Out of 4,726 total cost rental units assisted for delivery (not delivered), approximately 3,676 units (around 80%) are supported by public loans, with 3,250 units through the Cost Rental Equity Loan (CREL) and 426 units through the Secure Tenancy Affordable Rental (STAR) Investment Scheme. Public grants support the remaining 1,050 units (approximately 20%) via the Affordable Housing Fund (AHF) and the Cost Rental Tenant in Situ (CRTiS) scheme. This estimate follows the 'Housing for All' projection that one-third of affordable homes will be cost rental.

matures over time, surplus revenue from older housing will be used to finance new developments (P5; Byrne, 2022a; Kenna, 2021). This theory dates back to Kemeny (1995), who called it the process of maturation (P1; P5; Elsinga, 2020; Norris & Byrne, 2021). However, some Irish actors are skeptical of whether Ireland can achieve the same level of stock maturation seen in countries like Austria, given the small scale of the Irish market and the long trajectory required for these benefits to materialize (P1; P8; P10). One participant (P8) remarked that Ireland's housing sector is "*40 years behind*" European models, and while there is hope that rents will eventually become more affordable, this process is expected to take time. Others expressed doubt that Ireland's cost rental model could ever significantly lower rents without a substantial increase in the housing stock (P1).

Interestingly, the financial models in Ireland's cost rental scheme account for long-term maintenance costs from the outset, which ensures that the quality of units remains high for 20 to 40 years (P10). This is a positive aspect of the model, even if it raises initial costs. Ireland's comprehensive 'Housing for All' plan, along with various acts and national development frameworks, has laid a strong foundation for cost rental housing (P4; P6; P9; Byrne, 2022b), offering a strategic vision that many other countries might lack. As one interviewee (P4) noted, "*When I go abroad to conferences… they say, 'at least you actually have a plan, and you have funding…*'".

Another key factor in the success of Ireland's cost rental model has been the close collaboration between government bodies and the AHBs (P2; P4; P5; P8; P9; P10). These AHB organizations, through networks like the Irish Council for Social Housing (ICSH)[18] and the Housing Alliance, have provided continuous feedback on how policies impact practice. This ongoing dialogue has been essential in addressing the challenges and refining the implementation of cost rental housing in Ireland. The most important challenges with implementation and related considerations are therefore discussed next.

Part 5.3 Implementation challenges

Figure 44: 'Implementation & challenges' of cost rental in Ireland as part of the timeline (own work).

Implementing cost rental housing in Ireland presented unique challenges, primarily because the model represented an entirely new form of tenure in the Irish housing context. The decision to start quickly and figure things out along the way (P5) contributed to some of these challenges. As one interviewee (P8) remarked, cost rental housing was somewhat "*handed over*" to the AHBs without a well-developed plan in place. The focus on fast delivery, while essential for addressing urgent housing needs, left little room to consider long-term sustainability from the outset.

As a result, the early rollout was slow, with fewer than 60 units provided in 2021 (P5). This figure is small compared to the ambitious target set out in the 'Housing for All' plan, which aims to deliver 2,000 homes per year from 2022 to 2030. Early expectations for provision were placed on three of the largest AHBs: Cluíd, Tuath, and Respond, with Circle Voluntary Housing Association joining later (P2; P9; P10). The only other current providers are local authorities and the Land Development Agency. Interestingly, the first cost rental developments were located

[18] The Irish Council for Social Housing (ICSH) is the national social housing federation representing over 270 housing associations across Ireland. More information is found here.

outside the Dublin area, despite the acute nature of the housing crisis in the capital (P4; P7). This situation highlighted the geographical and cost-related challenges the sector faced, which are the first two challenges discussed below. Figure 45 beneath here provides for a detailed breakdown of all implementation challenges.

CHALLENGES WITH IMPLEMENTING COST RENTAL HOUSING IN IRELAND BASED ON INTERVIEWS			
1	Keeping costs down	5	Housing assistance
2	Geographical distribution	6	Competition between providers
3	Public unawareness	7	Role of local authorities
4	Tenant selection		

Figure 45: Challenges with implementing cost rental in Ireland as part of the timeline (own work).

Challenge 1 = Keeping costs down: One of the most critical challenges was managing rising inflation and increasing costs of materials, labor, construction, and land (P3-10; Byrne, 2022c). As rents in cost rental housing are directly tied to these costs, any price increases disproportionately impact affordability (P3-10; Byrne, 2022c). As one participant (P3) noted, cost rental was introduced "*at the worst possible time in Ireland*," as construction costs and property management expenses grew by as much as 30% due to inflation and external factors like the war in Ukraine. Contrastingly, when the cost rental model was first introduced, Ireland benefited from low interest rates and minimal inflation (P5; P9), but the rapid change in economic conditions complicated efforts to keep rents affordable. The high-cost environment in cities like Dublin (P8) further exacerbated these challenges, making it difficult to build in high-value areas (P5) while maintaining affordability for tenants. This also poses geographical challenges.

Challenge 2 = Geographical distribution: Another significant issue was the geographical concentration of cost rental developments. Because the model relies on low land and construction costs, many units were established in greenfield, peripheral areas with limited access to amenities and public transport (P6; P8). This location choice raised concerns for tenants who needed reliable transport and access to essential services, such as childcare and employment opportunities. One interviewee (P6) highlighted this issue, explaining how tenants faced long commutes and a lack of infrastructure after moving to these areas

Challenge 3 = Public unawareness: Public awareness of the cost rental model posed another challenge. Many people were simply unaware of the availability of cost rental housing (P8; P10), while others were skeptical of the concept (P6), perceiving it as too good to be true. As one participant(P7) explained, "*...it's a very slow psychological and societal, and cultural change to get people to think that... they don't have to own a home but can have cost rental for a long time and have security...*" This skepticism further complicated efforts to fill available units, particularly when tenants were unfamiliar with AHBs providing cost rental or unsure about the new model.

Challenge 4 = Tenant selection: The lottery-based tenant selection system also proved to be a major obstacle during implementation (P5; P8-10). When the system was first introduced, it struggled to cope with the large volume of applications and was overly bureaucratic. For example, one early scheme received over 1,000 applications for just 25 homes, leading to significant delays (P5). Fortunately, this process was refined over time, with adjustments made in collaboration with providers (P9). Simplifying the application process helped improve public recognition of the cost rental model and increased enthusiasm among potential tenants.

Challenge 5 = Housing assistance: Another challenge arose from the difficulty of cost rental tenants to access housing assistance payments (HAP) when needed (Byrne, 2022c). This situation left some tenants in a vulnerable position, especially if they faced illness or job loss, as they faced

barriers for financial support to cover their rent (P2; P3; P5). This limitation contrasted sharply with practices in other European countries, where such assistance was available (Byrne, 2024; see figure 42). The policy has since been updated, allowing cost rental tenants to apply for HAP after six months of residence. There is also increased awareness and application by local authorities recognising that cost rental tenants (P2).

Challenge 6 = Competition between providers: Competition between providers emerged as another issue. Differences in rent levels across cost rental developments, sometimes even between neighboring properties, caused tenants to seek out cheaper options, creating tensions between providers (P2; P9; P10). As one interviewee (P9) explained, "*...we've had a couple of examples where an AHB would create a cost rental estate next to the Land Development Agency (LDA) estate but at different rents*", which led to tenants trying to move from one provider to another based on price differences. This unintended competition has created inefficiencies and requires better coordination between housing providers.

Challenge 7 = Role of local authorities: Finally, local authorities, who are expected to be major providers of cost rental housing (P4; Byrne, M., 2022c), have faced significant difficulties in delivering on this responsibility. Ireland's highly centralized governance model has contributed to a lack of local authority capacity to manage cost rental projects effectively (P6). Moreover, there has been a gap in educating local authorities about the differences between cost rental and social housing, which has hampered progress (P2). One interviewee (P6) noted that "*...Ireland is one of those countries that has a very centralized governance model*", which limits local authorities' ability to take on housing challenges without more support from the national government.

Part 5.4 Ongoing developments and observations

Figure 46: 'Ongoing developments' of cost rental in Ireland as part of the timeline (own work).

Despite the many challenges and the early stage of cost rental housing in Ireland, its reception has generally been positive (P2-6; P8-10). Research into early tenant satisfaction reveals that a significant portion of participants feel that cost rental housing offers good value compared to the private rental sector. One interviewee (P3) explained that tenants experience cost rental as "*...so much better than the private rental sector*", particularly in terms of quality, professionalism, and security.

Preliminary findings from early satisfaction surveys reinforce these positive sentiments (P2; P3; P5; P6; P8; P10). According to the research[19], 90% of tenants reported being very satisfied with their homes, while 94% saw their tenure as a long-term housing solution. Common themes of satisfaction included security (P3; P4; P6; P10),, stability, and safety (Byrne, 2022d), which tenants valued as key benefits of the cost rental model. As one participant (P3) remarked, "*...to make people feel that cost rental is long-term secure is an achievement in itself.*".

Additionally, tenants valued not only the autonomy to furnish their homes as they wished (P6; Byrne, M., 2022d) but also the benefit of having a professional landlord and a well-maintained property compared to private rental housing (P8; P10; see part 5.1). Unlike the

[19] This research will be officially published in September 2024, just after this thesis is delivered.

often unreliable private rental sector, where landlords may neglect maintenance or place restrictions on tenants, cost rental housing offered residents more control and better living conditions. One tenant (P6) highlighted this difference, stating, "*...if I want to do my back garden like this, I don't have to get permission for it*", further underscoring the advantages of cost rental over private rental arrangements.

On a broader level, cost rental housing has positively impacted Ireland's housing supply and helped meet high demand (P3; P9). The introduction of mixed-housing communities, where cost rental is offered alongside social housing, has also been highlighted as a key benefit (P2; P4; P5). This approach fosters the development of integrated, diverse communities, rather than creating isolated pockets of income-based housing. As one participant (P2) noted, "*...providing cost rental alongside social housing... means that we're mixing incomes and backgrounds within one housing development.*".

Much of the success to date can be attributed to the strong cooperation between key stakeholders (P8), including government agencies, AHBs, and all other providers. Stable political support (P2; P4) has also played an important role in maintaining momentum for the program. Regular engagement between these parties has been essential in resolving issues and refining the cost rental model as it continues to evolve. As one interviewee (P8) mentioned, "*...there's been a huge amount of engagement... because the state is very, very keen to make it work.*".

However, the issue of affordability remains a disputed point. While many tenants are satisfied with the value they receive, others have expressed concerns about the affordability of rents (P1; P4; P6; P10; Byrne, 2022c), especially as construction and other costs continue to rise. Some rents have reached as high as €1,700 (P1) or more (Byrne, 2024), leading to mixed reactions from tenants. Approximately 68% of survey participants indicated that they had little difficulty paying their rent (Byrne, 2022c), but rental rates such as 35-45% below market rent instead of the proposed 25% (P8) have led to criticisms that the program is not meeting its full affordability potential.

Critics of the cost rental model argue that focusing too much on year-one rents overlooks the long-term affordability benefits (P3; P6; P10; Byrne, 2022b; 2022c). Unlike private rental markets, where rents tend to increase over time, cost rental housing offers stability and predictability, which should help offset initial high costs. This perspective aligns with international examples, such as Austria, where long-term rent stability has been a cornerstone of the cost rental model. Figure 47 illustrates the long-term stability of house prices in Austria, providing a comparison to Ireland's emerging system. Proponents of the model also argue that cost rental housing has the potential to, as part of a more unitary market, decrease rents and house prices in all other parts of the Irish housing market (P5), thereby contributing to wider affordability across sectors. As one participant (P5) explained, "*the intention is to have a wider impact over 10 years, not just on cost rental housing... "*, but on the overall affordability of housing.

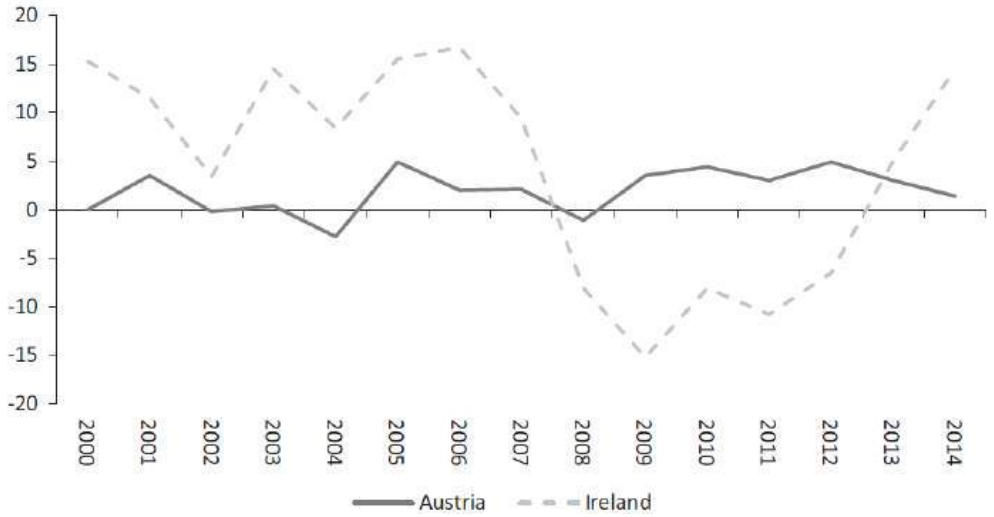

Figure 47: Annual % change in house prices in Austria and Ireland, between 2000 and 2014, which shows the stable prices of the Vienna model compared to Ireland (Norris & Byrne, 2018).

Looking ahead, the expansion of the cost rental housing stock is a critical priority. Several providers are planning to deliver between 1,800 and 2,000 homes in the next three years (P9), with a notable shift in focus from social to cost rental housing or commitments of a 50-50 between them (P5). This shift underscores the growing importance of cost rental as part of Ireland's broader housing strategy. Additionally, providers are working proactively to refine policies and processes based on ongoing feedback (P2; P8). Regular workshops and consultations have already led to improvements, such as the refinement of the lottery system used for tenant selection (P1; P9).

Despite these improvements, the issue of funding remains the most critical challenge (P5). While there have been successful regulatory refinements, the government has shown hesitation in fully embracing proactive feedback implementation. As one interviewee (P2) pointed out, "*they're hesitant because they've got lots of other priorities*", suggesting that housing, though important, is often competing with other pressing issues for attention and resources. To ensure the long-term success of cost rental housing, it will be crucial for the government to adopt a more proactive approach in addressing these challenges. Refining funding mechanisms, continuing stakeholder engagement, and focusing on the affordability aspect will be key elements in driving the program forward and realizing its full potential in Ireland. Therefore, as the discussed early successes and challenges continue to shape the current landscape of cost rental housing, it becomes increasingly important to consider the future trajectory and necessary developments to ensure the long-term viability and sustainability of this model in Ireland. This is discussed in the next part.

Part 4.2.5 Future considerations

Figure 48: 'Future considerations' of cost rental in Ireland as part of the timeline (own work).

FUTURE CONSIDERATIONS OF COST RENTAL HOUSING IN IRELAND BASED ON INTERVIEWS			
1	Sustain political consensus for cost rental to succeed	5	Encourage more AHB's to provide cost rental housing
2	Integrate structured, national monitoring	6	Share Irish lessons learned
3	Increase private investment	7	Strengthen the position of local government
4	Educate Irish households	8	Consider the impact of cost rental on housing circulation

Figure 49: Future considerations of cost rental in Ireland (own work).

Future consideration 1 = Sustain political consensus for cost rental to succeed: One of the key factors in the success of cost rental housing in Ireland has been the political consensus behind its introduction (P2; P4). However, lessons from international examples, such as the Vienna model, show that sustaining this political support over decades is critical to long-term success (P1; Byrne, 2022a; 2022b). In Ireland, bipartisan agreement on the need for middle-income housing and long-term funding commitments has provided optimism for the future of cost rental housing. As one interviewee (P9) stated, "*...if there were to be a change in government, I don't think there'll be a change in policy... cost rental will still be there.*". However, maintaining this consensus will be challenging, given the dynamics of democratic elections (P3) and the varying promises made by politicians to win votes (P10). The challenge will be to ensure that cost rental remains a priority even in the face of shifting political landscapes.

Future consideration 2 = Integrate structured, national monitoring: The current phase of cost rental housing offers a prime opportunity to implement structured, national monitoring (P6; P8) mechanisms to track both tenant satisfaction and the overall progression of cost rental developments (P10). Effective monitoring would allow the state to assess issues such as geographic distribution, ensuring that there is a balanced spread of cost rental housing across the country and avoiding overconcentration in certain areas. One interviewee (P8) emphasized the importance of such monitoring, noting that without it, "*it'll just be what it is.*". The presentation of tenant satisfaction research in September 2024 provides a strong starting point for establishing such monitoring systems, with suggestions for expanding resources, capacity (P8), survey sample sizes (Byrne, 2022d) and broadening the scope to include more than just tenant experiences (P6).

Future consideration 3 = Increase private investment: While Ireland has introduced the STAR scheme (P10) to encourage private investment in cost rental housing, as explained in part 5.2, there has yet to be any significant uptake by private parties. To establish a robust cost rental housing stock and ensure sustainable affordability, the government will need to adjust the STAR program or introduce a new scheme that offers more attractive returns for investors. Other European countries provide examples of how private investment can be successfully integrated into cost rental models, and Ireland could benefit from learning from these experiences.

Future consideration 4 = Educate Irish households: Public awareness and understanding of cost rental housing remain limited, as highlighted in previous sections. Both government agencies and housing providers need to invest consciousness (P8; P10) and perception (P4; P6; P7) of cost rental housing. A national strategy for raising awareness would be most effective, ensuring that the concept of cost rental is well understood by potential tenants (P7; P8; P10). Additionally, providers should continue to educate tenants on a local level, helping them understand the unique advantages of cost rental housing over private rental options (P4; P7). All in all, fostering a deeper public understanding of cost rental housing is essential to the model's long-term success, as informed and engaged tenants will not only benefit from the security and affordability offered but also contribute to the stability and growth of the sector.

Future consideration 5 = Encourage more AHB's to provide cost rental housing: Efforts are already underway to encourage more Approved Housing Bodies (AHBs) to participate in the cost rental sector, with the goal of increasing the number of organizations involved in delivering these homes to 10 (P9). Building a significant housing stock is crucial for the long-term success of the cost rental sector, as the maturity of the stock will allow for stable and sustainable rent levels over time. However, as the sector grows, it will be essential to manage new deliveries carefully to avoid confusion and maintain a streamlined, comprehensible system. Smaller-scale knowledge exchange efforts, such as those facilitated by the Housing Alliance, should continue to play a role in the sector's development, ensuring that lessons are shared and best practices are adopted (P2). The success of these knowledge exchange initiatives will be discussed further in Chapter 6.

Future consideration 6 = Share Irish lessons-learned: Ireland's cost rental housing model has attracted international attention, with other countries, including the UK, looking to learn from Ireland's experience (P4; P9; Byrne, 2022c). Given Ireland's history of benefiting from transnational knowledge exchange, the country is now in a unique position to share its own lessons learned. This could involve more formal exchanges with European countries and beyond, sharing insights on funding mechanisms, tenant satisfaction, and the broader challenges of implementing cost rental in a housing market traditionally dominated by homeownership.

Future consideration 7 = Strengthen the position of local government: Countries with stronger local governments, such as Vienna and Berlin, have been able to deliver more cost rental housing due to greater local authority control (P4). Strengthening the role of local governments in Ireland could enhance the provision of cost rental housing and improve cooperation with AHBs. As one participant (P4) noted, "*...our local government is very weak*", suggesting that more localized control over housing provision, perhaps through a directly elected mayor for Dublin, could improve accountability and lead to more cost rental developments.

Future consideration 8 = Consider the impact of cost rental housing on housing circulation: While cost rental housing offers tenants long-term security, its "tenure for life" model could hinder the circulation or flow of households within the housing market. As the cost rental housing stock grows, it may be necessary to facilitate transfers within the system to ensure that housing resources are used efficiently (P2). This could involve creating policies that allow tenants to move within the cost rental system as their needs change over time.

Part 5.6 Lessons from the introduction of cost rental housing in Ireland

The chapter, first and foremost, concludes that a lot can be learned from the introduction of cost rental housing as a new line of tender in Ireland. This conclusion lists the key lessons-learned by answering the research question: "What are the lessons-learned from the introduction of cost rental housing in Ireland?". The lessons-learned can both be beneficial for contemporary Irish developments and other countries exploring the introduction of cost rental in their housing system. In total, six key lessons can be learned:

Lesson 1 = Cost rental housing can be introduced even in a country with a deeply ingrained culture of home-ownership: The introduction of cost rental housing in Ireland demonstrates that even in a country with a deeply ingrained culture of homeownership, alternative housing models can be successfully implemented. Despite the traditional emphasis on homeownership, the Irish government's strong political will and strategic sectoral consensus enabled the adoption of cost rental housing as a viable solution to the nation's housing affordability crisis. Unlike in European countries with established rental traditions, Ireland's approach required a significantly different version of the cost rental model to align with its unique cultural and economic context. The

success in Ireland underscores the potential for other countries with similar homeownership cultures to adopt cost rental models, provided they can secure similar levels of political commitment and collaboration. This unique pivot in Ireland's housing strategy offers valuable lessons for other European nations facing similar challenges.

Lesson 2 = Political and strategic sectoral consensus: The success of cost rental housing in Ireland is largely attributed to the strong political and strategic sectoral consensus that underpinned its introduction. The inclusion of cost rental in the 2020 government program marked a significant step forward, driven by a coalition that recognized the urgent need for affordable housing solutions, particularly for the middle-income population. This consensus was not just political but also involved key stakeholders such as the Approved Housing Bodies (AHBs) and advocacy groups, whose collective efforts ensured that the model was both feasible and aligned with national housing goals. The Irish experience highlights that achieving such a consensus is crucial for the successful implementation of new housing models, especially in markets traditionally dominated by homeownership. Sustaining this consensus over the long term, however, remains a critical challenge for the continued success of cost rental housing in Ireland.

Lesson 3 = Targeted and exclusive approach: Ireland's approach to cost rental housing is notably targeted and exclusive, differing significantly from the more universal models seen in Austria, Denmark, and Finland. The Irish model is heavily reliant on public funding, with minimal involvement of private equity, which raises concerns about its long-term sustainability. Additionally, the total stock of cost rental housing in Ireland remains low, limiting the impact of the model compared to its European counterparts. Unlike the more inclusive eligibility criteria in other countries, Ireland's cost rental housing is specifically targeted at a middle-income cohort, which excludes a broader segment of the population, particularly those with lower incomes. This selective approach, while addressing a specific need, challenges the typical principles of cost rental housing and may limit the model's overall effectiveness in solving the wider housing affordability crisis.

Lesson 4 = Cost rental in Ireland faced 7 implementation challenges: The implementation of cost rental housing in Ireland encountered seven significant challenges that have shaped its development and potential for success. These challenges include keeping costs down in a high-inflation environment, addressing the geographical concentration of developments in less connected areas, and overcoming public unawareness and skepticism about the new housing model. Additional hurdles involved refining the tenant selection process, integrating housing assistance for those in need, managing competition between providers, and clarifying the role of local authorities in delivering cost rental units. Countries considering adopting the Irish model should carefully take these challenges into account, as they underscore the complexities of introducing a new housing model in a traditionally homeownership-focused market. Learning from Ireland's experience with these challenges can help other nations avoid similar problems and better tailor the model to their own contexts.

Lesson 5 = Cost rental in Ireland has 8 future considerations: Looking ahead, the Irish cost rental model presents eight key future considerations that will be crucial for its long-term success and sustainability. These include maintaining political consensus, integrating structured national monitoring of tenant satisfaction, increasing private investment, and educating the public about the benefits of cost rental housing. Additionally, there is a need to encourage more Approved Housing Bodies (AHBs) to participate in the sector, share lessons learned with other countries, strengthen the role of local government in housing provision, and consider the impact of cost rental housing on housing circulation. These considerations highlight the ongoing

challenges and opportunities for refining the model, and they also offer valuable insights for other countries looking to adopt or adapt the cost rental approach in their own housing policies.

Lesson 6 = Importance of transnational knowledge: The introduction of cost rental housing in Ireland underscores the critical importance of transnational knowledge exchange, particularly with European countries like Austria. The Irish model was significantly shaped by insights and best practices from Austria's well-established cost rental system, which provided a blueprint for adapting the model to Ireland's unique context. This exchange of knowledge was instrumental in shaping both the initial design and the advocacy efforts that brought cost rental housing onto the Irish political agenda. The success of these transnational exchanges highlights the value of learning from other countries' experiences, enabling Ireland to avoid potential pitfalls and accelerate the development of its own cost rental sector. For other nations considering similar housing affordability solutions, the Irish experience demonstrates the vital role that international knowledge exchange should play in successfully introducing different housing models.

Chapter 6 Lessons-learned from transdisciplinary and transnational knowledge exchange

Chapter 6 directly answers the fourth subquestion: "What are lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland?" This chapter synthesizes insights gained from the case study and interviews, highlighting the methods, barriers, enablers, and incentives associated with knowledge exchange. It provides crucial recommendations for improving future knowledge exchange efforts, emphasizing the importance of collaboration across disciplines and borders to effectively address affordable housing challenges. The lessons learned here are essential for guiding policymakers, practitioners, and researchers in enhancing the impact and sustainability of knowledge exchange initiatives in Europe.

Part 6.1 Knowledge exchange methods with cost rental housing in Ireland

The 10 conducted interviews delivered conversations about 22 different knowledge exchange methods, applied or proposed. Figure 50 lists all those entities. The methods that are literally apparent in theory are highlighted in green and the ones in yellow might not explicitly feature in literature but are very similar to methods or strategies that are. For example, a written report is seen as an evidence brief and a working group as a learning collaborative. What furthermore stands out is the fact that the majority of methods do feature in literature. Despite this, methods such as ‘advocacy / position paper’, ‘good- / best practices’, ‘pilot study’ and ‘exhibition’ are absent from theory. This finding aligns with the conclusion of the state-of-the-art methods part about how knowledge exchange on housing affordability seems to turn to methods which make knowledge tangible and concrete help translate information into actual housing provision. Where the methods applied with cost rental housing in Ireland differ from the state-of-the-art methods of chapter 4 is the limited provision of (web-based) information as a strategy. The only entity mentioned is the website, with the sole goal of informing the public and without a platform for knowledge exchange through discussions. Next, each method from figure 50 is elaborated upon by referencing quotes from the interviewees.

METHODS MENTIONED WITH KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES			
METHOD	STRATEGY	INTERVIEWEES	MENTIONED BY
Conference	*Application of KE tools or instruments*	9 of 10	(P1-8; P10)
Written (research) report	*Dissemination of knowledge*	8 of 10	(P1-7; P10)
Intermediary organization	*Use of knowledge brokerage*	7 of 10	(P1; P2; P4; P5; P8-10)
Working group	*Organizing KE activities*	7 of 10	(P2; P4-6; P8-10)
Regular knowledge exchange meeting	*Organizing KE activities*	6 of 10	(P2; P4; P5; P8-10)
Seminar	*Organizing KE activities*	5 of 10	(P3; P5; P7; P9; P10)
Study tour / Site visit	*Application of KE tools or instruments*	5 of 10	(P4-6; P9; P10)
Workshop	*Application of KE tools or instruments*	5 of 10	(P6-10)
Educational course / Lecture series	*Application of KE tools or instruments*	4 of 10	(P1; P4; P7; P8)
Website	*Provision of (web-based) information*	4 of 10	(P1; P7; P8; P10)
Advocacy / Position paper	*Dissemination of knowledge*	4 of 10	(P2; P4; P8; P9)
Good / Best practices	*Organizing KE activities*	3 of 10	(P1; P2; P8)
Training package	*Application of KE tools or instruments*	3 of 10	(P2; P4; P9)
Pilot study	*Application of KE tools or instruments*	3 of 10	(P2; P5; P6)
Festival	*Application of KE tools or instruments*	3 of 10	(P3; P4; P10)
Exhibition	*Application of KE tools or instruments*	3 of 10	(P4; P6; P10)
Regular European housing updates	*Dissemination of knowledge*	2 of 10	(P4; P8)
Forum	*Application of KE tools or instruments*	2 of 10	(P4; P8)
Publicity campaign	*Dissemination of knowledge*	2 of 10	(P7; P10)
Annual (research) report launches	*Application of KE tools or instruments*	1 of 10	(P2)
Evaluating knowledge exchange through surveys	*Organizing KE activities*	1 of 10	(P2)
High impact individuals	*Use of knowledge brokerage*	1 of 10	(P3)

Figure 50: Methods of knowledge exchange efforts mentioned by interviewees (own work).

Conferences: Conferences were highlighted by all but one interviewee as a key method for facilitating knowledge exchange (P1-8; P10). The primary benefit of conferences is the opportunity for real-life conversations in an accessible, interactive format (P1; P4; P10). These events allow participants to engage directly with others in their field, facilitating spontaneous discussions and sharing of ideas that might not emerge in more structured settings. As one interviewee (P4) noted, "*the annual conferences are so good because you can have those kind of side conversations*", emphasizing the informal exchanges that often happen on the sidelines.

The ability to hold numerous informal meetings alongside a formal program of speakers and policy debates was repeatedly highlighted as one of the most valuable aspects of conferences (P1; P4; P10). Interestingly, several participants indicated that these unstructured interactions, rather than the official conference agenda, are often where the most meaningful knowledge exchange occurs. One interviewee (P1) put it, "*Conferences are the key because people talk… you have main speakers and then gaps between speeches for people to meet and talk.*" These interactions enable participants to gain fresh insights, build new connections, and share relevant research findings (P2; P4), often leading to collaborations or follow-up discussions.

Conferences also play a central role in generating and disseminating research. Written reports and academic papers are frequently sparked by discussions at conferences, or conferences themselves can serve as platforms for launching calls for papers on specific topics (P3; P5). According to one academic (P1), conferences have been critical in connecting research with policy and practice, particularly in the area of cost rental housing, which in Ireland, was first introduced through transnational knowledge exchange at conferences in Vienna.

Both national and international conferences have proven essential in advancing Ireland's cost rental housing model. Events like those organized by the Irish Council for Social Housing (ICSH) frequently invite international speakers (P2), providing a platform for broader learning and exchange. Importantly, all organizations involved in cost rental such as the ICSH, Approved

Housing Bodies (AHBs), the Land Development Agency (LDA), and the Housing Agency regularly participate in these events (P1; P4; P7; P10). Many of these organizations recognize the benefits of attending, with some AHBs reflecting on the need to attend even more regularly (P8). For example, Tuath Housing is now considering joining a European network to enhance its participation in transnational conferences (P8), which would provide further opportunities for learning and collaboration. Figure 51 illustrates the memberships of Irish housing organizations in key European networks such as Housing Europe, the European Federation of Living (EFL), and FEANTSA. These networks help housing bodies stay informed about international best practices and participate in knowledge exchange efforts, enabling them to leverage knowledge from abroad and apply it in the Irish context.

MEMBERSHIPS OF EUROPEAN INTERMEDIARY ORGANIZATIONS OF THE DIFFERENT IRISH HOUSING ACTORS			
IRISH HOUSING ORGANIZATION	HOUSING EUROPE	EUROPEAN FEDERATION OF LIVING	FEANTSA
(AHB) Clúid Housing Association		x	
(AHB) Respond			x
(AHB) Circle Voluntary Housing Association		x	
(AHB) Tuath Housing			
Irish Council of Social Housing (ICSH)	x		x
Housing Agency		x	

Figure 51: All memberships of Irish housing organizations of the European networks of Housing Europe, the European Federation of Living (EFL) and FEANTSA (own work).

Despite the existence of multiple transnational conferences, there is a call for a more centralized European housing conference. One interviewee from the Land Development Agency (P7) suggested that such a conference, possibly funded by the European Commission, would offer a valuable platform for countries to share and learn from each other's housing practices and theories. As the interviewee remarked (P7), "*I think it would be really good to have a housing conference for Europe. I mean, that's something that the Council of Europe or the European Commission could possibly help fund, that we have research coming from all of the countries together to share and learn about housing practice, housing theory.*".

Not all interviewees, however, viewed conferences as entirely successful. Some critiques centered on the formal nature of many sessions, with too much emphasis on lectures and presentations (P1; P4). Others pointed out that certain conferences (P3) did not add much value beyond existing meetings, particularly in cases where attendees were already familiar with the key issues (P8). Time and resource constraints were also noted as barriers, as hosting or attending conferences requires significant investment (P2; P4-6; P8). Nonetheless, these concerns are balanced by the longer-term benefits of the connections made at conferences. One interviewee (P1) refuted the idea that conferences are too costly, arguing that the follow-up exchanges resulting from new relationships often justify the expenses. Furthermore, several suggestions were made to improve the effectiveness of conferences, such as organizing smaller working groups (P1) and dedicating more time to peer learning between housing entities (P7).

Overall, conferences are a vital tool for knowledge exchange in the housing sector. While formal lectures may sometimes feel repetitive, the informal conversations and opportunities to network continue to provide significant value, fostering collaboration and driving new ideas in the field.

Written (research) reports: Written reports emerged as a recurring and critical method for exchanging knowledge, particularly in the introduction of cost rental housing in Ireland (P1-7; P10). Reports like the collaboration between Housing Europe and the Housing Agency have been instrumental in applying lessons from other European countries to the Irish context (Housing

Europe, 2022). As one interviewee (P5) noted, these reports "*looked at cost rental in different European countries*" and were pivotal in shaping Ireland's approach to cost rental housing. The impact of such reports has been significant, providing clear examples of funding models, target markets, and operational strategies from across Europe.

Despite their utility, there is consensus that written reports are underutilized, with calls to make greater use of the knowledge available from existing documentation (P1; P5). Reports often serve as a foundation for further knowledge exchange, either providing talking points for conferences or being sparked by such events (P3). This dynamic interplay between written research and knowledge-sharing events reinforces the importance of reports in shaping discussions and policy directions.

As of September 2024, AHBs and academics are preparing to present their research on the first cost rental households in Ireland (P2; P3; P5; P6; P8; P10). This research, discussed in earlier chapters, exemplifies the role of written reports in sharing evidence-based knowledge and improving affordable housing provision (P2; P6). These reports help bridge the gap between theory and practice, but it's important to recognize the difference in audience: policy reports tend to target practitioners, while academic papers focus more on theoretical insights (P6). One key suggestion is to strengthen the connection between prominent academics and practitioners, particularly in a small country like Ireland, where collaboration can drive meaningful change. As one interviewee (P7) noted, "*what's missing is we don't probably or don't know the people like you who are doing the research.*".

Written reports are therefore an indispensable tool for both transnational and transdisciplinary knowledge exchange. With better integration of academic findings into practice, Ireland and other countries can maximize the impact of these reports, ensuring that knowledge is applied where it can drive the most significant improvements in housing provision.

Intermediary organization: Intermediary organizations, both at the European and national levels, play a pivotal role in facilitating transdisciplinary and transnational knowledge exchange in the housing sector (P1; P2; P4; P5; P8-10). On the European level, organizations such as Housing Europe, the European Federation of Living (EFL), and FEANTSA are instrumental in research funding and providing regular housing updates. Nationally, the Housing Alliance, Housing Agency, and the Irish Council for Social Housing (ICSH) are most frequently mentioned for their contributions to knowledge exchange and policy advocacy (P1; P4; P5).

The Housing Alliance, established between 2016 and 2018 by the six largest Approved Housing Bodies (AHBs), stands out as a key intermediary for practitioners on a national scale (P2; P4; P5 P9). It facilitates knowledge exchange through working and policy groups, consensus building, and advocacy toward government agencies. As one participant (P8) explained, shared submissions are an example of the Alliance's unified voice in policy advocacy, which strengthens its influence: "*...we'll do shared submissions... it went under the Housing Alliance's name, which is helpful in terms of speaking to the state because you're united...*".

Part of the Housing Alliance's strength comes from the substantial housing stock it represents, 95% of the sector (P9), and its ability to create an informal network for knowledge exchange outside formal structures (P2). However, challenges arise from the time constraints of participating practitioners, who often have to prioritize their day-to-day work (P2). Additionally, there is a need to avoid overlap with other intermediary organizations like the ICSH, which could lead to inefficient and repetitive knowledge exchange sessions (P2). The ICSH, while also representing AHBs, is more formal and structured, playing a significant role in the introduction of

cost rental housing through its connections with academics and consequent targeted research (P1). Interestingly, the Housing Agency praises the fact that the Housing Alliance and ICSH compete with each other, as it can drive innovation and progress (P10). This competitive dynamic allows both organizations to push boundaries and improve their contributions to the housing sector.

The Housing Agency, another key intermediary, has also been praised themselves for its strong connections with both the housing sector and the government (P9). Its ability to translate the sector's needs into actionable policy insights for the government has been crucial in advancing cost rental housing in Ireland (P5). As one interviewee (P9) noted, "*...the Housing Agency... can hear what we're saying, translate into what government need to know, and then say to them: 'This is what you need to change.*'".

At the international level, boundary-spanning organizations like Housing Europe have been particularly beneficial for transnational knowledge exchange. In addition to funding pivotal research (P4; P5), these organizations facilitate conferences, events, committees, and other research projects (P10). Strengthening ties with European intermediary organizations has become especially important for Ireland following Brexit. Reinforcing these connections will allow Ireland to benefit from the wealth of expertise in more developed European housing sectors (P5). Looking ahead, greater involvement with European intermediary organizations could enhance Ireland's capacity to exchange knowledge on cost rental housing and other affordable housing models. As one interviewee (P5) highlighted, "*...we would benefit by greater involvement... they have a lot more experience in areas we are interested in...*".

Working group: Working groups are widely mentioned as a knowledge exchange method by nearly every organization involved in affordable housing provision (P2; P4-6; P8-10). These groups are central to the structure of organizations like the Housing Alliance, where each group focuses on a topic relevant to the seven largest Approved Housing Bodies (AHBs). According to one participant from the Housing Agency, working groups create essential spaces for sharing targeted information (P10): "*There's different working groups where the information is really relevant for these kinds of actors.*". Organizations like the Housing Alliance, the Irish Council for Social Housing (ICSH) and the European Federation of Living (EFL) utilize working groups to bring together knowledge on affordable housing. However, since cost rental housing is not relevant to all AHBs, the specific cost rental housing working group is housed under the Housing Alliance, rather than the ICSH, which represents a much broader membership base of 270 Irish AHBs (P4). The use of working groups across these different organizations can result in overlapping themes, as representatives from the same AHBs may participate in multiple groups under different umbrella organizations (P6; P9). This structure ensures that relevant actors can focus on their areas of interest, such as cost rental housing, without requiring participation from those for whom the topic is irrelevant.

The European Federation of Living (EFL) also applies working groups as a key method for knowledge exchange, with the main distinction being that their meetings are conducted online due to the geographical spread of participants (P5). This approach highlights the flexibility of working groups to adapt to different contexts while still facilitating the sharing of knowledge across borders. A critical point raised by participants is the use of terms of reference to ensure both efficiency and clarity in the functioning of these groups. Terms of reference outline the objectives, structure, and expectations for each working group, ensuring that participants are aligned and that their time is well spent. As one AHB representative noted (P2), "*...it's important to have all of those terms of reference in place, because the work of the Housing Alliance isn't my main*

priority.". This ensures that working groups operate with clear goals and contribute effectively to the broader missions of their respective organizations.

Overall, working groups remain an essential tool for focused knowledge exchange in the housing sector. By bringing together the right participants and clearly defining their roles, these groups can facilitate impactful discussions and drive forward key initiatives, particularly in areas like cost rental housing.

Regular knowledge exchange meeting: Regular knowledge exchange meetings are a crucial element of knowledge-sharing practices within organizations like the Housing Alliance, ICSH, EFL, and Housing Europe (P2; P4; P5; P8-10). These meetings are more formal and structured compared to the informal interactions that often occur between participants. As one interviewee (P2) explained, "*...we have monthly meetings... more structured, with an agenda and specific topics...*" These meetings provide a dedicated space for discussing ongoing issues and developments in affordable housing.

On a national level, working groups under the ICSH and Housing Alliance hold regular meetings, with groups of CEOs from larger AHBs meeting monthly (P4). Similarly, European-level organizations like Housing Europe and the EFL also conduct regular meetings, though these occur less frequently throughout the year (P4). Both national and international meetings have increasingly shifted online, largely as a result of convenience and habits formed during the COVID-19 pandemic. However, offline meetings are still scheduled across the year when face-to-face interaction is essential, especially for strategic planning (P2). For example, the Housing Alliance schedules longer, in-person meetings when tasks require deeper discussion and collaboration. While online meetings are often more convenient, they are sometimes criticized for reducing the quality of knowledge exchange. The Housing Agency has observed that participants may not absorb information as effectively online as they would in physical meetings (P10). As one participant (P10) noted, "*...we might have explained well during online meetings, but they still had similar questions...*", indicating it didn't sink in.

Regular knowledge exchange meetings are a key method for maintaining ongoing dialogue within the housing sector. While online formats are convenient, in-person meetings continue to play an essential role in tasks requiring deeper engagement and collaboration.

Seminar: Seminars are another frequently mentioned method of facilitating knowledge exchange in the context of cost rental housing in Ireland (P3; P5; P7; P9; P10). These seminars can either be a permanent feature of intermediary organizations or organized spontaneously in response to emerging interest (P5; P9; P10). Often, seminars are closely tied to written reports and academic papers, serving as a platform for deeper discussions. As with conferences, seminars are often a follow-up to the publication of reports, and they help initiate further conversations (P3).

An academic interviewee emphasized the importance of basing seminars on evidence-based research. Without a solid research foundation, seminars can lack substance, and policy makers or housing providers are unlikely to engage meaningfully. As the academic (P3) put it, "*...for policy makers or housing providers to really get involved... they need to have the background information and see the empirical evidence...*". The Land Development Agency also highlights the collaborative value of seminars, using them as a method to bring together various stakeholders in the housing sector. They see seminars, along with conferences, as a vital tool for promoting collaboration and advancing knowledge exchange (P7).

To conclude, seminars provide a valuable platform for deeper discussions on housing issues, particularly when backed by solid research. Their ability to bring stakeholders together makes them a critical tool for fostering collaboration and informed decision-making in the sector.

Study tour / Site visit: City tours and site visits are frequently used as knowledge exchange methods within the affordable housing sector (P4-6; P9; P10). These activities can either be part of the regular schedule (P9) of an intermediary organization or organized as one-off events. A key benefit of such tours is the opportunity to collaborate with a wide range of actors, including other housing organizations, NGOs, and even tenants. As one interviewee (P6) noted, "*...we're doing a lot of walking tours in the city... with involvement from NGOs and different groups to talk us through different areas.*".

In the context of cost rental housing, the Irish Council for Social Housing (ICSH) plans to organize a city tour during the Housing Europe housing festival in Dublin next year. By then, they expect a larger number of cost rental homes to be available for viewing (P4). The most significant advantage of these visits is the tangible, hands-on understanding they offer to participants. As one interviewee (P8) emphasized, "*...you really need to see it to understand it*", reinforcing the idea that first hand exposure to housing models provides a clearer understanding of how they operate in practice and therefore how to introduce them elsewhere.

Study tours and site visits are therefore powerful tools for making housing models like cost rental more tangible. By allowing participants to see developments firsthand, these methods deepen understanding and foster meaningful exchanges.

Workshop: Workshops are another effective method of knowledge exchange (P6-10), often held as part of broader events like conferences. Cost rental housing has been a recurring topic in recent workshops, frequently featuring transnational speakers (P6; P10). Such workshops facilitate learning from diverse perspectives, as described by one interviewee about another workshop on housing (P6): "*We had a day-long workshop... with speakers from Brazil, South Africa, Portugal, and Vienna.*". The workshop is often combined with other activities, such as site visits, to enrich the learning experience (P9).

The interest in workshops around specifically cost rental housing comes from its perception as a relatively new concept, despite its long history in other countries (P7). Workshops have also played a critical role in systematically improving the cost rental housing process in Ireland. For instance, AHB providers and the Land Development Agency collaborated in a practical workshop to evaluate and enhance the entire process of cost rental provision, from planning to tenant management. The results were then shared with the Housing Agency and the national Housing Department to drive improvements. As one AHB participant described (P9), "*We went through the whole process from start to finish, covering everything from funding applications to tenant selection...*".

Workshops offer a structured, collaborative environment to tackle complex housing issues like cost rental. By bringing together diverse stakeholders and combining practical exercises with broader discussions, they serve as a critical tool for refining and improving housing provision processes.

Educational course / Lecture series: In response to the public's lack of awareness about cost rental housing, as mentioned in part 4.2.1, educational courses and lecture series have been employed as knowledge exchange methods (P1; P4; P7; P8). These initiatives help inform the public and stakeholders about various housing models, including cost rental. One example

comes from the Land Development Agency, which launched 'The Land Series' in collaboration with the Housing Agency. This series featured experts from countries like Austria and New Zealand and ran for eight weeks, focusing on themes such as the Vienna model (P7): "*...we had specific lectures over eight weeks, and each of them had a different theme.*". Additionally, AHBs are using social media and websites to educate households about cost rental housing (P2). Furthermore, a new European Housing Studies course is being developed by academics to provide broader insights into European housing models (P1), including cost rental (P8). This course will be offered online, making it accessible to a wider audience (P2): "*It's a new course... But there's not much, I mean, in terms of the European-wide thing, every country seems to have their own approach.*".

Educational courses and lecture series play an important role in raising awareness and providing detailed knowledge about cost rental housing. By bringing in transnational experts and leveraging digital platforms, these initiatives help bridge knowledge gaps and engage a diverse audience.

Website: Websites are also a significant tool for disseminating information and educating the public on cost rental housing (P1; P7; P8; P10). This web-based approach has been particularly useful in addressing the implementation challenge of public unawareness, as highlighted in part 5.3. AHBs and other organizations are using their websites and social media platforms to provide key information on cost rental housing to those unfamiliar with the sector (P8). One interviewee noted that without such platforms, the public might not even be aware of the concept (P8): "*We have a lot on our social media and our website, but if you don't know the AHB sector, you probably won't know about cost rental*".

Websites consequently serve as a valuable knowledge exchange tool, offering accessible and comprehensive information on cost rental housing. By utilizing digital platforms, organizations can reach broader audiences and improve public understanding.

Advocacy / Position paper: Advocacy and coordinated efforts through position papers have been essential for promoting cost rental housing in Ireland. Given that cost rental is a relatively new concept in the country, AHBs recognized the importance of uniting their voices to influence regulations and policies (P2; P4; P8; P9). These coordinated efforts allow AHBs to present a unified message to the Housing Agency and the Department of Housing, ensuring consistency in their approach (P8): "*You don't want to have too much variation... so a lot of it is trying to build consensus.*". The Irish Council for Social Housing (ICSH) plays a crucial role in this process by facilitating discussions and helping to craft position papers that are then presented to the government. These papers reflect the collective experiences of AHBs and serve as a formal method of communication with the Irish Housing Department (P4). As one interviewee explained, "*...we might then decide to... put together a position paper and send it to the government*" (P4).

Advocacy through for example position papers is a powerful method for bringing together voices and influencing housing policy. By aligning their experiences and presenting a united front, AHBs can effectively communicate their needs and recommendations to the government, driving policy changes that support cost rental housing.

Good / Best practices: Good and best practices were also highlighted as a critical method of knowledge exchange within the housing sector (P1; P2; P8). For some AHBs, regularly looking into good practices from both Ireland and abroad is integral to their operations, as it allows them to leverage the experiences and knowledge of others (P2): "*...when we commission research*

reports, they would usually include some sort of literature review which would also look at international kind of practice and benchmarking.".

However, there is a sentiment that best practices are underutilized. One AHB suggested that organizations should be more proactive in seeking out and sharing their own best practices, ensuring they learn from others while also promoting what they are doing well (P5). Furthermore, there was a suggestion that a more structured provision of best practices at the European level could greatly benefit Irish organizations (P8). The openness toward these exchanges was emphasized (P5): "*...we need to be more open... to go looking for the best practice and also to publicize what we're doing well.*"

All in all, good and best practices offer a powerful yet underexploited opportunity for knowledge exchange. By being more open to learning from others and sharing their successes, organizations can foster continuous improvement across the housing sector.

Training package: Training activities were another method mentioned for facilitating knowledge exchange, particularly among AHBs and the ICSH (P2; P4; P9). One AHB offers learning programs that send both staff and tenants to other countries, such as the UK, to learn from other housing associations. As one interviewee (P9) described an example outside of cost rental housing: "*We have a very significant training budget and send both tenants and staff to other countries... We went to Glasgow and London to learn about tenant engagement and financial management.*"

Training packages can also be linked to academic research. For example, research on the 'Brain health village concept' was translated into actions that improved health. The connected university later facilitated training to ensure the effective application of these findings (P2). Another AHB hopes that similar training packages will follow research on cost rental households, maximizing the practical benefits of the evidence-based knowledge (P2): "*We're hoping really practical things might come out of it like training packages... that can be delivered to other organizations.*". Such training packages can provide a structured way to turn research findings into actionable knowledge. By investing in cross-border learning and translating research into practical tools, AHBs can ensure that knowledge is effectively implemented across their organizations.

Pilot study: Pilot studies also play a vital role in facilitating knowledge exchange (P2; P5; P6), particularly in testing new approaches before broader implementation. One AHB explains it is currently involved in a pilot project focused on youth housing (P5). However, the most significant pilot study for cost rental housing in Ireland remains the St. Michael's estate project (also see part 5.1), which is considered a pivotal step in putting cost rental into practice (P4; P6). As one interviewee (P6) explained, "*...St. Michael's estate... was one of the places where I heard the push for a cost rental model.*". In short, pilot studies allow organizations to experiment with innovative solutions, gather valuable insights, and refine their approaches before scaling up. They are potentially essential for ensuring that cost rental housing models are feasible and effective in the Irish context.

Festival: International housing festivals have played a significant role in the knowledge exchange surrounding cost rental housing in Ireland, both historically and moving forward (P3; P4; P10). These festivals have introduced cost rental to wider Irish audiences (P3), disseminated knowledge transnationally (P10), and will continue to do so in the future (P4). The method was first used in Dublin when a festival focused on 'Housing in Vienna' was organized to promote cost rental housing in Ireland (P3): "*Dublin City Council organized a festival about Vienna... as a way to promote the type of housing policies they were interested in.*". Following this, Ireland's Housing

Agency presented at a Housing Europe festival in Barcelona, transitioning from a knowledge-seeking role to a knowledge-sharing role (P10). Next year's Housing Europe festival in Dublin will offer another opportunity for knowledge exchange, with plans for site visits to cost rental homes, highlighting how different methods like festivals and site visits can complement each other (P4). As one interviewee (P4) noted, "*...we can actually bring people on tours.*".

Festivals serve as dynamic platforms for both introducing new housing models like cost rental and facilitating transnational knowledge exchange. By combining activities like site visits, festivals deepen the learning experience and foster collaboration across borders.

Exhibition: Exhibitions have also been pivotal for raising awareness of cost rental housing, with the Vienna exhibition being particularly influential (P4; P6; P10). Held in Dublin, this exhibition showcased the potential of cost rental housing and made the concept more tangible for the Irish public (P4). As one interviewee (P4) explained, "*So it showcased the potential of it to a lot of people.*". The exhibition helped shift cost rental from an abstract idea to something more real and viable. As another interviewee (P10) noted, "*...until then, it was kind of like a catchphrase: 'Let's have cost rental!', but it wasn't really tied down as to what it would look like or how it might work. The exhibition made it much more viable for people to think about.*".

Exhibitions therefore offer a powerful way to transform abstract housing concepts into tangible realities. By allowing people to see examples firsthand, exhibitions make it easier for stakeholders to visualize the implementation of models like cost rental housing.

Regular European housing updates: Regular updates on housing developments across Europe are another suggested method for improving knowledge exchange (P4; P8). European intermediary organizations like FEANTSA and Housing Europe already provide such updates, but not all Irish housing actors involved with cost rental housing are members of these transnational organizations (P8). One interviewee highlighted the potential benefits of receiving regular updates, noting that they help save time by consolidating valuable information (P8): "*It just meant that you weren't really struggling to get that information yourself.*". However, even when updates are available, it's important to allocate time to actually read and apply the knowledge. As one interviewee from ICSH pointed out, "*...we had emails with updates, but you just go: 'I'll read that later,' and you don't make the time to do it.*" (P4).

This way, regular European housing updates are a valuable resource for keeping up with developments and best practices. However, their effectiveness depends on the commitment to actively engage with the information provided.

Forum: Forums are furthermore mentioned as an important method of knowledge exchange in the Irish housing sector (P4; P8). Unlike conferences, forums offer a more casual and inclusive atmosphere, facilitating open interactions among stakeholders. Forums are used to bring AHBs together for knowledge sharing and to initiate research projects on topics such as cost rental housing. For example, Housing Europe organized a forum for a research project on housing equality across member states, which included cost rental housing (P4): "*...this forum is set up, there's going to be 60 people on it, and we'll all be engaging on that.*". In the end, forums provide a valuable platform for collaborative discussions and are especially useful for initiating new research projects. Their informal nature fosters inclusive participation, making them effective tools for transdisciplinary and transnational knowledge exchange.

Publicity campaign: Publicity campaigns, similar to websites, are used as dissemination strategies to educate the Irish public on cost rental housing (P7; P10). One interviewee

emphasized that the National Housing Department has a responsibility to run national campaigns to raise awareness (P7): "*The state really has a responsibility to maybe do a national campaign for cost rental to explain it.*" However, a previous campaign was deemed unsatisfactory (P10), indicating that more comprehensive efforts are needed to increase public awareness. Publicity campaigns could be essential as a method for raising awareness about new housing models like cost rental. For these campaigns to be effective, they need to be well-organized and reach a broad audience, with clear, accessible messaging.

Annual (research) report launches: AHBs also use annual launches of their reports as a method of knowledge exchange, where they showcase research and foster learning among housing providers (P2). Attending these launches allows AHBs to learn from each other's findings, meet new contacts, and support colleagues. As one interviewee (P2) noted, "*You know you're going to meet other people that would be useful for your own projects, and you want to support your colleagues as well.*". Annual report launches serve as an important opportunity for networking and learning within the housing sector. By exchanging research and experiences, AHBs strengthen their long-term relationships and enhance collective knowledge.

Evaluating knowledge exchange through surveys: Surveys are an indirect but valuable method for evaluating the effectiveness of knowledge exchange efforts (P2). By capturing the outcomes of these efforts, participants can reflect on what worked and make improvements. An AHB collaborated with Trinity College to evaluate the knowledge exchange around brain health, linking educational efforts with community actions (P2): "*Trinity College… they'll evaluate what they've got from that… and do regular surveys to see how that community has enhanced their knowledge…*". The evaluative surveys can offer a practical way to assess the impact of knowledge exchange activities. By tracking outcomes, they help organizations refine their approaches and ensure continuous learning and improvement.

High-impact individuals: High-impact individuals are another important method of facilitating knowledge exchange (P3), similar to knowledge brokers as discussed in part 4.1. These individuals are skilled at connecting people across different sectors and translating information between groups, making them valuable assets in transdisciplinary housing discussions. An academic emphasized the role of these individuals in bridging the gap between academics, providers, government officials, and financial experts (P3): "*They are people who are very good at translating between different communities.*". Participants are often more likely to listen to high-impact individuals than academics, making them particularly effective in driving exchange and fostering collaboration (P3). High-impact individuals play a crucial role in knowledge exchange by bridging different communities and fostering collaboration. Their ability to connect diverse groups makes them indispensable in transdisciplinary housing efforts.

Part 6.2 Knowledge exchange barriers and enablers

Conversations with the interviewees as part of the case study delivered a total of 10 experienced barriers and 7 enablers concerned with knowledge exchange efforts (see figure 52 below). Similar to the methods found, barriers and enablers that are explicitly represented in transdisciplinary and transnational knowledge exchange theory are marked in green. The ones highlighted in yellow can be indirectly linked to the literature. Examples of this are the 'different work priorities' which basically fall in the category of the barrier of 'diverse approaches to work', and the differences in 'political'- and economical context can be regarded as part of the 'differences in institutional context'. When looking at the barriers and enablers, three insights are most critical. First of all, the by-far most mentioned enabler of knowledge exchange efforts are the informal exchanges. From a transdisciplinary perspective, the differences in knowledge

needed for academics and practitioners stands out as a barrier while tangible knowledge for users is emphasized as a clear enabler. Lastly, with the transnational aspect of the knowledge exchange, the more personal enablers of a 'nice atmosphere' and 'attractive and accessible location' are an interesting insight. These facilitators are less recognized by literature, but are important enablers for participants to commit to traveling for knowledge exchange interactions.

EXPERIENCED BARRIERS AND ENABLERS OF KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES		
BARRIER OR ENABLER	INTERVIEWEES	MENTIONED BY
Barriers		
Different general, national context	8 of 10	(P2; P3; P5-10)
Lack of organizational time, capacity and/or resources	5 of 10	(P2; P4-6; P8)
Different work priorities	5 of 10	(P2; P4; P5; P7; P9)
Competitive sensitivity	5 of 10	(P3; P4; P8-10)
Differences in knowledge needs	4 of 10	(P1; P3; P5; P8)
Different political context	4 of 10	(P2-4; P10)
Different cultural context	4 of 10	(P4; P7-9)
Different economical context	3 of 10	(P1; P2; P9)
Knowledge drain	2 of 10	(P1; P10)
Confirmation bias	1 of 10	(P3)
Enablers		
Room for informal interactions	7 of 10	(P1-4; P7; P8; P10)
Tangible knowledge for users	4 of 10	(P5; P6; P8; P10)
External financial support	3 of 10	(P2; P3; P9)
Nice atmosphere	2 of 10	(P1; P4)
Having a strategic goal	2 of 10	(P2; P6)
Speaking the same language	2 of 10	(P4; P5)
Attractive and accessible location	1 of 10	(P1)

Figure 52: Experienced barriers and enablers of knowledge exchange efforts mentioned by interviewees (own work).

Different general, national context: Nearly all interviewees identified differences in national contexts as the primary barrier to transnational and transdisciplinary knowledge exchange efforts (P2; P3; P5-10). While political (P2-4; P10), cultural (P4; P7-9), and economic contexts (P1; P2; P9) were also highlighted as separate, more explicit barriers, the overall national context significantly influences how housing knowledge is exchanged. As one academic noted, in housing, the national context is crucial for meaningful insights (P3): *"You have to know quite a lot about the national and even the city-level regulatory and policy environment to make good insights.*". The distinct approaches each country takes to housing create and sustain these contextual differences, making local application of shared knowledge a key consideration (P3; P6; P9). What works in one location may be counterproductive in another, as one AHB representative explained (P2): "*The application has to be local… because what works for one community or one group at any one time is different.*"

When exchanging knowledge on cost rental housing, the impact of these contextual differences becomes even more pronounced. Models that are effective in one country may not be replicable in another due to deeply embedded institutional practices (P5; P6; P8). As one interviewee noted, Ireland is trying to intervene in a system with entrenched practices, unlike Vienna, where cost rental housing has been successfully operating for 100 years (P6): "*Vienna has been operating this model for 100 years… which totally reshapes the power dynamics between actors compared to Dublin.*". The significant differences in national contexts can result in countries perceiving the cost rental model as fundamentally different from one another. An academic pointed out that people from Austria or Denmark might not even see the Irish cost rental model as the same concept (P3): "*In practice, the cost rental model in Ireland is different… people from those countries would say it's not the same.*" When implementation of the cost rental model first

was discussed, an ideal approach was likely to appear from theory, but in practice the outcome will always be different (P10).

Despite these differences, national context can also act as an enabler in some cases. Historical similarities between countries, such as Ireland and New Zealand, can enrich the knowledge exchange process (P5). Similarly, the exchanged knowledge is enriched when examples from different contexts are used, as was done with the frequently mentioned cost rental research of Housing Europe (P5; Housing Europe, 2022). Furthermore, the foundational cost rental model in Vienna is seen as the ultimate form of the model, offering valuable lessons to other nations (P7). This illustrates that while differences in national context pose challenges, there are also opportunities to learn from other countries facing similar housing problems.

Several interviewees emphasized the importance of knowledge exchange, despite these contextual barriers. European countries are currently grappling with similar housing issues, such as affordability (P3), which provides a strong incentive to learn from each other's experiences and avoid repeating the same mistakes (P5; P9; P10). As one interviewee noted (P10), "*We could definitely learn from other countries' experiences and anticipate problems… because we're so busy getting it off the ground.*". One AHB representative argued that there should be more transnational knowledge exchange, as learning from different contexts can help countries improve their approaches (P9): "*We can learn from each other to do better, and I don't think we do enough of that.*".

While differences in national contexts pose challenges to knowledge exchange, they also present opportunities for enriched learning. By understanding and adapting to these contextual nuances, countries can still benefit from each other's experiences and improve their affordable housing policies.

Lack of organizational time, capacity and/or resources: The second most mentioned barrier to transdisciplinary and transnational knowledge exchange is the lack of organizational time, capacity, and resources (P2; P4-6; P8). Each housing actor involved with cost rental faces limitations in terms of staff, time, and funding. For organizations like the ICSH and AHBs, the scarcity of time is a primary reason for reduced involvement in knowledge exchange efforts (P4; P5; P8). One interviewee explained (P8): "*…you've got other things to do, so you're not going to spend an hour researching what's happening in Brussels or Barcelona… you've got other work constraints…*".

This limitation affects how knowledge exchange is conducted, with participants opting for online meetings due to convenience rather than more in-depth interactions (P2). In addition to time, limited internal capacity and financial resources also create hesitation among organizations, despite recognizing the benefits of knowledge exchange (P4; P8). One interviewee noted (P4): "I*t kind of stretches our resources… There's only 11 of us, and we're quite a busy organization.*". This barrier is particularly relevant for practitioners, as confirmed by nearly all AHBs. Although they face significant time and capacity challenges, participants acknowledge that integrating more knowledge exchange into their routine is still possible. It's a matter of setting aside dedicated time for these interactions and finding a balance that doesn't overwhelm existing workloads (P2; P4; P5; P8). As one interviewee observed (P8): "*It has that good balance of being helpful but not too demanding… we meet every month, and it's part of our day-to-day work. Anything more would probably be too much.*".

The type of knowledge exchange method and how it's organized also impact the time and capacity required. For example, while writing a report is time-consuming, presenting

knowledge in practice demands more capacity from participants. As one academic noted when working on a report about a vacancy project (P6): "*Writing editorials… is additional work, but presenting in person can be even more capacity-consuming.*". Lack of time, capacity, and resources remains a significant barrier to knowledge exchange, but careful planning and balance can help organizations integrate more exchange activities into their routines. Choosing the right methods and organizing them efficiently is key to overcoming this challenge.

Different work priorities: In line with the barrier of time and resources, a critical issue mentioned by interviewees is the challenge of daily work priorities, which often leave little room for knowledge exchange efforts (P2; P4; P5; P7; P9). This barrier is particularly relevant for practitioners whose primary focus is on delivering services to their tenants, making it difficult to prioritize knowledge exchange activities (P2). When professionals are consumed by daily tasks, valuable lessons for others might be lost, either due to a lack of time for capturing those learnings or a disregard for sharing them. As one interviewee from the Land Development Agency noted (P7): *"The biggest focus is just achieving the homes… but the learnings can sometimes be lost."*.

The size of the organization also plays a significant role in how work priorities affect knowledge exchange. Smaller AHBs, especially those with fewer than 10 homes and run by volunteers, are often too focused on day-to-day operations like tenant management and rent collection to engage in knowledge exchange (P9). One interviewee explained the challenge for smaller organizations (P9): "*They're really focused on… understanding who their tenant is and… collecting their rent.*". Given this, it was suggested that knowledge exchange efforts should prioritize mid-sized providers, who have the capacity to benefit most from training and learning (P9). Two AHB employees emphasized that while this barrier is real, it can be overcome with deliberate action (P2; P5). Setting aside time for knowledge exchange can offer valuable new perspectives, helping to situate housing activities in a broader context. It also fosters creative tension between current practices and potential new approaches, sparking innovative ideas (P2; P5). As one interviewee described (P2): "*…the creative tension… is how you spark new ideas or different ways of doing something.*".

A further suggestion is to employ a dedicated person whose primary role is to focus on knowledge exchange. This individual would be responsible for both sharing insights with others and ensuring that external learnings are captured and disseminated within their organization (P8). While competing work priorities can limit participation in knowledge exchange, deliberate prioritization and the employment of dedicated personnel can help ensure that valuable insights are captured and shared effectively.

Competitive sensitivity: Competitive sensitivity is another significant barrier to housing knowledge exchange, particularly in the context of Ireland's cost rental housing sector, where there are only five providers (P3; P4; P8-10). Given the limited number of providers, knowledge becomes a valuable resource, and competition is most visible in the delivery of houses and the allocation of funding by the Housing Agency. One AHB acknowledged their hesitancy in sharing learnings due to the need to balance being a charitable organization and running a successful business (P9): "*The better we do business, the more we can do business… If we do good business, then we'll do more of it.*".

Similarly, the governmental department of housing is cautious about sharing information, primarily due to concerns about potential political consequences and media scrutiny (P8). An academic described the department's approach as "paranoid" and "very defensive," leading to minimal contribution to knowledge-sharing events like conferences (P3).

This defensive stance can hinder the overall learning process. However, not sharing knowledge can create the perception that organizations are working against each other, which may harm collaboration and create distrust (P8). An AHB interviewee stressed that openness and transparency are essential for effective knowledge exchange, as it fosters a productive working relationship across the sector (P8): "*It's important to be open and transparent… because everyone is trying to have more homes.*".

Interestingly, despite the barrier of competitive sensitivity, some AHBs and policymakers demonstrate openness in sharing knowledge, particularly in informal settings (P8). One interviewee noted that policy members tend to be very open to discussing ideas and sharing learnings, but there is still room for improvement (P9). Informal interactions, in particular, are seen as an effective way to overcome competitive sensitivity (P10), as they reduce the risk of speaking openly in public settings. The Housing Agency further highlighted that discussing competitive sensitivity openly within the sector could help reduce unnecessary competition and foster a more collaborative environment. Making competitive sensitivity a topic of discussion might ultimately lower the barriers to knowledge exchange.

Competitive sensitivity can hinder knowledge exchange, but openness, informal interactions, and addressing the issue directly can help mitigate its effects. By fostering transparency and collaboration, organizations can work together to achieve common goals without compromising competitive interests.

Differences in knowledge needs: The barrier of differing knowledge needs is especially apparent when comparing how practitioners and academics prefer to receive information (P1; P3; P5; P8). Practitioners typically require more general and practical knowledge, while academics seek more specialized, theoretical insights (P6). As one academic noted, this growing specialization in academia makes the information less accessible to practitioners, who often find it too detailed for their needs (P1): "*…policymakers kind of go: 'I need more general knowledge. I don't need this tiny specialist bits of knowledge.*'". This divide in knowledge needs can also extend to the scale of housing projects. Larger cost rental housing schemes require different types of knowledge compared to smaller ones, further complicating knowledge exchange (P8). To address this barrier, it was suggested that dedicated individuals, referred to earlier as "high-impact individuals", be tasked with translating knowledge between different groups, also ensuring that both practitioners and academics benefit from knowledge exchange efforts (P3): "*A part of a knowledge exchange strategy should focus on identifying individuals who can translate between different communities.*"

Bridging the gap between the differing knowledge needs of practitioners and academics is essential for effective knowledge exchange. High-impact individuals can play a pivotal role in translating specialized information into practical insights.

Different political context: Differences in political context are seen as a significant barrier to transnational knowledge exchange (P2-4; P10). Political systems and decision-making processes vary widely between countries, making it challenging to replicate the success of housing models like cost rental housing across different nations. For example, while political consensus on housing policy is crucial, the way such consensus is reached differs greatly depending on the political landscape (P2; P3). Additionally, the strength and role of local government also vary, impacting the delivery of cost rental housing (P4). In some countries, local governments play a strong role in housing, while in others, like Ireland, they are more centralized, which affects implementation.

Another key political difference is how cost rental housing is presented. In Ireland, it is framed as a substitute for homeownership, whereas in Vienna, it serves as an alternative to private rental housing (P3). These distinct political goals reflect the unique housing challenges in each country and affect how the model is perceived and implemented. Moreover, the size of the country impacts how housing actors interact transdisciplinary. In smaller countries like Ireland, key housing figures, including AHBs, ministers, and directors, have more frequent informal interactions, which can expedite decision-making. This differs significantly from larger countries, where interactions tend to be more formal and less frequent (P10): "*Our political system is such that directors of AHBs would have informal conversations with the minister… there's a lot of informal discussions…*".

The political context of a country significantly influences how housing models are implemented and how transdisciplinary interactions occur. Understanding and considering these differences is crucial for effective transnational knowledge exchange, as what works in one political environment may not be directly applicable in another.

Different cultural context: Cultural differences were highlighted by interviewees as an explicit barrier to transnational knowledge exchange (P4; P7-9). These distinctions complicate the transfer of housing models, such as cost rental, because cultural norms shape how renting and homeownership are perceived, and ultimately how such models are implemented. As a result, what works in one country might not be directly applicable in another due to deep-rooted cultural differences (P4; P7-9). However, despite this barrier, knowledge can still be shared and adapted through a cultural lens, which helps to avoid common mistakes. As one interviewee from the Land Development Agency noted (P7): "*They can put it through their own prism… but you can save 50% of the mistakes by listening and learning from common things across organizations.*". While cultural differences can complicate the adoption of models like cost rental housing, adapting shared knowledge to local contexts can still significantly reduce the risk of repeating mistakes.

Different economical context: Beyond political and cultural distinctions, economic differences present another explicit challenge to knowledge exchange (P1; P2; P9). The variation in funding streams and economic scales between countries is particularly relevant for cost rental housing, where the financial structure is critical. An academic who studied cost rental housing across Europe found that differences in funding streams were a key factor in determining how replicable the model was in other countries (P1). One interviewee emphasized that when economic contexts differ, replicating housing models becomes much harder (P9). Economic differences, particularly in funding streams, are a major barrier to replicating housing models like cost rental across countries. Careful consideration of these economic variables is essential for successful knowledge exchange.

Knowledge drain: Knowledge retention, or rather the lack of it, is another barrier to effective transdisciplinary and transnational knowledge exchange (P1; P10). When key personnel leave an organization, valuable knowledge can be lost, leading to the need for continuous updating and re-sharing of information. This is particularly evident in the governmental housing department, where public servants frequently move between departments (P1): "*public servants, they don't stay in housing for long… there's a constant need for updating and exchanging information*.". Despite this challenge, knowledge drain also creates opportunities to inspire knowledge exchange efforts. The Housing Agency, for example, highlighted the importance of its role as a constant source of knowledge, ensuring continuity in the face of personnel changes (P10). Knowledge drain therefore underscores the importance of having consistent knowledge repositories and intermediary organizations to ensure continuity in knowledge exchange efforts.

Confirmation bias: Confirmation bias, which is the tendency to seek out information that confirms existing beliefs while dismissing contradictory evidence, was also identified as a barrier to knowledge exchange (P3). This bias can limit openness to new ideas and perspectives, both in transdisciplinary and transnational exchanges. One academic illustrated this with an example, noting that policies are influenced not just by technical factors, but by political ones as well (P3). This explains, in part, why cost rental housing was adopted in Ireland, it aligned with the policy community's existing objectives (P3): "*Cost rental housing in Ireland happened… because it allowed them to solve a political problem of generation rent.*". Confirmation bias can therefore hinder both knowledge exchange and the successful introduction of housing models like cost rental, as it narrows the scope of ideas that are considered. Addressing confirmation bias looks to be critical for ensuring openness to new perspectives in both knowledge exchange and housing policy development, allowing for more innovative solutions.

<u>Enablers of knowledge exchange efforts by interviewees</u>

Room for informal interactions: The importance of informal interactions in knowledge exchange is already evident from discussions on conferences and as a countermeasure to competitive sensitivity. Seven out of ten interviewees (P1-4; P7; P8; P10) emphasized the critical role informal conversations play in enabling knowledge exchange, often describing them as more effective and influential than formal exchanges (P1; P3; P8). One interviewee explained (P1): "*…the real benefits… come from informal meetings and social chats… it's not valued enough how important that is.*". Informal exchanges typically occur during breaks, lunches, or social gatherings surrounding formal events like conferences. These unstructured moments allow for more candid and impactful discussions than formal sessions (P1; P4). However, an AHB interviewee pointed out that formal structures should not be entirely dismissed. Both formal and informal elements should instead complement each other in a knowledge exchange strategy. The Housing Alliance exemplifies this balance, combining structured meetings with informal interactions like phone calls or quick Zoom meetings between events (P2): "*…we've got informal exchanges, but we also have monthly meetings with an agenda and specific topics.*".

Additionally, informal interactions are particularly useful for uncovering deeper insights and rationales behind decisions that might not emerge in formal settings. One academic highlighted how informal conversations with civil servants provided a more detailed understanding of housing policy (P3): "*You don't know why certain policy decisions were made… unless you have an informal conversation with someone in the department.*". Informal interactions provide a valuable space for open, candid knowledge sharing, complementing formal structures. By integrating both into a knowledge exchange strategy, participants can gain deeper insights and uncover essential information.

Tangible knowledge for users: Another crucial enabler of effective transdisciplinary and transnational knowledge exchange is ensuring that knowledge is tangible and beneficial for the users (P5; P6; P8; P10). Knowledge needs to be seen as directly applicable and valuable to an individual's or organization's context, motivating participation (P6): "*Where people could see some kind of benefit towards their own work…*". One way to make knowledge more tangible is through practical, hands-on activities like site visits or walkthroughs, as discussed earlier. These experiences help participants visualize and apply the information to their specific circumstances, making abstract concepts more concrete (P5; P6; P8; P10). Although the quotes provided here relate to a different project and not specifically cost rental housing, an interviewee emphasized how essential such experiences are for gaining the necessary insights when it comes to housing (P6): "*…walking and learning in the city… you're seeing, you're able to ask questions about how this would work in your context, what the barriers are…*".

Making housing knowledge tangible through practical experiences like site visits ensures that participants find the knowledge exchange valuable and applicable. By directly connecting the information to real-world contexts, users are more likely to benefit and apply the insights.

External financial support: External financial support is a significant enabler of transdisciplinary and transnational knowledge exchange (P2; P3; P9), helping to address the barrier of limited resources. Interviewees noted that funding from sources such as the national government or European programs could increase opportunities for knowledge exchange. Currently, the Housing Agency supports Irish knowledge-sharing efforts by funding projects with a knowledge exchange component, underscoring the role of financial aid in promoting learning (P6).

Additionally, European funding sources like Horizon projects provide substantial financial support for initiatives with a knowledge exchange element, though these grants can be challenging to secure (P3). One academic suggested two improvements to enhance funding structures. First, they propose increasing the availability of European funds since most financial support is currently national. Second, they recommend a requirement for international collaboration, ensuring that knowledge exchange remains transnational (P3): "*…more dedicated international or European research funding with a knowledge exchange component would help… some more institutionally mandated requirement for international engagement would be appropriate.*". However, funding requirements must be aligned with practical knowledge needs. Strict application guidelines that do not consider the real needs of knowledge users or the housing sector could limit the effectiveness of these funds (P2).

External financial support could be essential for sustained knowledge exchange, funding programs must then be thoughtfully designed to genuinely benefit knowledge users and ensure productive international engagement.

Nice atmosphere: Creating a positive atmosphere is a simple but powerful enabler of successful knowledge exchange, especially in transnational events (P1; P4). As participants invest significant time in these activities, fostering an enjoyable environment encourages future participation. One interviewee emphasized this point (P1): "*Make it enjoyable, that's the key… people need something enjoyable.*". To support this, knowledge exchange events should balance formal interactions with opportunities for socializing and networking. As noted by the ICSH, attendees value engaging, enjoyable interactions that allow for connections beyond the strictly formal (P4). In the end, a welcoming and enjoyable atmosphere fosters stronger engagement in knowledge exchange, creating a foundation for sustained participation and collaboration.

Having a strategic goal: Establishing a clear strategic goal as part of the knowledge exchange strategy is another critical enabler (P2; P6). By defining specific objectives from the outset, organizations can ensure knowledge exchange activities serve a broader purpose and remain relevant rather than being one-off events. An academic and an AHB representative highlight the importance of setting this goal at the beginning to guide the exchange process effectively (P6): "*…what's helpful… is if it's guided by a strategic kind of goal in the first instance.*" This alignment ensures knowledge exchange efforts are cohesive and purpose-driven, optimizing their impact over time. Defining a strategic goal thus solidifies the direction of knowledge exchange activities, making them more impactful and aligned with long-term organizational objectives.

Speaking the same language: A common language is a clear enabler in transnational knowledge exchange (P4; P5). For Ireland, this advantage is particularly strong as English is widely spoken in European knowledge exchange settings, reducing language barriers and making exchanges more accessible and inclusive. The Housing Agency and an AHB interviewee both note that Ireland's

participation in international exchanges is highly facilitated by this linguistic benefit (P4): "*We're very lucky… a lot of Europeans have perfect English… it's nearly easier, there's no excuse for us not to seek that information and do those exchanges…*". Language accessibility enhances the inclusivity and fluidity of knowledge exchange, allowing Irish organizations to engage widely in international exchanges with minimal communication barriers.

Attractive and accessible location: Selecting an attractive and accessible location is another key enabler, directly contributing to a positive exchange atmosphere (P1). A conveniently located venue increases the likelihood of attendance and re-engagement, especially since organizations often face limited time, capacity, and resources. An academic explains that accessible locations with straightforward transportation options, like a single flight or train ride, help ensure high attendance and reduce logistical burdens (P1): "*You don't want to be getting two planes and a train… something where you can get on one flight, maybe one train.*". All in all, choosing accessible locations removes logistical obstacles, fostering better attendance and encouraging ongoing participation in knowledge exchange activities.

Part 6.3 Knowledge exchange incentives of participants

INCENTIVES TO BE INVOLVED WITH KNOWLEDGE EXCHANGE ON COST RENTAL HOUSING BY INTERVIEWEES			
	ROLE	INCENTIVE	ELABORATION
P1	Academic	Networking	*"Like, yeah, well, think it's about networks, networking, yeah, networking, you know, it's, I mean, okay, people, you need to go to a nice place, you know, if you can. But, you know, the real benefits I think come about from the informal meeting and just social chats and, you know, it's not highly, it's not valued enough how important that is."*
P2	Approved Housing Body	Showing how we can do better	*"Well, I think it is about learning and reputation and making sure that, you know, because we're a social justice organization. In that sense, we're really... We don't want to just do something because we think it's a good idea, it has to make a difference. And you're using public money. And your tenants and service users are really entrusting you, you know, our donors, and the partners that we work with, they're really trusting us with those kind of finances and to manage them efficiently."*
		Continuous learning & Helping others improve	*"So, you know, it's about that kind of continuous learning and improvement and really kind of saying: "Well, actually, you know, we think we're making a difference and how can we learn from each other? How can we help you adapt?""*
P3	Academic	Curiosity	*"But what I would say is, at the moment, in the context of cost rental housing anyway and it's driven, knowledge exchange is driven mainly by the curiosity and the kind of cosmopolitan values of the researchers and the policy community, right?"*
P4	Irish Council for Social Housing	To learn & provide the knowledge to others	*"To learn I suppose. To have like that knowledge that you, if your memberships develops a problem, that you can go: "Well actually I was speaking with our colleagues a month ago in the Netherlands and they came across this issue too maybe we should think about this or maybe we should you know…". Yeah, so I think it just kind of goes: "Well if they can do it over there. Why can't we do it here?" And then well you mightn't be able to do it. At least you can have a look at it and explore it and pick up the phone and have a chat."*
P5	Approved Housing Body	New perspectives	*"...that we would always look at that a wider perspective, both in Ireland but also more internationally, that we would try to inform our practice in a broader way."*
P6	Academic	Academic interest	*"I'm interested in, like, you know, exploring a thing theoretically, or, you know, looking at the context between it. But I mean, like, I'm also, like, very interested in kind of learning on the ground."*
		Networking	*"...because they're networking and they like meeting people who, you know, I think that element of it is like... people, you know, always find that useful, you know like. And it's more than just like meeting other people who are working the same thing. I think there is a lot of, like those are relationships that kind of you know actually inform everyday kind of, you know, knowledge exchange and, you know, after the fact."*
P8	Approved Housing Body	To improve	*"Oh yeah, I mean, if there's anything that we can do to improve how we deliver housing. And you know more financially efficiently or you know even just sustainability is a huge one anything around sustainability, sustainable communities that would improve the lives of our tenants…"*
P9	Approved Housing Body	To learn	*"The reason we get involved in the knowledge exchange, information exchange, is because we recognise, first of all, this is brand new. I personally, and as an organisation, we don't like to be at the bleeding edge of something. So whenever you're first in, you learn a lot, you make a lot of mistakes, and it costs a lot of money to do so. So we like to watch what's going on, understand what's going on, dissect it a little bit, get more information about it, and say, okay, how can we avoid the mistakes of those who have already gone ahead of us?"*
		Helping others to get into delivering cost rental housing	*"And the exchange then is to help others to get into it, because we recognise that we can't do it all. We recognise that we need a number of others to be doing it, and therefore having that knowledge exchange enables others to be part of that. And it takes out some of the, it demystifies it for someone, it derisks it for someone... So not wanting to get into things too early is one of those conservative, risk averse things that they do. So by having the information and the knowledge, you can derisk it for them, you can demonstrate the benefits of it, not just for the individuals who are tenants, but also from an organisational perspective."*
P10	Governmental housing agency	Learn from other countries	*"But we could definitely learn from other countries' experiences and maybe even anticipate some of the problems that might arise up the line that we haven't thought about yet, because we're so busy getting it off the ground."*

Figure 53: Incentives of interviewees to be involved with knowledge exchange efforts (own work).

OVERVIEW OF THE INCENTIVES OF INTERVIEWEES TO BE INVOLVED WITH KNOWLEDGE EXCHANGE ON COST RENTAL		
INCENTIVE	INTERVIEWEES	NAMED BY
To learn / Satisfy curiosity or an academic interest / Gain new perspectives	7 of 10	(P2-P6; P9; P10)
Networking	2 of 10	(P1; P6)
Showing how we can do better / To improve	2 of 10	(P2; P8)
Helping others to improve or get involved with cost rental housing	2 of 10	(P2; P9)

Figure 54: Overview of the main incentives of interviewees to be involved with knowledge exchange efforts (own work).

To learn / Satisfy curiosity or an academic interest / Gain new perspectives: The most common incentive driving engagement in knowledge exchange on cost rental housing is the desire to learn and gain fresh insights (P2-P5; P9; P10). This motivation often arises from a curiosity about new approaches and a desire to broaden understanding within an academic or practical framework. An AHB interviewee (P2) highlighted that learning should be continuous and mutual, urging that housing actors need to actively seek and embrace these opportunities. Academics, too, express a distinct curiosity, grounded in both theoretical exploration and practical insights (P3; P6). One academic notes (P6), "*…exploring a thing theoretically, looking at the context between it… but very interested in learning on the ground.*".

For practitioners, the incentive to learn also stems from a need to gain broader perspectives, as seen in one AHB's approach to view practices in both domestic and international contexts (P5). They explain (P5), *"…we wouldn't get completely stuck in the day-to-day stuff… we would try to inform our practice in a broader way*". Learning is thus viewed as a way to enrich practices, adapt to evolving standards, and ensure that all procedures meet high quality benchmarks (P9). To them learning is about listening, watching, understanding, analyzing and critiquing what is delivered by your organization. This is reinforced by an AHB leader who emphasizes that ongoing learning is central to maintaining excellence and improving upon even the best practices (P9).

In summary, this drive to learn not only fuels curiosity but also positions organizations to adapt and grow by absorbing lessons from both successes and setbacks across Europe, as emphasized by the Land Development Agency's call to exploit learning opportunities transnationally (P7).

Networking: Networking is a key incentive for many involved in knowledge exchange, especially academics, who value the connections built both during and after events (P1; P6). Establishing a network through these exchanges provides contacts for future collaboration and information-sharing. An academic suggests that having the right contacts may support knowledge exchange in a more practical, immediate way, enabling easy follow-ups to clarify details or deepen understanding (P6). They think out loud: "*…meeting people can be crucial… providing a kind of knowledge exchange in a more practical way, you know, even picking up the phone and…talking through how this works…*". The networking often takes place at structured events, where the inclusion of informal spaces, like breaks or social gatherings, allows people to connect more naturally. This format supports the need for, the earlier discussed, informal exchanges and enables individuals to grasp each other's goals and incentives, fostering more personal and effective communication (P1; P4). As one interviewee explains, face-to-face interactions, especially with new contacts, often lead to more open discussions, as people feel less pressure to adhere strictly to formal talking points (P4).

Moreover, becoming part of larger networks, such as European housing networks, broadens knowledge exchange opportunities for housing actors and strengthens ties that could be beneficial at both national and transnational levels (P2). An Irish interviewee even advocates for engaging tenants in these networks, which would allow them to benefit more directly from knowledge exchange efforts (P2). In summary, networking serves as both a practical tool and a catalyst for future exchanges, strengthening relationships and fostering trust within the housing sector to support continuous learning.

Showing how we can do better / To improve: For AHBs, the motivation to engage in knowledge exchange is also about demonstrating a commitment to improvement (P2; P8). This drive to excel aligns with a desire to provide better services and reassure tenants that their living

standards are continually enhanced. A specific AHB underscored the importance of showing tenants a commitment to improvement, even if current housing conditions are adequate (P2). Their approach involves evaluating and implementing best practices to meet evolving standards (P2): "*…looking at good practice and developments… and how we need to improve our services…"*. Ultimately, the incentive to improve reflects an organizational commitment to progress. Through knowledge exchange, AHBs position themselves to enhance tenant services and maintain a reputation for proactive, high-quality housing solutions.

Helping others to improve or get involved with cost rental housing: Another central incentive, particularly for AHBs, is the opportunity to help others improve or engage with cost rental housing (P2; P9). AHBs see clear value in assisting new or prospective providers to join the sector, believing this collective growth will enhance Ireland's cost rental housing landscape (see also figure 53). For instance, as new organizations enter the market, they often face a steep learning curve, requiring considerable knowledge to succeed. Sharing practical insights and experience can ease this entry process and showcase the tangible benefits of participating in the sector (P9). As one AHB interviewee notes, building a broader base of providers strengthens the entire sector by fostering shared knowledge and aligning efforts. Furthermore, for organizations like the ICSH, helping others goes beyond self-improvement, contributing to the sector's collective advancement (P4). For example, knowledge gained from events or reports is most impactful when it's shared broadly among networks back home. The ICSH interviewee highlights the significance of redistributing insights, emphasizing, "*…if we don't come back and share that with our networks here, then what's the point?*" (P4). Overall, this incentive therefore underscores a commitment to sector-wide progress. By supporting others, organizations contribute to a culture of shared learning and collective advancement, reinforcing a more robust and collaborative cost rental housing environment.

Part 6.4 Other key knowledge exchange insights

Apart from conversations about the applied method, and barriers and enablers experienced with knowledge exchange efforts, other themes stood out in the interviews with Irish actors involved with cost rental housing.

OTHER KEY INSIGHTS OF KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES		
INSIGHTS	INTERVIEWEES	NAMED BY
Knowledge exchange has a ripple effect	7 of 10	(P2-6; P8; P10)
Make sure knowledge exchange is structurally built in	6 of 10	(P2-5; P8; P9)
Exploit both on- and offline interactions	5 of 10	(P1; P2; P4; P5; P10)
Transnational knowledge exchange should be exploited more	5 of 10	(P1; P4; P7-9)
Seize opportunity of EU consensus on affordability	3 of 10	(P4; P7; P8)
Involve financial institutions transdisciplinary	2 of 10	(P1; P3)

Figure 55: Other key insights of knowledge exchange efforts mentioned by interviewees (own work).

Knowledge exchange has a ripple effect: Knowledge exchange efforts create a "ripple effect," spreading insights through networks, from initiating organizations to diverse stakeholders like local housing providers and even tenants (P2-P6; P8; P10). An AHB interviewee underscores this spreading impact, explaining that knowledge exchange should be "circular," applying to all levels of engagement, from prominent organizations like the OECD to community-level participants: "*…that was facilitated by some OECD funding… that was a government department accessing that funding, but then they were kind of going back to getting the user's voice… so it's this kind of real circular… at all levels*" (P2). This process is frequently sparked by new research publications (P4; P10), which create demand for knowledge and trigger related activities, such as seminars and conferences, to share findings and encourage further engagement. One academic describes how

"published documents… become the basis for a seminar or conference or a conversation" (P3) that amplifies knowledge sharing across the sector.

Once these exchanges begin, they ripple through broader networks, as noted by another academic who emphasizes the lasting impact (P6): "*…each of those individuals will have their own networks that they also bring that kind of knowledge back to.*". Similarly, a practitioner illustrates how these exchanges foster ongoing discussions within organizations, ultimately shaping broader strategies and approaches to challenges like cost rental housing (P2). In summary, the ripple effect demonstrates how knowledge exchange transcends initial activities, with each participant extending insights through their networks. This layered sharing strengthens knowledge across both local and international levels, enhancing understanding and the practical application of innovative models like Irish cost rental housing.

Make sure knowledge exchange is structurally built in: Interviewees frequently highlighted the value of structurally embedding knowledge exchange at various levels to maximize its impact (P2-P5; P8; P9). Building knowledge exchange into the fabric of individual and organizational routines emerged as a key theme. On an individual level, dedicating regular time to knowledge exchange activities helps overcome the barrier of limited capacity, as previously discussed. Organizationally, incorporating knowledge exchange into regular meetings, as the Housing Alliance does monthly, offers a consistent platform for sharing (P4). An AHB interviewee emphasized the need for a more structured approach, noting (P9), "*I think we could probably be better at it…more structured… So for me: I think there's a need for at least every couple of months for there to be a specific learning process…*". Another academic suggested the importance of formal collaborations for more robust policy support, explaining that in an ideal world there would be formal collaboration in the policy design and implementation (P3).

Integrating knowledge exchange can also occur through systematic monitoring efforts, as exemplified by the Housing Agency's annual conferences (P4) and recurring research studies, which promote continuous engagement. One AHB interviewee highlighted the need for regular surveys of cost rental housing residents, proposing biennial assessments to gauge progress and improve strategies. They emphasized that "*…if you're not in any way watching, monitoring, and guiding then it'll just… be what it is. But the state has the opportunity, I think, to kind of be watching it…*" (P8). However, given the limited capacity of AHBs to monitor extensively, several interviewees suggested that the Department of Housing assume a central oversight role (P8).

Structured collaboration on research with a knowledge exchange component, especially in a transdisciplinary framework, was also identified as an important structural enhancement. An AHB interviewee proposed joint applications for European funding, explaining (P2), "*…if we work together, we can maybe access research funding on a European level… there's strength in numbers… society, on a broader level, will get that.*". To ensure that knowledge exchange remains effective and relevant across borders, an academic recommended mandated requirements for transnational knowledge exchange in funded projects, which would guarantee beneficial exchanges of knowledge between different countries (P3).

Finally, other means to establish a systemic knowledge exchange infrastructure include leveraging external financial support (P9), which the Housing Agency currently helps provide through various knowledge exchange initiatives. Additionally, creating intermediary organizations like the Housing Agency enhances cross-sector connections and translates shared insights into actionable recommendations (P2; P5). Reflecting on this, an AHB interviewee praised the agency's dual role in linking the housing sector to government, stating (P9), "*…we're very fortunate…[the Housing Agency] can hear what we're saying… and be able to say to them: 'This is*

what you need to change.' And that feed backwards and forwards works really well.". Embedding knowledge exchange at both the individual and structural levels therefore not only strengthens transdisciplinary collaborations but also ensures that learnings are consistently refreshed and applied. Through these structured approaches, housing providers can better adapt to ongoing sector needs and leverage collective insights for sustainable progress.

Exploit both on- and offline interactions: The expansion of digital sessions alongside in-person meetings has become a hallmark of modern knowledge exchange (P1; P2; P4; P5; P10). Initially initiated during the COVID-19 pandemic, digital meetings became widely used, allowing participants to avoid travel and connect more efficiently (P5). Digital knowledge exchange is particularly helpful for quick or specific inquiries, where swift interactions are necessary. An AHB interviewee explained this advantage, saying (P4), "*…if you're under time pressure, they're very handy…*". Digital sessions also facilitate spontaneous, short conversations, like a quick call or Zoom meeting, that enable timely exchanges and problem-solving (P4).

However, digital meetings have several limitations. First, participants often struggle to retain information effectively in online settings compared to in-person interactions. The Housing Agency noted (P10), "*Some of the things we thought we explained well… we obviously didn't because they were asking the same questions*". Additionally, online interactions lack the informal exchanges that occur during in-person events, which are invaluable for building rapport and diving into complex discussions. Finally, the absence of body language in virtual meetings can make it harder to fully read participants, which may restrict opportunities for deeper, spontaneous conversations (P4). In contrast, in-person meetings offer unique advantages for establishing long-term relationships and addressing more detailed topics. The Housing Agency emphasized that "*Long-term connections are far better made physically*.", explaining that a face-to-face connection facilitates future collaboration and builds trust over time (P10). Overall, a balanced approach that includes both digital and in-person exchanges allows for efficient, timely communication while preserving the depth and relationship-building benefits of physical interactions.

Transnational knowledge exchange should be exploited more: Several interviewees noted that transnational knowledge exchange remains underutilized, even though it offers significant potential to improve affordable housing strategies across countries (P1; P4; P7-P9). An academic underscored the need for more extensive knowledge exchange, adding that the scale of exchange might never feel sufficient due to the continuous learning involved (P1; P9). The Housing Agency also called for expanding the reach of shared insights, emphasizing (P4), "*…it's all well and good just being in Housing Europe events, if we don't come back and share that with our networks here, then what's the point?*".

Two interviewees emphasized that both positive and negative lessons should be shared more broadly. Despite differences in context, culture, and funding models across European countries, each has valuable insights that could prevent others from repeating the same mistakes (P7). As one AHB interviewee noted (P9), "*They all have elements that you can see where it has worked better or where things you could learn from with doing it*". Reflecting on Ireland's introduction of cost rental housing, another AHB interviewee questioned whether the country had truly maximized the potential learnings from other nations, particularly from models like Vienna's. They reflected (P8), "*Have we really implemented any of that within cost rental? I don't know… practical things we could take from [other countries]*". Later in this chapter, the opportunity to capitalize on European consensus on housing affordability will be discussed, underscoring another avenue to amplify transnational knowledge exchange.

Incorporating transnational KE strategies more deeply could ensure that countries, despite their differences, leverage shared insights to strengthen housing solutions across borders. A proactive approach to transnational knowledge exchange thus holds the promise of enriched practices and collaborative progress in tackling housing challenges.

Seize opportunity of EU consensus on affordability: Several interviewees highlighted the potential to leverage the growing European consensus on housing affordability for increased knowledge exchange efforts across member states (P4; P7; P8). The new political guidelines from the European Commission echo this priority, with plans for the "First-ever European Affordable Housing Plan" and a "Pan-European investment platform for affordable and sustainable housing" (von der Leyen, U., 2024). Even before these guidelines were published, interviewees noted that a shared commitment to addressing housing challenges across Europe could catalyze significant research and collaborative learning. The ICSH interviewee noted (P4), "*There's a huge problem with housing for young people across all of Europe… I think they finally realised that they need to do a bit more around this sort of stuff*".

One practical suggestion from a Housing Agency interviewee was to apply flexible financial tools and emergency resources to housing affordability, similar to the EU's response to the COVID-19 pandemic (P4). Increased funding for affordable housing research and comparative studies could be an outcome of these new EU initiatives. Additionally, interviewees proposed that a European housing conference could serve as a vital forum for knowledge exchange, supported by EU funding, as another interviewee suggested (P4), "*If you could apply to the European Commission…do a comparative study, will you give us 50,000 euros to do this?*". Such initiatives could greatly reduce the resource burden on individual organizations while expanding the potential for transnational knowledge exchange around Europe. By exploiting these proposed EU initiatives, countries across Europe could exchange more actionable insights on affordable housing, increasing learning and enabling the development of innovative solutions that could mitigate affordability issues.

Involve financial institutions in transdisciplinary knowledge exchange efforts: The involvement of financial institutions is a last essential insight for advancing transdisciplinary knowledge exchange on housing affordability (P1; P3). Financial actors, who play a decisive role in housing policy outcomes through their influence on investment values and mortgage systems, appear to be often absent from the knowledge exchange landscape. One Irish academic emphasized the gap between housing policy and finance policy stakeholders, noting (P1), "*At the end of the day: It's the finance policy people who make the final decisions, and they [housing and finance] don't always talk to each other… nobody's asking… how do they work together to make sure we have lower housing costs?*". This lack of integration creates a disconnect between housing affordability goals and the financial realities that impact them.

Interestingly, the academic revealed that the European Central Bank and other finance entities recognize their exclusion from housing knowledge exchanges but often lack the opportunity to contribute meaningfully. The proposed pan-European investment platform offers an ideal opportunity to bridge this gap by integrating financial institutions into discussions on affordable housing solutions (P1; P3). By engaging these institutions, knowledge exchange efforts could incorporate a broader understanding of economic drivers and financial regulations, leading to more holistic, sustainable solutions. Incorporating financial actors could deepen the impact of knowledge exchanges by connecting economic perspectives with housing policy goals. Bridging this divide can provide a pathway toward more integrated strategies that address affordability challenges across multiple dimensions.

Part 6.5 Conclusion lessons from transdisciplinary and transnational knowledge exchange

The transdisciplinary and transnational knowledge exchange efforts surrounding the introduction of cost rental housing in Ireland have yielded several key lessons. These lessons, derived from a variety of knowledge exchange methods, activities, and instruments, show the complexity and richness of collaborative efforts across different disciplines and national contexts. The lessons are elaborated upon below, answering the subquestion of 'What are lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland?'.

Lesson 1 = Transnational knowledge exchange is underexploited: Transnational knowledge exchange is firstly underexploited as a means to advance affordable housing provision, with several interviewees emphasizing the need for greater efforts in this area. Despite the significant differences in national contexts, such as cultural, economic, and political environments, the interviewees remain optimistic about the potential for countries to learn valuable lessons from one another. These differences, rather than being insurmountable barriers, can provide diverse perspectives that improve the richness of knowledge exchange. By increasing the amount of transnational exchanges within Europe, countries can more effectively share the do's and don'ts of housing policies. This collaborative approach can help avoid repeating mistakes and foster the development of innovative solutions tailored to different contexts. Ultimately, the opportunities for greater learning across borders, such as the contemporary consensus in Europe on the importance of tackling housing affordability issues, should be seized to improve housing affordability on a broader scale.

Lesson 2 = Significant amount and variety of methods, barriers, enablers, and differences in incentives: The experience of knowledge exchange in the context of cost rental housing in Ireland has highlighted a significant amount and variety of methods, barriers, enablers, and differences in incentives. This variety might suggest that current knowledge exchange efforts are largely ad-hoc and lack a coherent, structured approach. Interviewees mentioned experiencing a broad range of methods, from conferences to informal exchanges, yet these methods appear to be applied in a sporadic manner rather than being integrated into a systematic strategy. The lack of deliberation and structure can limit the effectiveness of knowledge exchange, making it more difficult to achieve consistent and sustainable outcomes. However, the detailed listing of these methods, barriers, enablers, and incentives in this research provides a valuable resource that future initiators of knowledge exchange on affordable housing provision can profit from, enabling them to better anticipate challenges and optimize their strategies.

Lesson 3 = Need for more structured and deliberate approaches: In response to the observed unstructured nature of knowledge exchange efforts, there is a necessity for a more structured and deliberate approach. A more deliberate and coordinated approach would help streamline processes, ensuring that the fitting method is applied, participants incentives are considered, and critical barriers and enablers are contemplated. This could involve formalizing regular activities such as conferences, workshops, and collaborative research, while also embedding knowledge exchange into the daily routines of individuals and organizations. By dedicating specific roles or teams to oversee these efforts, organizations can ensure that knowledge exchange becomes a sustained priority rather than an occasional activity. A more structured approach would not only streamline knowledge-sharing processes but also foster stronger alignment and collaboration among stakeholders, ultimately leading to more impactful and sustained improvements in housing policy and practice.

Lesson 4 = Leverage the strength of intermediary organizations: Leveraging the strengths of intermediary organizations like a national Housing Agency, which facilitate connections and promote best practices, would enhance the overall effectiveness of these efforts. These organizations, both on a national and European level, such as Housing Europe, the European Federation of Living, and FEANTSA, play a pivotal role in transdisciplinary and transnational knowledge exchange by acting as key enablers. They are often easier for stakeholders to engage with due to their specialized expertise and ongoing dialogue with relevant parties. Being a member of and strengthening ties with existing intermediary organizations is therefore key. Establishing a strong national intermediary organization like Ireland with the Housing Agency is also critical as a sustainable beacon of experiences and expertise, and with support of pursuing knowledge exchange efforts on affordable housing provision.

Lesson 5 = Integrate informal exchanges: Informal exchanges are identified as the most critical enabler of effective knowledge exchange, with nine out of ten interviewees highlighting their importance. These interactions, often occurring on the sidelines of conferences or through personal networks, allow for discussions and the sharing of practical insights that might not surface in more formal settings. The power of these informal exchanges suggests that any structured approach to knowledge exchange should also include strategies to foster and support these less formal interactions, recognizing their role in driving innovation and the application of knowledge in practice. Moreover, while digital meetings have become more common due to convenience and the impact of the COVID-19 pandemic, physical interactions play a crucial role in enabling these informal exchanges, as they facilitate deeper relationships, better understanding, and the opportunity for spontaneous, meaningful conversations that are often difficult to achieve online.

Lesson 6 = Conferences are a key KE method: Conferences are widely recognized by interviewees as a key method for facilitating knowledge exchange, particularly because they enable both formal presentations and valuable informal interactions. While structured programs provide essential content, it is the side conversations and networking opportunities that often yield the most significant insights. serve as a catalyst for academic research and publications, which often spark a ripple effect of further knowledge dissemination. The insights and findings shared at these events can generate significant interest, leading to subsequent seminars, workshops, and additional research that continuously spread the knowledge across networks, ultimately having the potential to both influence policy and practice on national and transnational levels. Despite some concerns about overly formal formats, conferences remain a vital platform for disseminating knowledge and fostering collaboration across the housing sector. To maximize their impact, adjustments such as shorter presentations and more time for networking could be beneficial.

Lesson 7 = The primary incentive for participants is to learn: Another key lesson learned from the knowledge exchange efforts on cost rental housing is that the primary incentive driving housing actors to engage in these initiatives is the opportunity to learn. This learning is not only about gaining new perspectives but also about satisfying an inherent curiosity or academic interest that pushes participants to explore new ideas and approaches. For many, the process of learning is continuous and reciprocal, requiring an active effort to recognize and seize opportunities to learn from others, both within their own country and internationally. This commitment to learning ensures that housing practices remain dynamic and high-quality, as organizations continuously critique and improve upon their work. Initiators of knowledge exchanges should actively tap into this strong incentive to learn, alongside other motivations such as networking, self-improvement, and helping others to improve, to design more engaging and effective exchange opportunities. Ultimately, fostering a culture of learning across European

nations can help avoid repeating mistakes and build on successful strategies, making the exchange of knowledge a powerful tool for advancing affordable housing initiatives.

Lesson 8 = Involve financial actors transdisciplinary: Involving financial actors transdisciplinarity in knowledge exchange is crucial for advancing affordable housing initiatives like cost rental housing in Ireland. The research highlights that financial institutions, such as the European Central Bank, possess valuable insights and reports on housing affordability, yet they are often underutilized in knowledge exchange efforts. By integrating these actors more deliberately into KE processes, their financial expertise can support sustainable housing models and contribute to more robust and informed decision-making. This involvement is especially important for ensuring that the economic aspects of housing solutions are fully addressed, enabling a more comprehensive approach to tackling the housing affordability crisis across Europe.

Lesson 9 = Invest in high-impact individuals as knowledge brokers: Investing in high-impact individuals as knowledge brokers is essential for the successful implementation of transdisciplinary and transnational knowledge exchange. These individuals possess unique qualities that enable them to effectively bridge the gaps between different communities, such as academics, housing providers, government officials, and financial stakeholders. Their ability to translate complex information across disciplines and contexts makes them invaluable in ensuring that knowledge exchange efforts are not only understood but also acted upon. The research highlights that participants are more likely to engage and respond positively when high-impact individuals lead these efforts, emphasizing their critical role in driving the success of knowledge exchange initiatives.

Chapter 7 Discussion & Conclusion

This chapter synthesizes all key insights gained from the research on transdisciplinary and transnational knowledge exchange (KE) in the context of providing affordable housing across Europe, with a specific focus on the case study of cost rental housing in Ireland. The chapter reflects upon all findings, from contemporary challenges with housing affordability to state-of-the-art knowledge exchange methods and from lessons of the introduction of cost rental housing in Ireland to learnings from the knowledge exchange involved. By addressing both theory and real-world applications, the discussion debates the lessons learned from Ireland's unique approach to cost rental housing and explores how these findings can inform future KE efforts on housing affordability across Europe. The conclusion distills these insights into actionable lessons that emphasize the importance of structured KE, political and sectoral consensus facilitated by key knowledge exchange, the role of financial institutions with KE, the need for increased transdisciplinary and transnational approaches, and seizing of European consensus on the urgency of tackling the housing affordability crisis.

Part 7.1 Discussion of the findings

Contemporary challenges in affordable housing: The case of Ireland

The case study of cost rental housing in Ireland illustrates key contemporary challenges in affordable housing, aligning closely with those outlined in the theoretical framework. First, Ireland faces a primary challenge in maintaining cost-effectiveness for the sustainability of the cost rental model (P3-10; Byrne, 2022c) amid rising inflation, material, labor, and construction costs, and scarce funding sources, reflecting similar pressures across Europe (OECD, 2023; Byrne, 2022b, 2022c). These financial constraints underscore the difficulty for governments and housing providers in achieving genuine affordability for new housing units. Additionally, the Irish approach signals a governmental shift away from reduced state involvement in housing policy, as seen elsewhere (Lee et al., 2022; Wetzstein, 2017). Here, Ireland's significant subsidization of cost rental housing (Byrne, 2024; see figure 43) represents a conscious policy choice, indicating an acknowledgment that reliance solely on market forces has limitations in addressing the housing affordability crisis (EIPA, 2022; Galster & Lee, 2021; Byrne, 2024). Lastly, Ireland's focus on affordable rentals for middle-income households (see figure 42) mirrors an increasing need for solutions to economic inequality in housing across Europe, as even traditionally stable groups are now strained by housing costs (Anacker, 2019; Haffner & Hulse, 2021; UNECE & Housing Europe, 2021).

Cost rental housing as a viable solution in a homeownership-dominated market

As a potential solution, the introduction of cost rental housing in Ireland challenges the theoretical assumption that this model would be unsuitable for countries, such as Ireland, where homeownership dominates the housing market (Healy & Goldrick-Kelly, 2018b; Springler & Wöhl, 2020; P3; P7), where consequently a stigmatized (P4; P6) and unsecure rental sector exists (P8; P10). According to the theory, cost rental housing is often deemed inappropriate in contexts where cost-based rental systems have little interaction with the for-profit rental sector, particularly in countries like Ireland, where outright homeownership is dominant and rental housing lacks a strong, influential presence (Stephens, 2016). In such settings, the cost rental model may struggle to gain traction because rental options are typically marginalized, and subsidies or policies favor homeownership over rental support. However, Ireland's experience demonstrates that with the right political and sectoral consensus (P2; P4; P8), the introduction of cost rental housing can be achieved, even in a market traditionally focused on homeownership.

By engaging in transnational and transdisciplinary knowledge exchange, stakeholders were able to bring insights from other countries and discuss how similar models might be locally implemented. This exchange created a shared foundation for informed decision-making, which, in turn, contributed to a stable and lasting consensus across various sectors. Key to this achievement has been the Irish government's strong commitment to the model, supported by a broad coalition of stakeholders (P2; P4; P5; P8; P9; P10), from housing associations to academics. This widespread support facilitated the successful introduction of cost rental housing, suggesting that such an approach could similarly benefit other countries. While concerns remain about the long-term sustainability of the model, particularly regarding funding mechanisms (P4) and scalability (P1; P8), the initial achievement of making rental housing more affordable for middle-income households indicates that cost rental housing can be a viable solution, even in traditionally homeownership-focused societies. This case suggests that with political will and strategic consensus facilitated through early exploitation of transnational and transdisciplinary knowledge exchange, countries facing similar barriers might still adopt cost rental housing to address affordability challenges.

Distinctive characteristics of Ireland's cost rental model

Even though the case study proves the applicability of cost rental for countries like Ireland, the way in which it is applied, is likely to differ significantly. The implementation of cost rental housing in Ireland stands out compared to other European countries due to its highly targeted and limited approach (see figure 56 below, and the more extensive figure 42). Unlike countries such as Austria, Denmark, and Finland, where eligibility for cost rental housing is more universal (Housing Europe, 2022), Ireland's model focuses specifically on middle-income households through strict and explicit eligibility criteria (Affordable Homes Ireland, n.d.; McManus & Doyle, 2023). This makes the Irish model more restrictive and potentially limits its broader societal impact. Another key difference is Ireland's heavy reliance on public funding, with significantly higher levels of state involvement compared to the more balanced funding models in other European countries, where private equity plays a larger role. This may be partly due to the underdeveloped nature of Ireland's cost rental sector, which is still small in scale and has not yet reached the point where it can become self-sustaining or revolving (P5; Byrne, 2022a; Kenna, 2021), as seen in more mature models like Austria's (Elsinga, 2020; Kemeny, 1995; Norris & Byrne, 2021). The absence of private investment in Ireland, despite a targeted scheme (P10), also reflects concerns about the model's sustainability, as low profit margins (P6-8), high return on investment demands and uncertainty about long-term viability likely make private investors hesitant. However, the involvement of private equity could be crucial for ensuring the long-term sustainability of cost rental housing in Ireland, as public funding alone may be incapable of scaling the model to meet the country's long-term housing needs.

THE MAIN DIFFERENCES OF COST RENTAL IN EUROPEAN COUNTRIES (OWN WORK, BASED ON (HOUSING EUROPE, 2022))				
	IRELAND	AUSTRIA	DENMARK	FINLAND
COST-BASED SOCIAL HOUSING (% OF NATIONAL HOUSING STOCK)	~0,1% - *April 2024*	17%	20%	11% (narrow definition); c.20% (broad definition)
ELIGIBILITY	Selective - *only middle income households*	Universalist – *c.80% of households in practice*	Universalist – *but priority for most in need*	Universalist – *but local restrictions apply in practice*
FUNDING SOURCES	- Public loans (~80%); - Public grant (~20%).	- Public loans – *subordinate* (30-40%); - Bank loans (30-40%); - Own equity (10-20%); - Tenant equity (~5-10%); - Public grant (~5%)	- Loan from a mortgage institution – *with state guarantee* (86-90%); - Municipal loans (8-12%); - Tenant equity (2%)	- Private loans – *with state guarantee* (95%); - Own equity (5%); - Public grant
MAIN AREA FOR IMPROVEMENT	Small cost rental housing stock and absent private equity	Cost of new homes in areas with high land costs	Construction price cap in areas with high land costs	Depopulation in rural areas undermining cost-based principle

Figure 56: The three most significant differences between the Irish cost rental model compared other European countries such as Austria, Denmark and Finland (own work, based on (Housing Europe, 2022)).

Application of knowledge exchange strategies in the case study

In the case study of cost rental housing in Ireland, various transdisciplinary and transnational knowledge exchange strategies have been applied, while at the same time mirroring almost all in chapter 4 discussed state-of-the-art methods used in knowledge exchange. Conferences (P1-8; P10) emerged as the most frequently cited method by interviewees, acting as a critical tool in line with the stated state-of-the-art methods. Dissemination (Cvitanovic et al., 2015; Dobbins et al., 2009; Zhao et al., 2020) through evidence briefs, in the form of written reports (P1-7; P10), was another prominent strategy, with the added suggestion from interviewees to enhance this approach by incorporating European housing updates (P4; P8) more regularly to keep stakeholders informed across borders. Intermediary organizations play a vital role in knowledge brokerage (Cvitanovic et al., 2017; Fazey et al., 2013; Karcher et al., 2021; Lomas, 2007), with groups like the Housing Alliance, Irish Council of Social Housing, and Housing Agency as key national boundary spanners, while international collaborations with organizations like Housing Europe, EFL, and FEANTSA strengthen the transnational exchange (P1; P2; P4; P5; P8-10). However, high-impact individuals (P3) as individual knowledge brokers Cvitanovic et al., 2016; Dobbins et al., 2009; Mitton et al., 2007) is underexploited with KE on cost rental housing and investment in these individuals is therefore an improvement for knowledge exchange on housing affordability in Europe. Additionally, the use of passive, web-based information (Arevalo et al., 2023; Mitton et al., 2007) is notably underutilized, with only a website (P1; P7; P8; P10) mentioned as a method. Concerning the provision of (web-based) information strategy, there is a clear additional opportunity to improve KE by incorporating additional digital discussion platforms (Valkering et al., 2013) to facilitate additional ongoing knowledge exchange. Lastly, combining the dissemination of reports with a formal launch event (P2), as demonstrated in the case study, could further enhance the impact and reach of evidence briefs in future KE efforts on housing affordability.

Making knowledge tangible: Methods to engage stakeholders

The case study of cost rental housing in Ireland also underlines the importance of methods that make knowledge concrete and tangible (Eraut, 2000; Russel et al., 2004; Seo, 2022) similar to the

conclusion of the state-of-the-art methods in part 4.5. One uniquely applied method in this regard with the Irish case is the use of exhibitions, which played a pivotal role in introducing cost rental housing to a broader audience (P4: P6; P10) and crucially connected European cost rental actors (P3). Alongside exhibitions, other hands-on methods like site tours (P4-6; P9; P10), best practice exchanges (P1; P2; P8), pilot studies (P2; P5; P6), and housing festivals (P3; P4; P10) were crucial in making the concept of cost rental housing more relatable to various stakeholders, sparked new KE efforts and accelerate the process of introducing the model. These methods, without being prominent in general KE literature, allowed for a more practical and experiential understanding of how the striking example of housing affordability provision in cost rental housing could be implemented. Additionally, advocacy (P2; P4; P8; P9), although also less prominent in theoretical discussions, was a critical method in practice. In Ireland, early advocacy by academics and the Green Party (P1; P4: P5) helped push the cost rental model onto the political agenda, while ongoing efforts by the Housing Alliance and the Housing Agency built consensus (P1; P2; P4; P8; Byrne, 2022a) for the model's adoption. This underscores the importance of advocacy as a practical method in knowledge exchange, when dealing with complex issues like housing affordability where political and sectoral consensus is crucial.

Barriers and enablers of transdisciplinary and transnational knowledge exchange

In examining the barriers and enablers of knowledge exchange in both theory and the research findings, several key insights emerge. First, room for informal interactions were the most frequently mentioned enabler of KE efforts by a distance (P1-4; P7; P8; P10). This contrasts with theoretical discussions, where informal exchanges are underemphasized. They should however be more prominently considered in KE strategies, especially when addressing housing affordability. Second, from a transdisciplinary perspective, a major barrier identified which did not appear in theory was the differing knowledge needs of academics and practitioners (P1; P3; P5; P8). While academic knowledge tends to focus on theory and analysis, practitioners emphasize the need for tangible, actionable knowledge. This highlights the critical importance of providing practical, user-oriented knowledge as a key enabler in transdisciplinary KE, especially when dealing with issues that directly affect housing provision. In the end, despite the differences in national contexts (P2; P3; P5-10), work priorities (P2; P4; P5; P7; P9) and knowledge needs (P1; P3; P5; P8), particularly between academics and practitioners, participants emphasized transnational (P1; P4; P7-9) as well as transdisciplinary knowledge exchange should be exploited more. Shared housing affordability challenges across Europe make it crucial to learn from one another, even if solutions aren't directly transferable (P9). The transdisciplinary approach is valued because research and practice strengthen each other, with the research about early tenant satisfaction (part 5.4) in cost rental housing as a striking example. A transnational approach is key for states to learn from one another's tangible successes and evaluated mistakes.

Incorporating financial institutions and balancing online and offline knowledge exchange

The transdisciplinary and transnational dimensions of knowledge exchange in the case study on cost rental housing offer another two important lessons. First, the involvement of financial institutions, overlooked in knowledge exchange on housing affordability (P1), is critical. Institutions like the European Central Bank (ECB) hold valuable reports on housing, yet they are rarely involved in knowledge exchange efforts (P1). Similarly, private investors and developers are frequently overlooked. The case study underscores the need to better integrate financial actors, as their role is central to addressing affordability issues in Europe and could also help with external financial support (P2; P3; P9) as an enabler for knowledge exchange. Second, from a transnational perspective, the balance between online and offline sessions in KE is important.

The case study confirms theoretical insights (Cvitanovic et al., 2021; Nguyen et al., 2021) that, while online sessions offer convenience and wider participation, face-to-face interactions are essential for building deeper connections and fostering sustained engagement (P1; P2; P4; P5; P10). A hybrid approach ensures both accessibility and the interpersonal benefits of face-to-face exchanges, which are vital for long-term success.

Institutionalizing knowledge exchange for sustained learning

Additionally, the most mentioned 'other insight' from interviewees was the need to structurally build in knowledge exchange (P2-5; P8; P9) at different levels, both for individuals and organizations. One practical implementation is ensuring KE is part of the routine (P4), as exemplified by organizations like the Housing Alliance, which holds monthly meetings to facilitate regular knowledge exchanges on practical issues. Other examples were structural funding (P9), integration of an intermediary organization dedicated to KE (P2; P5 ;P9), dedicating personnel to KE efforts, and integrating KE into research and policy initiatives to capitalize fully on its potential (P8). Establishing more systematic and structured knowledge exchange could address current ad-hoc applications (Cvitanovic et al., 2016; Reed et al., 2014), and ensure sustainable learning and collaboration. Finally, with transdisciplinary and transnational knowledge exchange on cost rental housing, the primary incentive for participants, whether individually or as an organization, is the opportunity to learn (P2-P5; P9; P10). This motivation should be central to the design and implementation of knowledge exchange methods and strategies on housing affordability. To be concrete, a state-of-the-art method like peer learning (Abu-Rumman, 2021) could be applied. Ensuring that learning opportunities are embedded in the process can not only sustain engagement of participants long-term but also enhance the overall impact of the exchange, making it more relevant and beneficial for all involved.

Part 7.2 Conclusion of the research

To conclude, this research delivers seven main lessons-learned for transdisciplinary and transnational knowledge exchange on the provision of affordable housing across Europe, addressing the main research question: "*What are lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?*"

In answering this question, the study also addressed the following subquestions: Subquestion 1, "*What is housing affordability and what are contemporary challenges with providing affordable housing in Europe?*" is covered on page 18 in part 2.1 of the theoretical framework. Subquestion 2, "*What are state-of-the-art methods, its enablers and barriers, for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe?*" is answered on pages 61-62 in part 4.5, which is the conclusion of Chapter 4. Subquestion 3, "*What are lessons-learned from the introduction of cost rental housing in Ireland?*" is addressed on pages 74-75 in part 5.6, the conclusion of Chapter 5, and Subquestion 4, "*What are lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland?*" is answered on pages 102-104 in part 6.5, the conclusion of Chapter 6.

The seven key lessons-learned are as follows:

Lesson 1 = With sufficient political and sectoral consensus cost rental housing can be achieved, even in a market traditionally focused on homeownership: The Irish introduction of cost rental housing illustrates that, even in markets traditionally oriented toward homeownership, political and sectoral consensus is essential to adopt alternative housing models. Transnational and transdisciplinary knowledge exchange plays a vital role by bringing together actors with the

shared objective of learning from different countries or sectors. Through discussions on potential local adoption of new or adapted models, knowledge exchange facilitates informed decision-making, making consensus more likely to be achieved and sustained. Ireland thus serves as both a blueprint for adopting a contrasting housing model within a traditionally homeownership-focused country and for the early exploitation of transnational and transdisciplinary knowledge exchange to build the consensus necessary for successful adoption.

Lesson 2 = Ireland introduced an unique version of the cost rental model: Ireland's cost rental model differs significantly from other European countries with its highly targeted and limited approach, using strict eligibility criteria. Despite a successful introduction, the model relies heavily on public funding and lacks private investment, which poses risks to long-term sustainability. Implementation of the Irish variant of cost rental is met with seven key challenges: keeping costs down, geographical distribution, public unawareness, tenant selection, housing assistance, competition between providers, and the role of local authorities.

Lesson 3 = Implement transdisciplinary and transnational KE more deliberately and structurally: While there is no universal model for KE, various strategies, methods, barriers, enablers, incentives, and insights can be strategically applied to enhance KE on housing affordability. KE efforts should be integrated thoughtfully, focusing on alignment with key decision points or creating consensus-building moments, rather than only structural embedding. Using as many of the five knowledge exchange strategies and their state-of-the-art methods as applicable ensures that KE serves as both a foundation and a catalyst for impactful, collaborative decisions in housing policy across transdisciplinary and transnational contexts.

Lesson 4 = Integrate frequent informal interactions, individual knowledge brokers, actionable knowledge and structural learning: The most key enabler of KE on housing affordability is frequent informal interactions, as these foster sustained exchanges, side step competitive sensitivity and are easily incorporated into tools such as conferences. Similarly, investment in individual knowledge brokers can further enhance the impact of KE, by for example ensuring knowledge is tangible and actionable through explicit methods like exhibitions, site tours and best practices. Critical is also the facilitation of structural learning to align KE with the primary incentive for participants, which is the opportunity to learn.

Lesson 5 = Increase transdisciplinary- as well as transnational KE, despite differences in knowledge needs and national context: Despite significant differences in national contexts and knowledge needs, transdisciplinary and transnational knowledge exchange is critical for addressing Europe's shared housing affordability challenges. European countries are facing similar problems, providing an opportunity to learn from each other's successes and mistakes without directly replicating solutions. Expanding transnational and transdisciplinary KE efforts would foster collaboration, where research and practice reinforce each other, enabling countries to adapt successful strategies while addressing specific local needs.

Lesson 6 = Involve financial institutions, private investors and developers in the knowledge exchange: Financial institutions, such as the European Central Bank (ECB) and other national institutions, produce valuable reports on housing yet are seldom involved in knowledge exchange efforts with affordable housing provision. The same goes for private investors and developers. Their inclusion in transdisciplinary KE is crucial, as their expertise is central to addressing housing affordability issues across Europe. Involving these institutions, investors and developers both nationally and internationally could also provide external financial support, acting as a key enabler to make work of more deliberate and structured knowledge exchange.

Lesson 7 = Seize European consensus on housing affordability for more transnational KE: The growing European consensus on the importance of tackling the housing affordability crisis presents a unique opportunity to enhance transnational knowledge exchange. This consensus should be leveraged to foster more collaborative efforts across countries, sharing best practices and strategies to tackle housing challenges. By exploiting transnational KE more effectively, for example with targeted funding from the European Commission, Europe can create stronger, more unified approaches to affordable housing solutions.

Chapter 8 Limitations, recommendations & societal and scientific contribution

This chapter identifies key limitations of the research, including the exclusion of certain stakeholders and potential respondent biases. It also provides recommendations for future research to broaden knowledge exchange in housing and discusses the societal and scientific contributions of this study, particularly in addressing affordable housing challenges through transdisciplinary and transnational approaches.

Part 8.1 Limitations of the research

This section outlines key limitations encountered in the research, which may influence the generalizability and scope of the findings. The limitations include the exclusion of certain stakeholders, such as local authorities and private investors, whose involvement could offer additional insights into the Irish cost rental model. Other factors include a geographic focus primarily on Dublin and Galway, the unique dynamics of Ireland's close-knit housing sector, and potential biases among respondents due to competitive sensitivity. These limitations are discussed with brief recommendations for future studies to broaden and enhance the research approach to transdisciplinary and transnational knowledge exchange on affordable housing.

Limitation 1 = Exclusion of local authorities as interviewees: The role of local authorities in the Irish cost rental housing model emerged as more significant than initially anticipated, yet they were not included as interviewees. While snowball sampling was employed in this research, it did not lead to local authority representatives. Future studies should ensure the inclusion of local authorities, especially given the recommendations in this research concerning their evolving role in the cost rental model (see part 5.5).

Limitation 2 = Deliberate exclusion of private investors and developers: Private investors and developers, though key players in affordable housing across Europe, were excluded from the interviewees, as they are not currently involved in Ireland's cost rental model or its associated knowledge exchanges. While their perspectives on non-involvement could be insightful, this was outside the scope of this thesis, which focused on actors directly engaged in knowledge exchange and cost rental housing. Future research on KE in housing affordability should consider including these actors, especially if they become part of knowledge exchange interactions together and its private investments become part of the Irish cost rental model.

Limitation 3 = Geographic focus on Dublin and Galway: The interviewees in this study were predominantly from Dublin (90%) and Galway (10%), potentially limiting perspectives from rural Irish areas, which may have a different outlook on cost rental housing. However, the focus on these cities is justified, as all cost rental provision and relevant actors are currently based in Dublin and Galway.

Limitation 4 = Questionable replicability of the Irish case: Ireland's housing sector is relatively small, with a limited number of actors who often already know each other, enabling informal and frequent interactions. This close-knit and culturally specific environment, where informal exchanges are highly valued, facilitates the establishment and evaluation of knowledge exchange. However, this raises questions about whether Ireland's approach to knowledge exchange is replicable in larger, more complex, or culturally different housing sectors where formal interactions may be more customary. Despite this limitation, the choice of Ireland as a case study is justified due to the accessible and clear scope of its cost rental housing sector, which provided an ideal setting for in-depth research on knowledge exchange dynamics.

Limitation 5 = Potential impact of competitive sensitivity on the interviews: Various respondent biases may have influenced the interview data. Competitive sensitivity between stakeholders might have limited openness, while confirmation and recency biases could have led participants to emphasize recent or favorable aspects of the cost rental model, aligning with sectoral interests. Nonetheless, the author observed that interviewees generally spoke freely, reassured by the study's confidentiality and anonymization practices.

Part 8.2 Future recommendations

This section presents targeted recommendations based on the findings of this research, aimed at supporting key groups in addressing housing affordability challenges more effectively. General recommendations encourage all stakeholders involved with housing affordability to integrate the lessons learned, while specific recommendations address the needs of particular groups, including organizers of knowledge exchange (KE) efforts, academic researchers, and Irish cost rental housing actors. National Housing Departments and the European Commissioner on Energy and Housing are also provided with tailored guidance to enhance transnational knowledge exchange, build political consensus, and possibly adopt innovative models like Ireland's cost rental approach in tackling the housing affordability crisis across Europe.

General recommendations

Recommendation 1 [All involved with housing affordability] = Make use of all lessons-learned of this research: To address housing affordability more effectively, it is essential for stakeholders to integrate the key lessons from this research into their knowledge exchange (KE) efforts. These lessons highlight the importance of building political and sectoral consensus, implementing targeted KE strategies, and involving diverse actors, including financial institutions and private investors, in transdisciplinary and transnational exchanges. By adopting these insights, policymakers and practitioners can enhance collaboration, foster sustainable solutions, and make better-informed decisions that are adaptable to local and national contexts across Europe.

Recommendation 2 [Organizers of KE efforts] = Use as many of the five KE strategies when designing KE efforts: To maximize the effectiveness of knowledge exchange (KE), for example on affordable housing, it is recommended to incorporate as many of the five KE strategies as possible: (1) organization of knowledge exchange activities, (2) use of knowledge brokerage, (3) provision of (web-based) information, (4) application of knowledge exchange tools and instruments, and (5) dissemination of knowledge. Combining methods from each strategy enables organizations to harness the unique strengths of each approach, creating a cohesive and impactful KE process. By integrating these strategies, stakeholders can enhance the depth and reach of knowledge-sharing, ensuring a comprehensive approach to tackling housing challenges across Europe.

Recommendations for future research

Recommendation 3 = [Academics, Organizers of KE efforts] Inclusion of financial institutions, private investors and developers in both KE research and efforts: To enhance the sustainability and impact of affordable housing solutions, both research and practical KE efforts should actively include financial institutions, private investors, and developers. As key players in the housing sector, understanding their roles, motivations, and barriers in participating in knowledge exchange is crucial for assessing how they can contribute to long-term solutions like Ireland's cost rental model. In addition to exploring their perspectives through research, integrating these actors into KE efforts would enable a more comprehensive approach, leveraging their financial

expertise, investment capacity, and strategic insights to strengthen affordable housing initiatives across Europe.

Recommendation 4 [Academics] = Ensure consistent and correct use of KE terminology: To enhance the academic foundation of knowledge exchange (KE) theory, it is essential to use terms like 'strategy,' 'method,' and 'instrument' consistently and correctly. As discussed in Chapter 4, the interchangeable and sometimes inaccurate use of these terms can undermine the clarity and coherence of KE research, making it difficult to build on existing work. Future studies should focus on maintaining consistency in KE terminology to strengthen the theoretical framework and support the development of more robust and comprehensive research in the field.

Recommendation 5 [Academics] = Research replicability of the Irish model in different European contexts: Future research should also explore whether Ireland's cost rental model can be replicated in other European countries with larger or more complex housing sectors. Investigating how informal knowledge exchanges and tight-knit networks, which characterize Ireland's small housing sector, might differ in larger contexts could provide valuable insights into KE's role in scaling housing solutions.

Recommendation 6 [Academics, Irish cost rental housing actors] = Monitor and research the development of the Irish cost rental model: Future research should monitor the ongoing development of the Irish cost rental model, focusing on whether it can fulfill its long-term promises. Tracking its progress will provide valuable insights into the sustainability and scalability of the model. The Irish case also presents an ideal opportunity for studying how an alternative model matures in a traditionally home-ownership driven state, offering lessons for other countries facing similar challenges.

<u>Recommendation for Irish cost rental housing actors</u>

Recommendation 7 [Irish cost rental housing actors] = Make use of future considerations on cost rental housing in Ireland: Irish cost rental housing actors could benefit from incorporating the future considerations outlined in this research to support the model's long-term success. Actions like sustaining political consensus, implementing structured national monitoring, encouraging private investment, and raising public awareness can help strengthen the sector. Additionally, exploring increased AHB involvement, sharing Ireland's insights internationally, empowering local governments, and facilitating tenant mobility within the system may enhance the adaptability and impact of cost rental housing over time.

<u>Recommendations for National Housing Departments</u>

Recommendation 8 [National Housing Departments] = Start with transnational and transdisciplinary knowledge exchange efforts when introducing alternative housing models or solutions: National Housing Departments should prioritize transnational and transdisciplinary knowledge exchange early in the process when introducing alternative housing models. The Irish case demonstrates how early engagement with transnational insights, through site visits, exhibitions, and focused research, helped build the political and sectoral consensus needed to successfully launch cost rental housing. By bringing together actors from different countries and sectors to explore potential adaptations, these knowledge exchange efforts foster informed decision-making and increase the likelihood of successful adoption in new contexts.

Recommendation 9 [National Housing Departments] = Consider the Irish version of cost rental housing: National Housing Departments across Europe should consider the Irish version of cost rental housing as a valuable example of how a country with a strong homeownership tradition

can successfully adopt an alternative housing model. Ireland's approach provides new insights into the flexibility and adaptability required to introduce cost rental housing, even in contexts typically dominated by homeownership. By examining Ireland's experience, other nations can gain inspiration and practical lessons for implementing similar models to address their own housing affordability challenges.

Recommendation for the European Commissioner

Recommendation 10 [European Commissioner] = Seize European consensus on tackling the affordability crisis and built in transnational knowledge exchange: The new European Commissioner for Energy and Housing has a unique opportunity to capitalize on the growing consensus across Europe on the need to address the housing affordability crisis. By embedding transnational knowledge exchange into European policy efforts, the Commissioner can foster collaborative partnerships that enable countries to share best practices, adapt effective strategies, and address specific local needs. Leveraging this consensus with targeted funding from the European Commission would reinforce the connection between research and practice, leading to stronger, more cohesive approaches to affordable housing solutions across Europe.

Part 8.3 Societal and scientific contribution of the research

The research delivers above all lessons-learned for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe. Facilitators of knowledge efforts on this subject can profit from the thesis by considering the presented state-of-the-art methods and the learnings from the case study, such as the experienced barriers and enablers, and incentives of participants. By taking into account all of these lessons the performed knowledge exchanges become more deliberate, structured and sustainable by increasing the likelihood of keeping participants involved. Ultimately, through more successful exchanges, European countries can profit from the gained knowledge and are better able to tackle housing affordability issues.

Another way in which the thesis research aims to contribute to solving housing affordability problems more directly is by providing key insights into the cost rental model as a potential solution. The research delivers a clear overview, including challenges with implementation, of the introduction of cost rental housing in a state with an inherent tradition of home-ownership. European countries faced with housing affordability issues can take inspiration from the Irish model and its key lessons learned. Apart from other countries, Irish actors involved with cost rental housing might use the overview of the introduction and especially the future consideration for the further development of the model. Additionally, initiators of knowledge exchange efforts on cost rental housing in Ireland can utilize the research as an extensive guide to optimize the exchanges between participants.

Academic research on methods of knowledge exchange is notably limited, particularly within the housing sector and, even more so, in the context of affordable housing. This research thus fills a critical knowledge gap by exploring and defining state-of-the-art methods for knowledge exchange in affordable housing provision across Europe. Given the limited available research, the study also drew from knowledge exchange insights in other disciplines, providing a broader perspective that further strengthens the findings and opens avenues for future housing-specific knowledge exchange research. The research further places both transdisciplinary and transnational knowledge exchange at the forefront of discussions on housing affordability, emphasizing their critical role in addressing complex, European-wide issues. By highlighting the cost rental model as a viable solution, the research inspires further

exploration of how KE can make sure how we learn from each other's expertise. This work encourages intensified research into both KE strategies and cost rental housing, underscoring their potential to shape sustainable housing solutions across Europe for tomorrow and far into the future.

Reflection

This section offers a reflection on the outcome and process of delivering this master thesis, focusing first on research-related contemplations and then on personal development reflections.

Reflecting on the research process, choosing to focus on knowledge exchange for affordable housing has been deeply rewarding. This topic sustained my motivation throughout the project and left me with a sense of fulfillment in the final results. The case study on Ireland's cost rental housing model was especially gratifying, as it touches on core elements of housing systems that align with my interests. Conducting in-person interviews in Dublin was an enriching experience, marked by the hospitality and responsiveness of participants. Once again, I found that stepping out of my comfort zone, such as traveling to Dublin, yielded positive outcomes. However, I recognize that the diversity of interview participants could have been improved, as the absence of local authority representatives and non-responses from the national housing department somewhat limited the depth of my findings. Additionally, while my original intent was to produce a tangible, actionable outcome, the result was instead a list of lessons learned, though I now see that these are valuable for guiding future efforts.

On a personal level, one challenging aspect was the frequent adjustments to the research questions. While the shifts were not due to external factors alone, they were essential in refining the focus of the thesis to better address gaps in knowledge exchange and housing affordability. This process highlighted the need to adapt my research approach for clarity and depth. Though challenging, I recognize that this pivoting contributed positively to the thesis by refining its scope and improving its overall relevance. Still, the late adjustments after the interviews meant that additional questions on specific aspects of cost rental could have provided even greater insights.

Another area of reflection is my approach to learning. I have realized that my perfectionism and my tendency to be thorough in my research stem from a need to feel thoroughly backed by expert sources before I feel comfortable presenting my own perspective. While this gives me confidence in my findings, it has also led to an extensive amount of reading. Moving forward, I aim to balance this need for comprehensive research with more efficient decision-making and speaking out without having performed extensive research. Furthermore, this past year, I found myself missing the active, tangible impact of applied work, which I hope to incorporate into my first job. I've also found that I learn best through hands-on experience, which has reinforced my desire to pursue a practical role where theory and practice can complement each other.

Finally, the process of writing in English posed its own set of challenges, as I spent significant time searching for synonyms and rephrasing sentences. This experience underscored my perfectionistic tendencies, particularly in ensuring clarity and precision in expression. Recognizing this, I want to make efforts to work on improving these traits going forward.

REFERENCES

Aalbers, M. B. (2008). The Financialization of Home and the Mortgage Market Crisis. *Competition & Change, 12*(2), 148–166. https://doi.org/10.1179/102452908X289802. Retrieved October 22, 2023, from https://www.taylorfrancis.com/chapters/edit/10.4324/9781315668666-3/financialization-home-mortgage-market-crisis-manuel-aalbers.

Aalbers, M. B., Loon, J. V., & Fernandez, R. (2017). The financialization of a social housing provider. *International journal of urban and regional research, 41*(4), 572-587. Retrieved October 22, 2023, from https://onlinelibrary.wiley.com/doi/full/10.1111/1468-2427.12520.

Aalbers, M. B. (2022). Towards a relational and comparative rather than a contrastive global housing studies. *Housing Studies, 37*(6), 1054-1072. Retrieved September 21, 2023, from https://www.tandfonline.com/doi/full/10.1080/02673037.2022.2033176.

Abreu, M., Grinevich, V., Hughes, A., & Kitson, M. (2009). *Knowledge exchange between academics and the business, public and third sectors*. UK Innovation Research Centre, Cambridge. Retrieved May 1, 2024, from https://eprints.soton.ac.uk/357117/1/AcademicSurveyReport.pdf.

Abu-Rumman, A. (2021). Effective knowledge sharing: A guide to the key enablers and inhibitors. In *Handbook of Research on Organizational Culture Strategies for Effective Knowledge Management and Performance* (pp. 133-156). IGI Global. Retrieved 7 September, 2024, from https://www.igi-global.com/chapter/effective-knowledge-sharing/286312.

Affordable Homes Ireland. (n.d.). *Am I eligible?*. Retrieved July 24, 2024, from https://affordablehomes.ie/rent/am-i-eligible/.

Algozzine, B., & Hancock, D. (2017). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press. Retrieved December 4, 2023, from https://ds.amu.edu.et/xmlui/bitstream/handle/123456789/18440/Doing%20Case%20Study%20Research.pdf?sequence=1&isAllowed=y.

Anacker, K. B. (2019). Introduction: Housing affordability and affordable housing. *International Journal of Housing Policy, 19*(1), 1-16. Retrieved 8 April, 2024, from https://www.tandfonline.com/doi/pdf/10.1080/19491247.2018.1560544.

Arevalo, V. J. C., den Haan, R. J., Berends, K. D., Baart, F., van der Voort, M., & Hulscher, S. J. (2023). Drivers and barriers to knowledge exchange through an envisioned online platform for transdisciplinary research projects. *Environmental Science & Policy, 147*, 201-214. Retrieved 29 April, 2024, from https://www.sciencedirect.com/science/article/pii/S1462901123001661.

Arku, G. (2006). The housing and economic development debate revisited: economic significance of housing in developing countries. *Journal of Housing and the Built Environment, 21*, 377-395. Retrieved October 23, 2023, from https://link.springer.com/article/10.1007/s10901-006-9056-3.

Arnott, R. (1995). Time for revisionism on rent control? *Journal of Economic Perspectives, 9*(1), 99-120. Retrieved October 15, 2023, from https://pubs.aeaweb.org/doi/pdf/10.1257/jep.9.1.99.

Baehr, C. (2012). Incorporating user appropriation, media richness, and collaborative knowledge sharing into blended e-learning training tutorial. *IEEE Transactions on Professional Communication, 55*(2), 175-184. Retrieved June 18, 2024, from https://ieeexplore.ieee.org/abstract/document/6189768.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report, 13*(4), 544-559. Retrieved December 2, 2023, from https://nsuworks.nova.edu/tqr/vol13/iss4/2/.

Been, V., Ellen, I. G., & O'Regan, K. (2019). Supply skepticism: Housing supply and affordability. *Housing Policy Debate, 29*(1), 25-40. Retrieved April 9, 2024, from https://www.tandfonline.com/doi/full/10.1080/10511482.2018.1476899.

Blessing, L. T., & Chakrabarti, A. (2009). *DRM: A design research methodology* (pp. 13-42). Springer London. Retrieved March 21, 2024, from https://link.springer.com/chapter/10.1007/978-1-84882-587-1_2.

Bone, J. (2014). Neoliberal nomads: Housing insecurity and the revival of private renting in the UK. *Sociological Research Online, 19*(4), 1-14. Retrieved October 23, 2023, from https://journals.sagepub.com/doi/pdf/10.5153/sro.3491?casa_token=qBUVvoMiJokAAAAA:jfeO5qIJJCIoDxHCI8ClCwedDG98rvPz9tU9SkYxJxK_0IbW-K0CYZd6Vx8IViclVGQNQSjEYkb.

Bonnstetter, E. (2017). Importing the Legal Framework of Limited Profit Housing Associations into the Affordable Housing System of the United States. *Mich. St. Int'l L. Rev., 26*, 103. Retrieved October 28, 2023, from https://heinonline.org/HOL/LandingPage?handle=hein.journals/mistjintl26&div=8&id=&page=.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science, 2*, 40–57. Retrieved May 15, 2024 from https://pubsonline.informs.org/doi/abs/10.1287/orsc.2.1.40.

Bryman, A. (2016). *Social Research Methods*. Oxford: Oxford University Press (5th edition).

Byrne, M. (2022a, February 25). *Cost rental housing and the affordability question*. The Week in Housing. Retrieved July 23, 2024, from https://theweekinhousing.substack.com/p/cost-rental-housing-and-the-affordability.

Byrne, M. (2022b, March 11). *In defense of high cost rents*. The Week in Housing. Retrieved July 23, 2024, from https://theweekinhousing.substack.com/p/in-defense-of-high-cost-rents.

Byrne, M. (2022c, April 5). *Irish cost rental at the international level*. The Week in Housing. Retrieved July 23, 2024, from https://theweekinhousing.substack.com/p/irish-cost-rental-at-the-international.

Byrne, M. (2022d, November 4). *Is cost rental making a difference?*. The Week in Housing. Retrieved July 23, 2024, from https://theweekinhousing.substack.com/p/is-cost-rental-making-a-difference.

Byrne, M. (2024, January 19). Is cost rental 'in crisis'?. The Week in Housing. Retrieved July 23, 2024, from https://theweekinhousing.substack.com/p/is-cost-rental-in-crisis.

Cermeño, H., Bretfeld, N., & Bernhardt, F. (2022). Knowledge Practices Within and Beyond Sharing and Commoning Urban Initiatives. *Frontiers in Sustainable Cities, 4*, 767365. Retrieved March 7, 2024, from https://www.frontiersin.org/articles/10.3389/frsc.2022.767365/full.

Colavito, M. M., Trainor, S. F., Kettle, N. P., & York, A. (2019). Making the transition from science delivery to knowledge coproduction in boundary spanning: a case study of the Alaska Fire Science Consortium. *Weather, Climate, and Society, 11*(4), 917-934. Retrieved June 13, 2024, from https://journals.ametsoc.org/view/journals/wcas/11/4/wcas-d-19-0009_1.xml?tab_body=pdf.

Contandriopoulos, D., Lemire, M., Denis, J. L., & Tremblay, É. (2010). Knowledge exchange processes in organizations and policy arenas: a narrative systematic review of the literature. *The Milbank Quarterly*, *88*(4), 444-483. Retrieved 1 May, 2024, from https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-0009.2010.00608.x.

Creswell, J. W. (2012). *Educational research*: *Planning, conducting, and evaluating quantitative and qualitative research*. Pearson Education (4th edition).

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE publications.

Cvitanovic, C., Hobday, A. J., van Kerkhoff, L., Wilson, S. K., Dobbs, K., & Marshall, N. A. (2015). Improving knowledge exchange among scientists and decision-makers to facilitate the adaptive governance of marine resources: a review of knowledge and research needs. *Ocean & Coastal Management, 112*, 25-35. Retrieved 2 May, 2024, from https://www.sciencedirect.com/science/article/pii/S0964569115001167.

Cvitanovic, C., McDonald, J., & Hobday, A. J. (2016). From science to action: principles for undertaking environmental research that enables knowledge exchange and evidence-based decision-making. *Journal of environmental management, 183*, 864-874. Retrieved 1 May, 2024, from https://www.sciencedirect.com/science/article/pii/S030147971630696X.

Cvitanovic, C., Shellock, R. J., Mackay, M., Van Putten, E. I., Karcher, D. B., Dickey-Collas, M., & Ballesteros, M. (2021). Strategies for building and managing 'trust' to enable knowledge exchange at the interface of environmental science and policy. *Environmental Science & Policy, 123*, 179-189. Retrieved 15 September, 2024, from https://www.sciencedirect.com/science/article/pii/S1462901121001465.

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects, 49*(1), 91-96. Retrieved June 14, 2024, from https://link.springer.com/article/10.1007/s11125-020-09464-3?error=cookies_not_support.

Davidson, A. (1999). Alternative models of social housing: Tenure patterns and cost-renting in New Zealand and Sweden. *Housing Studies, 14*(4), 453. Retrieved December 23, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/02673039982722.

De Jong, M., & Edelenbos, J. (2007). An insider's look into policy transfer in transnational expert networks. *European Planning Studies, 15*(5), 687-706. Retrieved March 16, 2024, from https://www.tandfonline.com/doi/full/10.1080/09654310701213996.

Department of Housing, Local Government and Heritage. (2024, July 16). *Minister O'Brien publishes social and affordable housing delivery statistics for Quarter 1 2024*. Gov.ie. Retrieved July

22, 2024, from https://www.gov.ie/en/press-release/21336-minister-obrien-publishes-social-and-affordable-housing-delivery-statistics-for-quarter-1-2024/.

Dickey, A., Kosovac, A., Fastenrath, S., Acuto, M., & Gleeson, B. (2022). Fragmentation and urban knowledge: An analysis of urban knowledge exchange institutions. *Cities, 131*, 103917. Retrieved March 6, 2024, from https://www.sciencedirect.com/science/article/pii/S0264275122003560.

Dobbins, M., Hanna, S. E., Ciliska, D., Manske, S., Cameron, R., Mercer, S. L., ... & Robeson, P. (2009). A randomized controlled trial evaluating the impact of knowledge translation and exchange strategies. *Implementation science, 4*, 1-16. Retrieved 2 May, 2024, from https://link.springer.com/article/10.1186/1748-5908-4-61.

Egan, M., Kearns, A., Katikireddi, S. V., Curl, A., Lawson, K., & Tannahill, C. (2016). Proportionate universalism in practice? A quasi-experimental study (GoWell) of a UK neighbourhood renewal programme's impact on health inequalities. *Social science & medicine, 152*, 41-49. Retrieved October 23, 2023, from https://www.sciencedirect.com/science/article/pii/S0277953616300260.

Elsinga, M. (2020). About housing systems and underlying ideologies. *Housing, Theory and Society*, 37(5), 557-561. Retrieved March 4, 2024, from https://www.tandfonline.com/doi/pdf/10.1080/14036096.2020.1816572.

Elsinga, M., Haffner, M., & Van Der Heijden, H. (2008). Threats to the Dutch unitary rental market. *European Journal of Housing Policy, 8*(1), 21-37. Retrieved March 4, 2024, from https://www.tandfonline.com/doi/pdf/10.1080/14616710701817141.

EMF. (2017). *Hypostat 2017, A Review of Europe's Mortgage and Housing Markets*. Retrieved January 2, 2024, from https://hypo.org/app/uploads/sites/3/2017/09/HYPOSTAT-2017.pdf.

Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British journal of educational psychology, 70*(1), 113-136. Retrieved June 17, 2024, from https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/000709900158001.

European Institute of Public Administration (EIPA) (2022). PUBLIC SECTOR PERFORMANCE PROGRAMME 2022-2025: An International Benchmarking Study, Sub-Study 2022. Retrieved October 12, from https://www.eipa.eu/services/research-and-performance-analysis/.

Eurostat. (2023). *Housing in Europe – 2023 edition*. Retrieved October 18 from https://ec.europa.eu/eurostat/web/products-statistical-books/-/ks-dz-22-001.

Fazey, I., Evely, A. C., Reed, M. S., Stringer, L. C., Kruijsen, J., White, P. C., ... & Trevitt, C. (2013). Knowledge exchange: a review and research agenda for environmental management. *Environmental Conservation, 40*(1), 19-36. Retrieved 8 May, 2024, from https://www.cambridge.org/core/journals/environmental-conservation/article/knowledge-exchange-a-review-and-research-agenda-for-environmental-management/6D9F2E92C9F10BA51C6265C8BFAAED5D.

Fazey, I., Bunse, L., Msika, J., Pinke, M., Preedy, K., Evely, A. C., ... & Reed, M. S. (2014). Evaluating knowledge exchange in interdisciplinary and multi-stakeholder research. *Global Environmental Change, 25*, 204-220. Retrieved 11 September, 2024, from https://www.sciencedirect.com/science/article/pii/S0959378014000028.

Focus Ireland. (2018). Latest Figures on Homelessness in Ireland. Retrieved January 2, 2024, from https://www.focusireland.ie/resource-hub/latest-figures-homelessness-ireland/.

Fox, D. M. (2010). History matters for understanding knowledge exchange. *The Milbank Quarterly, 88*(4), 484. Retrieved 9 Augustus, 2024, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3037173/.

Galster, G., & Lee, K. O. (2021). Housing affordability: A framing, synthesis of research and policy, and future directions. *International Journal of Urban Sciences, 25*(sup1), 7-58. Retrieved October 29, from https://www.tandfonline.com/doi/pdf/10.1080/12265934.2020.1713864?casa_token=j-tAKQOJCMoAAAAA:ghUjovBMeyb1nuolkzV7Kq7_D46cg3RqyCIbSfzlYGvMazHuYy9wtOwa0PnwR5WID6cj1uYHK0x3.

Goddard, J., & Vallance, P. (2013). *The university and the city*. Routledge. Retrieved 1 May, 2024, from https://www.taylorfrancis.com/books/mono/10.4324/9780203068366/university-city-john-goddard-paul-vallance.

Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: time for a map?. *Journal of continuing education in the health professions, 26*(1), 13-24. Retrieved November 17, 2023, from https://onlinelibrary.wiley.com/doi/pdfdirect/10.1002/chp.47.

Grimshaw, J., Eccles, M., Thomas, R., MacLennan, G., Ramsay, C., Fraser, C., & Vale, L. (2006). Toward evidence-based quality improvement: Evidence (and its limitations) of the effectiveness of guideline dissemination and implementation strategies 1966–1998. *Journal of general internal medicine, 21*(S2), S14-S20. Retrieved January 4, 2024, from https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1525-1497.2006.00357.x.

Grol, R., & Grimshaw, J. (2003). From best evidence to best practice: Effective implementation of change in patients' care. *The Lancet*, *362*(9391), 1225-1230. Retrieved May 30, 2024, from https://www.thelancet.com/journals/lancet/article/PIIS0140673603145461/fulltext.

Hadorn, G. H., Biber-Klemm, S., Grossenbacher-Mansuy, W., Hoffmann-Riem, H., Joye, D., Pohl, C., ... & Zemp, E. (2008). The emergence of transdisciplinarity as a form of research. *Handbook of transdisciplinary research, 19-39*. Retrieved March 12, 2024, from https://link.springer.com/chapter/10.1007/978-1-4020-6699-3_2.

Haffner, M., Hoekstra, J., Oxley, M., & Heijden, H. V. D. (2010). Universalistic, particularistic and middle way approaches to comparing the private rental sector. *International Journal of Housing Policy, 10*(4), 357-377. Retrieved October 25, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/14616718.2010.526400?casa_token=WBs23tU2u_sAAAAA:wi9Mh_2j9siITcHeBG_cQwEayDAUJyPmIfj5PfcrwKI8RgV7aNb0r77h4TMf235wiGJttmjTQOEq.

Haffner, M., Hegedüs, J., & Knorr-Siedow, T. (2018). The private rental sector in Western Europe. *Private Rental Housing in Transition Countries: An Alternative to Owner Occupation?, 3-40*. Retrieved October 25, 2023, from http://ndl.ethernet.edu.et/bitstream/123456789/41198/1/35.pdf#page=17.

Haffner, M. E. A., & Hulse, K. (2021). A fresh look at contemporary perspectives on urban housing affordability. *International Journal of Urban Sciences, 25*(sup1), 59-79. Retrieved October 19, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/12265934.2019.1687320.

Hagemeier-Klose, M., Beichler, S. A., Davidse, B. J., & Deppisch, S. (2014). The dynamic knowledge loop: Inter-and transdisciplinary cooperation and adaptation of climate change knowledge. *International Journal of Disaster Risk Science, 5*, 21-32. Retrieved March 12, 2024, from https://link.springer.com/article/10.1007/s13753-014-0015-4.

Hairstans, R., & Smith, R. E. (2018). Offsite HUB (Scotland): Establishing a collaborative regional framework for knowledge exchange in the UK. *Architectural engineering and design management, 14*(1-2), 60-77. Retrieved November 19, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/17452007.2017.1314858?casa_token=5XtQbphXiJUAAAAA:v35zk8rDBPM4TduEoFiFhaQ7VVNrL6AFCBdTJ-ZVLNbSmEcsNmJYUQ9dRAyzOwiU2XDUg2zhZsTA.

Halliday, E., Tompson, A., McGill, E., Egan, M., & Popay, J. (2023). Strategies for knowledge exchange for action to address place-based determinants of health inequalities: an umbrella review. *Journal of Public Health, 45*(3), e467-e477. Retrieved November 19, 2023, from https://academic.oup.com/jpubhealth/article/45/3/e467/6855083.

Hantrais, L. (2008). *International comparative research: Theory, methods and practice*. Bloomsbury Publishing.

Hart, G. (2018). Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography, 42*(3), 371-394. Retrieved September 21, 2023, from https://journals.sagepub.com/doi/full/10.1177/0309132516681388?casa_token=cpW9QrXFCRkAAAAA:w4UAqXiQ4kG2GZqC-ASqFlnbAKXAjjEHi1f0Yj-gpUEv0Eu4h8CjyaVJ9FrGHody66xEVA_NpTmu.

Healy, T., & Goldrick-Kelly, P. (2017). Ireland's housing emergency-Time for a game changer. Vol. 41. *NERI, 1–79*. Retrieved December 21, 2023, from https://www.nerinstitute.net/sites/default/files/research/2019/irelands_housing_emergency_time_for_a_game_changer.pdf.

Healy, T., & Goldrick-Kelly, P. (2018a). *Cost rental housing – A model for Ireland?* (NERI Research inBrief No. 55). Nevin Economic Research Institute. Retrieved December 23, 2023, from https://www.nerinstitute.net/sites/default/files/research/2019/cost_rental_housing_a_model_for_ireland.pdf.

Healy, T., & Goldrick-Kelly, P. (2018b). Ireland's housing crisis – The case for a European cost rental model. *Administration, 66*(2), 33-57. Retrieved December 1, 2023, from https://intapi.sciendo.com/pdf/10.2478/admin-2018-0017.

Hope, A. (2016). Creating sustainable cities through knowledge exchange: A case study of knowledge transfer partnerships. *International Journal of Sustainability in Higher Education, 17*(6), 796-811. Retrieved November 19, 2023, from https://nrl.northumbria.ac.uk/id/eprint/24930/1/CreatingSustainableCities%20FINAL.pdf.

Horsewood, N. (2011). Demystifying quantitative methods in comparative housing research: Dispelling the myth of black magic. *International Journal of Housing Policy, 11*(4), 375-393.

Retrieved October 25, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/14616718.2011.626601?casa_token=BVcwc1XjdHcAAAAA:IXriCOfrsxzyizO_bD2LKDaLO8u63xYx2olM882XgBrL9ZKAOyrKOw7KhVMJFUHoNHf-NYSlqAX5.

Hou, H. T., & Wu, S. Y. (2011). Analyzing the social knowledge construction behavioral patterns of an online synchronous collaborative discussion instructional activity using an instant messaging tool: A case study. *Computers & Education, 57*(2), 1459-1468. Retrieved June 18, 2024, from https://www.sciencedirect.com/science/article/pii/S0360131511000509.

Housing Europe. (2022). *Cost-based social rental housing in Europe*. Brussels: Housing Europe. Retrieved April 2, 2024, from https://www.housingeurope.eu/resource-1651/cost-based-social-rental-housing-in-europe.

Housing Europe. (2023). *The state of housing in the EU*. Brussels: Housing Europe. Retrieved October 18, 2023, from https://www.housingeurope.eu/resource-1811/the-state-of-the-housing-in-europe-2023.

Hulse, K., Jones, C., & Pawson, H. (2010). Tenurial "competition", tenure dynamics and the private rented sector: An international reappraisal. *Journal of European Real Estate Research, 3(*2), 138-156. Retrieved December 22, 2023, from https://www.emerald.com/insight/content/doi/10.1108/17539261011062619/full/pdf.

Jahn, T., Bergmann, M., & Keil, F. (2012). Transdisciplinarity: Between mainstreaming and marginalization. *Ecological economics, 79*, 1-10. Retrieved March 13, 2024, from https://www.sciencedirect.com/science/article/pii/S0921800912001681.

Jansson, S. M., Benoit, C., Casey, L., Phillips, R., & Burns, D. (2010). In for the long haul: knowledge translation between academic and nonprofit organizations. *Qualitative health research, 20*(1), 131-143. Retrieved May 23, 2024 from https://journals-sagepub-com.tudelft.idm.oclc.org/doi/10.1177/1049732309349808.

Jesiek, B. K., Mazzurco, A., Buswell, N. T., & Thompson, J. D. (2018). Boundary spanning and engineering: A qualitative systematic review. *Journal of Engineering Education, 107*(3), 380-413. Retrieved June 18, 2024, from https://onlinelibrary.wiley.com/doi/full/10.1002/jee.20219.

Jones, T., Willis, E., Amorim-Lopes, M., Drach-Zahavy, A., & RANCARE Consortium COST–CA 15208. (2019). Advancing the science of unfinished nursing care: Exploring the benefits of cross-disciplinary knowledge exchange, knowledge integration and transdisciplinarity. *Journal of Advanced Nursing, 75*(4), 905-917. Retrieved March 13, 2024, from https://onlinelibrary.wiley.com/doi/full/10.1111/jan.13948.

Jost, F., Newell, R., & Dale, A. (2021). CoLabS: A collaborative space for transdisciplinary work in sustainable community development. *Heliyon, 7*(2). Retrieved 1 May, 2024, from https://www.cell.com/heliyon/pdf/S2405-8440(21)00102-X.pdf.

Karcher, D. B., Cvitanovic, C., Colvin, R. M., van Putten, I. E., & Reed, M. S. (2021). Is this what success looks like? Mismatches between the aims, claims, and evidence used to demonstrate impact from knowledge exchange processes at the interface of environmental science and policy. *Environmental Science & Policy, 125*, 202-218. Retrieved 1 May, 2024, from https://www.sciencedirect.com/science/article/pii/S1462901121002318.

Karvonen, A., Cvetkovic, V., Herman, P., Johansson, K., Kjellström, H., Molinari, M., & Skoglund, M. (2021). The 'New Urban Science': towards the interdisciplinary and transdisciplinary pursuit of sustainable transformations. *Urban Transformations, 3*, 1-13. Retrieved March 6, 2024, from https://link.springer.com/article/10.1186/s42854-021-00028-y.

Kemeny, J. (1980). Home ownership and privatization. *International Journal of Urban and Regional Research, 4*(3), 372-388. Retrieved December 22, 2023, from https://www.academia.edu/5170968/Home_ownership_and_privatization.

Kemeny, J. (1981). The Myth of Home Ownership: Private versus Public Choice in Housing Tenure. London, Routledge & Kegan Paul.

Kemeny, J. (1993). The significance of Swedish rental policy: cost renting: command economy versus the social market in comparative perspective. *Housing Studies, 8*(1), 3-15. Retrieved December 21, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/02673039308720746

Kemeny, J. (1995). *From public housing to the social market: Rental policy strategies in comparative perspective*. London: Routledge.

Kemeny, J., & Lowe, S. (1998). Schools of comparative housing research: From convergence to divergence. *Housing studies, 13*(2), 161-176. Retrieved December 22, 2023, from https://www.proquest.com/docview/211379984?pq-origsite=gscholar&fromopenview=true&sourcetype=Scholarly%20Journals.

Kenna, P. (2021). *Supporting the Irish housing system to address housing market failure – Cost Rental Housing and Services of General Economic Interest (SGEI)*. Dublin: Irish Council for Social Housing and Centre for Housing Law, Rights and Policy, NUI Galway. Retrieved April 9, 2024, from https://icsh.ie/resources/8055/.

Khan, B. H. (Ed.). (2007). *Flexible learning in an information society*. IGI Global. https://doi.org/10.4018/978-1-59904-325-8.

Kiefer, L., Frank, J., Di Ruggiero, E., Dobbins, M., Manuel, D., Gully, P. R., & Mowat, D. (2005). Fostering evidence-based decision-making in Canada: examining the need for a Canadian population and public health evidence centre and research network. *Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique, 96*(3), I1-I19. Retrieved November 19, 2023, from https://www.academia.edu/download/48949992/Fostering_evidence-based_decision-making20160918-13929-16ohx45.pdf.

Knorr-Siedow, T., & Tosics, I. (2005). *Knowledge management and policy application in urban management and housing* (No. 27). Working Paper. Retrieved 8 June, 2024, from https://www.econstor.eu/bitstream/10419/228557/1/irs-wp27.pdf.

Koppenjan, J. F. M., & Klijn, E. H. (2004). *Managing uncertainties in networks: a network approach to problem solving and decision making*. Psychology Press.

Krapp, M. C., Vaché, M., Egner, B., Schulze, K., & Thomas, S. (2022). Housing policies in the European Union. In *BBSR*. Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR). Retrieved September 19, 2023, from

https://www.bbsr.bund.de/BBSR/EN/research/programs/ExWoSt/Studies/housing-policies-eu/01-start.html;jsessionid=CA4359E8ED19B75CD8D039499C6C2502.live11311#Veroeffentlichungen.

LaRocca, R., Yost, J., Dobbins, M., Ciliska, D., & Butt, M. (2012). The effectiveness of knowledge translation strategies used in public health: a systematic review. *BMC public health, 12*(1), 1-15. Retrieved November 19, 2023, from https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-751.

Lavis, J., Ross, S., McLeod, C., & Gildiner, A. (2003). Measuring the impact of health research. *Journal of health services research & policy, 8*(3), 165-170. Retrieved November 17, 2023, from https://www.researchgate.net/profile/John-Lavis/publication/10655602_Measuring_the_Impact_of_Health_Research/links/54a6da0e0cf256bf8bb6a772/Measuring-the-Impact-of-Health-Research.pdf.

Lavis, J.N., Davies, H., & Gruen, R. L. (2006). Working within and beyond the Cochrane Collaboration to make systematic reviews more useful to healthcare managers and policy makers. *Healthcare Policy, 1*(2), 21-33. Retrieved May 30, 2024, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2585325/.

Lee, Y., Kemp, P. A., & Reina, V. J. (2022). Drivers of housing (un) affordability in the advanced economies: A review and new evidence. *Housing Studies, 37*(10), 1739-1752. Retrieved October 22, 2023, from https://www.tandfonline.com/doi/full/10.1080/02673037.2022.2123623.

Lomas, J. (2007). The in-between world of knowledge brokering. *Bmj, 334*(7585), 129-132. Retrieved March 12, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1779881/.

Maclennan, D., & Williams, R. (Eds.). (1990). Affordable housing in Britain and the United States. York, UK: Joseph Rowntree Foundation.

Mason, J. (2002). Qualitative Researching Sage Publications. London, *Thousand Oaks and New Delhi*. Retrieved December 10, 2023, from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Mason_2002.pdf.

Matznetter, W. (2020). How and where non-profit rental markets survive–a reply to stephens. *Housing, theory and society, 37*(5), 562-566. Retrieved December 22, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/14036096.2020.1816570.

May, T., Perry, B., Hodson, M., & Marvin, S. (2009). Active Intermediaries for Effective Knowledge Exchange: Populating the Missing Middle. No: 1. Retrieved March 12, 2024, from https://salford-repository.worktribe.com/output/1454846.

McCord, R. (2011, September 7). *A garden city – The Dublin Corporation housing scheme at Marino, 1924*. The Irish Story. Retrieved July 22, 2024, from https://www.theirishstory.com/2011/09/07/a-garden-city-the-dublin-corporation-housing-scheme-at-marino-1924/#ednref13.

McManus, F., & Doyle, A. (2023). *The Secure Tenancy Affordable Rental investment scheme (STAR)*. Housing Ireland Magazine. Retrieved July 22, 2024, from https://housingireland.ie/the-secure-tenancy-affordable-rental-investment-scheme-star/.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source book* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Mitton, C., Adair, C. E., McKenzie, E., Patten, S. B., & Perry, B. W. (2007). Knowledge transfer and exchange: review and synthesis of the literature. *The Milbank Quarterly, 85*(4), 729-768. Retrieved November 19, 2023, from https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-0009.2007.00506.x.

Mobjörk, M. (2010). Consulting versus participatory transdisciplinarity: A refined classification of transdisciplinary research. *Futures, 42*(8), 866-873. Retrieved March 13, 2024, from https://www.sciencedirect.com/science/article/pii/S0016328710000376.

Mulliner, E., & Maliene, V. (2014). An analysis of professional perceptions of criteria contributing to sustainable housing affordability. *Sustainability, 7(*1), 248-270. Retrieved October 21, 2023, from https://www.mdpi.com/2071-1050/7/1/248/pdf.

National Economic and Social Council. (2004). Housing in Ireland: Performance and policy. Retrieved December 21, 2023, from https://www.lenus.ie/bitstream/handle/10147/299004/NESC1122004.pdf?sequence=1.

Nguyen, V. M., Bell, C., Berseth, V., Cvitanovic, C., Darwent, R., Falconer, M., ... & Young, N. (2021). Promises and pitfalls of digital knowledge exchange resulting from the COVID-19 pandemic. *Socio-Ecological Practice Research, 3*, 427-439. Retrieved June 14, 2024, from https://link.springer.com/article/10.1007/s42532-021-00097-0.

Nonaka, I., & Von Krogh, G. (2009). Perspective—Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory. *Organization science, 20*(3), 635-652. Retrieved June 16, 2024, from https://pubsonline.informs.org/doi/abs/10.1287/orsc.1080.0412.

Nooteboom, B. (2000). Learning by interaction: absorptive capacity, cognitive distance and governance. *Journal of management and governance, 4*, 69-92. Retrieved November 27, 2023, from https://link.springer.com/content/pdf/10.1023/A:1009941416749.pdf.

Norris, M., & Byrne, M. (2018). Housing market (in) stability and social rented housing: comparing Austria and Ireland during the global financial crisis. *Journal of housing and the built environment, 33*, 227-245. Retrieved July 23, 2024, from https://link.springer.com/article/10.1007/s10901-018-9595-4.

Norris, M. (2019). *Financing the Golden Age of Irish Social Housing, 1932-1956 (and the dark ages which followed)*. Geary Institute, University College Dublin. Retrieved July 23, 2024, from https://www.ucd.ie/geary/static/publications/workingpapers/gearywp201901.pdf.

Norris, M., & Byrne, M. (2021). Funding resilient and fragile social housing systems in Ireland and Denmark. *Housing studies, 36(9)*, 1469-1489. Retrieved July 23, 2024, from https://www.tandfonline.com/doi/full/10.1080/02673037.2020.1777944.

Norris, M., & Lawson, J. (2023). Tools to tame the financialisation of housing. *New Political Economy, 28*(3), 363-379. Retrieved October 22, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/13563467.2022.2126447.

OECD (1972). *Interdisciplinarity: Problems of Teaching and Research in Universities*. Washington, OECD Publications Centre. Retrieved March 9, 2024, from https://eric.ed.gov/?id=ED061895.

OECD (2021a). *Brick by Brick: Building Better Housing Policies*. OECD Publishing, Paris. https://doi.org/10.1787/b453b043-en. Retrieved September 19, 2023, from https://www.oecd.org/social/brick-by-brick-b453b043-en.htm.

OECD (2021b). *Building for a better tomorrow: Policies to make housing more affordable*. Employment, Labour and Social Affairs Policy Briefs. OECD Publishing, Paris. Retrieved April 25, 2024, from http://oe.cd/affordable-housing-2021.

OECD (2022). *Key characteristics of social rental housing - Definitions and methodology Key findings*. OECD Publishing, Paris. Retrieved April 8, 2024, from https://policycommons.net/artifacts/3794859/ph43-key-characteristics-of-social-rental-housing/4600687/.

OECD (2023), *Brick by Brick (Volume 2): Better Housing Policies in the Post-COVID-19 Era*. OECD Publishing, Paris. https://doi.org/10.1787/e91cb19d-en. Retrieved October 18, 2023, from https://www.oecd.org/publications/brick-by-brick-volume-2-e91cb19d-en.htm.

Pang, S., Bao, P., Hao, W., Kim, J., & Gu, W. (2020). Knowledge sharing platforms: An empirical study of the factors affecting continued use intention. *Sustainability, 12*(6), 2341. Retrieved 23 June, 2024, from https://www.mdpi.com/2071-1050/12/6/2341.

Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Newbury Park, CA: SAGE publication.

Peng, Y., & Sutanto, J. (2012). Facilitating knowledge sharing through a boundary spanner. IEEE *Transactions on Professional Communication, 55*(2), 142-155. Retrieved June 18, 2024, from https://ieeexplore.ieee.org/abstract/document/6178031.

Perry, B., & May, T. (2010). Urban knowledge exchange: devilish dichotomies and active intermediation. *International Journal of Knowledge-Based Development, 1*(1-2), 6-24. Retrieved March 7, 2024, from https://orca.cardiff.ac.uk/id/eprint/156071/.

Polk, M. (2014). Achieving the promise of transdisciplinarity: a critical exploration of the relationship between transdisciplinary research and societal problem solving. *Sustainability science, 9*, 439-451. Retrieved March 8, 2024, from https://link.springer.com/content/pdf/10.1007/s11625-014-0247-7.pdf.

Posner, S. M., & Cvitanovic, C. (2019). Evaluating the impacts of boundary-spanning activities at the interface of environmental science and policy: A review of progress and future research needs. *Environmental science & policy, 92*, 141-151. Retrieved 9 September, 2024, from https://www.sciencedirect.com/science/article/pii/S1462901118306427.

Punch, K. F. (2013). *Introduction to Social Research: Quantitative and Qualitative Approaches*. SAGE Publications. Retrieved December 2, 2023, from https://books.google.nl/books?id=tfZHAwAAQBAJ.

Reed, M. S., Stringer, L. C., Fazey, I., Evely, A. C., & Kruijsen, J. H. (2014). Five principles for the practice of knowledge exchange in environmental management. *Journal of environmental*

management, 146, 337-345. Retrieved November 22, 2023, from https://www.sciencedirect.com/science/article/pii/S030147971400365X.

Routhier, G. (2019). Beyond worst case needs: Measuring the breadth and severity of housing insecurity among urban renters. *Housing Policy Debate, 29*(2), 235–249. Retrieved 16 April, 2024, from https://www.tandfonline.com/doi/full/10.1080/10511482.2018.1509228.

Roux, D. J., Rogers, K. H., Biggs, H. C., Ashton, P. J., & Sergeant, A. (2006). Bridging the science–management divide: moving from unidirectional knowledge transfer to knowledge interfacing and sharing. *Ecology and society, 11*(1). Retrieved June 16, 2024, from https://www.jstor.org/stable/26267817.

Rushmer, R. K., Hunter, D. J., & Steven, A. (2014). Using interactive workshops to prompt knowledge exchange: a realist evaluation of a knowledge to action initiative. *Public Health, 128*(6), 552-560. Retrieved 12 March, 2024, from https://www.sciencedirect.com/science/article/pii/S0033350614000754.

Russell, J., Greenhalgh, T., Boynton, P., & Rigby, M. (2004). Soft networks for bridging the gap between research and practice: Illuminative evaluation of CHAIN. *BMJ, 328*(7449), 1174. Retrieved May 30, 2024, from https://www.bmj.com/content/328/7449/1174.short.

Ryan-Collins, J. (2021). Breaking the housing–finance cycle: Macroeconomic policy reforms for more affordable homes. *Environment and Planning A: Economy and Space, 53*(3), 480-502. Retrieved October 22, 2023, from https://journals.sagepub.com/doi/pdf/10.1177/0308518X19862811?casa_token=gCKca-fjjN8AAAAA:hwCm7N7BBwRJ2RetfMVBtGbMqQxJcWi6XDQ4oPhIVN9NLYDDqEtT14gUEOrE6lf7K7anu7mRI8Yy.

Seo, B. K. (2022). Co-creation of knowledge in the urban planning context: The case of participatory planning for transitional social housing in Hong Kong. *Cities, 122*, 103518. Retrieved November 19, 2023, from https://www.sciencedirect.com/science/article/pii/S0264275121004170.

Springler, E., & Wöhl, S. (2020). The financialization of the housing market in Austria and Ireland. *The State of the European Union: Fault Lines in European Integration, 155-173*. Retrieved December 21, 2023, from https://link.springer.com/chapter/10.1007/978-3-658-25419-3_7.

Stephen Ezennia, I., & Hoskara, S. O. (2019). Methodological weaknesses in the measurement approaches and concept of housing affordability used in housing research: A qualitative study. *PloS one, 14*(8), e0221246. Retrieved October 19, 2023, from https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0221246.

Stephens, M. (2016). The use of Esping-Andersen and Kemeny's welfare and housing regimes in housing research. *Critical Housing Analysis, 3*(1), 19-29. Retrieved December 22, 2023, from https://www.housing-critical.com/data/USR_057_DEFAULT/Regimes_and_Indicators_final.pdf.

Stephens, M. (2020). How housing systems are changing and why: A critique of Kemeny's theory of housing regimes. *Housing, Theory and Society, 37*(5), 521-547. Retrieved December 22, 2023, from https://www.tandfonline.com/doi/epdf/10.1080/14036096.2020.1814404?needAccess=true.

Stevenson, F., & Baborska-Narozny, M. (2018). Housing performance evaluation: challenges for international knowledge exchange. *Building Research & Information, 46*(5), 501-512. Retrieved November 13, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/09613218.2017.1357095.

Stone, D. A. (2012). *Policy paradox: The art of political decision making*. WW Norton & Company.

Stone, D. (2004). Transfer agents and global networks in the 'transnationalization' of policy. *Journal of European public policy, 11*(3), 545-566. Retrieved June 13, 2024, from https://www.tandfonline.com/doi/full/10.1080/1350176041000169429 1.

Suggs, L. S. (2006). A 10-year retrospective of research in new technologies for health communication. *Journal of Health Communication, 11*(1), 61-74. Retrieved May 30, 2024, from https://www.tandfonline.com/doi/full/10.1080/10810730500461083.

SURF (2009). *Active Intermediaries for Effective Knowledge Exchange*. SURF, Manchester.

Thomas, E. (2013). Supplier integration in new product development: Computer mediated communication, knowledge exchange and buyer performance. *Industrial Marketing Management, 42*(6), 890-899. Retrieved June 14, 2024, from https://www.sciencedirect.com/science/article/pii/S0019850113001144.

Tucker, R., Kelly, D., Frawley, P., Johnson, L., Andrews, F., Murfitt, K., & Watchorn, V. (2023). Overcoming obstacles to accessibility and inclusivity in an Australian regional city: A transdisciplinary research approach. *Urban Policy and Research, 41*(3), 262-278. Retrieved 8 March, 2024, from https://www.tandfonline.com/doi/pdf/10.1080/08111146.2022.2103670.

UNECE & Housing Europe. (2021). #Housing2030: Effective policies for affordable housing in the UNECE region. In *Housing4Europe*. United Nations. Retrieved September 19, 2023, from https://housing4europe.org/time-to-think-and-do-differently-housing2030-report-by-housing-europe-unece-and-un-habitat/.

van Bueren, E., Bougrain, F., & Knorr-Siedow, T. (2002). Sustainable neighbourhood rehabilitation in Europe: from simple toolbox to multilateral learning. In *The Theory and Practice of Institutional Transplantation: Experiences with the Transfer of Policy Institutions* (pp. 263-279). Dordrecht: Springer Netherlands. Retrieved March 16, 2023, from https://link.springer.com/chapter/10.1007/978-94-011-0001-4_17.

Valkering, P., Beumer, C., De Kraker, J., & Ruelle, C. (2013). An analysis of learning interactions in a cross-border network for sustainable urban neighbourhood development. *Journal of Cleaner Production, 49*, 85-94. Retrieved March 15, 2023, from https://www.sciencedirect.com/science/article/pii/S0959652612004751.

Ward, V. L., House, A. O., & Hamer, S. (2009). Knowledge brokering: exploring the process of transferring knowledge into action. *BMC health services research, 9*, 1-6. Retrieved November 17, 2023, from https://link.springer.com/article/10.1186/1472-6963-9-12.

Ward, K. (2010). Towards a relational comparative approach to the study of cities. *Progress in human geography, 34*(4), 471-487. Retrieved September 21, 2023, from https://journals.sagepub.com/doi/pdf/10.1177/0309132509350239?casa_token=UoI0Y5Tq3I4AAAAA:4U56MEBTs5ZLfnsHYlGvj3-ZgAQzz9JV0jhUTxaRm8EcMdmtJogVGLe-CoUYN1e2lbau54RVHgDS.

Washbourne, C. L., Culwick, C., Acuto, M., Blackstock, J. J., & Moore, R. (2021). Mobilising knowledge for urban governance: the case of the Gauteng City-region observatory. *Urban Research & Practice, 14*(1), 27-49. Retrieved 1 May, 2024, from https://www.tandfonline.com/doi/full/10.1080/17535069.2019.1651899.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). Seven principles for cultivating communities of practice. *Cultivating Communities of Practice: a guide to managing knowledge, 4*, 1-19. Retrieved May 15, 2024, from https://dl.acm.org/doi/10.5555/560383.

Wenger, E., 1998. *Communities of Practice: Learning, Meaning and Identity*. Cambridge University Press, Cambridge, UK. Retrieved May 15, 2024, from https://psycnet.apa.org/record/1998-06054-000.

Wetzstein, S. (2017). The global urban housing affordability crisis. *Urban studies*, 54(14), 3159-3177. Retrieved October 19, 2023, from https://journals.sagepub.com/doi/full/10.1177/0042098017711649?casa_token=fDRz_SVFlrUAAAAA:x70_ZJ9s65em95eXejDtnhUB0bP_s1mjF9KmXogJnPmNB0EJXWma1PgZ5EBMNUxER4wbElcyBgya.

Wetzstein, S. (2022). Toward affordable cities? Critically exploring the market-based housing supply policy proposition. *Housing policy debate, 32*(3), 506-532. Retrieved October 22, 2023, from https://www.tandfonline.com/doi/full/10.1080/10511482.2021.1871932.

Wijburg, G. (2021). The de-financialization of housing: towards a research agenda. *Housing Studies, 36*(8), 1276-1293. Retrieved October 21, 2023, from https://www.tandfonline.com/doi/pdf/10.1080/02673037.2020.1762847.

Wlasak, P., & Blais, J. S. (2016). Learning from each other for governance: Transatlantic, transdisciplinary knowledge exchange for governance innovation. EUR. AC research. *Bonzen und Bolzano, 15*(1). Retrieved March 7, 2024, from https://core.ac.uk/download/pdf/80602303.pdf.

World Bank. (2013). *The art of knowledge exchange: A primer for government officials and development practitioners*. World Bank. Retrieved 5 May, 2024, from https://openknowledge.worldbank.org/entities/publication/0768260d-0320-56cf-8d4b-accea856860a.

Yadav, S. K., Para, S., Singh, G., Gupta, R., Sarin, N., & Singh, S. (2021). Comparison of asynchronous and synchronous methods of online teaching for students of medical laboratory technology course: a cross-sectional analysis. *Journal of education and health promotion, 10*(1), 232. Retrieved June 18, 2024, from https://journals.lww.com/jehp/fulltext/2021/10000/why_people_are_becoming_addicted_to_social_media_.223.aspx.

Yamey, G., Horváth, H., Schmidt, L., Myers, J., & Brindis, C. D. (2016). Reducing the global burden of Preterm Birth through knowledge transfer and exchange: a research agenda for engaging effectively with policymakers. *Reproductive health, 13*, 1-9. Retrieved 5 May, 2024, from https://link.springer.com/content/pdf/10.1186/s12978-016-0146-8.pdf.

Yin, R. K. (2003). *Case study research: Design and methods* (Vol. 3). Thousand Oaks, CA: SAGE publications.

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). SAGE publications.

Zhao, N., Koch-Weser, S., Lischko, A., & Chung, M. (2020). Knowledge translation strategies designed for public health decision-making settings: a scoping review. *International journal of public health, 65*, 1571-1580. Retrieved 6 September, 2024, from https://link.springer.com/article/10.1007/s00038-020-01506-z.

APPENDICES

Appendix 1 Selection of affordability measurements in OECD and EU countries (own work, based on OECD (2021b))

COMMON METRICS TO ASSESS HOUSING AFFORDABILITY BY OECDb (2021)			
TYPE OF MEASURE	**EXAMPLE OF INDICATORS**	**ADVANTAGES**	**LIMITATIONS**
PRICE-TO-INCOME RATIOS	• House-price-to-income ratio • Rent-price-to-income ratio	• Relatively straightforward, intuitive • Relies on data that are generally readily available in most countries • Shows, at aggregate level, how the association between prices and income varies over time and/or across markets, such as across countries	• Does not provide any indication of the distribution of housing costs and housing affordability (e.g. who has/does not have access to affordable housing) • Does not provide any indication of housing quality • Does not take into account borrowing costs
HOUSING EXPENDITURE-TO-INCOME RATIOS	• Housing cost burden • Housing cost verburden rate (e.g. share of households spending over 40% of disposable income on housing costs)	• Relatively straightforward, intuitive • Relies on data that are generally readily available in most countries • Can be disaggregated to measure actual housing spending at household level	• 'Overburden' threshold is set at an arbitrary level that remains fixed, regardless of household characteristics or their position in the income distribution • Does not provide any indication of housing quality
RESIDUAL INCOME MEASURES	• Shelter poverty • Housing-induced poverty	• Captures the level of income a household has left after paying for housing costs, to assess the extent to which households have sufficient income left for nonhousing expenses after paying for housing • Can be useful to measure affordability gaps among vulnerable low- and middle-income households	• Can require extensive additional data collection on the cost of the minimum basket of non-housing expenses • Arbitrariness with respect to what constitutes the minimum income a household needs for non-housing expenses • Does not provide any indication of housing quality (e.g. what households are paying for) • Can misdiagnose general cost-of-living problems as cost-of-housing problems
HOUSING QUALITY MEASURES	• Rooms per person • Overcrowding rate • Housing deprivation rate	• Overcrowding can be assessed based on a very simple (or more complex) definition • Provides insights into a key dimension of housing affordability (e.g. what households are paying for)	• Potential trade-offs between social and environmental objectives when interpreting indicators relating to dwelling size • Cross-country/cultural differences in what characteristics are most relevant to assess housing quality • Some quality metrics require up-to-date data on technical characteristics of dwellings, which may not be readily available
SUBJECTIVE INDICATORS OF HOUSING AFFORDABILITY	• Satisfaction with the availability of good, affordable housing • Housing as a key short-term concern	• Can complement other measures of housing outcomes and can help better understand the determinants of housing satisfaction	• Perceptions and expectations about what constitutes good-quality affordable housing differ across individuals, countries and cultures, and may also depend on sociodemographic characteristics • Satisfaction levels may depend on country-specific factors, including the overall economic environment, and/or the level of social protection policies

Appendix 2 Interview Protocol case study interviews

Transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe.

Daylam Dag Master's student Management in the Built Environment at TU Delft
Student number 4472845
Date: 04-07-2024
Location: Dublin

Interviewee	Profession	Organization	Date/time	Location	Interviewer
Person x	*Profession y*	*Organization z*	04-07-2024 / 1pm	Dublin	Daylam Dag

Instructions for the interviewer
Research question: Which methods are applied, and enablers and barriers faced, with transdisciplinary and transnational knowledge exchange on 'cost rental housing' in Ireland?

Purpose of the interview:
The purposes of the interview are: (1) to map the methods used for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe and; (2) deliver enablers and barriers from practice for criteria for a promising method.

Ethical considerations: Ensure informed consent, respect privacy, and maintain confidentiality (if necessary).

Interview tips: Remain neutral, listen actively, and avoid suggestive questions. Record the interview with the interviewees' consent.

Checklist for the interviewer for the start of the interview:
1. Ensure informed consent is signed;
2. Ensure the audio recording is working;
3. Repeat the questions about informed consent after the recorder is on.

Opening (Total 5 minutes)
Hello, thank you very much for participating in this research!

Informed consent
- Ask if the interviewee agrees to the recording of the interview for research purposes.
- Ask the interviewee if they have any questions about the informed consent form.
- Explain that answers will remain confidential and anonymous in the research.

Introduction
Our interview is part of a research thesis about transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe. The questions I will ask are aimed at two main purposes: (1) to map the methods used in practice for transdisciplinary and transnational knowledge exchange with providing affordable housing in Europe and; (2) deliver enablers and barriers from practice for criteria for a promising method. Ultimately, insights from this interview are used to design a promising method for effective knowledge exchange on affordable housing provision in Europe specifically.

Icebreaking and Research Questions (Total 52 minutes)

Introduction (5 minutes):

- Introduce myself.
- Can you shortly describe your current role and exact responsibilities?

Research Questions (Total 40 minutes):

Current practices of and motives for involvement with cost rental housing in Ireland (10min.)

- Can you specify your **current involvement** with the concept of cost rental housing in Ireland?
- Can you shortly share your view on the current application of cost rental housing in Ireland?
- What has been and could be the role of transnational, and transdisciplinary knowledge exchange in Europe for cost rental housing in Ireland?
    - (Use Housing Europe report of 2022)

General perception on transdisciplinary and transnational knowledge exchange efforts (5min.)

What is your **perception** of the importance and potential of transdisciplinary and transnational knowledge exchange on affordable housing challenges in Europe?

a. What would you say are in general the main benefits?
b. What would you say are in general the main challenges?

Experiences, enablers and barriers faced, of engagement with knowledge exchange methods (15min.)

Can you share any **personal experiences** or examples of transnational, and transdisciplinary knowledge exchange initiatives on cost rental housing you have been involved in?

a. What strategies or **methods** have you been involved with in facilitating transdisciplinary and transnational knowledge exchange?
    i. Can you provide examples of specific methods or approaches that have yielded positive or negative outcomes?
    ii. Which criteria have made, in your experience, the knowledge exchange successful or unsuccessful?
b. What were the main **enablers and barriers** you and other participants faced?
    i. What was done to profit from the enablers?
    ii. What was done to overcome the barriers?

*Stakeholder specific barriers (**cultures of reception**) → Researcher and housing agency.*

Have you experienced one of the following **barriers**, mentioned in theory, when being involved with knowledge exchange on affordable housing provision? (1) Staffing and job security; (2) Organizational change and stability; (3) Funding volume and source; (4) Organizational learning mechanisms; (5) Partnerships and collaboration; (6) Strategic capacity and commitment. (10 min.)

*Stakeholder specific barriers (**cultures of enquiry**)*

Have you experienced one of the following **barriers**, mentioned in theory, when being involved with knowledge exchange on affordable housing provision? (1) Staffing and job security; (2) Time-scales and levels of activity (international, national, regional); (3) Funding volume and source; (4) Institutional position and research support; (5) Partnerships and collaboration; (6) Disciplinary contexts. (10 min.)

*Stakeholder specific barriers (**active intermediaries**)*

Have you experienced one of the following **barriers**, mentioned in theory, when being involved with knowledge exchange on affordable housing provision?

a. From the perspective of cultures of enquiry: (1) Staffing and job security; (2) Time-scales and levels of activity (international, national, regional); (3) Funding volume and source; (4) Institutional position and research support; (5) Partnerships and collaboration; (6) Disciplinary contexts;
b. From the perspective of cultures of reception: (1) Staffing and job security; (2) Organizational change and stability; (3) Funding volume and source; (4) Organizational learning mechanisms; (5) Partnerships and collaboration; (6) Strategic capacity and commitment. (10 min.).

Incentives to engage *with transdisciplinary and transnational knowledge exchange (15min.)*

a. What would incentivize you to participate in transdisciplinary and/or transnational knowledge exchange on affordable housing provision?
b. What would other stakeholders, practitioners and researchers, incentivize to participate in transdisciplinary and/or transnational knowledge exchange on cost rental housing?

Extra: Involvement with facilitating transdisciplinary and transnational knowledge exchange (5min.)

What barriers or obstacles have you encountered in implementing and/or **facilitating knowledge exchange initiatives** in the affordable housing sector?

a. How have you navigated these barriers, and what lessons have you learned from these experiences?

Extra: Room for ideas (5min.)

a. Do you have any other comments on the subject of transnational and/or transdisciplinary knowledge exchange on affordable housing provision, such as cost rental housing in Ireland?

Extra extra: Transdisciplinary and transnational knowledge exchange in practice

Are you **personally involved with** any form of transdisciplinary and transnational knowledge exchange concerned with affordable housing provision? If not, have you ever been?

a. Can you describe in what way you were involved?
b. How do you engage with stakeholders from different housing disciplines (researcher, housing association, government, investor or developer) specifically?
c. How do you engage with stakeholders from different European countries specifically?

Extra extra: Enablers and barriers in practice

What **enablers and barriers** have you encountered in exchanging knowledge across disciplines and national boundaries in the context of affordable housing provision?

a. How have you addressed or taken advantage of these enablers or facilitators?
b. How have you addressed or overcome the barriers?

Concluding the interview (Total 2 minutes)

- Ask if you've overlooked anything or if they have any further questions.
- Thank the interviewee.

Checklist after the interview:

- Check if the audio recording is satisfactory.
- Save the audio recording in a secure location and delete it from the phone later.
- Transcribe the interview and have the content reviewed by a second team member.

Appendix 3 Informed consent form interviews

TU Delft Delft University of Technology

Informed consent form

Delft, 24 June 2024

Dear Sir/Madam,

This interview is part of a dissertation about transdisciplinary and transnational knowledge exchange on affordable housing in Europe. The methods[1] to fulfill the potential of knowledge exchange within the housing sector and transnationally are, however, unexplored in relation to the affordable housing crisis. The ultimate goal of the thesis research is to deliver a 'promising' method for transdisciplinary and transnational knowledge exchange with specifically affordable housing provision in Europe. A case study is performed about cost rental housing in the Republic of Ireland to gain practice insights about knowledge exchange on affordable housing provision and the methods applied to facilitate it. Participants will be interviewed about their involvement with 'cost rental housing' in Ireland, their view on and experience with transdisciplinary and transnational knowledge exchange, and the methods applied.

The interviews are conducted by student Daylam Dag, master's student Management in the Built Environment at TU Delft, as part of a thesis research. The student is supervised by Prof. Marja Elsinga (TU Delft) and Dr. ing. Gerard van Bortel (TU Delft).

I promise to handle your data carefully, and the data will be stored on a secure European server with a password for extra security. The document in which we keep track of under which code your data is processed will also be secured with an additional password and stored in a separate location. We will destroy this key document immediately after the final scientific publication on this research. The research data itself collected in the project will be anonymised. Audio-recordings are made on an external device and are deleted after transcription.

If you have any questions about this study, you can contact me: Daylam Dag (D.Dag@student.tudelft.nl).

If you would like to participate in this study, would you please fill out and sign the attached statement?

With kind regards, Daylam Dag

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[1] *"Local authorities and their intermediary organizations need a better understanding of not only 'what' should be done at the urban scale to improve the effectiveness of knowledge exchange, but 'how'"* (Perry, B., & May, T., 2010).

	Yes	No
(1) I declare that I have read the information letter dated 24 June 2024 or it has been read to me. I have understood this information. Additionally, I have been given the opportunity to ask questions about it, and these questions have been satisfactorily answered.	☐	☐
(2) I hereby declare that I participate voluntarily in this research. I understand that I may refuse to answer questions and that I can withdraw my participation in this research at any time without giving a reason. I understand that participating in this research means that my answers will be stored.	☐	☐
(3) I understand that the audio material (or its processing) and other collected data will be used exclusively for analysis and scientific presentation and publications.	☐	☐
(4) I understand that the stored data will be kept under a code and processed anonymously.	☐	☐
(5) I hereby separately consent to allow the anonymized data to be used by other researchers in the future.	☐	☐

I have read this form, or it has been read to me, and I consent to participate in the research.

Location: Date:

_____ (Full name, in block letters)

_____ (Interviewee's signature)

"We have provided clarification on the research. We declare ourselves willing to answer any further questions arising about the study."

Name of researcher: Daylam Dag

Appendix 4 Description of all knowledge exchange methods from theory

ALL KNOWLEDGE EXCHANGE METHODS FROM THEORY INCLUDING THEIR DESCRIPTION		
STRATEGY	**METHOD**	**DESCRIPTION**
Organizing knowledge exchange activities	Action Planning	Describes how participants will implement the knowledge gained during the exchange. It's a road map for follow up actions. Usually, a facilitator helps the participants create the action plan (World Bank, 2013).
	Action Learning Sets	Structured mechanisms for working in small groups to tackle complicated issues by collectively share knowledge and work on problems faced in ongoing practice. Sets are often multidisciplinary and comprise members from a range of organizations. Some virtual action learning may take place if organizations are geographically dispersed (Abu-Rumman, A., 2021).
	After-action review	A process of structured review or de-brief for analyzing what happened in a given situation or event, why it happened, and how it can be done better in the future. As a tool, After-Action Reviews can convert unconscious learning into tacit learning and can help build trust amongst team members and overcome the fear of making or admitting to mistakes (Abu-Rumman, A., 2021).
	Brainstorming	A group problemsolving technique for generating many ideas about a specific topic or issue. A brainstorming session should tap into the wisdom of peers, encourage novelty, and occur in the initial stages of a project or process (World Bank, 2013).
	Coaching	A longitudinal professional relationship that exists between an expert coach and a trainee and one which focuses on the mastery of a clearly defined, measurable, and achievable skill. It differs from mentoring in that it is much more structured and focuses on specific objectives within a set period of time (Abu-Rumman, A., 2021).
	Demonstra-tion	An activity during which an expert or presenter shows participants how to perform an activity or procedure or introduces a new process or innovation. Ultimately, learners should be able to perform the demonstrated task on their own and apply it in their specific work environment. A discussion frequently follows the demonstration (World Bank, 2013).
	E-discussion	An online dialogue that permits discussion of a topic in an open setting. E-discussions are asynchronous; communication does not have to occur at the same time, so participants can engage when it is convenient for them. E-discussions are managed online through a discussion forum or similar tool (World Bank, 2013).
	Group discussion	May be topic based, case-based, or general; the objective is to solve a problem, make a decision, or create something together (World Bank, 2013).
	Knowledge fairs	Events whereby participants have the opportunity to meet face-to-face with their partners and the public to share their knowledge and undertakings. They provide an opportunity for people to interact with each other and display and view best practice examples of work and practice (Abu-Rumman, A., 2021).
	Learning collaboratives	These bring policymakers together in an ongoing way to share knowledge about how to improve a specific outcome. Common characteristics of learning collaboratives are: (1) An explicit mission; (2) Routine learning activities (e.g. continuous learning groups) and; (3) Relationship-building (e.g. through social networking) (Yamey et al., 2016).
	Meetings	Essentially, a meeting assembles people for a particular purpose and can take many forms but are generally characterized by location, ground rules, and norms for information and knowledge exchange (Abu-Rumman, A., 2021; Mitton et al., 2007).
	Mentoring	Often described as one of the most effective ways of passing down tacit knowledge from an expert or specialist to someone with less experience. In essence, mentoring is about learning and sharing knowledge under the guidance of an expert and can be formal or informal (Abu-Rumman, A., 2021).
	Panel of experts	A group of people with specialized knowledge who are invited to discuss a topic/issue before an audience. It requires a coordinator and a moderator. An action plan describes how participants will implement the knowledge gained during the exchange (World Bank, 2013).
	Peer assist	Supports 'learning before doing' processes. It is based on the premise that, for any given activity, another person will have done something that is at least broadly similar. Often takes the form of regular, coordinated group study sessions. The sessions create a less formal, "safe" learning environment for peers to support and learn from each other and together. Most commonly used in higher education settings (Abu-Rumman, A., 2021).
	Presentation	An oral report, usually a one-way transmission from the presenter to participants. To be sure that the audience stays engaged, you will need to assess the presenter's communication and delivery skills as well as the presentation format (World Bank, 2013).
	Role play	A highly interactive activity in which participants act out situations and problems and then analyze the situation with the help of other participants and observers. Role play requires an experienced facilitator (World Bank, 2013).
	Simulation	Presents a realistic situation and invites learners to interact in that setting with objects and/or people (for example, through role play, model building, and computer games). Many simulations take the form of games; the most successful is the real-estate game Monopoly (World Bank, 2013).
	Storytelling	Storytelling involves using narrative to share knowledge and understanding. It can be a powerful tool used to convey vision, pass on knowledge and wisdom, and to shape organizational culture (Abu-Rumman, A., 2021).
	Survey	A way to gather information from participants. Surveys can be used to prompt discussions, surface areas for consensus or stakeholder ownership, and prioritize important next steps from knowledge exchange activities (World Bank, 2013).

STRATEGY	METHOD	DESCRIPTION
Application of knowledge exchange tools or instruments	Boundary material	Objects used to carry and exchange knowledge, that are adaptable to local needs, intersect social worlds and metaphorically sit in the middle of a group of actors with divergent viewpoints (Karcher et al., 2021).
	Conferences and fora	Opportunities for a large number of stakeholders to engage on a specific topic with a high level of interaction among participants (Abu-Rumman, A., 2021; World Bank, 2013).
	Deliberative- and global dialogues	Deliberate, in-person discussions between researchers and policymakers, typically followed by a year-long service in which policymakers receive evidence updates (Yamey et al., 2016). Global dialogues provide an opportunity to explore participants' knowledge on a common subject from which new or stronger understanding, meaning, and possibilities can emerge (World Bank, 2013).
	Expert visits	An instrument where a subject matter expert (or group) goes to a requesting country, city, or organization to impart knowledge on their area of expertise. The visits allow for in-depth consideration of an issue or problem and the localization of practical knowledge and experience to address it (World Bank, 2013).
	Study tours	A visit by an individual or a group to one or more countries/areas for knowledge exchange. Study tours provide an opportunity for key stakeholders to learn relevant, good development practice from their peers (World Bank, 2013).
	SUPPORT-tools	Tools for evidence-informed policy making. A set of tools developed by the Supporting Policy Relevant Reviews and Trials (SUPPORT) project aimed at helping decision makers to make decisions informed by evidence. The tools cover topics such as identifying evidence needs, finding the evidence, and applying the evidence (Yamey et al., 2016).
	Training courses, seminars	They may take a number of forms, including face-to-face courses (such as instructor-led/classroom type courses) and online programs. Most sessions of this type primarily focus on the transfer of explicit knowledge (Abu-Rumman, A., 2021; Mitton et al., 2007).
	Twinning arrangements	A process that pairs an organizational entity in a developing country with a similar but more mature entity in another country (World Bank, 2013).
	Workshop	An educational seminar or series of meetings emphasizing interaction and exchange of information among participants (usually small number) (Mitton et al., 2007; World Bank, 2013).
Use of knowledge brokerage	Boundary organization	Organizations that are placed between science and policy, linking research to decision-making on multiple levels, involving actors from both sides of the boundary (Karcher et al., 2021).
	Community of practice	Networks of practitioners within or across organizations who support each other to perform better through sharing their knowledge (Abu-Rumman, A., 2021; Mitton et al., 2007; World Bank, 2013).
	Collective impact	A collaborative, multi-sectoral approach to achieving policy change, with five characteristics: A common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and the presence of a backbone organization (Yamey et al., 2016).
	Intermediary organization	Engage with an intermediary organization whose mission is to promote the exchange of knowledge for solving complex problems (international perspectives) (Zhao et al., 2020).
	Social connections	Less institutionalized connections of people, groups or organizations of different backgrounds performing such boundary work often with specific focus topics (Karcher et al., 2021).
	Steering committees	Groups composed of local experts and key stakeholders who provide guidance and oversight in the design, conduct, and interpretation of research, particularly in relation to knowledge exchange processes (Mitton et al., 2007).
	Knowledge brokers	Employ a knowledge brokerage, who is an intermediary agent whose job is to promote and facilitate interaction between researchers and end-users, and develops Knowledge Translation capacity (Dobbins et al., 2009; Karcher et al., 2021; Zhao et al., 2020).
Provision of (web-based) information	Expertise Locator Systems	Knowledge repositories that aim to organize knowledge to make it more easily accessible by identifying experts who possess specific knowledge. This may take the form of directories, online databases, skills catalogues, and so forth (Abu-Rumman, A., 2021).
	One-stop-shops	"One-stop shops" of optimally-packaged online systematic review-derived products (Yamey et al., 2016).
	Social media platforms	Social networks supported through an increasing selection of social media platforms can be a powerful source of knowledge sharing. A highly and specifically targeted network can facilitate access to relevant knowledge, connections, and advice (Abu-Rumman, A., 2021).
Dissemi-nation of knowledge	Evidence briefs	Short, accessible summaries of systematic review and local evidence, describing thecontext, problem and policy options, and paying attention to issues such as policy implementation, equity, local applicability and the quality of the underlying evidence (Yamey et al., 2016).
	Rapid res-ponse units	Units which provide policymakers written summaries, telephone consultations or in-person consultations about best evidence (Yamey et al., 2016).
	Review-derived products	Systematic provision of summaries of reviews, overviews of reviews, and policy briefs (Yamey et al., 2016).
	Tailored and targeted messages	Messages that connect relevant research evidence to specific decision makers (Dobbins et al., 2009; Zhao et al., 2020).

Appendix 5 Intermediary organizations and their applied KE methods

INTERMEDIARY ORGANIZATIONS INVOLVED WITH KNOWLEDGE EXCHANGE ON AFFORDABLE HOUSING IN EUROPE		
NR.	ORGANIZATION	USED METHODS
[1]	European Federation of Living (EFL); Topic group: 'Social'	Conferences; Webinars; Collecting statistics; Topic groups; Online learning environment (academy); Online courses; Protocols; Brochures; Projects; Toolkits; Best practice use-cases; Employee exchange; Newsletter; Teams platform; Summer school; Design challenges.
[2]	SHAPE-EU: European Affordable Housing Consortium	One-stop shops; Online events; Real-life events; Blueprints; Peer-to-peer mentoring programme; Newsletter; Policy lab; Conferences; Trainings; Funding simulator; Handbook of Best Practices; Helpdesk; Webinar; Toolkits; Bootcamp; Tech camp.
[3]	European Network for Housing Research (ENHR)	Conferences; Working groups; Researchers Colloquium; Seminars; Workshops; Presentation; Reports; Symposium; Summer school.
[4]	Housing Plus	Presentation; Seminars; Meetings; Online training; Summer courses; Guide to incorporate gamification in housing; App-game; Transnational manual on housing studies; Training videos; Collaborative research.
[5]	Housing Studies Association	Conferences; Seminars; Lectures; Summer school; Symposium; Online event; Workshops.
[6]	Urban Affairs Association	Conferences; Symposium; Research groups; Webinar; Research publication; Roundtables; Colloquy; Panel- & poster presentations.
[7]	European Urban Knowledge Network	Conferences; Newsletter; Policy labs; Urban reviews; Knowledge sharing platform; Workshop; External projects.
[8]	European Real Estate Society (ERES)	Conferences; Seminars; Summer schools; Conference app; PhD network; Digital library; Research journal.
[9]	FEANTSA	Conferences; Seminars; Webinar; Workshops; Newsletters; Reports; Debate; Mentoring programmes (PRODEC); Observatory (EOH); Forums (HABITACT).
[10]	Housing Rights Watch	Conferences; Trainings; Thematic workshop; Expert workshop; Webinars; Seminar; Expert meetings; Round Table Event; Study sessions; Online database; E-newsletter; Analysis.
[11]	UNECE Committee on Urban Development, Housing and Land Management	Sessions; Informal meetings; Reports; Field trips; Forum; Webinars.
[12]	Housing First Europe Hub	Conference; Webinars; Working groups; Workshops; Trainings; Communities of Practice; Site visits; Network event; Reports; Podcast; Pilot project; Guides; Presentation; Advocacy; Table talk; Templates; Newsletter; Guidelines; Workshop; Symposium; Research; Training; Capacity building.
[13]	URBACT	Conferences; Knowledge hub; Capacity building; Workshops; Online courses; Toolbox; Guides; Practical tools; City festivals; Newsletter; Good practices; Transnational Transfer Networks; Transnational Action Planning Networks; Innovation Transfer Networks; Pool of experts; National info days; Webinars; Online info sessions; City labs.
[14]	Habitat for Humanity International (Europe, Middle East and Africa)	Reports; Advocacy; Newsletter; Research; Community-based projects; Capacity building.
[15]	International Union of Tenants (IUT)	Conferences; Online training courses; Workshops; Advocacy; Publications; Research; Reports; Newsletters; Seminars; Working groups.
[16]	Co-operative Housing International (CHI)	Digital platform; Advocacy; Panel discussions, Symposiums; Good practices; Toolkits; Webinars; Presentations; Member forums; Podcasts; Cooperative network.
[17]	International Federation for Housing and Planning (IFHP)	Policy toolbox; Publications; Webinars; Online events; Summit Masterclasses; Online academy; Ideation lab; Best-practice platform; Social Cities Index; Newsletter; Online meetings; Co-creation.
[18]	European Economic and Social Committee (EESC)	Conferences; Recommendations.
[19]	Housing Europe	Reports; Working committees; General assembly; Conferences; Webinar series; Workshops; Study visits; Festival; Internal meetings; Roundtables; Pilot projects; Public events; Educative sessions; Recommendations; Bootcamp; Summit; Training; Publications; Position papers; Articles; Advocacy; Newsletter. Observatory; Manifestos.
[20]	Organization for Economic Cooperation and Development (OECD)	Database; Publications; Advocacy; Reports; Survey; Working paper; Policy brief; Press releases.
[21]	UN-Habitat	Videos; Publications; Meetings; Programmes; Research; Best practices; Capacity building; Initiatives; Data & analysis; Reports; Lectures; Conferences; Summits; Forums; Assembly; Sessions; Guides.
[22]	Affordable Housing Initiative	Pilot projects; Programmes; Presentations; Best practices; Bootcamp; Summit.
[23]	European Institute of Public Administration (EIPA)	Publications; Benchmarking reports.
[24]	Housing Solutions Platform	Debates; Knowledge exchange platform; Capacity building; Newsletter; Social Media; Training; Communities of Practice; Webinars; Study visits; Workshops; Best practices.
[25]	Eurocities	Global dialogues; Reports; Advocacy; Publications; Good practices; Policy papers; Summits; Forum; Discussions; Debates; (Digital) Conference; Workshops.

Appendix 6 Chapter 5 findings with extended interview quotes

Chapter 5, Lessons of the Introduction of Cost Rental Housing in Ireland, answers the third subquestion: "What are lessons-learned from the introduction of cost rental housing in Ireland?" This chapter provides a comprehensive analysis of Ireland's experience in establishing cost rental housing, detailing the challenges, strategies, and outcomes encountered. Through interviews and extensive research, it identifies key lessons that can inform both ongoing developments in Ireland and the potential adoption of similar models in other European countries. The insights gained in this chapter are crucial for understanding how cost rental housing can be successfully implemented in diverse contexts, contributing to the broader discussion of knowledge exchange in affordable housing provision.

Figure 37: Complete timeline of the introduction of cost rental housing in Ireland (own work).

The chapter is mainly based on insights from interviewees complemented by relevant papers, articles, blogs and reports. Participants of the interviews are referred to as P1, P2,... P10. The timeline of figure 37 is run through to consider all phases, and therefore all learnings, of the introduction of cost rental housing in Ireland. The first step is to point out the original mechanisms that put cost rental housing on the map in Ireland. As a follow-up, the establishment of policies, acts and regulations by the state to integrate cost rental is discussed. The resulting implementation and facing of early challenges are considered next, followed by ongoing developments and observations. To conclude, future considerations for cost rental housing in Ireland are depicted.

Part 5.1 Early knowledge and exposure

Figure 38: 'Early knowledge and exposure' of cost rental in Ireland as part of the timeline (own work).

The journey toward the establishment of cost rental housing in Ireland can be traced back to early efforts of transnational knowledge exchange, advocacy, reports, plans and a pilot. This model, although new in its modern form, builds upon earlier approaches to affordable housing in the 1930s (Norris, 2019; McCord, 2011). However, for nearly a century, Ireland's housing policies were predominantly shaped by market forces, with a strong emphasis on promoting homeownership (P3; P6; P7). This focus came at the expense of investment in public housing (Springler & Wöhl, 2020), and housing assistance compared to other European nations (Healy & Goldrick-Kelly, 2018b):

> *(P3) "They really feel that even though it's rental housing is long -term, which in Ireland is quite new because we usually think that our long -term housing in Ireland is home ownership, is the only type of long -term housing."*
> *(P7) "The history if you look at in Ireland of housing was very much purchase. Everybody here would want to purchase their houses and their land. Exactly and that probably comes out of the land history of colonialism. Wherever it is, a very land history of colonialism and a country gets independence, there is often, you'll see, I think, the phenomenon or the theory and the facts would show you that people want to own their land, because they're afraid of the land*

beauty… But a hundred years later we have very much this: I need to own my own house and land, but that's not feasible and realistic for anybody. So the housing model has changed over the years and we're now looking more to the European models, the cost rental models, particularly the Vienna model and stuff and to try to get people to understand that they don't have to own a home but they can have cost rental for a long time and have security but not have a mortgage around their house."

The dominance of homeownership as the cultural ideal (P3; P4; P6; P7; P8; P10) shaped how the rental sector developed. This cultural bias resulted in a stigmatized rental sector (P4; P6), where accommodations were often of poor quality (P10). Renting was often seen as a temporary arrangement, particularly for young people or single individuals (P10). As one interviewee (P4) noted, renting was "*"So the rental sector was always deemed as, kind of, for people for a year or two while they were students or while they were a single person and then they get married, and then they buy the house.*". This deeply embedded cultural preference for homeownership fostered a rental market that lacked professionalism and long-term security (P8), which further discouraged individuals from considering renting as a viable long-term option:

(P10) "One of the things that's probably a little bit different compared to some of the other European countries is that Ireland has a social housing system that is separate to its cost rental system. And going back to 2015 it's like while there had been experience of affordable housing it had only ever been affordable purchases."
(P6) "We also did find that people still aspire to home ownership… a lot of the respondents and there's different kind of reasons for that…"
(P8) "I don't think that landlords in Ireland kind of don't always see it as a business or an investment that they have to treat professionally. So sometimes they kind of think of it almost as you're a guest in their house, that they own. And it's like, well, no, they're paying rent. So you can't just walk in the front door. But I think that cultural adjustment will take time, but there's a lot of landlords who are still there who don't really, I think, respect rental as a tenure that is secured."
(P8) "It's someone else's home when they're renting it. And that means that there's just a sort of a disrespect towards tenants that I think has been very problematic over the years and now that people are much more reliant on that, those kind of things just become real."
(P10) "That's one of its benefits is that you're renting from a state support entity who is going to be able to give you security of tenure and also is going to manage your property and be a proper landlord, a proper institutional landlord."
(P10) "But depending on where you came from, so if you came from an accidental landlord, you're probably delighted that everything is new and that, you know, everything works. And actually, somebody will answer your phone when you ring them."

A key turning point came after the Global Financial Crisis (P6), when mortgage reregulation reshaped the housing landscape. Yet, by 2014, a growing cohort of people still found themselves unable to access either social housing or mortgages, prompting discussions on alternative housing models, such as cost rental housing. These discussions gained traction through transnational exchanges, particularly in national and European networks. Visits to Vienna's Karl Marx Hof (P1; P6), a renowned example of cost rental housing, played a key role in bringing these ideas back to Ireland (P5) and helped inspire discussions around how this model could be adapted to fit the Irish context:

(P6) "…like some of the, I guess, the drivers that are some of the differences, there's like the global financial crisis collapsed house prices. It was a very home ownership driven approach up until that point, so mortgage to home ownership, but that's substantially kind of shifted

after the crash. And so that kind of section, sector, was reregulated, less people get access to mortgages and you had a real bottleneck in the private rental sector…"
(P5) "Yeah, and there is an openness to exchange because we've benefited that in going to places like Vienna and places in Denmark that people went to. They were hugely useful in terms of bringing those lessons back."
(P1) "I've been to visit Karl Marx Hof many times in Vienna, you know."
(P6) "…, but a lot of trips to Vienna in particular,…"
(P6) "I think there's like and I mean just coming back from Vienna myself I mean I have like even just from being there for the week I have a better understanding of like just the history and the kind of scale of like the housing system there."

These early discussions led to the development of draft reports (P10), the initiation of academic research[20] on cost rental (P3), and increased advocacy efforts (P5), particularly from the Approved Housing Bodies (AHBs)[21]. To build consensus and improve the effectiveness of their advocacy (P4; P5; P10), the AHBs formed the 'Housing Alliance[22]'. All those efforts helped secure the inclusion of cost rental housing in the 'Rebuilding Ireland; Action Plan for Housing and Homelessness'[23] (P4) as an "*Affordable Rental Scheme*.". However, despite this progress, some critics argued that the plan lacked sufficient focus on affordable housing (P10), highlighting the need for continued advocacy. Reports[24] from the Nevin Economic Research Institute (NERI) also played a significant role in sustaining momentum for cost rental housing (P3).

(P10) "We've sent a report to the Department of Housing in 2015. It was a kind of a draft report looking at affordable rent, I think what we called it at the time, and that it has changed over time to eventually become the system that has been set out in the Affordable Housing Act 2021."
(P3) "And we wrote a report, which actually was never published, but we did write a report on it, and then we published some academic articles on it."
(P5) "I suppose we've been banging this strong for a long number of years, at least 10 or 15 years, trying to get some kind of rental scheme which gave security to people who were working."
(P5) "Some years ago we developed a housing alliance which is slightly out of the Irish Council for Social Housing. It was very much done on the basis that we were trying to develop the scale and the impact of housing, of not -profit housing associations and the Irish Council for Social Housing is a body of 300 or 400, it's very small, it's a very mixed. So the Housing Alliance was there to promote scale in the sector and to help larger associations get larger and to try and structure the environment in which we operated to help grow the sector."
(P10) "So the Housing Alliance is something that came about in a calendar year, but it was probably 2018 or 2019, something like that, where the bigger Approved Thousand Bodies came together, six of them. They said, well, there's loads, we've about 500 Approved Thousand Bodies, most of them are very small, and they only deal with small numbers of houses. So they said we're actually, because we are trying to develop at scale, our problems are quite different to the vast majority of Approved Thousand Bodies."
(P4) "Yeah, so the Housing Alliance are… They were set up separately around, I think, 2016, when one of the new government housing plans came in: Rebuild in Ireland. So they were set up, I think, with the encouragement of the department, just because their issues were a lot

[20] For example by Norris & Byrne (2018; 2021);
[21] Approved Housing Bodies (AHB's) are the, by government approved, not-for-profit housing associations in Ireland. More information is found here;
[22] The Housing Alliance is an ensemble of the 7 largest AHB's In Ireland. More information is found here;
[23] The 'Rebuilding Ireland; Action Plan For Housing and Homelessness' is found here;
[24] For example by Healy (2017) and Healy & Goldrick-Kelly (2017; 2018a; b);

different, especially in terms of funding issues and growth and stuff, than a lot of our smaller members."
(P4) "It was mentioned in Rebuild Ireland during cost rental and Housing for All, kind of expanded on it when the new government came in after."
(P10) "Rebuilding Ireland which came about in probably 2018 or something like that. And that was again primarily focused on social housing in terms of state intervention was all about social housing. And it's only when housing for all came out, which I think is the end of 2020, that is September 2020 it was, where affordable housing started to become a real thing again."
(P3) "But over time, support was, was built up. And in, uh, about 2017, I think tank that is linked to and funded by the trade unions published a report on cost rental housing, arguing for cost rental housing. So that was quite a big development..."

One major challenge emerged in 2018, when the European Union reclassified AHBs as part of state spending (P3). This reclassification complicated the establishment of sustainable funding schemes for cost rental housing in Ireland. Despite these financial obstacles, advocacy and practical efforts continued. A pilot project in Dublin, which involved transforming former social housing into cost rental units, marked a key milestone in putting the cost rental model into practice, even though the full transformation is still underway (P4; P6). To further advance the provision of affordable housing, the Irish government established the Land Development Agency (LDA)[25] (P7), which signaled a significant commitment to increasing the housing stock, including cost rental units:

(P3) "...with maybe 2018, the approved housing bodies were re-categorised by the European Union as state spending... The debt ratio, yeah. So in Austria and Denmark, the debt of the housing associations is not considered government debt. In Ireland, that was one of the reasons why cost rental is attractive, but then it was re -categorized in Ireland as being part of government debt. And that meant that all of the borrowing from the housing associations would be up. Yeah. Yeah. So there wasn't like, it didn't mean you couldn't have cost rental, obviously, but it was like, not, not good for promoting cost rental."
(P6) "But they had kind of advocated kind of early on, and lobbied for St. Michael's estate to be a pilot project for cost rental. And as far as I know, that's like, it still hasn't been kind of like redeveloped... But they're definitely like early on, one of the places where I heard kind of like the push for a cost rental model so that there would be cost rental and social housing would be the entirety of that site redeveloped."
(P4) "But funnily enough, one of the schemes that was meant to be like the the starting point for this, St. Michael's Estate, and I think it's in Shakur in Dublin, like still hasn't got planning and still isn't off ground."
(P7) "So the Land Development Agency was set up in 2018 as a semi -state body by the state to be a new body to try and unlock state land and to develop affordable homes for the community."

Public attention to cost rental reached new heights in 2019 with a two week exhibition on the Vienna model[26], held in three locations across Dublin (P4; P6). This event featured many

[25] The Land Development Agency is a semi-state body which was established to buy and redevelop public land that has been vacant or used ineffectively. Since last year, they have developed 400 cost rental units. More information on their cost rental schemes can be found here;
[26] A programme of all daily activities of the 'Vienna model' exhibition is found here;

seminars (P10) organized by a transdisciplinary coalition that included the Housing Agency[27], academics, and Dublin City Council. Austrian and Irish practitioners were able to directly exchange knowledge (P3), further reinforcing the relevance of transnational cooperation in shaping Ireland's approach to cost rental housing:

> *(P4) "And there was an exhibition here for two weeks that Dublin City Council hosted. So I kind of yeah, showcased the potential of it to a lot of people."*
> *(P6) "So just to follow on from my last point, I think that probably important was those series of exhibitions on the Vienna model that were kind of hosted by Dublin City Council and there was public talks and things like that, and I think that was probably important in terms of embedding that sort of idea of this tenure and this kind of form of housing intervention within the sort of housing sector more generally. And so I think that that gets a bit of momentum that this is something which is potential to be driving."*
> *(P10) "So, yes, and back in 2019, we had a Vienna model exhibition here in Dublin… Yeah, so that was actually a very important exhibition at the time, because it helped us, people. Yeah, kind of, it was very abstract to me both, you know, and we actually saw the buildings… It sort of provided an opportunity for seminars and talks from people coming over from Vietnam, the Netherlands, and so on, to say, I live in a cost rental, you know, I've been living in one for 25 years and, you know, all that sort of thing. So it became very real and people could see the advantages of it and how it would work."*
> *(P3) "And then I also organized with Michel two seminars here that brought together the Austrian practitioners with the Irish housing policy community."*

Part 5.2 Formation of government policies

Figure 39: 'Early knowledge and exposure' of cost rental in Ireland as part of the timeline (own work).

One of the most significant milestones in realizing cost rental housing in Ireland was its inclusion in the 2020 'Programme for Government; Our Shared Future'[28] (P3). A clear commitment to developing a cost rental model was outlined: "*Develop a cost rental model for the delivery of housing that creates affordability for tenants and a sustainable model for the construction and management of homes. In doing this, we will be informed by international experience of the delivery of cost rental, such as the 'Vienna Model*". The admission of the Green Party into the coalition government played a crucial role in advancing this agenda, as they had long been advocates of cost rental housing both at the European and national levels (P1; P4; P5). For the center-right coalition partners, this proposal represented a compromise (P1), primarily because it addressed the growing housing crisis while focusing on the middle-income population, a demographic that was becoming increasingly squeezed out of both homeownership and social housing:

> *(P3) "But eventually, a commitment to cost rental housing ended up in the program for government, with the government plan for the, for the previous administration."*
> *(P1) "It began around 2020 as a government policy, because we had a new government with Green Party members who were very interested in cost rental. They had been promoting it at*

[27] The Housing Agency is a government body concerned with the funding and financing, the provision of advisory support, collaborating with stakeholders and implementing policies on cost rental housing amongst others. More information is found here.
[28] The programme is found here;

an European level. So they were aware of it, and it was also acceptable to the kind of centralized parties because it's not social housing. Social housing, they don't see any votes for them in social housing, but they do see votes for them in cost rental housing because they're more better off than more…"
(P5) "So we've been pushing this for a long number and what happened really was there was a new government formed and part of the coalition partners was the Green Party were part of the coalition partners and they insisted in the programme for government that there would be some kind of affordable or cost rental brought in."
(P4) "A lot of political pressure I would say after a couple of elections from the left. I think the government felt that they needed to do something about this politically."
(P1) "Yeah, it's a compromise because the idea of putting more money into social housing politically for the central right parties, it's not. There's no gain."

Cost rental ambitions were further formalized in the 2021 'Affordable Housing Act'[29] (P2), which provided key legal specifications on what constitutes 'costs' in the cost rental model (Byrne, 2024), as depicted in figure 40. However, one of the most significant challenges in establishing the act was ensuring compliance with EU state aid rules. As one participant (P1) highlighted, "*(P1) "(P1) "…we have very powerful property companies here in Ireland, who keep a very close eye on state aid rules. And this was one of the biggest challenges that the public servants, when they were creating the legislation, had to be careful that by creating this model they didn't create illegal state aid by favouring particular groups."*, forcing public servants to carefully craft legislation to avoid creating illegal state aid by favoring specific groups:

(P2) "So within the Affordable Housing Act which is the legislation that allows cost rental to be developed there's particular rules and one of the provisions in that is that if you go into cost rental housing."

WHAT CONSTITUTES THE 'COSTS' IN COST RENTAL IN IRELAND BY BYRNE, M., 2024	
1	Costs associated with making the dwelling available for rent including any capital development or acquisition costs involved;
2	Financing costs associated with making the dwelling available for rent including debt finance costs, interest charges and limited equity returns;
3	Necessary and appropriate management costs associated with the dwelling, including costs of letting the dwelling;
4	Costs associated with necessary and appropriate maintenance of the dwelling during the cost calculation period;
5	Costs of maintaining a prudent contingency surplus in addition to a sinking fund created to meet projected maintenance costs associated with the dwelling during the cost calculation period.

Figure 40: Elements of what constitutes the 'costs' in Irish cost rental (own work, based on Byrne, 2024).

Insights from Kenna (2021) helped to navigate these regulatory challenges, outlining a structure that would comply with EU rules while theoretically (P4) allowing private companies to participate in cost rental housing (P1). Yet, despite the launch of a dedicated scheme for private providers in August 2023[30], no private entities have bid for the funding schemes (P10). The main reasons include low profit margins due to targeted rents set 25% below market rates (P6-8) as well as strict terms of conditions and eligibility rules (McManus & Doyle, 2023):

(P4) "…theoretically cost rental can be provided by housing associations, the Land Development agency, private providers, in the legislation there's also scope for them to come in and do it, and the local authority."
(P1) "But the reason they didn't is that there's two regulations that go with the policy which allows private companies to make a bid for the funding under the Cost Rental scheme. So, it's a, in theory, it's open to everyone, yeah. Okay, so that's the reason. That's how it's satisfied.

[29] The Irish Housing Affordable Act 2021 is found here;
[30] More information on this Secure Tenancy Affordable Rental investment scheme (STAR) is found here;

Now it's very likely that one of the property companies will make a bid for it for some funding in there. We'll see what happens."
(P10) "And it's set up for private entities, okay. Now, to date, the only entity that we've dealt with successfully on it is the Land Development Agency because they can apply as a commercial entity. And STAR stands for Secure Tenancy Affordable Rental, okay."
(P6) "There's also, like quite a, I guess detailed modeling around like the finances of it and you know, having to come in 25% blown market rents,..."
(P7) "Yeah like that and we're trying to get them to the point that they're a decent affordable class rental 25% below the market rate is the game."
(P8) "..., they have to be over 25% below market rent."

Further details regarding the implementation of cost rental housing were laid out in the 'Housing for All' plan[31] (P2; P4; P9; P10). This plan explicitly targets the middle-income cohort (P3; P5; P6; P8) or "*squeezed middle*" (Byrne, 2022c), a demographic above the social housing income limits but unable to afford homeownership. Cost rental homes under this plan are projected to offer rents at least 25% below the market rate, with an average of 2,000 homes per year planned during the program's lifetime. Eligibility criteria include households with an annual net income below €66,000 in Dublin and €59,000 in the rest of Ireland (Affordable Homes Ireland, n.d.). This targeted approach, while addressing a specific housing need, has sparked debate over the inclusiveness of the model. One interviewee (P3) argued that "(P3) "*It's not really cost rental because only a particular income is quite narrow who can apply, the income cohort. Low income people are not eligible to apply.*", pointing out that the strict eligibility criteria (figure 41) exclude low-income individuals, which runs counter to the more universalist cost rental models found in countries like Austria, Denmark, and Finland (Housing Europe, 2022). Furthermore, the percentage of cost-based housing in Ireland's total housing stock remains notably low. By April 2024, cost-based housing is projected to account for only 0.1% of the total housing stock, a much smaller percentage than in countries like Austria and Denmark, where cost rental housing is a more established part of the housing system. Figure 42 highlights all international comparisons.

(P10) "And it's only when housing for all came out, which I think is the end of 2020, that is September 2020 it was, where affordable housing started to become a real thing again."
(P4) "It was mentioned in Rebuild Ireland during cost rental and Housing for All, kind of expanded on it when the new government came in after."
(P2) "That's so, in Housing For All which is the government plan for housing. There's very specific objectives in there to kind of facilitate and grow the approved housing body sector and they are doing their own strategic review of what we can kind of..."
(P6) "...that increasing kind of cohort, which is sort of caught in the middle between those things, you know, where they don't access social housing, obviously. And they can't get, you know, the credit together for mortgage ownership either..."
(P3) "Most of them were long -term renters and they basically had a housing need which was mainly a need for secure long -term housing which they couldn't access because they couldn't afford homeownership and they weren't eligible to apply for social housing because of incomes."
(P5) "So in Ireland we've had a very binary system, so if you can afford it, it's the private sector, if you can't, it's the social sector. So there was none of that layer of affordable renting or affordable housing that was ever developed."
(P8) "Yeah, so I suppose cost rental is supposed to be that in between tenure."

[31] The Housing for All plan is found here.

ELIGIBILITY CRITERIA FOR COST RENTAL HOUSING IN IRELAND BY AFFORDABLE HOUSING IRELAND, N.D.	
1	Your net household income is below €66,000 per annum for Dublin and €59,000 for elsewhere in the country. Applicants will have to prove how they have calculated their net household income.
2	You are not in receipt of any social housing supports (including Rent Supplement or Housing Assistance Payments).
3	You do not own a property in Ireland or elsewhere.
4	Your household size matches the size of the property advertised (All members of the household must be living in Ireland at time of applying.
5	You can afford to pay the cost rent for the home.
6	Your household has only entered one application for a specific cost rental property.

Figure 41: Eligibility criteria of Irish cost rental (own work, based on Affordable Housing Ireland, n.d.).

Moreover, Ireland's reliance on public funding (P9; Byrne, 2024) raises concerns about the long-term sustainability of its cost rental model (P5). While Austria and Denmark have managed to balance public and private investment, Ireland's model currently depends almost entirely on public loans (80%) and grants (20%), with private equity remaining largely absent (as shown in figure 43). This heavy reliance on public resources has led some to question the model's viability, especially given the competing demands on public finances for healthcare and childcare (P4):

> *(P9) "But they also see the significant levels of funding that we're putting into it, to make it work."*
> *(P5) "...the other piece of funding that they've that they continued with is that they, they wanted to cost rental developed, with a hundred percent debt. So There's a senior lender and there's also what they give us this Low interest bearing loan, but it's all still lending. So it's a hundred percent date. So it's not really sustainable into the future."*
> *(P4) "So that's not sustainable going forward, especially like when there's other competing demands around healthcare, around childcare, around everything else."*

KEY DIFFERENCES OF COST RENTAL IN EUROPEAN COUNTRIES (OWN WORK, BASED ON (HOUSING EUROPE, 2022))				
	IRELAND	AUSTRIA	DENMARK	FINLAND
COST-BASED SOCIAL HOUSING (% OF NATIONAL HOUSING STOCK)	~0,1%* - *April 2024*	17%	20%	11% (narrow definition); c.20% (broad definition)
ELIGIBILITY	Selective** - *only middle income households*	Universalist – *c.80% of households in practice*	Universalist – *but priority for most in need*	Universalist – *but local restrictions apply in practice*
FUNDING SOURCES	- Public loans (~80%); - Public grant (~20%). ***	- Public loans – *subordinate* (30-40%); - Bank loans (30-40%); - Own equity (10-20%); - Tenant equity (~5-10%); - Public grant (~5%)	- Loan from a mortgage institution – *with state guarantee* (86-90%); - Municipal loans (8-12%); - Tenant equity (2%)	- Private loans – *with state guarantee* (95%); - Own equity (5%); - Public grant
DOWNPAYMENT REQUIRED FROM TENANTS?	No	Yes – *though not compulsory*	Yes	No
COST-RENT APPLIED AT...	Building/estate level	Building/estate level	Building/estate level	Social provider level
POST REPAYMENT OF LOANS IS SET BY...	Cost-based rent setting continues – *with regulated increases to ensure long-term affordability*	'Grundmiete' system – *fixed price per square metre*	Fixed nominal rent	Ceases to be officially 'social' – *rents in line with prior cost-rents*
MAIN STRENGTH	Long-term financial sustainability	Long-term financial sustainability	Long-term financial sustainability	Long-term financial sustainability
MAIN AREA FOR IMPROVEMENT	Total cost rental housing stock and private equity	Cost of new homes in areas with high land costs	Construction price cap in areas with high land costs	Depopulation in rural areas undermining cost-based principle

Figure 42: Key differences of cost rental housing in Ireland compared to other European nations (own work, based on (Housing Europe, 2022)).

FUNDING SOURCES OF COST RENTAL HOUSING IN IRELAND				
	FUNDING SOURCE	TYPE OF SOURCE	AVAILABLE SINCE...	AMOUNT APPROVED
1	Cost Rental Equity Loan (CREL)	Public loan	2021	Over €730 million
2	Affordable Housing Fund (AHF)	Public grant	December 2022	€369 million (*mainly for affordable purchase delivery*
3	Cost Rental Tenant in Situ (CRTiS)	Public grant	April 2023	*unknown*
4	Secure Tenancy Affordable Rental (STAR) Investment Scheme	Public loan	August 2023	€750 million

Figure 43: Elements of what constitutes the 'costs' in Irish cost rental (own work, based on Byrne, 2022c).

Despite these concerns, public grants were essential in getting cost rental housing off the ground. Initially, cost rental housing provision in Ireland was entirely debt-financed via public loans, which made it unsustainable for providers (P5; P6). The integration of public grants helped alleviate some of this financial pressure. The theory is that as the cost rental housing stock matures over time, surplus revenue from older housing will be used to finance new developments (P5; Byrne, 2022a; Kenna, 2021):This theory dates back to Kemeny (1995), who called it the process of maturation (P1; P5; Elsinga, 2020; Norris & Byrne, 2021). However, some Irish actors are skeptical of whether Ireland can achieve the same level of stock maturation seen in countries like Austria, given the small scale of the Irish market and the long trajectory required for these benefits to materialize (P1; P8; P10). One participant (P8) remarked that Ireland's housing sector is "*40 years behind*" European models, and while there is hope that rents will eventually become more affordable, this process is expected to take time. Others expressed

doubt that Ireland's cost rental model could ever significantly lower rents without a substantial increase in the housing stock (P1):

> *(Byrne, M., 2022a) "In order for Housing Associations to build up equity, they need to have some model of recycling revenue, for example by using surplus revenue from older housing to finance new development."*
> *(P1) "I think the big difference between Vienna and Ireland is the people who are producing the cost rental in Ireland. They don't have a big stock of housing which goes back 50 -60 years."*
> *(P5) "So that we hope to, over time, to build up and increase the stock. And then we'll get some of that kind of maturation or that kind of beneficial interest."*
> *(P8) "And it's just going to take a long time before you see the rents really being as affordable. But the expectation is almost pegged to a European standard that is 40 years further on than where we are. And so speaking to people with that expertise you know you come back and say; "Well hang on, the reason why this is apples and oranges is you know because we're 40 years behind."*
> *(P1) "They [Housing Associations] don't have that pool of assets that would make cost rental cheaper. And okay, the idea is they will have in 50 years time, I don't know, who knows."*
> *(P1) "The idea that it's going to reduce rents, it would require a lot of units to reduce rents, you know. And I'm not sure that it'll ever actually have that."*

Interestingly, the financial models in Ireland's cost rental scheme account for long-term maintenance costs from the outset, which ensures that the quality of units remains high for 20 to 40 years (P10). This is a positive aspect of the model, even if it raises initial costs. Ireland's comprehensive 'Housing for All' plan, along with various acts and national development frameworks, has laid a strong foundation for cost rental housing (P4; P6; P9; Byrne, 2022b), offering a strategic vision that many other countries might lack:

> *(P10) "I think if you look properly long term, I think that will happen, you know, but if after five years, it's probably not long enough, because I think we still have issues, but if you're looking at maybe 20 years, well, then, yeah, I think you will see that better. The other thing that I think again is not properly understood in terms of the discourse of people in terms of cost management here, is that the models that I talked about their operational costs, they are building in a lot of plan maintenance costs in that. So they have at least a 40 year plan. Yeah. So that the quality of the units will still be good in 20, 30, 40 years beyond that. And that's actually built into the model, and that's actually affecting day one rent. Technically, yeah. So you're paying towards those."*
> *(P9) "They're all jealous of what we're doing, and they're all jealous of what we're doing for a number of reasons. One is we have a long -term plan, so we have Housing for All, but we also have the National Development Framework for the future, or National Planning Framework for the future, which is out till 2040."*
> *(P9) "So they see the fact that we have a consistent approach, a stable policy, a policy that's short and longer term, and also then plans that are short and longer term, and then also the consensus from government that what we're doing is a positive thing and that constantly selling that out there as well."*
> *(P4) "When I go abroad to conferences and I speak to, like our counterparts in Spain or Portugal or whatever and they're like: "Oh you actually have, like at least you actually have a plan, and you have funding and like at least it's been done". They're like: "We don't have any of that..."*
> *(P6) "that they're like they obviously do have strategic plans and they have strategic kind of oversight in what they'd like to do,..."*

Another key factor in the success of Ireland's cost rental model has been the close collaboration between government bodies and the AHBs (P2; P4; P5; P8; P9; P10). These AHB organizations, through networks like the Irish Council for Social Housing (ICSH)[32] and the Housing Alliance, have provided continuous feedback on how policies impact practice. This ongoing dialogue has been essential in addressing the challenges and refining the implementation of cost rental housing in Ireland. The most important challenges with implementation and related considerations are therefore discussed next.

> *P8) "I think as a sector we kind of like to work productively with the state and because everyone is trying to have more homes. It's the same goal. So for that reason we kind of we would probably speak to both at the same time. And I think we have to inform as well when these issues are arising, because that's what's happened, like everyone. Cost rental has been delivered because it's needed, it's necessary, it's definitely needed for the, I suppose your middle income earners. And that's the department of the government acknowledging that there's a huge sector that are not able to afford private rental, that are living at home, that are homeless, you know different circumstances. And so it was delivered on that."*
> *(P4) "I think because the government again like, working with them… They were worried that they wouldn't deliver on their targets. And then they'd get it in the neck I suppose from the media and opposition politicians, and voters, and stuff. So everyone kind of wanted to work together on that there was a real kind of consensus there around trying to find a solution to that. So that was done."*
> *(P8) "Yeah, our approach would be very collaborative as an organization for sure, in general, but also the team. Ithink it's only helpful."*
> *(P9) "And I have to say, we're very fortunate. We have an organization like the Housing Agency who is very much connected into the housing sector and also very connected into government. So they can hear what we're saying, exactly as you said, translate into what government need to know and understand and then be able to say to them: "This is what you need to change." And that feed backwards and forwards works really well."*
> *(P4) "Yeah, so we're all on the same page, yeah."*

Part 5.3 Implementation challenges

Figure 44: 'Implementation & challenges' of cost rental in Ireland as part of the timeline (own work).

Implementing cost rental housing in Ireland presented unique challenges, primarily because the model represented an entirely new form of tenure in the Irish housing context. The decision to start quickly and figure things out along the way (P5) contributed to some of these challenges. As one interviewee (P8) remarked, cost rental housing was somewhat "*handed over*" to the AHBs without a well-developed plan in place. The focus on fast delivery, while essential for addressing urgent housing needs, left little room to consider long-term sustainability from the outset:

> *(P8) "…cost rental has been somewhat, I would say, handed over to us."*
> *(P5) "But it came quite quickly and it was very much developed on the hoof. So there was a commitment in government to introduce it and we were really making it up as we went along.*

[32] The Irish Council for Social Housing (ICSH) is the national social housing federation representing over 270 housing associations across Ireland. More information is found here.

And we were involved, to be fair, we were involved in those discussions and we were a little bit in the dark as well."

As a result, the early rollout was slow, with fewer than 60 units provided in 2021 (P5). This figure is small compared to the ambitious target set out in the 'Housing for All' plan, which aims to deliver 2,000 homes per year from 2022 to 2030. Early expectations for provision were placed on three of the largest AHBs: Cluíd, Tuath, and Respond, with Circle Voluntary Housing Association joining later (P2; P9; P10). The only other current providers are local authorities and the Land Development Agency. Interestingly, the first cost rental developments were located outside the Dublin area, despite the acute nature of the housing crisis in the capital (P4; P7). This situation highlighted the geographical and cost-related challenges the sector faced, which are the first two challenges discussed below. Figure 45 beneath here provides for a detailed breakdown of all implementation challenges.

(P4) "So it started very small. I think the first year there was only, now you can correct me on this, but I think it was fewer than 60 units provided."
(P9) We've only been in the cost rental market for about just under 12 months. We were in the second phase, or second wave. At the moment, there are only four organizations providing cost rental in our sector, and you've talked to some of them already, so Cluíd, Tuath, Respond, and now ourselves are the fourth.
(P2) "So there's three organizations that have delivered cost rental, there's now a fourth: Circle, who delivered their first cost rental housing scheme only maybe about six months ago."
(P4) "A lot of them aren't in Dublin city which is where the biggest crisis is. So they're in like, the LDA had some out in Wicklow or members of some like in like South Dublin. So like Clondalkin, there's some in Tallah, and I think there's some in North County Dublin but where the housing and affordability crisis is most acute especially for the need for cost rental is in Dublin city. Now there's a lot of reasons for that, like a lot of sites haven't got off the ground especially sites around Dublin nation. Those areas which are very densely populated anyway due to many reasons. Community pushback around the cost, around public spaces, around like these communities have been I suppose badly burned historically by some planning decisions and homes that were delivered that weren't great and quality wise and idle sites and all of that sort of stuff.'
(P7) "Our very first one was in Wicklow in the east of the country, Delganey…"

CHALLENGES WITH IMPLEMENTING COST RENTAL HOUSING IN IRELAND BASED ON INTERVIEWS			
1	Keeping costs down	5	Housing assistance
2	Geographical distribution	6	Competition between providers
3	Public unawareness	7	Role of local authorities
4	Tenant selection		

Figure 45: Challenges with implementing cost rental in Ireland as part of the timeline (own work).

Challenge 1 = Keeping costs down: One of the most critical challenges was managing rising inflation and increasing costs of materials, labor, construction, and land (P3-10; Byrne, 2022c). As rents in cost rental housing are directly tied to these costs, any price increases disproportionately impact affordability (P3-10; Byrne, 2022c). As one participant (P3) noted, cost rental was introduced (P3) *"…at the worst possible time in Ireland, because there's been construction costs and property management costs have increased by as much as 30% because of the inflation and the war in the Ukraine and the whatever reasons.."*. Contrastingly, when the cost rental model was first introduced, Ireland benefited from low interest rates and minimal inflation (P5; P9), but the rapid change in economic conditions complicated efforts to keep rents affordable. The high-cost environment in cities like Dublin (P8) further exacerbated these challenges, making it difficult to

build in high-value areas (P5) while maintaining affordability for tenants. This also poses geographical challenges:

> *(P3) "It's just the worst period of construction inflation in many decades. So that creates a big challenge for cost rental."*
> *(P9) "And in the last number of years, it has jumped because inflation on materials, inflation on labor, that kind of stuff."*
> *(P6) "...the price of land has gone up and also the construction and other material kind of costs have gone up."*
> *(P4) "So it was kind of slow to get going, if I'll be honest with you, and for our members the context of that is I suppose it was when it was really trying to get off the ground was what happened inflation started rising and the war, Russia's war in Ukraine and those two issues: inflation and materials and labor all of that sort of stuff kind of put the squeeze in the viability of some developments."*
> *(P10) "...how expensive cost rental is, because it's not cheap here and the rents that were able to achieve like when we started delivering cost rental. It was, covid had struck, but the full effects of inflation hadn't and interest rates had gone up. So in the early days of cost rental it was, looking back and we didn't think it was at the time, but looking back, it was really easy to get kind of pretty nice rents that were attractive to people and now increased interest rates and inflation and construction costs."*
> *(P5) "Cost rental first was first initiated during a period of basically zero interest rates zero inflation. Yeah interest rates were flat."*
> *(P9) "I think we, because we've had zero interest rates for so long, because we've had low inflation for so long, excluding the recent past, but for a decade after 2008: low interest rates and low cost of delivery."*
> *(P8) "So the challenge, I think some of the challenges around cost rental are keeping the cost down just because Ireland is such a high cost jurisdiction, and also especially with apartments and that kind of thing as well."*
> *(P5) "So they didn't envisage inflation and prices increasing so that cost rental became very difficult to develop except in very high, they, what they did was they tied the cost rent to the market rent and then it became very difficult to do cost rental except in very high end, high value areas areas a very high market rent. So that's then now they've now changed that So hopefully they've eased off that..."*

Challenge 2 = Geographical distribution: Another significant issue was the geographical concentration of cost rental developments. Because the model relies on low land and construction costs, many units were established in greenfield, peripheral areas with limited access to amenities and public transport (P6; P8). This location choice raised concerns for tenants who needed reliable transport and access to essential services, such as childcare and employment opportunities. One interviewee (P6) highlighted this issue, explaining how tenants faced long commutes and a lack of infrastructure after moving to these areas.

> *(P6) "Apparently it's an outcome of like the land prices, construction prices... So like, some of where they're able to deliver large scale kind of, you know, cost rental developments is more peripheral kind of areas, you know. So it's kind of like greenfield peripheral, you know, and that raises challenges about like transport, about other kinds of infrastructures, so like a lot of tenants, for example, talk about like maybe having to get a car after moving. There might be a lot of commuting longer distances."*
> *(P8) "And things like geographic location, making sure they're kind of well located so there's public transport and other amenities, and all the infrastructures around them as well is a huge, huge challenge."*

Challenge 3 = Public unawareness: Public awareness of the cost rental model posed another challenge. Many people were simply unaware of the availability of cost rental housing (P8; P10), while others were skeptical of the concept (P6), perceiving it as too good to be true. As one participant(P7) explained, "*...to try to get people to understand that they don't have to own a home but they can have cost rental, for a long time and have security, but not have a mortgage around their house. Yes, but it's a very slow psychological and societal, and cultural change to get people to think that. Yeah, but that's the line and the journey we're on and a lot of what we're trying to do is educate people on cost rental and encourage people to understand about cost rental.*" This skepticism further complicated efforts to fill available units, particularly when tenants were unfamiliar with AHBs providing cost rental or unsure about the new model:

> *(P8) "We have a lot on our social media and our website, but if you don't know the Approved Housing Bodies sector, you probably won't know about cost rental. You might, luckily enough for you, might hear a radio ad or something."*
> *(P10) "Yeah. So people thought that there'd be a very quick uptake, but actually the practice has been that it actually takes a fair bit longer to get people moved into properties than we thought..."*
> *(P10) "So basically there's an information sort of gap which has improved a bit but needs to..."*
> *(P6) "So we had like respondents saying, you know, it was like: "Well, I thought this might be a scam, because like it's just the location and the type of property, the rent seemed much cheaper than what I would expect from it.""*
> *(P8) "Because I do think a point will come where you know maybe not enough people know about it to make sure that these homes are all being filled..."*

Challenge 4 = Tenant selection: The lottery-based tenant selection system also proved to be a major obstacle during implementation (P5; P8-10). When the system was first introduced, it struggled to cope with the large volume of applications and was overly bureaucratic. For example, one early scheme received over 1,000 applications for just 25 homes, leading to significant delays (P5). Fortunately, this process was refined over time, with adjustments made in collaboration with providers (P9). Simplifying the application process helped improve public recognition of the cost rental model and increased enthusiasm among potential tenants:

> *(P10) "And while we all thought that effectively it's a lottery, a lottery -based system. People apply, it's open for a week, then there's a lottery that takes place based on whether you've applied for a two bed or one bed or whatever. Yeah. So people thought that there'd be a very quick uptake, but actually the practice has been that it actually takes a fair bit longer to get people moved into properties than we thought."*
> *(P9) " We've had a very significant discussion about the efficiency of the lottery system or not and it's not very efficient. For example it has systemic time delays built into it, which means it can take longer than anticipated to let homes."*
> *(P9) "And one of the clear examples of that is how we've gone about the process of the lottery, how people actually get selected for it. That changed significantly as a result of the cooperation between us all."*
> *(P8) "We don't get much like a window of the lottery system, Rosemary mentioned earlier, that's so it's to apply for the housing. It's open for about two weeks, it's two weeks, 14 days. See if you don't know that there happens to be cost rental coming up in your area in that period."*
> *(P5) "Like we have this lottery system where the first scheme that we developed was at 25 homes and we got over a thousand applications. We had to put all those into a lottery and then we had to go through people's applications to make sure they were eligible according to the criteria. It was overly bureaucratic. So it needs to be a lot more a lot simpler for people to*

apply. And I think then it will get more public recognition and people will get more excited about it."
(P9) "And one of the clear examples of that is how we've gone about the process of the lottery, how people actually get selected for it. That changed significantly as a result of the cooperation between us all."

Challenge 5 = Housing assistance: Another challenge arose from the inability of cost rental tenants to access housing assistance payments (HAP) when needed (Byrne, 2022c). This situation left some tenants in a vulnerable position, especially if they faced illness or job loss, as they could not apply for financial support to cover their rent (P2; P3; P5). This limitation contrasted sharply with practices in other European countries, where such assistance was available (Byrne, 2024; see figure 42). The policy has since been updated, allowing cost rental tenants to apply for HAP after six months of residence:

(P2) "So what they said in the act was that, you would, people would be eligible to apply for the housing assistance payment and local authorities administer that. Now that is a provision that's been put in there so what we have had some cost rental tenants that have been, you know, falling into difficulty especially kind of post COVID and the cost of living crisis. Like for example we've had a tenant that has developed a heart condition, so is waiting for an operation that's therefore can't work for a short amount of time until that is all progressed. So when they've applied for housing assistance, so help with rental payments, the local authorities have said well because there's certain rules currently for social housing tenants: if they live in an approved housing body tenancy, then you're not entitled to that specific support. So there's been difficulties for the local authorities to administer those payments because they've not been used to the rules and the rules haven't been completely ironed out."
(P3) "Yeah. Yeah. So theoretically, if you lose your income, you can get access to HAP, we call it, the housing assistance. Theoretically, no, not theoretically, that should work. There is a little bit of confusion among the relevant actors about this issue."
(P5) "So if you're in cost rental and you have for some reason have some short term loss of income, so redundancy or a period of loss, half is a much longer term. Yeah, I don't know if you know... So we were hoping that eligibility would be extended for rent supplement for cost rental, cost rental tenants as well."

Challenge 6 = Competition between providers: Competition between providers emerged as another issue. Differences in rent levels across cost rental developments, sometimes even between neighboring properties, caused tenants to seek out cheaper options, creating tensions between providers (P2; P9; P10). As one interviewee (P9) explained, "*So for example we've had a couple of examples where an approved housing body would create a cost rental estate and next door the LDA would create a cost rental estate but at different rents. Now, on a couple of occasions they've had rents that are higher which means they haven't got any tenants. On a couple of occasions they've had rents that are lower which meant the tenants from the approved housing bodies have tried to move across to the LDA. So without deliberately creating a competitive process, it kind of created a competitive process.*", which led to tenants trying to move from one provider to another based on price differences. This unintended competition has created inefficiencies and requires better coordination between housing providers:

(P2) "No, I think it kind of, I think there are kind of competing tensions and I think that's what we wrestle with in policy and then implementing it."
(P9) "So without deliberately creating a competitive process, it kind of created a competitive process. And the reality is we shouldn't be competing. There's a significant requirement for everybody. If we get the product right and we're charging roughly the same prices then we

should be able to accommodate a significant number of people rather than having people move out of cost rent towards another cost rent."
(P10) "Yeah, they're kind of like: "I'll show, a bit like plain poker and I have some cost rental plans here, and I might show you them, but I'm not going to show them to him". So because there is competition between them, so Respond, Cluíd and Circle there. While they're all colleagues, and they all have similar issues when they own them, when they have delivered them, they are competitors."

Challenge 7 = Role of local authorities: Finally, local authorities, who are expected to be major providers of cost rental housing (P4; Byrne, M., 2022c), have faced significant difficulties in delivering on this responsibility. Ireland's highly centralized governance model has contributed to a lack of local authority capacity to manage cost rental projects effectively (P6). Moreover, there has been a gap in educating local authorities about the differences between cost rental and social housing, which has hampered progress (P2). One interviewee (P6) noted that "*I think more broadly, Ireland is one of those countries that has a very centralized governance model and so there's wider challenges about the capacity of local authorities to deliver on various things in relation to housing. So, because of that reliance on funding from centralized sources. So, that impacts the way in which they might operate. So I think in all sorts of ways, I mean, sort of cost rental is one sort of direction of that and I think local authorities are pushing, and would like that to a certain extent because it's an attractive model for them as well, but they will follow kind of like where there's lines of finance or there's policy, you know,…*", which limits local authorities' ability to take on housing challenges without more support from the national government:

(P2) "The local authorities aren't kind of fully aware, they haven't been educated in the fact that cost rental is a different tenure, it's different to social housing."

Part 5.4 Ongoing developments and observations

Figure 46: 'Ongoing developments' of cost rental in Ireland as part of the timeline (own work).

Despite the many challenges and the early stage of cost rental housing in Ireland, its reception has generally been positive (P2-6; P8-10). Research into early tenant satisfaction reveals that a significant portion of participants feel that cost rental housing offers good value compared to the private rental sector. One interviewee (P3) explained that tenants experience cost rental as "*…so much better than the private rental sector*", particularly in terms of quality, professionalism, and security:

(P3) "Another part is security, long -term security. And cost rental has delivered that for, if you look at the problems in the Irish housing system, and maybe this is different, maybe not, but maybe this is different from somewhere like the Netherlands, in the Irish housing system, there's basically three problems. One, supply, two, affordability and prices, and three is security. And it has a huge impact in Ireland because a lot of people renting, they have no security, so it means they get evicted all the time, and some of them become homeless, et cetera, et cetera, right?… And then, so I think cost rental, it helps with supply, it helps with security. So it's really effective and those two of the most important issues on affordability, it's more mixed. But yeah, so that's my view on it."
(P8) "And the affordability I think as well. The average cost rental rent monthly is just over

1,200 and like that will be you know, on the salaries that are there, that will be affordable for people that they can pay rent they're living in a very efficient brand-new home you know."
(P2) "So we had an idea that we wanted to actually document the outcomes for cost rental tenants from an early stage so that we can maybe correct the course of action of the policy, you know, really see how it's being delivered at an early stage so that we could kind of go forward, kind of start to develop that and again it's being evidence informed and that's where [person y] from UCD, we collaborated with him. So he's been, you know, basically his research team have kind of gone out and interviewed tenants but also government individuals and kind of staff working across the organizations who have currently been involved in delivering cost rental, so that research is finished and we're kind of planning the launch and delivery of that report and probably it will be launched in September."
(P6) "...which looked at interviewing and serving first tenants in cost rental and so it very much focused from a tenant perspective and sort of the satisfaction they have with that tenure with their housing..."
(P6) "...there's no real preconceptions about it... there's, you know, preconceptions, sometimes stigma about like different forms of housing, you know, people that have ideas or attitudes towards social housing. they might have ideas and hear about, kind of, owner occupation and what that sort of entails, etc. And this was something kind of completely new, so we were very interested in just getting that sense of like, this is being introduced, how are people understanding it, how are they seeing it, and what kind of levels of satisfaction there are [with it]."
(P3) "There is a lot of demand for it. So households, even though the rents are a little bit high, from one perspective, the actual many people view it as good value and want to move into it. And we did find in the research that even though people are playing a reasonably high proportion of their rent on, or proportion of their income on rent, they view cost rental as being fair and affordable rent. So they actually feel, in terms of their, what is sometimes called, subjective measures of housing affordability, they don't feel that it's a burden and they feel that it's good value and that it's fair. And the reason is when you ask them, they say, this is so much better than the private rental sector. The quality is better, the professionalism of the landlord is much better and the security is much better. So what I'm getting here, you can't compare it to the private rental sector. It's not a fair, it's not a meaningful comparison. That's what residents will say to you because the private rental sector, you could be evicted any day. And for families with children in particular, they hate that. They absolutely hate that. Because every time you get evicted, maybe you, sometimes they have to move their children to a new school. You have to change your doctor, you have to do so much stuff that has such a big impact on your life. And just psychologically, people who've moved a lot to different private rental houses, psychologically they really want to feel what the word we would use is, feel like settled, like they can settle down."

Preliminary findings from early satisfaction surveys reinforce these positive sentiments (P2; P3; P5; P6; P8; P10). According to the research[33], 90% of tenants reported being very satisfied with their homes, while 94% saw their tenure as a long-term housing solution. Common themes of satisfaction included security (P3; P4; P6; P10),, stability, and safety (Byrne, 2022d), which tenants valued as key benefits of the cost rental model. As one participant (P3) remarked, "*So to make people feel that cost rental is long-term secure is an achievement in itself.*":

(P6) "Yes, sense of security..."

[33] This research will be officially published in September 2024, just after this thesis is delivered.

Additionally, tenants valued not only the autonomy to furnish their homes as they wished (P6; Byrne, M., 2022d) but also the benefit of having a professional landlord and a well-maintained property compared to private rental housing (P8; P10; see part 5.1). Unlike the often unreliable private rental sector, where landlords may neglect maintenance or place restrictions on tenants, cost rental housing offered residents more control and better living conditions. One tenant (P6) highlighted this difference, stating, "*...if I want to do my back garden like this, I don't have to get permission for it*", further underscoring the advantages of cost rental over private rental arrangements:

> *(P6) "...ultimate kind of autonomy and control over the dwelling, you know. So things like, if I want to do my back garden like this, I don't have to get permission for it or if I want to make some internal changes to the layout of the house..."*
> *(P10) "That's one of its benefits is that you're renting from a state support entity who is going to be able to give you security of tenure and also is going to manage your property and be a proper landlord, a proper institutional landlord."*
> *(P8) "And to be fair, that is because you couldn't live in the private rented sector securely, because at any given time a landlord can sell. I mean, yeah, they've brought in new regulations around that, well not around selling, but it's better than it was. But also like you have, number one, there's no security, number two, landlords, they fixate a lot of these properties that are not it's not good at all. I mean, it's a lot of really poor private rent accommodation in Ireland and you know that's not really looked at..."*

On a broader level, cost rental housing has positively impacted Ireland's housing supply and helped meet high demand (P3; P9). The introduction of mixed-housing communities, where cost rental is offered alongside social housing, has also been highlighted as a key benefit (P2; P4; P5). This approach fosters the development of integrated, diverse communities, rather than creating isolated pockets of income-based housing. As one participant (P2) noted, "*We very much believe in integrated communities. So providing cost rental alongside social housing fits in with that model, because it means that we're mixing incomes and people's backgrounds within one housing development so that, you know, you're not kind of, you know, it kind of becomes kind of dispersed. Integrated and kind of developing a community.*":

> *(P3) "There is a lot of demand for it. So households, even though the rents are a little bit high, from one perspective, the actual many people view it as good value and want to move into it."*
> *(P9) "We think it's a very important tenure of housing that hasn't existed in Ireland. It's new to Ireland. We're only 18 months in for it really, maybe two years now. What's very clear is that there's a huge demand for it. I still think we have a way to go to get it right fully, but I think we've made a very positive start from zero to where we are now. I think there's nearly 2,500 homes that have been provided in cost rental across the whole of Ireland."*
> *(P4) "The cost rental providers also provide social housing and they also are looked too to provide, to help out with some supported housing as well and a lot of common issues around like communal facilities, biodiversity, green space, that applies to everyone."*
> *(P5) "The other piece, I suppose, is very much around a willingness or a desire not to create monotonia. So there was a strong desire to create mixed tenure so that we would have both social and affordable in schemes, so we wouldn't have just all social or all private. There would be more of a mixture. And generally that would be an aspiration for a more cohesive society or more integrated society between different levels of the population. Rather than different people with socioeconomic backgrounds living in completely different areas, that it would be more mixed and integrated."*
> *(P5) "But also, what's happening is that the properties we developed right at the beginning of Cluíd, and now those mortgages are maturing, and those mortgages require the properties to*

be retained as social housing. So when they become mortgage free, there will be an opportunity to introduce more mixed tenure, so some cost rental within what has been exclusively social rental estate."

Much of the success to date can be attributed to the strong cooperation between key stakeholders (P8), including government agencies, AHBs, and all other providers. Stable political support (P2; P4) has also played an important role in maintaining momentum for the program. Regular engagement between these parties has been essential in resolving issues and refining the cost rental model as it continues to evolve. As one interviewee (P8) mentioned, "*Every month there's something new, where they go: "We haven't thought about this before". And so then we're kind of chatting to the Housing Agency about it, or to the Housing Alliance and kind of raising those issues. So it's been good, though, there's been a huge amount of engagement on it, because, as I said, the state is very, very keen to make it work.*":

(P4) "I think because the government, again like, working with them. They were worried that they wouldn't deliver on their targets. And then they'd get it in the neck I suppose from the media and opposition politicians, and voters, and stuff. So everyone kind of wanted to work together on that, there was a real kind of consensus there around trying to find a solution to that."
(P2) "So it's very important for the government to support us in delivering that because it's a key part of their kind of government strategy to deliver affordable housing."

However, the issue of affordability remains a disputed point. While many tenants are satisfied with the value they receive, others have expressed concerns about the affordability of rents (P1; P4; P6; P10; Byrne, 2022c), especially as construction and other costs continue to rise. Some rents have reached as high as €1,700 (P1) or more (Byrne, 2024), leading to mixed reactions from tenants. Approximately 68% of survey participants indicated that they had little difficulty paying their rent (Byrne, 2022c), but rental rates such as 35-45% below market rent instead of the proposed 25% (P8) have led to criticisms that the program is not meeting its full affordability potential:

(P4) "And there was a sense that what was being provided wasn't affordable."
(P6) "Whether we're thinking about affordability kind of now you know so like a lot of discussion is around cost rental it is it's this much below market rents but the rents are still quite high. Or are we thinking about like cost rental as an intervention that over the lifetime of a tenancy will you know have lower costs for a secure tenancy."
(P10) "...how expensive cost rental is, because it's not cheap here and the rents that were able to achieve like when we started delivering cost rental. It was, covid had struck, but the full effects of inflation hadn't and interest rates had gone up. So in the early days of cost rental it was, looking back and we didn't think it was at the time, but looking back, it was really easy to get kind of pretty nice rents that were attractive to people and now increased interest rates and inflation and construction costs."
(P1) "...the other thing is that the rents are expensive. I mean, you know, $1,700 a month."
(P8) "I don't know and we've been getting over 35-45% in some cases."

Critics of the cost rental model argue that focusing too much on year-one rents overlooks the long-term affordability benefits (P3; P6; P10; Byrne, 2022b; 2022c). Unlike private rental markets, where rents tend to increase over time, cost rental housing offers stability and predictability, which should help offset initial high costs. This perspective aligns with international examples, such as Austria, where long-term rent stability has been a cornerstone of the cost rental model. Figure 47 illustrates the long-term stability of house prices in Austria, providing a comparison to

Ireland's emerging system. Proponents of the model also argue that cost rental housing has the potential to, as part of a more unitary market, decrease rents and house prices in all other parts of the Irish housing market (P5), thereby contributing to wider affordability across sectors. As one participant (P5) explained, "*...the intention, you know, obviously is to try to have a wider impact across 10 years, you know, not just cost rental, you know. That by, you know, partially de-commodifying some of the housing stock here, you're also hoping to have an effect of more affordability across 10 years and sectors.*", but on the overall affordability of housing:

> *(P3) "So, you would expect that over the longer term, market rents will increase much faster and also you would expect incomes will increase faster than rents. So, both of those factors will make cost rental seem more affordable, be more affordable in the long term. Of course, that's not guaranteed because incomes could fall and rents can fall. So, it's not guaranteed that incomes will rise over time, but usually it would be very surprising if they don't."*
> *(P6) "So that, you know, that intervention, I guess the intention, you know, obviously is to try to have a wider impact across 10 years, you know, not just cost rental, you know, that by, you know, partially de-commodifying some of the housing stock here, you're also hoping to have an effect of more affordability across 10 years and sectors."*
> *(Byrne, M., 2022b) "If we take for example the new Tuath units in City West mentioned above, assuming rent inflation for cost rental is around 2% per year, in ten years a €1,300 per month two-bed will have a rent of around €1,581. If we take the cheaper of the two PRS units I found in the same area on Daft.ie, over the same period the rent will increase from €1,625 to €2,906. So the cost rental unit will be 45% cheaper at that point than the PRS unit. This is a very positive result from an affordability point of view. In short, if you are going to critique rents in the cost rental sector, please focus on rents at year 5, year 10, year 15 and even year 30."*

Figure 47: Annual % change in house prices in Austria and Ireland, between 2000 and 2014, which shows the stable prices of the Vienna model compared to Ireland (Norris & Byrne, 2018).

Looking ahead, the expansion of the cost rental housing stock is a critical priority. Several providers are planning to deliver between 1,800 and 2,000 homes in the next three years (P9), with a notable shift in focus from social to cost rental housing or commitments of a 50-50 between them (P5). This shift underscores the growing importance of cost rental as part of Ireland's broader housing strategy. Additionally, providers are working proactively to refine policies and processes based on ongoing feedback (P2; P8). Regular workshops and consultations have already led to improvements, such as the refinement of the lottery system used for tenant selection (P1; P9):

(P9) "We are hoping, our intention will be to get to about 25 to 30 percent of our overall housing stock as cost rental. Yeah, now while we only own 3,500 homes. We have a pipeline for future development of about 3,000 homes for the next three years. So in total, yeah, so when you look when you put that together when you get to 6,000 homes We're hoping that we should be able to get to about 1800 to 2000 homes as cost rental over the next three years."
(P5) "...the percentage will shift towards cost rental. Now it will take some time, and there are a couple of things driving that. I think the need is far larger on that cohort, so I think the need is much larger.
(P2) "We are looking to problems in the future, because we, you know, we manage housing, we want to make it sustainable in the long term. So we're presenting these arguments saying, well, we can kind of see this coming and let's not wait until it's an urgent matter. And also if somebody wants to move because of employment or economic circumstances or caring for family or whatever, you know, we want to maybe facilitate one person moving from one county to another county, for example."
(P5) "We'd like to be more involved here. We'd like to be involved before they make the decisions rather than after them."
(P8) "Every month there's something new, where they go: "We haven't thought about this before". And so then we're kind of chatting to the Housing Agency about it, or to the Housing Alliance and kind of raising those issues. So it's been good, though, there's been a huge amount of engagement on it, because, as I said, the state is very, very keen to make it work."
(P9) "So, they're hearing us moan when it doesn't go right, but they're also then hearing what ís working and they've seen the effectiveness."
(P5) "We had to put all those into a lottery and, and then we had to go through people's Applications to make sure they were eligible according to the criteria. It was overly bureaucratic So, it needs to be, it needs to be a lot more, a lot simpler for people to apply. And I think then it will get more public recognition and people will get more excited about it."

Despite these improvements, the issue of funding remains the most critical challenge (P5). While there have been successful regulatory refinements, the government has shown hesitation in fully embracing proactive feedback implementation. As one interviewee (P2) pointed out, "*they're hesitant because they've got lots of other priorities*", suggesting that housing, though important, is often competing with other pressing issues for attention and resources. To ensure the long-term success of cost rental housing, it will be crucial for the government to adopt a more proactive approach in addressing these challenges. Refining funding mechanisms, continuing stakeholder engagement, and focusing on the affordability aspect will be key elements in driving the program forward and realizing its full potential in Ireland. Therefore, as the discussed early successes and challenges continue to shape the current landscape of cost rental housing, it becomes increasingly important to consider the future trajectory and necessary developments to ensure the long-term viability and sustainability of this model in Ireland. This is discussed in the next part:

(P5) "Okay, so I think, I think there's that aspect of it, I think the other thing that they've struggled a little bit is with the funding piece So, they've they've had to change the funding."
(P2) "They're hesitant because they've got lots of other priorities. So they kind of go: "Okay if this isn't an issue right now. Let's kind of leave it, let's deal with the ten other things. And the same with the kind of rental income, like the housing supports: it's not affecting huge numbers of people at the moment. But we can see that, you know, for the, for even the 10-15 families across the organizations, it's a huge problem you know because they're stressed they don't know how to."
(P5) "We'd like to be more involved here. We'd like to be involved before they make the decisions rather than after them."

Part 4.2.5 Future considerations

Figure 48: 'Future considerations' of cost rental in Ireland as part of the timeline (own work).

FUTURE CONSIDERATIONS OF COST RENTAL HOUSING IN IRELAND BASED ON INTERVIEWS			
1	Sustain political consensus for cost rental to succeed	5	Encourage more AHB's to provide cost rental housing
2	Integrate structured, national monitoring	6	Share Irish lessons learned
3	Increase private investment	7	Strengthen the position of local government
4	Educate Irish households	8	Consider the impact of cost rental on housing circulation

Figure 49: Future considerations of cost rental in Ireland (own work).

Future consideration 1 = Sustain political consensus for cost rental to succeed: One of the key factors in the success of cost rental housing in Ireland has been the political consensus behind its introduction (P2; P4). However, lessons from international examples, such as the Vienna model, show that sustaining this political support over decades is critical to long-term success (P1; Byrne, 2022a; 2022b). In Ireland, bipartisan agreement on the need for middle-income housing and long-term funding commitments has provided optimism for the future of cost rental housing. As one interviewee (P9) stated, "*(P9) "...if there were to be a change in government, I don't think there'll be a change in policy. I think we will still have cost rental into the future."*". However, maintaining this consensus will be challenging, given the dynamics of democratic elections (P3) and the varying promises made by politicians to win votes (P10). The challenge will be to ensure that cost rental remains a priority even in the face of shifting political landscapes:

> *(P4) "I think because the government, again like, working with them. They were worried that they wouldn't deliver on their targets. And then they'd get it in the neck I suppose from the media and opposition politicians, and voters, and stuff. So everyone kind of wanted to work together on that, there was a real kind of consensus there around trying to find a solution to that."*
> *(P2) "So it's very important for the government to support us in delivering that because it's a key part of their kind of government strategy to deliver affordable housing."*
> *(P1) "I think the big difference between Vienna and Ireland is the people who are producing the cost rental in Ireland. They don't have a big stock of housing which goes back 50 -60 years."*
> *(P8) "But the expectation is almost pegged to a European standard that is 40 years further on than where we are. And so speaking to people with that expertise you know you come back and say; "Well hang on, the reason why this is apples and oranges is you know because we're 40 years behind."*
> *(P3) "..., but we also live in democracies where people first of all decide what type of housing system they want and then the evidence can tell you how to get that housing system but the evidence can't tell you what's the best form of housing system. The evidence can't tell you what is better home ownership or rental..., because it's up to people to decide. If they, if they, if in my view, if Irish society decides that they prefer home ownership, then that's legitimate. We live in a democracy, so then housing policy should support home ownership. Obviously we should know then, what is the problems with that approach and the challenges, but I don't think you can just say, we're all gonna look at the empirical evidence and then we'll just be able to, we can derive from the empirical evidence the correct policy. Part of it is like values and culture and all that stuff."*
> *(P10) "...the politicians will promise all kinds of things to get elected. And I think there's a*

symbiotic relationship with the electorate. The electorate wants to be promised things. But the main opposition politician on housing will bring. Now I think he's clever enough to know that there is a complexity here, but he would say that those rents are too high."

Future consideration 2 = Integrate structured, national monitoring: The current phase of cost rental housing offers a prime opportunity to implement structured, national monitoring (P6; P8) mechanisms to track both tenant satisfaction and the overall progression of cost rental developments (P10). Effective monitoring would allow the state to assess issues such as geographic distribution, ensuring that there is a balanced spread of cost rental housing across the country and avoiding overconcentration in certain areas. One interviewee (P8) emphasized the importance of such monitoring, noting that without it, "*And if you're not in any way watching, monitoring and guiding that then I think, it'll just, you know, it'll be what it is. But the state has the opportunity, I think, to kind of be watching it and be, you know, be saying: "Actually the geographic spread is off" or "there's far too much in, North concentration in North Dublin and what we need to do is you know...*". The presentation of tenant satisfaction research in September 2024 provides a strong starting point for establishing such monitoring systems, with suggestions for expanding resources, capacity (P8), survey sample sizes (Byrne, 2022d) and broadening the scope to include more than just tenant experiences (P6).

(P6) "And research should be continuously and standardized."
(P8) "So I think our plan is definitely, what we've kind of spoken about with that research, is to do it again and to kind of keep doing things like that. And it's great, but I think there needs to be more, a lot more, and it would be my preference. Because you are trying something very new and you are trying to kind of even culturally bring about these great big changes, and so you can't just do it and then throw it out there."
(P8) "I would love to do it every year or maybe every two years but just to kind of to see what the reactions are over time."
Author: "But there were also people mentioning, maybe on a more national scale, that there need to be some monitoring in the sense of it's costs and then to delivering on their goals, you know. Would you agree or not? (P10) "Yeah, I do agree."
(P8) "And if you're not in any way watching, monitoring and guiding that then I think, it'll just you know, it'll be what it is. But the state has the opportunity, I think, to kind of be watching it and be you know be saying: "Actually the geographic spread is off", or "there's far too much, in North concentration, in North Dublin and what we need to do is you know..."."
(P8) " I also think, and it's a little bit outside the scope of our capacity. But I think the state should be constantly, constantly, constantly researching and monitoring cost rental and seeing what effect it's having, what effect it's having on market rents and because it's..."
(P6) "And our project was very focused, I suppose, on the tenant experience. So it was the questions we were trying to ask her is like, that this is a new tenancy. So it's like, it's coming in, there's no real preconceptions about it... there's, you know, preconceptions, sometimes stigma about like different forms of housing, you know, people that have ideas or attitudes towards social housing. they might have ideas and hear about, kind of, owner occupation and what that sort of entails, etc."

Future consideration 3 = Increase private investment: While Ireland has introduced the STAR scheme (P10) to encourage private investment in cost rental housing, as explained in part 5.2, there has yet to be any significant uptake by private parties. To establish a robust cost rental housing stock and ensure sustainable affordability, the government will need to adjust the STAR program or introduce a new scheme that offers more attractive returns for investors. Other European countries provide examples of how private investment can be successfully integrated into cost rental models, and Ireland could benefit from learning from these experiences:

(P10) "..., because the STAR program, if you heard of STAR, okay, well, if you have a couple of funding program that's fairly new, that is all about funding cost rental housing. And it's set up for private entities, okay. Now, to date, the only entity that we've dealt with successfully on it is the Land Development Agency because they can apply as a commercial entity. And STAR stands for Secure Tenancy Affordable Rental, okay."

Future consideration 4 = Educate Irish households: Public awareness and understanding of cost rental housing remain limited, as highlighted in previous sections. Both government agencies and housing providers need to invest consciousness (P8; P10) and perception (P4; P6; P7) of cost rental housing. A national strategy for raising awareness would be most effective, ensuring that the concept of cost rental is well understood by potential tenants (P7; P8; P10). Additionally, providers should continue to educate tenants on a local level, helping them understand the unique advantages of cost rental housing over private rental options (P4; P7). All in all, fostering a deeper public understanding of cost rental housing is essential to the model's long-term success, as informed and engaged tenants will not only benefit from the security and affordability offered but also contribute to the stability and growth of the sector:

(P8) "Because I do think a point will come where you know maybe not enough people know about it to make sure that these homes are all being filled..."
(P10) "Yeah. So people thought that there'd be a very quick uptake, but actually the practice has been that it actually takes a fair bit longer to get people moved into properties than we thought..."
(P10) "So basically there's an information sort of gap which has improved a bit but needs to..."
(P4) "So there's a bit of education needed I think around some of that stuff."
(P6) "So we had like respondents saying, you know, it was like: "Well, I thought this might be a scam, because like it's just the location and the type of property, the rent seemed much cheaper than what I would expect from it."
(P7) "...to try to get people to understand that they don't have to own a home but they can have cost rental for a long time and have security, but not have a mortgage around their house. Yes, but it's a very slow psychological and societal, and cultural change to get people to think that. Yeah, but that's the line and the journey we're on and a lot of what we're trying to do is educate people on cost rental and encourage people to understand about cost rental."
(P7) 'We would also argue that the state really have a responsibility to maybe do a national campaign for cost rental to explain it, which isn't happening right yet,..."
(P8) "But I feel, I would like the department to do more about letting people know that cost rental exists."
(Author) "So a lot of people I've been to also said that it could be maybe a more national initiative when it comes to making cost rental more known to possible tenants. Is that something that you would agree on or not? (P10) "Yes, we would."
(P7) ""A lot of what we're trying to do is educate people on cost rental and encourage people to understand about cost rental."
(P7) "We're trying to educate people around cost rental being an option, particularly for those who might like to buy in 10, 15 years, but for now have a very secure and stable option to have a cost rental apartment."
(P4) "The point of cost rental is that you have a tenancy for life and that you stay there and build a community, put down rates and stay there for 20 or 30 years and in the same space and, but everything there. So there's a bit of education needed I think around some of that stuff."

Future consideration 5 = Encourage more AHB's to provide cost rental housing: Efforts are already underway to encourage more Approved Housing Bodies (AHBs) to participate in the cost

rental sector, with the goal of increasing the number of organizations involved in delivering these homes to 10 (P9). Building a significant housing stock is crucial for the long-term success of the cost rental sector, as the maturity of the stock will allow for stable and sustainable rent levels over time. However, as the sector grows, it will be essential to manage new deliveries carefully to avoid confusion and maintain a streamlined, comprehensible system. Smaller-scale knowledge exchange efforts, such as those facilitated by the Housing Alliance, should continue to play a role in the sector's development, ensuring that lessons are shared and best practices are adopted (P2). The success of these knowledge exchange initiatives will be discussed further in Chapter 6:

> *(P9) "What we're trying to do is encourage another two, who are very interested, and then we're hoping to get up to 10 in total who will be part of the delivery process. We're enthusiastic in respect of it."*
> *(P2) "Yeah, so it was always six. It was always six members and the Ivy Trust have only recently grown, sorry joined. Although the Ivy Trust have been very well established. So I don't, I'm not familiar with the ins and outs of what made their decision, but you know certainly I'm just saying that that shows that there is a commitment to. Yeah and in some ways we need to rationalise, like there's a role for the Housing Alliance but there's also the Irish Council of Social Housing which is the representative body. So we don't want to kind of replicate each other. But I think what the Housing Alliance is trying to do is to just have more focus on the kind of development activity, because it's really only the four or five largest Approved Housing Bodies that are actually developing new housing."*

Future consideration 6 = Share Irish lessons-learned: Ireland's cost rental housing model has attracted international attention, with other countries, including the UK, looking to learn from Ireland's experience (P4; P9; Byrne, 2022c). Given Ireland's history of benefiting from transnational knowledge exchange, the country is now in a unique position to share its own lessons learned. This could involve more formal exchanges with European countries and beyond, sharing insights on funding mechanisms, tenant satisfaction, and the broader challenges of implementing cost rental in a housing market traditionally dominated by homeownership:

> *(P4) "There's huge interest. I know like from the outside, like you might read about Ireland and see the headlines about like housing crisis, unaffordable and expensive, and there is all of that, but also when you… When I, go abroad to conferences and I speak to like our counterparts in Spain or Portugal or whatever and they're like: 'Oh you actually have, like at least you actually have a plan, and you have funding and like at least it's been done."*
> *(Byrne, M., 2022c) "…I (online) yesterday's session at the International Social Housing Festival on 'Cost rental: a new approach from Ireland'. There were a number of Irish and international speakers looking at how the model works in Ireland, how it has drawn on international lessons and what the challenges are."*
> *(P9) "I've been talking to a lot of folks in the UK because I'm linked with the UK. And in the UK it's called different: the 'Intermediate Market' in the UK. So it's the same thing, but it's managed slightly differently and it's funded significantly differently. They're all jealous of what we're doing, and they're all jealous of what we're doing for a number of reasons. One is we have a long -term plan, so we have Housing for All, but we also have the National Development Framework for the future, or National Planning Framework for the future, which is out till 2040."*

Future consideration 7 = Strengthen the position of local government: Countries with stronger local governments, such as Vienna and Berlin, have been able to deliver more cost rental housing due to greater local authority control (P4). Strengthening the role of local governments in Ireland could enhance the provision of cost rental housing and improve cooperation with

AHBs. As one participant (P4) noted, *"Like, our local government is very weak. So I think you might have seen more cost rental developments if we had, say, a directly elected mayor for Dublin City or someone that was more accountable to the people in terms of housing, like housing provision is quite centralized from the department.*":

> *(P4) "I think that's a problem here. Like our local government is very weak. So I think you might have seen more cost rental developments if we had, say, a directly elected mayor for Dublin City or someone that was more accountable to the people in terms of housing, like housing provision is quite centralized from the department."*
> *(P4) "So, I think, countries where there's stronger local government, there might be more scope to develop out cost rent, like you see in Berlin and other places where it's there…"*

Future consideration 8 = Consider the impact of cost rental housing on housing circulation: While cost rental housing offers tenants long-term security, its "tenure for life" model could hinder the circulation or flow of households within the housing market. As the cost rental housing stock grows, it may be necessary to facilitate transfers within the system to ensure that housing resources are used efficiently (P2). This could involve creating policies that allow tenants to move within the cost rental system as their needs change over time:

> *(P2) "So we want to kind of facilitate transfers within cost rental housing, and you have to provide people incentives to do that."*
> *(P2) "We want to kind of facilitate transfers within cost rental as the stock kind of grows."*

Appendix 7 Chapter 6 findings with extended interview quotes

Chapter 6 directly answers the fourth subquestion: "What are lessons-learned from the transdisciplinary and transnational knowledge exchange with the introduction of cost rental housing in Ireland?" This chapter synthesizes insights gained from the case study and interviews, highlighting the methods, barriers, enablers, and incentives associated with knowledge exchange. It provides crucial recommendations for improving future knowledge exchange efforts, emphasizing the importance of collaboration across disciplines and borders to effectively address affordable housing challenges. The lessons learned here are essential for guiding policymakers, practitioners, and researchers in enhancing the impact and sustainability of knowledge exchange initiatives in Europe.

Part 6.1 Knowledge exchange methods with cost rental housing in Ireland

The 10 conducted interviews delivered conversations about 22 different knowledge exchange methods, applied or proposed. Figure 50 lists all those entities. The methods that are literally apparent in theory are highlighted in green and the ones in yellow might not explicitly feature in literature but are very similar to methods or strategies that are. For example, a written report is seen as an evidence brief and a working group as a learning collaborative. What furthermore stands out is the fact that the majority of methods do feature in literature. Despite this, methods such as ‘advocacy / position paper’, ‘good- / best practices’, ‘pilot study’ and ‘exhibition’ are absent from theory. This finding aligns with the conclusion of the state-of-the-art methods part about how knowledge exchange on housing affordability seems to turn to methods which make knowledge tangible and concrete help translate information into actual housing provision. Where the methods applied with cost rental housing in Ireland differ from the state-of-the-art methods of chapter 4 is the limited provision of (web-based) information as a strategy. The only entity mentioned is the website, with the sole goal of informing the public and without a platform for knowledge exchange through discussions. Next, each method from figure 50 is elaborated upon by referencing quotes from the interviewees.

METHODS MENTIONED WITH KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES			
METHOD	STRATEGY	INTERVIEWEES	MENTIONED BY
Conference	*Application of KE tools or instruments*	9 of 10	(P1-8; P10)
Written (research) report	*Dissemination of knowledge*	8 of 10	(P1-7; P10)
Intermediary organization	*Use of knowledge brokerage*	7 of 10	(P1; P2; P4; P5; P8-10)
Working group	*Organizing KE activities*	7 of 10	(P2; P4-6; P8-10)
Regular knowledge exchange meeting	*Organizing KE activities*	6 of 10	(P2; P4; P5; P8-10)
Seminar	*Organizing KE activities*	5 of 10	(P3; P5; P7; P9; P10)
Study tour / Site visit	*Application of KE tools or instruments*	5 of 10	(P4-6; P9; P10)
Workshop	*Application of KE tools or instruments*	5 of 10	(P6-10)
Educational course / Lecture series	*Application of KE tools or instruments*	4 of 10	(P1; P4; P7; P8)
Website	*Provision of (web-based) information*	4 of 10	(P1; P7; P8; P10)
Advocacy / Position paper	*Dissemination of knowledge*	4 of 10	(P2; P4; P8; P9)
Good / Best practices	*Organizing KE activities*	3 of 10	(P1; P2; P8)
Training package	*Application of KE tools or instruments*	3 of 10	(P2; P4; P9)
Pilot study	*Application of KE tools or instruments*	3 of 10	(P2; P5; P6)
Festival	*Application of KE tools or instruments*	3 of 10	(P3; P4; P10)
Exhibition	*Application of KE tools or instruments*	3 of 10	(P4; P6; P10)
Regular European housing updates	*Dissemination of knowledge*	2 of 10	(P4; P8)
Forum	*Application of KE tools or instruments*	2 of 10	(P4; P8)
Publicity campaign	*Dissemination of knowledge*	2 of 10	(P7; P10)
Annual (research) report launches	*Application of KE tools or instruments*	1 of 10	(P2)
Evaluating knowledge exchange through surveys	*Organizing KE activities*	1 of 10	(P2)
High impact individuals	*Use of knowledge brokerage*	1 of 10	(P3)

Figure 50: Methods of knowledge exchange efforts mentioned by interviewees (own work).

Conferences: Conferences were highlighted by all but one interviewee as a key method for facilitating knowledge exchange (P1-8; P10). The primary benefit of conferences is the opportunity for real-life conversations in an accessible, interactive format (P1; P4; P10). These events allow participants to engage directly with others in their field, facilitating spontaneous discussions and sharing of ideas that might not emerge in more structured settings. As one interviewee (P4) noted, "*Like that's why the annual conferences are so good because you can have those kind of side conversations with someone going: "Look, we saw this in, someone mentioned this at a commission meeting, is that something that Ireland are doing actively or can you give us some more information on that?*", emphasizing the informal exchanges that often happen on the sidelines:

> *(P4) "So I think there's probably a bit more like useful exchange in the more informal settings, if that makes sense."*

The ability to hold numerous informal meetings alongside a formal program of speakers and policy debates was repeatedly highlighted as one of the most valuable aspects of conferences (P1; P4; P10). Interestingly, several participants indicated that these unstructured interactions, rather than the official conference agenda, are often where the most meaningful knowledge exchange occurs. One interviewee (P1) put it, "*I think conferences are the key. Conferences are the key because people talk. Yeah, and conferences, you know, generate a lot of informal meetings. You know, you have main speakers and then you have like a lot of gaps between the speeches for people to talk and meet.*" These interactions enable participants to gain fresh insights, build new connections, and share relevant research findings (P2; P4), often leading to collaborations or follow-up discussions:

> *(P1) "I think conferences are the key. Conferences are the key because people talk. Yeah, and conferences, you know, generate a lot of informal meetings. You know, you have main*

speakers and then you have like a lot of gaps between the speeches for people to talk and meet."

(P10) "So people will come to that and you know there'll be kind of knowledge exchange that way, but at the event itself there'll be a lot of informal kind of talking and people would be having informal meetings to advance different."

(P4) "And what we have found in the feedback from attendees after every event is they want more room for informal networking. And while the policy debates are good. And it's an opportunity for people to showcase new research or they what they really enjoy. It is that time in between like dinner and the last session where they can just go off and have a cup of coffee have a drink yeah whatever and just have a chat about…"

(P4) "Chatting with someone, you don't know where you're asking them: "Oh, what's housing provision like in Norway?". Yeah. And then they're like: "Oh, I didn't know that.". And I'm like: "Oh, that's really interesting. Do you have a name of someone that I could contact about that, that we could?""

(P2) "The idea might be maybe to kind of hold a conference. There will be the kind of written reports, but to do some publicity around it."

Conferences also play a central role in generating and disseminating research. Written reports and academic papers are frequently sparked by discussions at conferences, or conferences themselves can serve as platforms for launching calls for papers on specific topics (P3; P5). According to one academic (P1), conferences have been critical in connecting research with policy and practice, particularly in the area of cost rental housing, which in Ireland, was first introduced through transnational knowledge exchange at conferences in Vienna.

(P3) "My point was just that usually what happens is you have a publication, some form of written document and that document has detail and has evidence and that then becomes the basis for a seminar or conference or a conversation that allows the conversation to happen."

(P5) "I think the call for papers is due to go out quite soon, I think, so we're hoping that a number of those will be around affordable rental and cost rental so that we can, you know, and that'll encourage papers from other parts of Europe and that there'll be that exchange, so I think those kinds of things are essential."

(P1) "Academics have a big role to play, you know, through the academic literature and through conferences. Because academics do meet a lot and exchange ideas a lot. You know, we're very much more international, I would say, than the housing policy people."

(P1) "Well, I've known about Cost Rental from years ago, from conferences, housing conferences in Vienna."

Both national and international conferences have proven essential in advancing Ireland's cost rental housing model. Events like those organized by the Irish Council for Social Housing (ICSH) frequently invite international speakers (P2), providing a platform for broader learning and exchange. Importantly, all organizations involved in cost rental such as the ICSH, Approved Housing Bodies (AHBs), the Land Development Agency (LDA), and the Housing Agency regularly participate in these events (P1; P4; P7; P10). Many of these organizations recognize the benefits of attending, with some AHBs reflecting on the need to attend even more regularly (P8). For example, Tuath Housing is now considering joining a European network to enhance its participation in transnational conferences (P8), which would provide further opportunities for learning and collaboration. Figure 51 illustrates the memberships of Irish housing organizations in key European networks such as Housing Europe, the European Federation of Living (EFL), and FEANTSA. These networks help housing bodies stay informed about international best practices and participate in knowledge exchange efforts, enabling them to leverage knowledge from abroad and apply it in the Irish context:

(P2) "They also run a conference once a year so although it's in Ireland they would invite international speakers."
(P4) *"So I think like any of the conferences, like as an organization we do conferences every year. So we do a finance one every second year and then we do a kind of more general one with community housing awards and things."*
(P7) "*So what we've been doing as well is we've tried to do seminars and conferences and speak at various aspects where we're learning from each other and sharing."*
(P10) "So we organize a conference every year for housing practitioners. So there will be people working in housing in local authorities and a group of Approved Housing bodies. And over the last couple of years we'd have, cost rental would be one of the topics that would be covered in workshops or in a session."
(P1) "And they promote a lot of knowledge exchange and research and conferences."
(P8) "We attend some of their conferences and things. But we haven't really been, and it's something that we want to move into a lot more."
(P8) "Exactly, but ideally you're kind of a member of a group, the group is sort of European-wide. They make it really easy for you by saying: "There's these conferences coming up", and "here's the information". And that's… We sort of have that on a national level with the ICSH as well and it just means that you're not kind of doing all that work yourself… So I think being a member of a group, that just sort of is dedicated to that, would be brilliant."
(P8) "So I think being a member of a group, that just sort of is dedicated to that, would be brilliant."
(P2) "I actually am kind of visiting and attending conferences and kind of doing that. So for example at Cluíd you would know through the connections with your own university and they're kind of part of the European Federation of Living and also we would be involved in things like the, you know, kind of Housing Europe. From our own point of view because we deal with a lot of, you know, we have homelessness services, we're part of FEANTSA."

MEMBERSHIPS OF EUROPEAN INTERMEDIARY ORGANIZATIONS OF THE DIFFERENT IRISH HOUSING ACTORS			
IRISH HOUSING ORGANIZATION	HOUSING EUROPE	EUROPEAN FEDERATION OF LIVING	FEANTSA
(AHB) Clúid Housing Association		x	
(AHB) Respond			x
(AHB) Circle Voluntary Housing Association		x	
(AHB) Tuath Housing			
Irish Council of Social Housing (ICSH)	x		x
Housing Agency		x	

Figure 51: All memberships of Irish housing organizations of the European networks of Housing Europe, the European Federation of Living (EFL) and FEANTSA (own work).

Despite the existence of multiple transnational conferences, there is a call for a more centralized European housing conference. One interviewee from the Land Development Agency (P7) suggested that such a conference, possibly funded by the European Commission, would offer a valuable platform for countries to share and learn from each other's housing practices and theories. As the interviewee remarked (P7), "*I think it would be really good to have a housing conference for Europe. I mean, that's something that the Council of Europe or the European Commission could possibly help fund, that we have research coming from all of the countries together to share and learn about housing practice, housing theory.*".

Not all interviewees, however, viewed conferences as entirely successful. Some critiques centered on the formal nature of many sessions, with too much emphasis on lectures and presentations (P1; P4). Others pointed out that certain conferences (P3) did not add much value beyond existing meetings, particularly in cases where attendees were already familiar with the

key issues (P8). Time and resource constraints were also noted as barriers, as hosting or attending conferences requires significant investment (P2; P4-6; P8):

> *(P1) "You don't want like four or five hours of lectures, you know, you want like short 15-20 minute presentations and then lots of coffee breaks and moving people around."*
> *(P4) "Now, where like, people don't want their day full of just policy stuff, they want to be able to socialize and network in that kind of way."*
> *(P8) "And because you're going to have someone from, Tuath will speak, someone from Cluíd will speak, and we know what they're doing anyway. There's never much at that level that you're learning. You don't really come away from those conferences inspired: "Oh we're going to do something really different". Because we meet at the Alliance level, we talk to the ICSH."*
> *(P3) "I think that the format, whether you do a seminar or a conference or a video or is probably, all of those things can probably be effective."*
> *(P8) "I'd have to go and, like, actively say: "I'm going to go to a conference in the autumn.""*

Nonetheless, these concerns are balanced by the longer-term benefits of the connections made at conferences. One interviewee (P1) refuted the idea that conferences are too costly, arguing that the follow-up exchanges resulting from new relationships often justify the expenses. Furthermore, several suggestions were made to improve the effectiveness of conferences, such as organizing smaller working groups (P1) and dedicating more time to peer learning between housing entities (P7):

> *(P1) "It's very cheap, because you get to meet the key people in one place. You know, if you can get them to stay there for two or three days, get to know each other. That's a very valuable thing."*
> *(P1) "…these kind of small groups actually work well."*
> *(P7) "But it would be really good to say: "What could we work with?" Maybe something like the land, the Department of Housing, the Housing Agency to do a seminar or a half day conference on: "How do we learn from what we're doing?""*

Overall, conferences are a vital tool for knowledge exchange in the housing sector. While formal lectures may sometimes feel repetitive, the informal conversations and opportunities to network continue to provide significant value, fostering collaboration and driving new ideas in the field.

Written (research) reports: Written reports emerged as a recurring and critical method for exchanging knowledge, particularly in the introduction of cost rental housing in Ireland (P1-7; P10). Reports like the collaboration between Housing Europe and the Housing Agency have been instrumental in applying lessons from other European countries to the Irish context (Housing Europe, 2022). As one interviewee (P5) noted, these reports "…*looked at cost rental in different European countries…*" and were pivotal in shaping Ireland's approach to cost rental housing. The impact of such reports has been significant, providing clear examples of funding models, target markets, and operational strategies from across Europe:

> *(P4) "So even then like it was good to kind of look at reports from other countries, look at like say academic journals, look at things and go: "Oh they floated this. Did it actually progress in practice or did it, was it just an idea or was it…?"."*
> *(P5) "And also the Housing Europe and the Housing Agency, in fact, had done a report on cost rental housing."*
> *(P10) "But from time to time, the Alliance kind of comes together and produces documentation or reports or whatever, as it kind of feels it has to."*

(P4) "So, there's a lot of research, like Mick Byrne, like Michelle Norris, like all those people are doing research all the time, like the Housing Commission reports."
(P5) "And what was really instructive was that they looked at cost rental in different European countries and how they funded it and the target market for it and how it was operating. So those kinds of things were pivotal, I think, in developing this thinking here. So I think that has been hugely useful. I mean, it would be very hard to downplay or to exaggerate the effect of something like those, particularly the housing agency and the Housing Europe report."

Despite their utility, there is consensus that written reports are underutilized, with calls to make greater use of the knowledge available from existing documentation (P1; P5). Reports often serve as a foundation for further knowledge exchange, either providing talking points for conferences or being sparked by such events (P3). This dynamic interplay between written research and knowledge-sharing events reinforces the importance of reports in shaping discussions and policy directions:

(P5) "Even that report, again that affordable rental piece has been in Europe for a long time and I think we could have avoided some of the mistakes if we had taken them."
(P1) "Well, the European Centre Bank has hundreds of reports on housing, you know, on their website."
(P3) "So yeah, I think, still that kind of old-fashioned just doing research, writing reports is like the first stage of them."
(P3) "My point was just that usually what happens is you have a publication, some form of written document and that document has detail and has evidence and that then becomes the basis for a seminar or conference or a conversation that it allows the conversation to happen."

As of September 2024, AHBs and academics are preparing to present their research on the first cost rental households in Ireland (P2; P3; P5; P6; P8; P10). This research, discussed in earlier chapters, exemplifies the role of written reports in sharing evidence-based knowledge and improving affordable housing provision (P2; P6). These reports help bridge the gap between theory and practice, but it's important to recognize the difference in audience: policy reports tend to target practitioners, while academic papers focus more on theoretical insights (P6). One key suggestion is to strengthen the connection between prominent academics and practitioners, particularly in a small country like Ireland, where collaboration can drive meaningful change. As one interviewee (P7) noted, "*Now, there's a lot of reports and there's a lot of people probably studying that. I think maybe what's missing is we don't probably or don't know the people like you who are doing the research*".

(P2) "So he's been, you know, basically his research team have kind of gone out and interviewed tenants but also government individuals and kind of staff working across the organisations who have currently been involved in delivering cost rental, so that research is finished and we're kind of planning the launch and delivery of that report and probably it will be launched in September."
(P6) "Yeah, the reports there and on, what's still to be launched, and we're working with, kind of, a few of the approved housing bodies kind of on that as well. So they're involved in it."
(P6) "But with all of those things, like it's, it's all kind of my experience is all translation kind of work as well, because like how you write that up for a policy focus report is different to an active paper."

Written reports are therefore an indispensable tool for both transnational and transdisciplinary knowledge exchange. With better integration of academic findings into practice, Ireland and other countries can maximize the impact of these reports, ensuring that knowledge is applied where it can drive the most significant improvements in housing provision.

Intermediary organization: Intermediary organizations, both at the European and national levels, play a pivotal role in facilitating transdisciplinary and transnational knowledge exchange in the housing sector (P1; P2; P4; P5; P8-10). On the European level, organizations such as Housing Europe, the European Federation of Living (EFL), and FEANTSA are instrumental in research funding and providing regular housing updates. Nationally, the Housing Alliance, Housing Agency, and the Irish Council for Social Housing (ICSH) are most frequently mentioned for their contributions to knowledge exchange and policy advocacy (P1; P4; P5):

> *(P4) "Yeah, so the Housing Alliance are… They were set up separately around, I think, 2016, when one of the new government housing plans came in: Rebuild in Ireland. So they were set up, I think, with the encouragement of the department, just because their issues were a lot different, especially in terms of funding issues and growth and stuff, than a lot of our smaller members."*
> *(P9) "…the Housing Alliance, which is the seven largest housing associations in the country, an Alliance of those groups."*
> *(P2) "So you may have heard that we are part of what's called the Housing Alliance. So that is the seven of the largest approved housing bodies in Ireland. So through that we have a range of kind of working groups and knowledge sharing groups."*
> *(P10) "So the Housing Alliance is something that came about in a calendar year, but it was probably 2018 or 2019, something like that, where the bigger Approved Housing Bodies came together, six of them. They said, well, there's loads, we've about 500 Approved Housing Bodies, most of them are very small, and they only deal with small numbers of houses. So they said we're actually, because we are trying to develop at scale, our problems are quite different to the vast majority of Approved Housing Bodies."*
> *(P5) "Some years ago we developed a housing alliance which is slightly out of the Irish Council for Social Housing. It was very much done on the basis that we were trying to develop the scale and the impact of housing, of not -profit housing associations and the Irish Council for Social Housing is a body of 300 or 400, it's very small, it's a very mixed."*
> *(P2) "Yeah, but I think the structure of it. So I suppose what I'm saying is that if there were 20, like in the UK it's a larger country, but they have like the G15 or the G20 of the largest organization. So I think the idea for the Housing Alliance is a kind of similar one that you know as a smaller group what can you do together?"*

The Housing Alliance, established between 2016 and 2018 by the six largest Approved Housing Bodies (AHBs), stands out as a key intermediary for practitioners on a national scale (P2; P4; P5 P9). It facilitates knowledge exchange through working and policy groups, consensus building, and advocacy toward government agencies. As one participant (P8) explained, shared submissions are an example of the Alliance's unified voice in policy advocacy, which strengthens its influence: "*So the policy group, for example, we'll do shared submissions. So that was one example with the rent supplement where we had a shared submission. So I think everybody signed on to it actually in the end, yeah. So it went under the Housing Alliance's name, which it's helpful in terms of speaking to the state because you're united and the whole sector is saying this is an issue and we all think this is the way forward, which is great. And then we also can commission kind of shared research as well and things like that. So it just means you share a little bit about the burden, I suppose, of bringing these things forward and financially as well and all that.*":

(P8) "And so a lot of it is trying to build consensus. And again, just a productive way."
(P9) "And I also had been a lot of consensus building in that sense, right, that you've combined with the Housing Alliance, is a good example of that, that you combine these pieces of knowledge and experiences, and say: this is working out. Right? And that has been really important in us getting into cost rental that exchange of knowledge that working together understanding the difficulties that others have gone when they've been the pioneers."

Part of the Housing Alliance's strength comes from the substantial housing stock it represents, 95% of the sector (P9), and its ability to create an informal network for knowledge exchange outside formal structures (P2). However, challenges arise from the time constraints of participating practitioners, who often have to prioritize their day-to-day work (P2). Additionally, there is a need to avoid overlap with other intermediary organizations like the ICSH, which could lead to inefficient and repetitive knowledge exchange sessions (P2). The ICSH, while also representing AHBs, is more formal and structured, playing a significant role in the introduction of cost rental housing through its connections with academics and consequent targeted research (P1). Interestingly, the Housing Agency praises the fact that the Housing Alliance and ICSH compete with each other, as it can drive innovation and progress (P10). This competitive dynamic allows both organizations to push boundaries and improve their contributions to the housing sector.

(P9) "So if you take the seven members of the Housing Alliance, we deliver 95% of all of the new social housing."
(P2) "Yeah. So first of all, I think we have kind of an informal kind of working relationship. So we all kind of know each other and we're all kind of grappling with kind of similar problems and we've spoken to the same people."
(P2) "So we've got an informal exchange, but then we have monthly meetings where I suppose that's a bit more structured, you know, we have an agenda and we'll kind of have specific topics that we want to discuss."
(P2) "Yeah, it's a very natural kind of synergy, but it's important to have all of those terms of reference in place, because the work of the Housing Alliance isn't my main priority. Respond is my main priority. So suddenly if a project is going to, if they say, manage this research project for the Housing Alliance on some sort of asset management or environmental thing I'm going to be kind of like well I'm only going to devote five percent of my time."
(P2) "So we don't want to kind of replicate each other. But I think what the Housing Alliance is trying to do is to just have more focus on the kind of development activity, because it's really only the four or five largest Approved Housing Bodies that are actually developing new housing."
(P2) "And, so I think when organizations join the Housing Alliance, because of the terms of reference they're joining for a very specific reason. So their incentive is to have those conversations and not necessarily be difficult. But I think in Ireland for example, I mean this is off the top of my head, but I kind of think if it was if it got to 20 or 25 you would maybe start to get into the territory of the Irish Council of Social Housing."
(P2) "Yeah, so I mean you've been in contact with the Irish Council of Social Housing, so we're members of that. So I would go to a regular monthly meeting that they facilitate as well. So as well as the Housing Alliance kind of groups, we have the Irish Council of Social Housing groups as well and that includes far more Approved Housing Bodies."
(P1) "...so this is one of the things that the Irish Council for Social Housing asked me: Could we, could I, look into this question because I do a good bit of EU law on that."
(P10) "But I suppose one thing we're quite proud of, they compete with each other as well. So there can be some tension around that."

The Housing Agency, another key intermediary, has also been praised themselves for its strong connections with both the housing sector and the government (P9). Its ability to translate the sector's needs into actionable policy insights for the government has been crucial in advancing cost rental housing in Ireland (P5). As one interviewee (P9) noted, "*And I have to say, we're very fortunate. We have an organization like the Housing Agency who is very much connected into the housing sector and also very connected into government. So they can hear what we're saying, exactly as you said, translate into what government need to know and understand and then be able to say to them: 'This is what you need to change." And that feed backwards and forwards works really well.*":

> *(P5) "So the Housing Alliance was there to promote scale in the sector and to help larger associations get larger and to try and structure the environment in which we operated to help grow the sector."*

At the international level, boundary-spanning organizations like Housing Europe have been particularly beneficial for transnational knowledge exchange. In addition to funding pivotal research (P4; P5), these organizations facilitate conferences, events, committees, and other research projects (P10). Strengthening ties with European intermediary organizations has become especially important for Ireland following Brexit. Reinforcing these connections will allow Ireland to benefit from the wealth of expertise in more developed European housing sectors (P5). Looking ahead, greater involvement with European intermediary organizations could enhance Ireland's capacity to exchange knowledge on cost rental housing and other affordable housing models. As one interviewee (P5) highlighted, "*...we would benefit by greater involvement... they have a lot more experience in areas we are interested in...*":

> *(P4) "So they coordinate a lot of research there."*
> *(P5) "And also the Housing Europe and the Housing Agency, in fact, had done a report on cost rental housing."*
> *(P4) "Our Housing Europe got funding for a research project around housing equality all across the member states and affordable housing, cost rental all fall into that. So that's another like this forum is set up, there's going to be 60 people I think plus on it and we'll all be engaging on that."*
> *(P5) "So I think that has been hugely useful. I mean, it would be very hard to downplay or to exaggerate the effect of something like those, particularly the housing agency and the housing Europe report."*
> *(P10) "I think (person x) has given a couple of presentations to the ENHR conferences and the housing Europe conferences and things like that. So he's outlined the cost rental journey that we've gone through."*
> *(P4) "So, like our CEO is over at Housing Europe events. He's on a committee over there."*
> *(P4) "Like, Housing Europe, have a big, have their meetings like every three or four months and there's exchange there with different groups from across Europe."*
> *(P4) "Housing Europe has a festival, housing festival. So we're hosting it next year in Dublin."*
> *(P5) "But the European Federation for Living and Housing Europe, those connections are being forged and particularly now with following Brexit. I think we really do feel the need, a greater need to connect better and more with the European movements."*
> *(P5) "...I think we would benefit by greater involvement and I think there is a better, because it is a more developed sector in Europe and they have a lot more experience in a lot of areas that we are interested in getting involved in."*

Working group: Working groups are widely mentioned as a knowledge exchange method by nearly every organization involved in affordable housing provision (P2; P4-6; P8-10). These groups are central to the structure of organizations like the Housing Alliance, where each group

focuses on a topic relevant to the seven largest Approved Housing Bodies (AHBs). According to one participant from the Housing Agency, working groups create essential spaces for sharing targeted information (P10): "*There's different working groups where the information is really relevant for these kinds of actors.*". Organizations like the Housing Alliance, the Irish Council for Social Housing (ICSH) and the European Federation of Living (EFL) utilize working groups to bring together knowledge on affordable housing. However, since cost rental housing is not relevant to all AHBs, the specific cost rental housing working group is housed under the Housing Alliance, rather than the ICSH, which represents a much broader membership base of 270 Irish AHBs (P4). The use of working groups across these different organizations can result in overlapping themes, as representatives from the same AHBs may participate in multiple groups under different umbrella organizations (P6; P9). This structure ensures that relevant actors can focus on their areas of interest, such as cost rental housing, without requiring participation from those for whom the topic is irrelevant:

> *(P10) "There's a certain amount of formal interaction in relation to cost rental. Like one of the things that I'm aware of is that when the Approved Housing Bodies meet, and they meet in different forms, okay. There's different working groups where the information is really relevant for these kinds of actors."*
> *(P2) "So you may have heard that we are part of what's called the Housing Alliance. So that is the seven of the largest approved housing bodies in Ireland. So through that we have a range of, kind of, working groups and knowledge sharing groups."*
> *(P8) "So I would sit with the policy and communications kind of working group. There are other working groups as well. So the CEOs have a working group where they'll kind of meet within the Housing Alliance and things like people working on sustainability, they'll get together and work. So there's lots of different working groups across them."*
> *(P2) "So if we're working on cost rental policy, like the housing working group might come back, for example, and say like there was an issue that was happening in some of our larger schemes that we have..."*
> *(P9) "So I sit on the council and the board there and Circle participates in their learning groups, their wider groups for smaller organizations as well as the big organizations."*
> *(P6) "There's more, kind of, more tangible kind of working groups I guess created, which involve people across, kind of, approved housing bodies and sort of like some of those government departments that tried to explore that sort of idea."*
> *(P4) "Like they still, they're still part of our groups, our working groups. So it was just kind of a separate vehicle for them, I suppose, to kind of push for different things around cost rental, around bits and pieces, so."*

The European Federation of Living (EFL) also applies working groups as a key method for knowledge exchange, with the main distinction being that their meetings are conducted online due to the geographical spread of participants (P5). This approach highlights the flexibility of working groups to adapt to different contexts while still facilitating the sharing of knowledge across borders. A critical point raised by participants is the use of terms of reference to ensure both efficiency and clarity in the functioning of these groups. Terms of reference outline the objectives, structure, and expectations for each working group, ensuring that participants are aligned and that their time is well spent. As one AHB representative noted (P2), "*...it's important to have all of those terms of reference in place, because the work of the Housing Alliance isn't my main priority.*" (P2). This ensures that working groups operate with clear goals and contribute effectively to the broader missions of their respective organizations:

> *(P5) "Certainly the groups, the special groups or the working groups they have on particular topics, they're available online."*

(P2) "So I'd say it's that, so I'll kind of describe the structure. So for example, for the policy and communications working group, we've developed terms of reference… So obviously the Housing Alliance has a terms of reference about how those organizations are going to work together and what missions and objectives they're going to pursue. And so as a group, we have our own terms of reference about how we then, how that group kind of feeds back up to other groups and back up to the kind of chief exec group and the kind of key messages… Yeah, it's a very natural kind of synergy, but it's important to have all of those terms of reference in place, because the work of the Housing Alliance isn't my main priority."

Overall, working groups remain an essential tool for focused knowledge exchange in the housing sector. By bringing together the right participants and clearly defining their roles, these groups can facilitate impactful discussions and drive forward key initiatives, particularly in areas like cost rental housing.

Regular knowledge exchange meeting: Regular knowledge exchange meetings are a crucial element of knowledge-sharing practices within organizations like the Housing Alliance, ICSH, EFL, and Housing Europe (P2; P4; P5; P8-10). These meetings are more formal and structured compared to the informal interactions that often occur between participants. As one interviewee (P2) explained, "*So we've got an informal exchange, but then we have monthly meetings where I suppose that's a bit more structured, you know, we have an agenda and we'll kind of have specific topics that we want to discuss.*". These meetings provide a dedicated space for discussing ongoing issues and developments in affordable housing:

(P2) "Yeah, so I mean you've been in contact with the Irish Council of Social Housing, so we're members of that. So I would go to a regular monthly meeting that they facilitate as well. So as well as the Housing Alliance kind of groups, we have the Irish Council of Social Housing groups as well and that includes far more Approved Housing Bodies."
(P4) "Um, so it depends on the issue. Um, so with our larger members, we have monthly meetings with the CEOs of the, the 'tier threes' we call them. So they're the bigger, the bigger members who are developing all the time, both social and around four of them are at the moment involved in cost rental provision. So we wait monthly to talk through, like big issues, like macro issues."
(P4) "Like, Housing Europe, have a big, have their meetings like every three or four months and there's exchange there with different groups from across Europe."
(P5) "We would interact reasonably regularly. We hosted one of their meetings in Dublin there a couple of years ago and we would send people to the various colloquiums when they get together as well in Europe and then some of our people are involved in some of the groups that they have."

On a national level, working groups under the ICSH and Housing Alliance hold regular meetings, with groups of CEOs from larger AHBs meeting monthly (P4). Similarly, European-level organizations like Housing Europe and the EFL also conduct regular meetings, though these occur less frequently throughout the year (P4). Both national and international meetings have increasingly shifted online, largely as a result of convenience and habits formed during the COVID-19 pandemic. However, offline meetings are still scheduled across the year when face-to-face interaction is essential, especially for strategic planning (P2). For example, the Housing Alliance schedules longer, in-person meetings when tasks require deeper discussion and collaboration. While online meetings are often more convenient, they are sometimes criticized for reducing the quality of knowledge exchange. The Housing Agency has observed that participants may not absorb information as effectively online as they would in physical meetings (P10). As one participant (P10) noted, *And some of the things that we taught, we might have*

explained well, you know, on the online meetings. We obviously didn't because they were asking the same kind of question or saying, so you do it like this.", indicating it didn't sink in:

> *(P2) "Yeah, so I mean you've been in contact with the Irish Council of Social Housing, so we're members of that. So I would go to a regular monthly meeting that they facilitate as well. So as well as the Housing Alliance kind of groups, we have the Irish Council of Social Housing groups as well and that includes far more Approved Housing Bodies."*
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> *(P4) "Like, Housing Europe, have a big, have their meetings like every three or four months and there's exchange there with different groups from across Europe."*
> *(P5) "We would interact reasonably regularly. We hosted one of their meetings in Dublin there a couple of years ago and we would send people to the various colloquiums when they get together as well in Europe and then some of our people are involved in some of the groups that they have."*
> *(P2) "So we've mainly met online just for convenience, and I think that's kind of from COVID… So we have regular online meetings, but we try and meet face to-face. We're trying to do that once every third or fourth meeting. Okay, yeah. And again, that just facilitates you know relationships, and so we have maybe a longer meeting."*
> *(P2) "So for example, when we were doing the work planning for this year for the Housing Alliance… And that was actually, you can't do that kind of work online too easily. So there was a practical reason to kind of meet and to have a longer meeting."*

Regular knowledge exchange meetings are a key method for maintaining ongoing dialogue within the housing sector. While online formats are convenient, in-person meetings continue to play an essential role in tasks requiring deeper engagement and collaboration.

Seminar: Seminars are another frequently mentioned method of facilitating knowledge exchange in the context of cost rental housing in Ireland (P3; P5; P7; P9; P10). These seminars can either be a permanent feature of intermediary organizations or organized spontaneously in response to emerging interest (P5; P9; P10). Often, seminars are closely tied to written reports and academic papers, serving as a platform for deeper discussions. As with conferences, seminars are often a follow-up to the publication of reports, and they help initiate further conversations (P3):

> *(P9) "So the IHP[34] does a quarterly learning seminar internationally that's run and it gets between 100 and 200 members attending it, all giving a particular topic, discussing that topic, giving the learning on it."*
> *(P5) "And we organized a seminar here and we had people from Spain and people from Norway and people from Scotland who came over and spoke to us about their youth housing projects so that really piqued our appetite."*
> *(P10) "It sort of provided an opportunity for seminars and talks from people coming over from Vietnam, the Netherlands, and so on, to say: "I live in a cost rental, you know, I've been living in one for 25 years". And, you know, all that sort of thing."*
> *(P3) "My point was just that usually what happens is you have a publication, some form of*

[34] The IHP or International Housing Partnerships is a collaborative between housing entities from the UK, the United States, Canada and Australia. More information can be found here.

written document and that document has detail and has evidence and that then becomes the basis for a seminar or conference or a conversation that it allows the conversation to happen."

An academic interviewee emphasized the importance of basing seminars on evidence-based research. Without a solid research foundation, seminars can lack substance, and policy makers or housing providers are unlikely to engage meaningfully. As the academic (P3) put it, "*...for policy makers or housing providers to really get involved... they need to have the background information and see the empirical evidence...*". The Land Development Agency also highlights the collaborative value of seminars, using them as a method to bring together various stakeholders in the housing sector. They see seminars, along with conferences, as a vital tool for promoting collaboration and advancing knowledge exchange (P7):

(P3) "So I just think that it is those, kind of, published documents are like the starting point for the rest, because otherwise if I had a seminar on some policy right and I just have the seminar, and the department officials come and the housing association people come. They're just learning about it in the seminar and they're going to come and they might think: "That's interesting", but for policy makers or housing providers to really get involved in a conversation they need to have the background information and they want to see the empirical evidence is there. They want to see the detail, because they don't, you know, these issues are complex. So it's good to have, like a comprehensive. So I think publications are really good."
(P7) "..., but we would always be trying to work with, say, the Institute of Planning in Ireland, the Housing Agency, the Department of Housing, to see where it will be or to do seminars, conferences, to gather and share the learning."

To conclude, seminars provide a valuable platform for deeper discussions on housing issues, particularly when backed by solid research. Their ability to bring stakeholders together makes them a critical tool for fostering collaboration and informed decision-making in the sector.

Study tour / Site visit: City tours and site visits are frequently used as knowledge exchange methods within the affordable housing sector (P4-6; P9; P10). These activities can either be part of the regular schedule (P9) of an intermediary organization or organized as one-off events. A key benefit of such tours is the opportunity to collaborate with a wide range of actors, including other housing organizations, NGOs, and even tenants. As one interviewee (P6) noted, "*And part of the methods we're using I suppose really is kind of that we're doing a lot of kind of walking tours in the city you know... we got a lot of kind of involvement with NGOs and different sort of groups and stuff to to talk us through different areas different parts of that sort of puzzle and in Vienna a lot of it was our colleague with some you know input from some other people.*":

(P9) "And the Housing Partnership UK and Ireland do study tours on a two-monthly basis to different parts of the UK and Ireland, where we pick something, whatever it might be, and we're trying to do a bit of learning around that..."

In the context of cost rental housing, the Irish Council for Social Housing (ICSH) plans to organize a city tour during the Housing Europe housing festival in Dublin next year. By then, they expect a larger number of cost rental homes to be available for viewing (P4). The most significant advantage of these visits is the tangible, hands-on understanding they offer to participants. As one interviewee (P8) emphasized, "*...you really need to see it to understand it*", reinforcing the idea that firsthand exposure to housing models provides a clearer understanding of how they operate in practice and therefore how to introduce them elsewhere:

(P4) "And but we are and Dublin is every two years Housing Europe has a festival, housing festival. So we're hosting it next year in Dublin. So that'll be the opportunity again for more knowledge exchange, where we can actually bring people on tours. Hopefully we'll have lots more [cost rental homes], in a years' time... So hopefully there'll be more cost rental projects actually delivered and open then, so they'll be able to bring some of our peers in our counterparts Europe actually see them, how they work, meet the tenants and yeah...".
(P8) "...to meet with people and potentially travel to see some developments, you know, you really need to see it to understand it."
(P6) "Yeah, my understanding of those trips is, like, is really to get a better sense and understanding of, like, how that model works in that context."
(P5) "No, we go on site, because again, it's much more valuable if you can see it, and some of the sites are in walking distances, so it's easy to cover the system."

Study tours and site visits are therefore powerful tools for making housing models like cost rental more tangible. By allowing participants to see developments firsthand, these methods deepen understanding and foster meaningful exchanges.

Workshop: Workshops are another effective method of knowledge exchange (P6-10), often held as part of broader events like conferences. Cost rental housing has been a recurring topic in recent workshops, frequently featuring transnational speakers (P6; P10). Such workshops facilitate learning from diverse perspectives, as described by one interviewee about another workshop on housing (P6): "*We had a day-long, kind of workshop which was, you know, a conference, you know, with a set of papers kind of in a hybrid form and so we were, had a lot of different geographies there you know speak from Brazil from South Africa, Portugal, yeah, Vienna etc. So I would say we learned there kind of from the Vienna papers.*". The workshop is often combined with other activities, such as site visits, to enrich the learning experience (P9):

(P10) "So we organize a conference every year for housing practitioners. So there will be people working in housing in local authorities and a group of Approved Housing bodies. And over the last couple of years we'd have, cost rental would be one of the topics that would be covered in workshops or in a session."

The interest in workshops around specifically cost rental housing comes from its perception as a relatively new concept, despite its long history in other countries (P7). Workshops have also played a critical role in systematically improving the cost rental housing process in Ireland. For instance, AHB providers and the Land Development Agency collaborated in a practical workshop to evaluate and enhance the entire process of cost rental provision, from planning to tenant management. The results were then shared with the Housing Agency and the national Housing Department to drive improvements. As one AHB participant described (P9), "*Yeah, they're really practical workshops. So they're in person. So we would have tours, and representatives from each of the organizations around the table who are dealing with it on a day-to-day basis and what we examined was: We went through the whole process of from start to finish, so from the application of planning funding through to the selection of the individuals, to the letting and management of them and also the consideration of for example what goes into a house.*":

(P7) "What's interesting is that in nearly all of the workshops we run, people ask about Cost Rental because it's new to them, it's not known to them, it's a new concept and there's a lot of interest and a lot of queries on it."
(P9) "Yeah, yeah, we've run two workshops between the four associations and the LDA where we've been exchanging learning about either the build process, the recruitment process, the process around the lottery. We've been talking to them about how the funding structures

might work differently because they're funded differently to us and how that's been impacting and we've been talking about how we get to the criteria for people to qualify for cost rental housing."

Workshops offer a structured, collaborative environment to tackle complex housing issues like cost rental. By bringing together diverse stakeholders and combining practical exercises with broader discussions, they serve as a critical tool for refining and improving housing provision processes.

Educational course / Lecture series: In response to the public's lack of awareness about cost rental housing, as mentioned in part 4.2.1, educational courses and lecture series have been employed as knowledge exchange methods (P1; P4; P7; P8). These initiatives help inform the public and stakeholders about various housing models, including cost rental. One example comes from the Land Development Agency, which launched 'The Land Series' in collaboration with the Housing Agency. This series featured experts from countries like Austria and New Zealand and ran for eight weeks, focusing on themes such as the Vienna model (P7): *What we did do is we did an important series, which I had sent out to you, it was called The Land Series, talking about land series. That was a series we ran with the housing agency, but we had specific lectures over eight weeks, and each of them had a different team. But some of them looked at, say, the Vienna model. So we had people who were experts on the Vienna model. We had experts, I think, from Australia and New Zealand*.". Additionally, AHBs are using social media and websites to educate households about cost rental housing (P2). Furthermore, a new European Housing Studies course is being developed by academics to provide broader insights into European housing models (P1), including cost rental (P8). This course will be offered online, making it accessible to a wider audience (P1): "*It's a new course we're starting called European Housing Studies. It's supposed to be online… But there's not much, I mean, in terms of the European-wide thing, every country seems to have their own kind of approach, you know, and it's not easy to compare.*":

(P7) "Yeah, but that's the line and the journey we're on and a lot of what we're trying to do is educate people on cost rental and encourage people to understand about cost rental."
(P7) "So we're trying to educate people around cost rental being an option, particularly for those who might like to buy in 10, 15 years, but for now have a very secure and stable option to have a cost rental apartment, mostly our house, that they can live in, but possibly could stay in longer."
(P8) "Because right now we're doing as much as we can to educate people… We have a lot on our social media and our website…"

Educational courses and lecture series play an important role in raising awareness and providing detailed knowledge about cost rental housing. By bringing in transnational experts and leveraging digital platforms, these initiatives help bridge knowledge gaps and engage a diverse audience.

Website: Websites are also a significant tool for disseminating information and educating the public on cost rental housing (P1; P7; P8; P10). This web-based approach has been particularly useful in addressing the implementation challenge of public unawareness, as highlighted in part 5.3. AHBs and other organizations are using their websites and social media platforms to provide key information on cost rental housing to those unfamiliar with the sector (P8). One interviewee noted that without such platforms, the public might not even be aware of the concept (P8): "*We have a lot on our social media and our website, but if you don't know the AHB sector, you probably won't know about cost rental*":

(P7) "So on our website we have a full dedicated section on our page to explaining cost rental and affordable purchase."
(P8) "Because right now we're doing as much as we can to educate people… We have a lot on our social media and our website, but if you don't know the Approved Housing Bodies sector, you probably won't know about cost rental."

Websites consequently serve as a valuable knowledge exchange tool, offering accessible and comprehensive information on cost rental housing. By utilizing digital platforms, organizations can reach broader audiences and improve public understanding.

Advocacy / Position paper: Advocacy and coordinated efforts through position papers have been essential for promoting cost rental housing in Ireland. Given that cost rental is a relatively new concept in the country, AHBs recognized the importance of uniting their voices to influence regulations and policies (P2; P4; P8; P9). These coordinated efforts allow AHBs to present a unified message to the Housing Agency and the Department of Housing, ensuring consistency in their approach (P8): "*And then to kind of speak to the state with the united front, because you don't really want to have a lot of variation between how different… There's always going to be variations, but you don't want to have too much variation in terms of how we do things, because it just creates kind of unnecessary friction within the sector. So if everybody's doing things one way, we'll speak about that and say, well, this is why we're doing it this other way. And so a lot of it is trying to build consensus. And again, just a productive way.*". The Irish Council for Social Housing (ICSH) plays a crucial role in this process by facilitating discussions and helping to craft position papers that are then presented to the government. These papers reflect the collective experiences of AHBs and serve as a formal method of communication with the Irish Housing Department (P4). As one interviewee explained (P4), "*So if more issues are coming up they're brought to us at our monthly meeting and then we might then decide to do another meeting and just with the members that its effect and put together a position paper. And then send them to government and that would include engagement with the Housing Agency and yeah as they're the, kind of, they kind of oversee a lot of this policy development and stuff.*":

(P8) "…it's things like ensuring that the current kind of legislation, the model around cost rental actually works in practice."
(P2) "So it was the housing teams that identified this, but they wanted the policy support for us to then lobby government to say we need to make some very specific changes."
(P8) "But by and large, just as a sector, it makes sense for us all to kind of try and reach unanimity on these issues and kind of thrash it out ourselves."
(P9) "…we've kind of been able to influence government policy a little bit. Particularly around the acceptance criteria, so: "Who do we accept and how do we accept them?""

Advocacy through for example position papers is a powerful method for bringing together voices and influencing housing policy. By aligning their experiences and presenting a united front, AHBs can effectively communicate their needs and recommendations to the government, driving policy changes that support cost rental housing.

Good / Best practices: Good and best practices were also highlighted as a critical method of knowledge exchange within the housing sector (P1; P2; P8). For some AHBs, regularly looking into good practices from both Ireland and abroad is integral to their operations, as it allows them to leverage the experiences and knowledge of others (P2): "*So when we commission research reports they would usually include some sort of literature review which would also look at international kind of practice and kind of benchmarking…*":

(P2) "So what I would look at is kind of good practice and developments in government, kind of policy and how that applies to [an organization] and how we need to kind of improve our services and maybe implement good practice."
(P2) "So very much, you know, good practice, looking to see what other providers are doing kind of both around Ireland, but you know, overseas as well."

However, there is a sentiment that best practices are underutilized. One AHB suggested that organizations should be more proactive in seeking out and sharing their own best practices, ensuring they learn from others while also promoting what they are doing well (P5). Furthermore, there was a suggestion that a more structured provision of best practices at the European level could greatly benefit Irish organizations (P8). The openness toward these exchanges was emphasized (P5): "*I think we need to be more open, particularly, as I say, to those exchanges and to looking for it as well. So in other words, to go looking for the best practice and also to publicize what we're doing, and what we're doing well, and then what we're having difficulties with.*":

(P8) "Author: "So maybe some best practices in that sense or…?". P8: "Yeah, yeah, exactly. I think as well, ongoing information just at EU level is brilliant,…""

All in all, good and best practices offer a powerful yet underexploited opportunity for knowledge exchange. By being more open to learning from others and sharing their successes, organizations can foster continuous improvement across the housing sector.

Training package: Training activities were another method mentioned for facilitating knowledge exchange, particularly among AHBs and the ICSH (P2; P4; P9). One AHB offers learning programs that send both staff and tenants to other countries, such as the UK, to learn from other housing associations. As one interviewee (P9) described an example outside of cost rental housing: "*We have a very significant training budget and we send both tenants and staff to other countries to learn about what they're doing and what they're doing in particular areas. So, for example, we went last year. We had two trips, one to Wheatley in Glasgow, which is the largest housing association in Glasgow, in the Scottish area, to learn about tenant engagement and how to make sure tenants are involved. We sent 15 people, I think there were 10 tenants and 5 staff. And last year as well, we sent a cohort of about 12 staff to B3Living, which is a housing association in London, just outside London, to learn about processes around financial management, property management, letting, that kind of stuff.*":

(P4) "And we also provide training,…"

Training packages can also be linked to academic research. For example, research on the 'Brain health village concept' was translated into actions that improved health. The connected university later facilitated training to ensure the effective application of these findings (P2). Another AHB hopes that similar training packages will follow research on cost rental households, maximizing the practical benefits of the evidence-based knowledge (P2): "*We also kind of are hoping really practical things might come out of it like training packages for example that can be run and delivered to other organizations.*". Such training packages can provide a structured way to turn research findings into actionable knowledge. By investing in cross-border learning and translating research into practical tools, AHBs can ensure that knowledge is effectively implemented across their organizations:

(P2) "So, Trinity College have delivered training to staff."

Pilot study: Pilot studies also play a vital role in facilitating knowledge exchange (P2; P5; P6), particularly in testing new approaches before broader implementation. One AHB explains it is currently involved in a pilot project focused on youth housing (P5). However, the most significant pilot study for cost rental housing in Ireland remains the St. Michael's estate project (also see part 5.1), which is considered a pivotal step in putting cost rental into practice (P4; P6). As one interviewee (P6) explained, "*But they had kind of advocated kind of early on, and lobbied for St. Michael's estate to be a pilot project for cost rental. And as far as I know, that's like, it still hasn't been kind of like redeveloped... But they're definitely like early on, one of the places where I heard kind of like the push for a cost rental model so that there would be cost rental and social housing would be the entirety of that site redeveloped.*". In short, pilot studies allow organizations to experiment with innovative solutions, gather valuable insights, and refine their approaches before scaling up. They are potentially essential for ensuring that cost rental housing models are feasible and effective in the Irish context:

> *(P2) "So what we're trying to do is a pilot study."*
> *(P5) "We also have age-friendly housing which is more older person's housing and then very recently we've become involved in a project involving youth housing. So it's just a pilot project but we're hoping that's going to develop more."*
> *(P4) "But funnily enough, one of the schemes that was meant to be like the the starting point for this, St. Michael's Estate, and I think it's in Shakur in Dublin, like still hasn't got planning and still isn't off ground."*

Festival: International housing festivals have played a significant role in the knowledge exchange surrounding cost rental housing in Ireland, both historically and moving forward (P3; P4; P10). These festivals have introduced cost rental to wider Irish audiences (P3), disseminated knowledge transnationally (P10), and will continue to do so in the future (P4). The method was first used in Dublin when a festival focused on 'Housing in Vienna' was organized to promote cost rental housing in Ireland (P3): "*And Dublin City Council organized a festival about Vienna. Housing in Vienna... For people in Dublin City Council this was a way to kind of promote the type of housing policies they were interested in, using the Vienna example as being the best place in the world: "Everybody loves Vienna". So, but like, that was a formal thing. So a lot of people in the housing sector could attend that, they could learn about information about cost rental.*". Following this, Ireland's Housing Agency presented at a Housing Europe festival in Barcelona, transitioning from a knowledge-seeking role to a knowledge-sharing role (P10). Next year's Housing Europe festival in Dublin will offer another opportunity for knowledge exchange, with plans for site visits to cost rental homes, highlighting how different methods like festivals and site visits can complement each other (P4). As one interviewee (P4) noted, "*...we can actually bring people on tours.*":

> *(P10) "We presented at the Social Housing Festival in Barcelona on cost rental and that kind of attracted attention from other countries and they came here to Dublin a couple of months ago, and went, and had a look at a couple of estates."*
> *(P4) "...and Dublin is, every two years Housing Europe has a festival, housing festival. So we're hosting it next year in Dublin. So that'll be the opportunity again for more knowledge exchange, where we can actually bring people on tours."*

Festivals serve as dynamic platforms for both introducing new housing models like cost rental and facilitating transnational knowledge exchange. By combining activities like site visits, festivals deepen the learning experience and foster collaboration across borders.

Exhibition: Exhibitions have also been pivotal for raising awareness of cost rental housing, with the Vienna exhibition being particularly influential (P4; P6; P10). Held in Dublin, this exhibition

showcased the potential of cost rental housing and made the concept more tangible for the Irish public (P4). As one interviewee (P4) explained, "*And there was an exhibition here for two weeks that Dublin City Council hosted. So I kind of, yeah, showcased the potential of it to a lot of people.*". The exhibition helped shift cost rental from an abstract idea to something more real and viable. As another interviewee (P10) noted, "*...until then, it was kind of like a catchphrase: 'Let's have cost rental!', but it wasn't really tied down as to what it would look like or how it might work. The exhibition made it much more viable for people to think about.*":

> *(P5) "I think that probably important was those series of exhibitions on the Vienna model that were, kind of, hosted by Dublin City Council and there was public talks and things like that, and I think that was probably important in terms of embedding that sort of idea of this tenure and this kind of form of housing intervention within the sort of housing sector more generally."*
> *(P10) "So, yes, and back in 2019, we had a Vienna model exhibition here in Dublin... Yeah, so that was actually a very important exhibition at the time, because It helped us, people... Yeah, kind of, it was very abstract to me both, you know, and we actually saw the buildings... So it became very real and people could see the advantages of it and how it would work... Yeah, until then it was kind of like a catchphrase: "Let's have cost rental", you know, but it wasn't really tied down as to what it would look like or how it might work. And that helps to just really make it much more viable for people to think about."*

Exhibitions therefore offer a powerful way to transform abstract housing concepts into tangible realities. By allowing people to see examples firsthand, exhibitions make it easier for stakeholders to visualize the implementation of models like cost rental housing.

Regular European housing updates: Regular updates on housing developments across Europe are another suggested method for improving knowledge exchange (P4; P8). European intermediary organizations like FEANTSA and Housing Europe already provide such updates, but not all Irish housing actors involved with cost rental housing are members of these transnational organizations (P8). One interviewee highlighted the potential benefits of receiving regular updates, noting that they help save time by consolidating valuable information (P8): "*It just meant that you weren't really struggling to get that information yourself.*". However, even when updates are available, it's important to allocate time to actually read and apply the knowledge. As one interviewee from ICSH pointed out, "*...because we had emails from Housing Europe with updates, but you just go: "Oh I'll read that later", and you don't really make the time to do it.*" (P4):

> *(P8) "So I used to work with... Focus Ireland, which is a homelessness and homelessness charity. And they were very involved with a group called FEANTSA, which was Brussels based, and the great benefit and incentive that they had was they would just keep like a regular, you know: "Here's what happened, here's what's happening, here's what's going on". And it just meant that you weren't kind of really struggling to get that information yourself looking through European websites. Spending a lot of time on it. So, that, kind of, those updates were brilliant. So if we had something similar to the AHB sector, would be great."*

This way, regular European housing updates are a valuable resource for keeping up with developments and best practices. However, their effectiveness depends on the commitment to actively engage with the information provided.

Forum: Forums are furthermore mentioned as an important method of knowledge exchange in the Irish housing sector (P4; P8). Unlike conferences, forums offer a more casual and inclusive atmosphere, facilitating open interactions among stakeholders. Forums are used to bring AHBs

together for knowledge sharing and to initiate research projects on topics such as cost rental housing. For example, Housing Europe organized a forum for a research project on housing equality across member states, which included cost rental housing (P4): "*Housing Europe got funding for a research project around housing equality all across the member states and affordable housing, cost rental all fall into that. So that's another, like, this forum is set up, there's going to be 60 people I think plus on it and we'll all be engaging on that.*". In the end, forums provide a valuable platform for collaborative discussions and are especially useful for initiating new research projects. Their informal nature fosters inclusive participation, making them effective tools for transdisciplinary and transnational knowledge exchange:

> *(P8) "So things like the AHB Forum, where will be involved in from September…"*

Publicity campaign: Publicity campaigns, similar to websites, are used as dissemination strategies to educate the Irish public on cost rental housing (P7; P10). One interviewee emphasized that the National Housing Department has a responsibility to run national campaigns to raise awareness (P7): "*We would also argue that the state really have a responsibility to maybe do a national campaign for cost rental to explain it.*" However, a previous campaign was deemed unsatisfactory (P10), indicating that more comprehensive efforts are needed to increase public awareness. Publicity campaigns could be essential as a method for raising awareness about new housing models like cost rental. For these campaigns to be effective, they need to be well-organized and reach a broad audience, with clear, accessible messaging:

> *(P10) "One of those was to do with, we were involved in a publicity campaign last year."*
> *(P10) "It was called the Open Door Campaign. My view was that it tried to cover too many things."*

Annual (research) report launches: AHBs also use annual launches of their reports as a method of knowledge exchange, where they showcase research and foster learning among housing providers (P2). Attending these launches allows AHBs to learn from each other's findings, meet new contacts, and support colleagues. As one interviewee (P2) noted, "*You know you're going to meet other people that would be useful for your own projects, and you want to support your colleagues as well.*". Annual report launches serve as an important opportunity for networking and learning within the housing sector. By exchanging research and experiences, AHBs strengthen their long-term relationships and enhance collective knowledge:

> *(P2) "Yeah, we would also attend each other's, kind of, research launches and annual report launches and things like that so you're kind of getting to know the organization. Yeah, they would always be on our kind of radar lists and you would probably prioritize going to them as well. Not every single one maybe because you're like: "Oh, well I already know about this". But you know that you're going to meet other people that would be useful for your own projects and you're not going to know them and you want to support your colleagues as well."*

Evaluating knowledge exchange through surveys: Surveys are an indirect but valuable method for evaluating the effectiveness of knowledge exchange efforts (P2). By capturing the outcomes of these efforts, participants can reflect on what worked and make improvements. An AHB collaborated with Trinity College to evaluate the knowledge exchange around brain health, linking educational efforts with community actions (P2): "*(P2) "So, Trinity College have delivered training to staff. So they're evaluating that, you know, has the kind of knowledge exchange, kind of developing expertise around brain health. And then if we're delivering, for example, a healthy eating program to tenants. So they'll evaluate what they've got from that. And then they'll be doing kind of regular surveys then to see how that community has enhanced their knowledge around brain health,*

whether they've actually changed habits, and how it might affect outcomes."". The evaluative surveys can offer a practical way to assess the impact of knowledge exchange activities. By tracking outcomes, they help organizations refine their approaches and ensure continuous learning and improvement.

High-impact individuals: High-impact individuals are another important method of facilitating knowledge exchange (P3), similar to knowledge brokers as discussed in part 4.1. These individuals are skilled at connecting people across different sectors and translating information between groups, making them valuable assets in transdisciplinary housing discussions. An academic emphasized the role of these individuals in bridging the gap between academics, providers, government officials, and financial experts (P3): "*I think there is such a thing as, kind of, high-impact individuals. So specific individuals who can have a big impact. Mainly because they have some personal qualities and also because they are people who are very good at translating between different communities… So for example in housing you have the academic community, then you have the providers, then you have the government people and then you kind of have the finance people, the money people right yeah, and they're all quite different.*". Participants are often more likely to listen to high-impact individuals than academics, making them particularly effective in driving exchange and fostering collaboration (P3). High-impact individuals play a crucial role in knowledge exchange by bridging different communities and fostering collaboration. Their ability to connect diverse groups makes them indispensable in transdisciplinary housing efforts:

> *(P3) "So you could say, look, that you need to identify who are the knowledge exchange leaders in a context and try to support them."*

Part 6.2 Knowledge exchange barriers and enablers

Conversations with the interviewees as part of the case study delivered a total of 10 experienced barriers and 7 enablers concerned with knowledge exchange efforts (see figure 52 below). Similar to the methods found, barriers and enablers that are explicitly represented in transdisciplinary and transnational knowledge exchange theory are marked in green. The ones highlighted in yellow can be indirectly linked to the literature. Examples of this are the 'different work priorities' which basically fall in the category of the barrier of 'diverse approaches to work', and the differences in 'political'- and economical context can be regarded as part of the 'differences in institutional context'. When looking at the barriers and enablers, three insights are most critical. First of all, the by-far most mentioned enabler of knowledge exchange efforts are the informal exchanges. From a transdisciplinary perspective, the differences in knowledge needed for academics and practitioners stands out as a barrier while tangible knowledge for users is emphasized as a clear enabler. Lastly, with the transnational aspect of the knowledge exchange, the more personal enablers of a 'nice atmosphere' and 'attractive and accessible location' are an interesting insight. These facilitators are less recognized by literature, but are important enablers for participants to commit to traveling for knowledge exchange interactions.

EXPERIENCED BARRIERS AND ENABLERS OF KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES		
BARRIER OR ENABLER	INTERVIEWEES	MENTIONED BY
Barriers		
Different general, national context	8 of 10	(P2; P3; P5-10)
Lack of organizational time, capacity and/or resources	5 of 10	(P2; P4-6; P8)
Different work priorities	5 of 10	(P2; P4; P5; P7; P9)
Competitive sensitivity	5 of 10	(P3; P4; P8-10)
Differences in knowledge needs	4 of 10	(P1; P3; P5; P8)
Different political context	4 of 10	(P2-4; P10)
Different cultural context	4 of 10	(P4; P7-9)
Different economical context	3 of 10	(P1; P2; P9)
Knowledge drain	2 of 10	(P1; P10)
Confirmation bias	1 of 10	(P3)
Enablers		
Room for informal interactions	7 of 10	(P1-4; P7; P8; P10)
Tangible knowledge for users	4 of 10	(P5; P6; P8; P10)
External financial support	3 of 10	(P2; P3; P9)
Nice atmosphere	2 of 10	(P1; P4)
Having a strategic goal	2 of 10	(P2; P6)
Speaking the same language	2 of 10	(P4; P5)
Attractive and accessible location	1 of 10	(P1)

Figure 52: Experienced barriers and enablers of knowledge exchange efforts mentioned by interviewees (own work).

Different general, national context: Nearly all interviewees identified differences in national contexts as the primary barrier to transnational and transdisciplinary knowledge exchange efforts (P2; P3; P5-10). While political (P2-4; P10), cultural (P4; P7-9), and economic contexts (P1; P2; P9) were also highlighted as separate, more explicit barriers, the overall national context significantly influences how housing knowledge is exchanged. As one academic noted, in housing, the national context is crucial for meaningful insights (P3): *"You have to know quite a lot about the national and even the city-level regulatory and policy environment to make good insights.*". The distinct approaches each country takes to housing create and sustain these contextual differences, making local application of shared knowledge a key consideration (P3; P6; P9). What works in one location may be counterproductive in another, as one AHB representative explained (P2): "*..., but I think the application has to be local, you know, because what works for one community or one set of one group at any one time is different to what works. So it's about being adaptable.*":

> *(P3) "..., but in housing usually the national context is really important. So you have to know quite a lot about the national and even the city level regulatory and policy environment to kind of really make good insights."*
> *(P9) "Massively so. I mean, nobody's doing the same thing. I think that's one of the things to point out. Yeah, the context is different."*
> *(P3) "...it's a big obstacle to this whole process is the fact that countries are so different and their national, their historical context is so different..."*
> *(P6) "But you have challenges influencing it into a system that already operates in a particular way."*

When exchanging knowledge on cost rental housing, the impact of these contextual differences becomes even more pronounced. Models that are effective in one country may not be replicable in another due to deeply embedded institutional practices (P5; P6; P8). As one interviewee noted, Ireland is trying to intervene in a system with entrenched practices, unlike Vienna, where cost rental housing has been successfully operating for 100 years (P6): "*Vienna has been operating this model for 100 years... which totally reshapes the power dynamics between actors compared to*

Dublin.". The significant differences in national contexts can result in countries perceiving the cost rental model as fundamentally different from one another. An academic pointed out that people from Austria or Denmark might not even see the Irish cost rental model as the same concept (P3): "*On that front, in practice the cost rental model in Ireland, it is different in some significant respects from Austria and Denmark and Netherlands and in some ways I think people from those countries would say it's not the same.*" When implementation of the cost rental model first was discussed, an ideal approach was likely to appear from theory, but in practice the outcome will always be different (P10):

> *(P5) "So that was an important thing to realize that some of the models that they were using wouldn't be replicable here."*
> *(P8) "And I do think that depends on kind of understanding: "Well okay, but here's why this works, very specifically, in this specific context.". Because sometimes that can be lost. So even bringing in cost rental you know, it's so well embedded say in certain European countries. But land was so much cheaper. Like I know in Denmark at the moment they're struggling to have affordable housing around Copenhagen, for example, because the prices are so much higher and so the cost of the rent has risen. And we're already experiencing that."*
> *(P6) "...that you know Ireland is trying to make an intervention in a system that's like, that's firstly I suppose experiencing a bit of an affordability crisis but also is, you know, has embedded institutional practices and you know the roles of different actors. Whereas like Vienna has been, you know, operating this model for 100 years and it's a very well-oiled ecology you know and so there's all aspects which totally reshape the different power dynamics between different sets of actors I would say kind of in that context that's very different to Dublin."*
> *(P10) "...which we got housing Europe to do around cost rental, looking at different countries and looking at the Irish example and of course you know you can't, you start off with an ideal model and then you apply it to a country and it's always going to be slightly different."*

Despite these differences, national context can also act as an enabler in some cases. Historical similarities between countries, such as Ireland and New Zealand, can enrich the knowledge exchange process (P5). Similarly, the exchanged knowledge is enriched when examples from different contexts are used, as was done with the frequently mentioned cost rental research of Housing Europe (P5; Housing Europe, 2022). Furthermore, the foundational cost rental model in Vienna is seen as the ultimate form of the model, offering valuable lessons to other nations (P7). This illustrates that while differences in national context pose challenges, there are also opportunities to learn from other countries facing similar housing problems:

> *(P5) "For instance, when we were, we had groups from New Zealand... And it wasn't, you know, it may be because they're, you know, they're a British colony, originally a British colony as well. So maybe there was a lot of, there was a lot of very valuable exchange and a lot of ways that they did things which were recognizable to us as well. So the context seemed to be more, seemed to be a lot more similar as well. So it was a very valuable and rich exchange. Okay, so that helps in a similar context, I guess."*
> *(P5) "And what was really instructive was that they looked at cost rental in different European countries and how they funded it and the target market for it and how it was operating. So those kinds of things were pivotal, I think, in developing this thinking here."*
> *(P7) "Yes, every country is different, and no countries will be the same, but there are models that are very key. The Vienna model was one that was talked about a lot, because there was affordable housing models."*

Several interviewees emphasized the importance of knowledge exchange, despite these contextual barriers. European countries are currently grappling with similar housing issues, such as affordability (P3), which provides a strong incentive to learn from each other's experiences and avoid repeating the same mistakes (P5; P9; P10). As one interviewee noted (P10), *Yeah, like, I don't think we could necessarily go to another country, take a solution and just apply here in Ireland, because you know it's a different landscape. But we could definitely learn from other countries' experiences and maybe even anticipate some of the problems that might arise up the line that we haven't thought about yet, because we're so busy getting it [cost rental housing] off the ground.*". One AHB representative argued that there should be more transnational knowledge exchange, as learning from different contexts can help countries improve their approaches (P9): "*We can learn from each other to do better, and I don't think we do enough of that.*":

> *(P3) "I think the way housing markets have developed and financial markets has made housing problems more similar in different countries. For some reason, I don't think people fully understand. I don't fully understand, but I don't think anybody does, but it's very noticeable now that if you go to Amsterdam or Berlin or Madrid or Dublin or London, you get very similar problems even though the housing systems are very different."*
> *(P9) "But they all have elements that you can see where it has worked better or where things you could learn from with doing it."*
> *(P5) "And practice and so on like that. I mean, these models are developed in Europe. Now, it's not completely transferable to Ireland, but a number of aspects of them will be."*

While differences in national contexts pose challenges to knowledge exchange, they also present opportunities for enriched learning. By understanding and adapting to these contextual nuances, countries can still benefit from each other's experiences and improve their affordable housing policies.

Lack of organizational time, capacity and/or resources: The second most mentioned barrier to transdisciplinary and transnational knowledge exchange is the lack of organizational time, capacity, and resources (P2; P4-6; P8). Each housing actor involved with cost rental faces limitations in terms of staff, time, and funding. For organizations like the ICSH and AHBs, the scarcity of time is a primary reason for reduced involvement in knowledge exchange efforts (P4; P5; P8). One interviewee explained (P8): "*Because naturally you've got other things to do so you're not going to spend an hour kind of researching: What's happening in Brussels, what's happening in Barcelona. It's just not realistic I think because you've got other work constraints happening.*".

> *(P4) "Like that'd be great, because like a lot of us want to do it, but we don't have the time."*
> *(P8) "It's just time and capacity to meet with people and potentially travel to see some developments."*
> *(P5) "Yes, and also because of the distance and the travel involved. You don't like to get on a plane if you can avoid it as well."*

This limitation affects how knowledge exchange is conducted, with participants opting for online meetings due to convenience rather than more in-depth interactions (P2). In addition to time, limited internal capacity and financial resources also create hesitation among organizations, despite recognizing the benefits of knowledge exchange (P4; P8). One interviewee noted (P4): "*We were, we were going to do that but then... It kind of stretches our resources a little bit just in terms of our like... There's only I think 11 of us and we're quite a busy organization.*"". This barrier is particularly relevant for practitioners, as confirmed by nearly all AHBs. Although they face significant time and capacity challenges, participants acknowledge that integrating more knowledge exchange into their routine is still possible. It's a matter of setting aside dedicated

time for these interactions and finding a balance that doesn't overwhelm existing workloads (P2; P4; P5; P8). As one interviewee observed (P8): "*It has that good balance of being helpful but not too demanding… we meet every month, and it's part of our day-to-day work. Anything more would probably be too much.*":

> *(P2) "So we've mainly met online just for convenience, and I think that's kind of from COVID. We all, not everyone's based in the office, and these days it's, we're kind of time poor and traveling for an hour to a meeting, it's like you should be talking to somebody else at that time."*
> *(P8) "I also think and it's a little bit outside the scope of our capacity…"*
> *(P8) "Conferences and workshops are brilliant. Yeah, I hope, we need to attend them more. I mean, they I think they are happening and we're probably, I mean, are we unaware maybe to a certain extent or not? Again resources and capacity…"*
> *(P4) "We were, we were going to do that but then… It kind of stretches our resources a little bit just in terms of our like… There's only I think 11 of us and we're quite a busy organization."*
> *(P6) "I would imagine for, kind of, I would imagine for kind of policy practitioners, they have, like, less capacity and time to…"(P4) "You need to be able to set aside time during the week to be able to read things and see what's happening, because we had emails from Housing Europe with updates, but you just go: "Oh I'll read that later", and you don't really make the time to do it."*
> *(P2) "I'm going to be kind of like well: "I'm only going to devote five percent of my time""*
> *(P8) "It just has that good balance of being helpful but not too demanding. I think that's what works well, so the reason, like with the Housing Alliance, you know, we meet every month and we're kind of in an ongoing conversation, but that's much more our day-to-day work. Anything more than that, I think we'll probably get too much then. So it's always just about balancing those kind of things just for time and capacity constraints, as you said."*
> *(P5) "Now we could be better at it and more involved and I think again it is that distance that sometimes stops it."*

The type of knowledge exchange method and how it's organized also impact the time and capacity required. For example, while writing a report is time-consuming, presenting knowledge in practice demands more capacity from participants. As one academic noted when working on a report about a vacancy project (P6): "*So writing editorials or anything like that, that's all like, it's all sort of additional sort of work, you know, but that can be, you know, written, but it can also be, you know, for example, we would have in the vacancy project presented for, you know, say for Dublin City Council.*". Lack of time, capacity, and resources remains a significant barrier to knowledge exchange, but careful planning and balance can help organizations integrate more exchange activities into their routines. Choosing the right methods and organizing them efficiently is key to overcoming this challenge.

Different work priorities: In line with the barrier of time and resources, a critical issue mentioned by interviewees is the challenge of daily work priorities, which often leave little room for knowledge exchange efforts (P2; P4; P5; P7; P9). This barrier is particularly relevant for practitioners whose primary focus is on delivering services to their tenants, making it difficult to prioritize knowledge exchange activities (P2). When professionals are consumed by daily tasks, valuable lessons for others might be lost, either due to a lack of time for capturing those learnings or a disregard for sharing them. As one interviewee from the Land Development Agency noted (P7): *"I think the biggest focus on the pressure is just achieving the homes and getting the homes in. We're under so much pressure now. Well there's a priority as well, right? But unfortunately, when you're doing that, the learnings can sometimes be lost and that's a very important thing.*":

(P2) "They're hesitant, because they've got lots of other priorities. So they kind of go: "Okay if this isn't an issue right now, let's kind of leave it, let's deal with the ten other things."
(P7) "There's a lot of people working off of their own and they don't think about working together very well."

The size of the organization also plays a significant role in how work priorities affect knowledge exchange. Smaller AHBs, especially those with fewer than 10 homes and run by volunteers, are often too focused on day-to-day operations like tenant management and rent collection to engage in knowledge exchange (P9). One interviewee explained the challenge for smaller organizations (P9): "*Absolutely. That's right, I would agree with your analysis. I think the smaller the organization. In Ireland particularly we have, like, I think we have 428 housing associations. Of the 428, 85% of them own less than 10 homes. And of those, of those 428, whatever it is, of the 85% of them, most of them have no staff. They're all run by volunteers. So they're really focused on one, understanding who their tenant is and two, collecting their rent. That tends to be what they focus on.*". Given this, it was suggested that knowledge exchange efforts should prioritize mid-sized providers, who have the capacity to benefit most from training and learning (P9). Two AHB employees emphasized that while this barrier is real, it can be overcome with deliberate action (P2; P5). Setting aside time for knowledge exchange can offer valuable new perspectives, helping to situate housing activities in a broader context. It also fosters creative tension between current practices and potential new approaches, sparking innovative ideas (P2; P5). As one interviewee described (P2): "*No, I think it kind of, I think there are kind of competing tensions and I think that's what we wrestle with in policy and then implementing it. So kind of my passion is really about looking at new ideas, but really seeing how they work on the ground and adapting them and for me somebody early on in my career kind of described that as the creative tension. So, and I think that's how you spark then new ideas or kind of slightly different ways of doing something, yeah. So I understand that you sometimes have to keep the kind of fidelity of a certain practice like I know that's really important in housing first for example when you're looking at homelessness but sometimes, I don't think it's always possible to strictly apply one rule or approach*":

(P9) "We are the key deliveries. So the learning needs to be focused there, particularly in terms of the future. But of the ones, the mid -sized ones, there is a need I think for learning, maybe not on cost rental, but certainly on the ability to provide better services, be more efficient with services, look at, for example, the future of the environmental requirements."
(P9) "So there is a need for a considerable cohort to focus more in their training and learning that they don't necessarily do."
(P5) "I always found that I benefited by having an interest in policy and an interest in what's going on, because I think if you can't situate it within a broader context, it becomes monotonous, it gets you down a little bit, more of these problems coming up against the same problems all the time. So I think the policy perspective helps you do better at your work and puts it in a broader context."

A further suggestion is to employ a dedicated person whose primary role is to focus on knowledge exchange. This individual would be responsible for both sharing insights with others and ensuring that external learnings are captured and disseminated within their organization (P8). While competing work priorities can limit participation in knowledge exchange, deliberate prioritization and the employment of dedicated personnel can help ensure that valuable insights are captured and shared effectively:

(P8) "So, it has to be within someone's job spec or it has to be their role to do that."

Competitive sensitivity: Competitive sensitivity is another significant barrier to housing knowledge exchange, particularly in the context of Ireland's cost rental housing sector, where there are only five providers (P3; P4; P8-10). Given the limited number of providers, knowledge becomes a valuable resource, and competition is most visible in the delivery of houses and the allocation of funding by the Housing Agency. One AHB acknowledged their hesitancy in sharing learnings due to the need to balance being a charitable organization and running a successful business (P9): "*I'm very conscious we're a business as much as we are a charitable organization. We have to make returns for our banks, we have to make returns for the state, we have to ensure that we're generating enough in cash to continue to pay everybody, and to provide services. So from that perspective, it's a business. The better we do business, the more we can do business. So it's kind of that thing. If we do business badly, we won't be in business for very long. But if we do good business, then we'll do more of it.*":

> *(P10) "Yeah, they're kind of like: "I'll show, a bit like plain poker and I have some cost rental plans here, and I might show you them, but I'm not going to show them to him". So because there is competition between them, so Respond, Cluíd and Circle there. While they're all colleagues, and they all have similar issues when they own them, when they have delivered them, they are competitors."*
> *(P9) "I think we sometimes are a little bit hesitant to give that learning to others as a sector. I think we're cautious about that. And I think there are times where certainly some of the bigger ones want to retain what they might see as some commercial advantage by not telling everybody everything."*

Similarly, the governmental department of housing is cautious about sharing information, primarily due to concerns about potential political consequences and media scrutiny (P8). An academic described the department's approach as "paranoid" and "very defensive," leading to minimal contribution to knowledge-sharing events like conferences (P3). This defensive stance can hinder the overall learning process. However, not sharing knowledge can create the perception that organizations are working against each other, which may harm collaboration and create distrust (P8). An AHB interviewee stressed that openness and transparency are essential for effective knowledge exchange, as it fosters a productive working relationship across the sector (P8): "*Yeah and I think openness as well, like you don't want anyone to think that you're kind of working against them or you know hiding things from them. It's important to be kind of open and transparent. I think as a sector we kind of like to work productively with the state and because everyone is trying to have more homes.*":

> *(P3) "Then you have the policymakers in the department are kind of paranoid, very defensive and don't really want to talk to anyone."*
> *(P3) "Okay, you know, but you know, there's obviously, there's huge the limitations on that are the political limitations and even you know the Department of Housing and the policy making world they have a little bit of defensiveness."*
> *(P8) "The state can be very, like when you go to a conference, if there's someone speaking from the department or something. They're very, very conscious of the media, yeah, and the politics, because housing is so politicized in Ireland for obvious reasons. So they just don't feel comfortable saying very much. So you're sort of in the audience going: "You're not saying anything, you know…""*

Interestingly, despite the barrier of competitive sensitivity, some AHBs and policymakers demonstrate openness in sharing knowledge, particularly in informal settings (P8). One interviewee noted that policy members tend to be very open to discussing ideas and sharing learnings, but there is still room for improvement (P9). Informal interactions, in particular, are

seen as an effective way to overcome competitive sensitivity (P10), as they reduce the risk of speaking openly in public settings. The Housing Agency further highlighted that discussing competitive sensitivity openly within the sector could help reduce unnecessary competition and foster a more collaborative environment. Making competitive sensitivity a topic of discussion might ultimately lower the barriers to knowledge exchange:

> *(P8) "But by and large I find it to be really positive and there is, definitely with the policy members, there is a very openness. Like, we will speak very freely, and we need to, and it just means you do kind of have colleagues within the sector that you can ask and say, you know: "Have you been talking to this person about that? Or have you heard about that?". And that kind of stuff. And it is really helpful, because it just means you have kind of contacts out there in a network of information.*
> *(P9) "But generally speaking, it's pretty good. But like everything: It can always be better."*
> *(P4) "Opposed to a formal way, where you might feel like maybe I'm not meant to do that, because I'm representing this government or agency, and maybe I should be a bit more careful. So I think there's probably a bit more like useful exchange in the more informal settings if that makes sense."*
> *(P4) "And, you know, so there needs to be, I think, more talk given to how they're not competing and pushing up then the price of that land."*

Competitive sensitivity can hinder knowledge exchange, but openness, informal interactions, and addressing the issue directly can help mitigate its effects. By fostering transparency and collaboration, organizations can work together to achieve common goals without compromising competitive interests.

Differences in knowledge needs: The barrier of differing knowledge needs is especially apparent when comparing how practitioners and academics prefer to receive information (P1; P3; P5; P8). Practitioners typically require more general and practical knowledge, while academics seek more specialized, theoretical insights (P6). As one academic noted, this growing specialization in academia makes the information less accessible to practitioners, who often find it too detailed for their needs (P1): "*The problem with the academics has now become so specialized that the policymakers kind of go: "You know: I need more general knowledge. I don't need this tiny specialist bits of knowledge" We need more housing policy knowledge.*'". This divide in knowledge needs can also extend to the scale of housing projects. Larger cost rental housing schemes require different types of knowledge compared to smaller ones, further complicating knowledge exchange (P8). To address this barrier, it was suggested that dedicated individuals, referred to earlier as "high-impact individuals", be tasked with translating knowledge between different groups, also ensuring that both practitioners and academics benefit from knowledge exchange efforts (P3): "*...that a part of a knowledge exchange strategy should be focusing on identifying individuals who can translate between different communities.*":

> *(P8) "Deliveries at different scales have significant different knowledge needs than others in larger versus smaller providers."*

Bridging the gap between the differing knowledge needs of practitioners and academics is essential for effective knowledge exchange. High-impact individuals can play a pivotal role in translating specialized information into practical insights.

Different political context: Differences in political context are seen as a significant barrier to transnational knowledge exchange (P2-4; P10). Political systems and decision-making processes vary widely between countries, making it challenging to replicate the success of housing models

like cost rental housing across different nations. For example, while political consensus on housing policy is crucial, the way such consensus is reached differs greatly depending on the political landscape (P2; P3). Additionally, the strength and role of local government also vary, impacting the delivery of cost rental housing (P4). In some countries, local governments play a strong role in housing, while in others, like Ireland, they are more centralized, which affects implementation.

> *(P3) "…and their political context is so difficult that makes it really hard to…"*
> *(P2) "…obviously different political systems."*

Another key political difference is how cost rental housing is presented. In Ireland, it is framed as a substitute for homeownership, whereas in Vienna, it serves as an alternative to private rental housing (P3). These distinct political goals reflect the unique housing challenges in each country and affect how the model is perceived and implemented. Moreover, the size of the country impacts how housing actors interact transdisciplinary. In smaller countries like Ireland, key housing figures, including AHBs, ministers, and directors, have more frequent informal interactions, which can expedite decision-making. This differs significantly from larger countries, where interactions tend to be more formal and less frequent (P10): "*Our political system is such that, you know, say, directors and of approved housing bodies would have kind of informal conversations with the minister at different things. You know, the minister would be out at a lot of events, and they go to every opening and you know, every red ribbon that has to be put. So there's a lot of informal discussions with the minister and his officials would be with him, when he's out and about.*":

> *(P4) "Every country is different. Every country has different political setups and stronger local government."*
> *(P3) "It's more in Ireland, it's more imagined as a housing for people who can't afford homeownership. That's the way the government even describes it. Whereas in Austria anyway, which is a country I know best, there's more view that cost rental is an alternative to private housing that should be open to as many people as possible."*

The political context of a country significantly influences how housing models are implemented and how transdisciplinary interactions occur. Understanding and considering these differences is crucial for effective transnational knowledge exchange, as what works in one political environment may not be directly applicable in another.

Different cultural context: Cultural differences were highlighted by interviewees as an explicit barrier to transnational knowledge exchange (P4; P7-9). These distinctions complicate the transfer of housing models, such as cost rental, because cultural norms shape how renting and homeownership are perceived, and ultimately how such models are implemented. As a result, what works in one country might not be directly applicable in another due to deep-rooted cultural differences (P4; P7-9). However, despite this barrier, knowledge can still be shared and adapted through a cultural lens, which helps to avoid common mistakes. As one interviewee from the Land Development Agency noted (P7): "*They can then put it through their own prism and their own filter of their culture, their country, their laws, their planning, their rules etc., but you can save 50% of the mistakes maybe from listing and learning from what's the common things across the organization.*". While cultural differences can complicate the adoption of models like cost rental housing, adapting shared knowledge to local contexts can still significantly reduce the risk of repeating mistakes:

(P9) "The culture is different."
(P8) ""But it's home-ownership in Ireland, it's a long -term, historic….". Author: "Almost cultural…". P8: "Yeah, cultural.""
(P4) "Like again, it's cultural too. Like some countries would have a more cultural thing with renting, like here aren't…"
(P7) "There's a very different way of thinking in Ireland."

Different economical context: Beyond political and cultural distinctions, economic differences present another explicit challenge to knowledge exchange (P1; P2; P9). The variation in funding streams and economic scales between countries is particularly relevant for cost rental housing, where the financial structure is critical. An academic who studied cost rental housing across Europe found that differences in funding streams were a key factor in determining how replicable the model was in other countries (P1). One interviewee emphasized that when economic contexts differ, replicating housing models becomes much harder (P9). Economic differences, particularly in funding streams, are a major barrier to replicating housing models like cost rental across countries. Careful consideration of these economic variables is essential for successful knowledge exchange.

(P9) "The economies are different scales and different sizes… But they all have elements that you can see where it has worked better or where things you could learn from with doing it."
(P9) "The funding streams are different."
(P9) "Okay, we won't all do the same thing because we can't. Cultural funding, everything is different."
(P2) "…, you kind of look at international practice that, then you kind of apply that over here and there's always different things that kind of come up, because like I said about funding systems…"
(P1) "So I had to research the policy documents, the funding mechanisms, the practices from other parts of Europe."

Knowledge drain: Knowledge retention, or rather the lack of it, is another barrier to effective transdisciplinary and transnational knowledge exchange (P1; P10). When key personnel leave an organization, valuable knowledge can be lost, leading to the need for continuous updating and re-sharing of information. This is particularly evident in the governmental housing department, where public servants frequently move between departments (P1): "*public servants, they don't stay in housing for long… there's a constant need for updating and exchanging information*.". Despite this challenge, knowledge drain also creates opportunities to inspire knowledge exchange efforts. The Housing Agency, for example, highlighted the importance of its role as a constant source of knowledge, ensuring continuity in the face of personnel changes (P10). Knowledge drain therefore underscores the importance of having consistent knowledge repositories and intermediary organizations to ensure continuity in knowledge exchange efforts.

(P1) "Sometimes you have qualifications, but because policy people move around, they don't just stay in housing policy."
(P10) "So basically, people change quite a bit in the department because it's part of the way the public, the civil service works."
(P1) "There's a good exchange between these public servants, you know, but part of the problem with the public servants, they don't stay in housing… You know, they might go in housing for two years, and then they move to some other department. So there's a constant need for, you know, updating and exchanging information."

Confirmation bias: Confirmation bias, which is the tendency to seek out information that confirms existing beliefs while dismissing contradictory evidence, was also identified as a barrier to knowledge exchange (P3). This bias can limit openness to new ideas and perspectives, both in transdisciplinary and transnational exchanges. One academic illustrated this with an example, noting that policies are influenced not just by technical factors, but by political ones as well (P3). This explains, in part, why cost rental housing was adopted in Ireland, it aligned with the policy community's existing objectives (P3): "*The only people who talk about Texas are the real estate industry because in Texas there's no regulations for anything and it's just like 700 miles of suburban housing. So but also the part of how policies can influence each other is it is a political process it's not just a technical process. So cost rental housing in Ireland happens because it was supported by the policy community and the research community, because it was, it had a strong kind of social objectives and it was interesting for the government because it allowed them to solve a political problem of generation rent.*". Confirmation bias can therefore hinder both knowledge exchange and the successful introduction of housing models like cost rental, as it narrows the scope of ideas that are considered. Addressing confirmation bias looks to be critical for ensuring openness to new perspectives in both knowledge exchange and housing policy development, allowing for more innovative solutions.

> *(P3) "Knowledge exchange is confirmation bias… I mean nobody in Ireland is ever gonna go to Texas to study their housing system to learn about their housing system. Do you know what I mean?"*

<u>Enablers of knowledge exchange efforts by interviewees</u>

Room for informal interactions: The importance of informal interactions in knowledge exchange is already evident from discussions on conferences and as a countermeasure to competitive sensitivity. Seven out of ten interviewees (P1-4; P7; P8; P10) emphasized the critical role informal conversations play in enabling knowledge exchange, often describing them as more effective and influential than formal exchanges (P1; P3; P8). One interviewee explained (P1): "*But, you know, the real benefits I think come about from the informal meeting and just social chats and, you know, it's not highly, it's not valued enough how important that is.*". Informal exchanges typically occur during breaks, lunches, or social gatherings surrounding formal events like conferences. These unstructured moments allow for more candid and impactful discussions than formal sessions (P1; P4). However, an AHB interviewee pointed out that formal structures should not be entirely dismissed. Both formal and informal elements should instead complement each other in a knowledge exchange strategy. The Housing Alliance exemplifies this balance, combining structured meetings with informal interactions like phone calls or quick Zoom meetings between events (P2): "*So we've got an informal exchange, but then we have monthly meetings where I suppose that's a bit more structured, you know, we have an agenda and we'll kind of have specific topics that we want to discuss.*":

> *(P8) "Yeah, I think that's why those kind of informal exchanges can sometimes be a lot more effective."*
> *(P3) "…and that just basically occurs through the fact that within the housing policy community ideas and discussions take place informally yeah and that is possibly more influential in some respects."*
> *(P3) "…there's a lot of discussion and debate happens in just personal interactions."*
> *(P1) "You just have to create an atmosphere, I think, of a lot of chatting, also a little bit of room to maybe… Yeah, lots of room and lots of coffee breaks for people to mix. That's where most of the exchange goes on. Not in the formal sessions people just listen, yeah that's really…"*

(P4) "...we have the policy conferences and there's the exchange of ideas. A lot of the real conversations happen when you're having lunch or you're having coffee during the event or you go for a drink."
(P2) "So I think it kind of works on both those informal and formal structures that, you know, we have very specific objectives that we want to meet."

Additionally, informal interactions are particularly useful for uncovering deeper insights and rationales behind decisions that might not emerge in formal settings. One academic highlighted how informal conversations with civil servants provided a more detailed understanding of housing policy (P3): "*(P3) "Usually the government when they have a policy don't really tell you why they have the policy... But you don't really know more deeply what was the rationality for this thing. "Why did you design it in this way? Why did you make these choices?". You don't know that. Unless you have an informal conversation with somebody who works in the department."*". Informal interactions provide a valuable space for open, candid knowledge sharing, complementing formal structures. By integrating both into a knowledge exchange strategy, participants can gain deeper insights and uncover essential information.

Tangible knowledge for users: Another crucial enabler of effective transdisciplinary and transnational knowledge exchange is ensuring that knowledge is tangible and beneficial for the users (P5; P6; P8; P10). Knowledge needs to be seen as directly applicable and valuable to an individual's or organization's context, motivating participation (P6): "*Where people, I suppose, they came maybe, you know, where they could see some kind of, you know, benefit towards their own work...*". One way to make knowledge more tangible is through practical, hands-on activities like site visits or walkthroughs, as discussed earlier. These experiences help participants visualize and apply the information to their specific circumstances, making abstract concepts more concrete (P5; P6; P8; P10). An interviewee emphasized how essential such experiences are for gaining the necessary insights when it comes to housing (P6): "*In a walking, I think, is like for us actually in this particular thing, it was like it was really walking, yeah, walking, learning in the city. I think that that's like as a process and knowledge exchange, I think that's like, it's been really like, fundamental, I think, you know, because you're kind of, you're, you're seeing and then you're, you're able to like, from the landscape, you're able to sort of, yeah, kind of ask those questions that are like, get you thinking kind of, about how this would work in your context, what are the kinds of barriers towards that sort of operating in the same way.*":

(P6) "...people go to one of these fact-finding, kind of, missions or, you know, get a bit more of a sense of it and come back with something they feel is worthwhile or tangible to their own organizations."
(P10) "Yeah, kind of, it was very abstract to me both, you know, and we actually saw the buildings. It got really tangible, right?"
(P8) "...you know, you really need to see it to understand it."
(P5) "No, we go on site, because again, it's much more valuable if you can see it..."

Making housing knowledge tangible through practical experiences like site visits ensures that participants find the knowledge exchange valuable and applicable. By directly connecting the information to real-world contexts, users are more likely to benefit and apply the insights.

External financial support: External financial support is a significant enabler of transdisciplinary and transnational knowledge exchange (P2; P3; P9), helping to address the barrier of limited resources. Interviewees noted that funding from sources such as the national government or European programs could increase opportunities for knowledge exchange. Currently, the

Housing Agency supports Irish knowledge-sharing efforts by funding projects with a knowledge exchange component, underscoring the role of financial aid in promoting learning (P6):

> *(P9) "But I do think one of the ways you could help expand that to deliver more of that is through government supporting it. So I think there should be a specific kind of budget line to support learning in those areas, transnational learning."*

Additionally, European funding sources like Horizon projects provide substantial financial support for initiatives with a knowledge exchange element, though these grants can be challenging to secure (P3). One academic suggested two improvements to enhance funding structures. First, they propose increasing the availability of European funds since most financial support is currently national. Second, they recommend a requirement for international collaboration, ensuring that knowledge exchange remains transnational (P3): "*If there was more dedicated international or European research funding with a knowledge exchange component that could help because as far as I know 90% of housing stuff is funded research, I mean is funded through national research.*". However, funding requirements must be aligned with practical knowledge needs. Strict application guidelines that do not consider the real needs of knowledge users or the housing sector could limit the effectiveness of these funds (P2):

> *(P3) "So maybe some more institutionally mandated requirement for some international engagement would be appropriate."*
> *(P2) "And you know I think a lot of NGOs sometimes are forced to kind of just apply for some sort of government funding that's available and make programmes fit the funding as opposed to saying what is the real need in the community."*

External financial support could be essential for sustained knowledge exchange, funding programs must then be thoughtfully designed to genuinely benefit knowledge users and ensure productive international engagement.

Nice atmosphere: Creating a positive atmosphere is a simple but powerful enabler of successful knowledge exchange, especially in transnational events (P1; P4). As participants invest significant time in these activities, fostering an enjoyable environment encourages future participation. One interviewee emphasized this point (P1): "*Make it enjoyable, that's the key, enjoyable. Because they're already working very hard and they need something that's enjoyable.*". To support this, knowledge exchange events should balance formal interactions with opportunities for socializing and networking. As noted by the ICSH, attendees value engaging, enjoyable interactions that allow for connections beyond the strictly formal (P4). In the end, a welcoming and enjoyable atmosphere fosters stronger engagement in knowledge exchange, creating a foundation for sustained participation and collaboration.

> *(P4) "And people like getting out of the office and kind of into these kind of… If you're not doing them all the time, yeah, I think people like doing that yeah…"*
> *(P1) "…have a nice atmosphere, that kind of thing."*
> *(P4) "Now, where like, people don't want their day full of just policy stuff, they want to be able to socialize and network in that kind of way."*

Having a strategic goal: Establishing a clear strategic goal as part of the knowledge exchange strategy is another critical enabler (P2; P6). By defining specific objectives from the outset, organizations can ensure knowledge exchange activities serve a broader purpose and remain relevant rather than being one-off events. An academic and an AHB representative highlight the importance of setting this goal at the beginning to guide the exchange process effectively (P6):

"*…what's helpful… is if it's guided by a strategic kind of goal in the first instance.*" This alignment ensures knowledge exchange efforts are cohesive and purpose-driven, optimizing their impact over time. Defining a strategic goal thus solidifies the direction of knowledge exchange activities, making them more impactful and aligned with long-term organizational objectives.

> *(P6) "I think what's probably helpful in some of these things is like if it's guided by a sort of like strategic kind of goal in the first instance."*
> *(P2) "So I think it kind of works on both those informal and formal structures that, you know, we have very specific objectives that we want to meet."*

Speaking the same language: A common language is a clear enabler in transnational knowledge exchange (P4; P5). For Ireland, this advantage is particularly strong as English is widely spoken in European knowledge exchange settings, reducing language barriers and making exchanges more accessible and inclusive. The Housing Agency and an AHB interviewee both note that Ireland's participation in international exchanges is highly facilitated by this linguistic benefit (P4): "*Which is, I think, just in that sense we're very lucky that like, and you yourself as I suppose as well, like that a lot of Europeans have perfect English. So it's so much easier for us to engage, like, and we're so lucky in that way that, like, even like you talk to your Spanish kind or whatever and they all have good enough English that they can… So we don't have to, which is terrible. Like, but I suppose that's just and a lot of our conferences, the Housing Europe stuff is done through English as well. So there's, it's nearly easier again, there's no excuse for us not to try and seek that kind of information, and do those exchanges…*". Language accessibility enhances the inclusivity and fluidity of knowledge exchange, allowing Irish organizations to engage widely in international exchanges with minimal communication barriers:

> *(P5) "And I think there's the language piece as well. So because we're English speakers, it's very much easier for us to access and to understand English data and reports and so on. So now we contribute to them as well and that there's a knowledge exchange both ways."*

Attractive and accessible location: Selecting an attractive and accessible location is another key enabler, directly contributing to a positive exchange atmosphere (P1). A conveniently located venue increases the likelihood of attendance and re-engagement, especially since organizations often face limited time, capacity, and resources. An academic explains that accessible locations with straightforward transportation options, like a single flight or train ride, help ensure high attendance and reduce logistical burdens (P1): "*Also location, you know, somewhere that's easy to get to is another thing. Like you don't want to be getting like two planes and a train, you know. You need something like where you can get on one flight, maybe on one train, that's it.*". All in all, choosing accessible locations removes logistical obstacles, fostering better attendance and encouraging ongoing participation in knowledge exchange activities.

> *(P1) "I think you have to make it attractive locations."*
> *(P1) "Yeah, like two days to go there are two days to come back, yeah. It's a big thing. That's one of the things about Galway, the problem with Galway is we have to go to the airport in Dublin which is three hours to just go anywhere. So whereas Dublin you know people can fly to most places from Dublin, so yeah."*

Part 6.3 Knowledge exchange incentives of participants

INCENTIVES TO BE INVOLVED WITH KNOWLEDGE EXCHANGE ON COST RENTAL HOUSING BY INTERVIEWEES			
	ROLE	INCENTIVE	ELABORATION
P1	Academic	Networking	*"Like, yeah, well, think it's about networks, networking, yeah, networking, you know, it's, I mean, okay, people, you need to go to a nice place, you know, if you can. But, you know, the real benefits I think come about from the informal meeting and just social chats and, you know, it's not highly, it's not valued enough how important that is."*
P2	Approved Housing Body	Showing how we can do better	*"Well, I think it is about learning and reputation and making sure that, you know, because we're a social justice organization. In that sense, we're really... We don't want to just do something because we think it's a good idea, it has to make a difference. And you're using public money. And your tenants and service users are really entrusting you, you know, our donors, and the partners that we work with, they're really trusting us with those kind of finances and to manage them efficiently."*
		Continuous learning & Helping others improve	*"So, you know, it's about that kind of continuous learning and improvement and really kind of saying: "Well, actually, you know, we think we're making a difference and how can we learn from each other? How can we help you adapt?""*
P3	Academic	Curiosity	*"But what I would say is, at the moment, in the context of cost rental housing anyway and it's driven, knowledge exchange is driven mainly by the curiosity and the kind of cosmopolitan values of the researchers and the policy community, right?"*
P4	Irish Council for Social Housing	To learn & provide the knowledge to others	*"To learn I suppose. To have like that knowledge that you, if your memberships develops a problem, that you can go: "Well actually I was speaking with our colleagues a month ago in the Netherlands and they came across this issue too maybe we should think about this or maybe we should you know…". Yeah, so I think it just kind of goes: "Well if they can do it over there. Why can't we do it here?" And then well you mightn't be able to do it. At least you can have a look at it and explore it and pick up the phone and have a chat."*
P5	Approved Housing Body	New perspectives	*"...that we would always look at that a wider perspective, both in Ireland but also more internationally, that we would try to inform our practice in a broader way."*
P6	Academic	Academic interest	*"I'm interested in, like, you know, exploring a thing theoretically, or, you know, looking at the context between it. But I mean, like, I'm also, like, very interested in kind of learning on the ground."*
		Networking	*"...because they're networking and they like meeting people who, you know, I think that element of it is like... people, you know, always find that useful, you know like. And it's more than just like meeting other people who are working the same thing. I think there is a lot of, like those are relationships that kind of you know actually inform everyday kind of, you know, knowledge exchange and, you know, after the fact."*
P8	Approved Housing Body	To improve	*"Oh yeah, I mean, if there's anything that we can do to improve how we deliver housing. And you know more financially efficiently or you know even just sustainability is a huge one anything around sustainability, sustainable communities that would improve the lives of our tenants…"*
P9	Approved Housing Body	To learn	*"The reason we get involved in the knowledge exchange, information exchange, is because we recognise, first of all, this is brand new. I personally, and as an organisation, we don't like to be at the bleeding edge of something. So whenever you're first in, you learn a lot, you make a lot of mistakes, and it costs a lot of money to do so. So we like to watch what's going on, understand what's going on, dissect it a little bit, get more information about it, and say, okay, how can we avoid the mistakes of those who have already gone ahead of us?"*
		Helping others to get into delivering cost rental housing	*"And the exchange then is to help others to get into it, because we recognise that we can't do it all. We recognise that we need a number of others to be doing it, and therefore having that knowledge exchange enables others to be part of that. And it takes out some of the, it demystifies it for someone, it derisks it for someone... So not wanting to get into things too early is one of those conservative, risk averse things that they do. So by having the information and the knowledge, you can derisk it for them, you can demonstrate the benefits of it, not just for the individuals who are tenants, but also from an organisational perspective."*
P10	Governmental housing agency	Learn from other countries	*"But we could definitely learn from other countries' experiences and maybe even anticipate some of the problems that might arise up the line that we haven't thought about yet, because we're so busy getting it off the ground."*

Figure 53: Incentives of interviewees to be involved with knowledge exchange efforts (own work).

OVERVIEW OF THE INCENTIVES OF INTERVIEWEES TO BE INVOLVED WITH KNOWLEDGE EXCHANGE ON COST RENTAL		
INCENTIVE	INTERVIEWEES	NAMED BY
To learn / Satisfy curiosity or an academic interest / Gain new perspectives	7 of 10	(P2-P6; P9; P10)
Networking	2 of 10	(P1; P6)
Showing how we can do better / To improve	2 of 10	(P2; P8)
Helping others to improve or get involved with cost rental housing	2 of 10	(P2; P9)

Figure 54: Overview of the main incentives of interviewees to be involved with knowledge exchange efforts (own work).

To learn / Satisfy curiosity or an academic interest / Gain new perspectives: The most common incentive driving engagement in knowledge exchange on cost rental housing is the desire to

learn and gain fresh insights (P2-P5; P9; P10). This motivation often arises from a curiosity about new approaches and a desire to broaden understanding within an academic or practical framework. An AHB interviewee (P2) highlighted that learning should be continuous and mutual, urging that housing actors need to actively seek and embrace these opportunities. Academics, too, express a distinct curiosity, grounded in both theoretical exploration and practical insights (P3; P6). One academic notes (P6), "*…exploring a thing theoretically, looking at the context between it… but very interested in learning on the ground.*":

> *(P3) "So what I mean by that is, what would normally happen is that somebody, often an academic, but not always, would be interested in something and use their own initiative, they would go and research it and then maybe they would get some funding… So, I think those are, those are kind of incentive to me to kind of go to those and sort of learn across them."*

For practitioners, the incentive to learn also stems from a need to gain broader perspectives, as seen in one AHB's approach to view practices in both domestic and international contexts (P5). They explain (P5), *"…I've been quite keen that we would always have, you know, that we wouldn't get completely stuck in the day-to-day stuff, that we would always look at that a wider perspective, both in Ireland but also more internationally, that we would try to inform our practice in a broader way.*". Learning is thus viewed as a way to enrich practices, adapt to evolving standards, and ensure that all procedures meet high quality benchmarks (P9). To them learning is about listening, watching, understanding, analyzing and critiquing what is delivered by your organization. This is reinforced by an AHB leader who emphasizes that ongoing learning is central to maintaining excellence and improving upon even the best practices (P9):

> *(P9) "So it's maintaining that business focus, but making sure that we adhere to and deliver on our purpose as an organization, and then it's ensuring that what we provide is really good quality stuff as well. The only way you do that is through learning and making sure that you listen, and you watch, and you understand, that you analyze it and you critique it in a way that ensures that there is something to learn from it. Everything, no matter how good it is. My staff here hate me for this because I say this all the time but: 'Everything you do could be done better. It doesn't matter how good you are. It doesn't matter even if you're the best. It can still be better.'"*

In summary, this drive to learn not only fuels curiosity but also positions organizations to adapt and grow by absorbing lessons from both successes and setbacks across Europe, as emphasized by the Land Development Agency's call to exploit learning opportunities transnationally (P7):

> *(P7) "So trying to, particularly in Europe anyway, look at the European connection to them. I think we could do a lot more. I think it would be really interesting to see if we could do more collaboration in learning from how has this worked in other countries and what mistakes or lessons could we learn."*
> *(P7) "But I do think we have, we couldn't be at a better chance to be able to collaborate and learn…"*

Networking: Networking is a key incentive for many involved in knowledge exchange, especially academics, who value the connections built both during and after events (P1; P6). Establishing a network through these exchanges provides contacts for future collaboration and information-sharing. An academic suggests that having the right contacts may support knowledge exchange in a more practical, immediate way, enabling easy follow-ups to clarify details or deepen understanding (P6). They think out loud: "*So, I think where, like, where I would imagine kind of the incentives there are, like, you know, are meeting people, you know, which then can*

be crucial, I would imagine, in terms of, like, you know, providing a kind of knowledge exchange in a more practical way, you know, even pick up the phone and, like, talk soon about, like, you know, talk me through how this, how this works and understanding it.". The networking often takes place at structured events, where the inclusion of informal spaces, like breaks or social gatherings, allows people to connect more naturally. This format supports the need for, the earlier discussed, informal exchanges and enables individuals to grasp each other's goals and incentives, fostering more personal and effective communication (P1; P4). As one interviewee explains, face-to-face interactions, especially with new contacts, often lead to more open discussions, as people feel less pressure to adhere strictly to formal talking points (P4).

> *(P4) "And what we have found in the feedback from attendees after every event is they want more room for informal networking."*
> *(P1) "Yeah, and conferences, you know, generate a lot of informal meetings. You know, you have main speakers and then you have like a lot of gaps between the speeches for people to talk and meet."*
> *(P4) "And okay a lot of the time like and that's, when like especially, when you're like meeting with people you hadn't met before, you don't really know that well. It's a good way of kind of getting a sense of them as well where they're coming from and people don't feel as under pressure to stick to the lines you know?"*

Moreover, becoming part of larger networks, such as European housing networks, broadens knowledge exchange opportunities for housing actors and strengthens ties that could be beneficial at both national and transnational levels (P2). An Irish interviewee even advocates for engaging tenants in these networks, which would allow them to benefit more directly from knowledge exchange efforts (P2). In summary, networking serves as both a practical tool and a catalyst for future exchanges, strengthening relationships and fostering trust within the housing sector to support continuous learning:

> *(P2) "Yeah, I think that kind of Ireland being part of Europe and part of those European networks even at a governmental level I've seen. It really can help."*
> *(P2) "…I think it's important for our tenants and service users to also be part of those networks, both across Ireland and internationally as well."*

Showing how we can do better / To improve: For AHBs, the motivation to engage in knowledge exchange is also about demonstrating a commitment to improvement (P2; P8). This drive to excel aligns with a desire to provide better services and reassure tenants that their living standards are continually enhanced. A specific AHB underscored the importance of showing tenants a commitment to improvement, even if current housing conditions are adequate (P2). Their approach involves evaluating and implementing best practices to meet evolving standards (P2): "*So what I would look at is kind of good practice and developments in government kind of policy and how that applies to … and how we need to kind of improve our services and maybe implement good practice."*. Ultimately, the incentive to improve reflects an organizational commitment to progress. Through knowledge exchange, AHBs position themselves to enhance tenant services and maintain a reputation for proactive, high-quality housing solutions.

Helping others to improve or get involved with cost rental housing: Another central incentive, particularly for AHBs, is the opportunity to help others improve or engage with cost rental housing (P2; P9). AHBs see clear value in assisting new or prospective providers to join the sector, believing this collective growth will enhance Ireland's cost rental housing landscape (see also figure 53). For instance, as new organizations enter the market, they often face a steep learning curve, requiring considerable knowledge to succeed. Sharing practical insights and

experience can ease this entry process and showcase the tangible benefits of participating in the sector (P9). As one AHB interviewee notes, building a broader base of providers strengthens the entire sector by fostering shared knowledge and aligning efforts. Furthermore, for organizations like the ICSH, helping others goes beyond self-improvement, contributing to the sector's collective advancement (P4). For example, knowledge gained from events or reports is most impactful when it's shared broadly among networks back home. The ICSH interviewee highlights the significance of redistributing insights, emphasizing, "*But it's just, it's all well and good just being in Housing Europe events, but if we don't come back and share that with our networks here then what's the point?*" (P4). Overall, this incentive therefore underscores a commitment to sector-wide progress. By supporting others, organizations contribute to a culture of shared learning and collective advancement, reinforcing a more robust and collaborative cost rental housing environment.

Part 6.4 Other key knowledge exchange insights

Apart from conversations about the applied method, and barriers and enablers experienced with knowledge exchange efforts, other themes stood out in the interviews with Irish actors involved with cost rental housing.

OTHER KEY INSIGHTS OF KNOWLEDGE EXCHANGE EFFORTS BY INTERVIEWEES		
INSIGHTS	INTERVIEWEES	NAMED BY
Knowledge exchange has a ripple effect	7 of 10	(P2-6; P8; P10)
Make sure knowledge exchange is structurally built in	6 of 10	(P2-5; P8; P9)
Exploit both on- and offline interactions	5 of 10	(P1; P2; P4; P5; P10)
Transnational knowledge exchange should be exploited more	5 of 10	(P1; P4; P7-9)
Seize opportunity of EU consensus on affordability	3 of 10	(P4; P7; P8)
Involve financial institutions transdisciplinary	2 of 10	(P1; P3)

Figure 55: Other key insights of knowledge exchange efforts mentioned by interviewees (own work).

Knowledge exchange has a ripple effect: Knowledge exchange efforts create a "ripple effect," spreading insights through networks, from initiating organizations to diverse stakeholders like local housing providers and even tenants (P2-P6; P8; P10). An AHB interviewee underscores this spreading impact, explaining that knowledge exchange should be "circular," applying to all levels of engagement, from prominent organizations like the OECD to community-level participants (P2): "*...that was facilitated by some OECD funding and so, you know, that so, that was a government department accessing that funding, but then they were kind of going back to getting the user's voice to kind of develop the strategy and then that also then facilitates you know the kind of European partnerships." Author: "So, it really sparks something?" (P2) "Yeah, absolutely, because I think the other European countries would have access that kind of similar funding that supported them. And then, you know, the OECD can kind of facilitate those networks across. So it's this kind of like real circular, you know, I think it has to be at all levels.*". This process is frequently sparked by new research publications (P4; P10), which create demand for knowledge and trigger related activities, such as seminars and conferences, to share findings and encourage further engagement. One academic describes how *"So I just think that it's those kind of published documents are like the starting point for rest... My point was just that usually what happens is you have a publication, some form of written document and that document has detail and has evidence and that then becomes the basis for a seminar or conference or a conversation that it allows the conversation to happen.*" (P3) that amplifies knowledge sharing across the sector:

> *(P5) "If that's the theme of the conference, then that'll encourage papers from other parts of Europe and that there'll be that exchange, so I think those kinds of things are essential..."*
> *(P10) "So we were very interested. So I think when that research is ready it will spark a certain*

amount of interest in the wider housing."
(P8) "So I think our plan is definitely, what we've kind of spoken about with that research, is to do it again and to kind of keep doing things like that. And it's great, but I think there needs to be more, a lot more, and it would be my preference. Because you are trying something very new and you are trying to kind of even culturally bring about these great big changes, and so you can't just do it and then throw it out there."
Author: "And would you say that those kind of funding and research is like a spark to get people engaged? (P4) "Absolutely."

Once these exchanges begin, they ripple through broader networks, as noted by another academic who emphasizes the lasting impact (P6): *"...each of those individuals will have their own networks that they also bring that kind of knowledge back to.*". Similarly, a practitioner illustrates how these exchanges foster ongoing discussions within organizations, ultimately shaping broader strategies and approaches to challenges like cost rental housing (P2). In summary, the ripple effect demonstrates how knowledge exchange transcends initial activities, with each participant extending insights through their networks. This layered sharing strengthens knowledge across both local and international levels, enhancing understanding and the practical application of innovative models like Irish cost rental housing.

(P6) "I think that that sort of like percolates a broader discussion there where... it's no longer a question of like this is just one of the options... [but rather] this is something we should explore more... by the time you have another like event... you've got like more people who are actively trying to develop a strategy towards that in their own organizations. I mean I don't know the complete storyline of it but I would imagine you'd find something similar to that happening with cost rental in Ireland... you know there's conversations happening at multiple kind of levels..."
(P2) "And then each of those individuals will have their own networks that they also bring that kind of knowledge back to."

Make sure knowledge exchange is structurally built in: Interviewees frequently highlighted the value of structurally embedding knowledge exchange at various levels to maximize its impact (P2-P5; P8; P9). Building knowledge exchange into the fabric of individual and organizational routines emerged as a key theme. On an individual level, dedicating regular time to knowledge exchange activities helps overcome the barrier of limited capacity, as previously discussed. Organizationally, incorporating knowledge exchange into regular meetings, as the Housing Alliance does monthly, offers a consistent platform for sharing (P4). An AHB interviewee emphasized the need for a more structured approach, noting (P9), "*I think we could probably be better it in it being more structured. I think sometimes it's not as structured as it could be or as planned as it could be. So for me: I think there's a need for at least every couple of months for there to be a specific learning process that is put out there.*". Another academic suggested the importance of formal collaborations for more robust policy support, explaining that in an ideal world there would be formal collaboration in the policy design and implementation (P3).

(P4) "Um, so it depends on the issue. Um, so with our larger members, we have monthly meetings with the CEOs of the, the 'tier threes' we call them. So they're the bigger, the bigger members who are developing all the time, both social and around four of them are at the moment involved in cost rental provision. So we wait monthly to talk through, like big issues, like macro issues."
(P3) "I mean I think in an ideal world there would be formal collaboration between policy makers in different countries to get as much support as possible in the policy design and

implementation."
(P8) "So, it has to be within someone's job spec or it has to be their role to do that."

Integrating knowledge exchange can also occur through systematic monitoring efforts, as exemplified by the Housing Agency's annual conferences (P4) and recurring research studies, which promote continuous engagement. One AHB interviewee highlighted the need for regular surveys of cost rental housing residents, proposing biennial assessments to gauge progress and improve strategies. They emphasized that (P8) "*And if you're not in any way watching, monitoring and guiding that then I think, it'll just you know, it'll be what it is. But the state has the opportunity, I think, to kind of be watching it and be you know be saying: 'Actually the geographic spread is off', or 'there's far too much in North concentration in North Dublin and what we need to do is you know…*"". However, given the limited capacity of AHBs to monitor extensively, several interviewees suggested that the Department of Housing assume a central oversight role (P8).

(P4) "So there's always that kind of comparison and exchange of ideas. Like that's why the annual conferences are so good because you can have those kind of side conversations with someone going: "Look, we saw this in, someone mentioned this at a commission meeting, is that something that Ireland are doing actively or can you give us some more information on that?"
(P8) "I would love to do it every year or maybe every two years but just to kind of to see what the reactions are over time."
(P8) "I also think and it's a little bit outside the scope of our capacity. But I think the state should be constantly, constantly, constantly researching and monitoring cost rental and seeing what effect it's having what effect it's having on market rents and because it's…"

Structured collaboration on research with a knowledge exchange component, especially in a transdisciplinary framework, was also identified as an important structural enhancement. An AHB interviewee proposed joint applications for European funding, explaining (P2), "*Commission for European funding together, doing collaborative research in a structured way. Yeah. And I think we can do that through that kind of collaborative research, you know, so if there's kind of saying, right, okay, how can we, if we work together, there's strength in numbers, but we can maybe access kind of research funding on an European level. And I think that kind of puts a real structure around it, because, you know, the kind of agreements are kind of set that, you know, this is what you will get, this is what we will get, but actually society, you know, on a broader level will get that. And I think we would work with organizations that share those kinds of missions and objectives. So I think it's quite a natural synergy in that sense.*". To ensure that knowledge exchange remains effective and relevant across borders, an academic recommended mandated requirements for transnational knowledge exchange in funded projects, which would guarantee beneficial exchanges of knowledge between different countries (P3).

(P3) "So maybe some more institutionally mandated requirement for some international engagement would be appropriate."
(P9) "…one of the ways you could help expand that to deliver more of that is through government supporting it. So I think there should be a specific kind of budget line to support learning in those areas, transnational learning."

Finally, other means to establish a systemic knowledge exchange infrastructure include leveraging external financial support (P9), which the Housing Agency currently helps provide through various knowledge exchange initiatives. Additionally, creating intermediary organizations like the Housing Agency enhances cross-sector connections and translates shared insights into actionable recommendations (P2; P5). Reflecting on this, an AHB interviewee

praised the agency's dual role in linking the housing sector to government, stating (P9), "*And I have to say, we're very fortunate. We have an organization like the Housing Agency who is very much connected into the housing sector and also very connected into government. So they can hear what we're saying, exactly as you said, translate into what government need to know and understand and then be able to say to them: "This is what you need to change." And that feed backwards and forwards works really well.*". Embedding knowledge exchange at both the individual and structural levels therefore not only strengthens transdisciplinary collaborations but also ensures that learnings are consistently refreshed and applied. Through these structured approaches, housing providers can better adapt to ongoing sector needs and leverage collective insights for sustainable progress:

> *(P5) "So the Housing Alliance was there to promote scale in the sector and to help larger associations get larger and to try and structure the environment in which we operated to help grow the sector."*
> *(P2) "Yeah, but I think the structure of it. So I suppose what I'm saying is that if there were 20, like in the UK it's a larger country, but they have like the G15 or the G20 of the largest organization. So I think the idea for the Housing Alliance is a kind of similar one that you know as a smaller group what can you do together?"*

Exploit both on- and offline interactions: The expansion of digital sessions alongside in-person meetings has become a hallmark of modern knowledge exchange (P1; P2; P4; P5; P10). Initially initiated during the COVID-19 pandemic, digital meetings became widely used, allowing participants to avoid travel and connect more efficiently (P5). Digital knowledge exchange is particularly helpful for quick or specific inquiries, where swift interactions are necessary. An AHB interviewee explained this advantage, saying (P4), "*So for those things, if you're under time pressure, it's they're very handy…*". Digital sessions also facilitate spontaneous, short conversations, like a quick call or Zoom meeting, that enable timely exchanges and problem-solving (P4):

> *(P4) "So, like obviously, like COVID, a lot of stuff moved online and there was no space for any of those informal exchanges."*
> *(P5) "Certainly the groups, the special groups or the working groups they have on particular topics, they're available online… Yes, and also because of the distance and the travel involved."*
> *(P4) "Think if you have a specific query or if you need something really quickly, like say our government is notorious for saying like oh: "We're looking for feedback on this thing, but we need it back on Tuesday". And this is like Thursday, and you're like: "Oh no". So like you'd email highs in Europe and go look: "Can you jump on a quick zoom on Friday morning for an hour?"*

However, digital meetings have several limitations. First, participants often struggle to retain information effectively in online settings compared to in-person interactions. The Housing Agency noted (P10), "*Some of the things we thought we explained well… we obviously didn't because they were asking the same questions*". Additionally, online interactions lack the informal exchanges that occur during in-person events, which are invaluable for building rapport and diving into complex discussions. Finally, the absence of body language in virtual meetings can make it harder to fully read participants, which may restrict opportunities for deeper, spontaneous conversations (P4). In contrast, in-person meetings offer unique advantages for establishing long-term relationships and addressing more detailed topics. The Housing Agency emphasized that "*Long-term connections are far better made physically.*", explaining that a face-to-face connection facilitates future collaboration and builds trust over time (P10). Overall, a balanced

approach that includes both digital and in-person exchanges allows for efficient, timely communication while preserving the depth and relationship-building benefits of physical interactions:

> *(P10) "And while potentially during COVID, you know, you were kind of seeing people online or, you know, looking at presentations or whatever. The, you know, that is definitely valuable. I'm not saying it's not valuable, but when you do visit people and do see what they're actually talking about, the check interaction, they came here and we had a number of online interactions with them, but then they actually came here for a few days. And some of the things that we taught, we might have explained well, you know, on the online meetings. We obviously didn't because they were asking the same kind of question or saying, so you do it like this."*
> *(P10) "So once you make the connection, and I think that, again, the whole physical meeting thing helps, I think, because once you've, you know, had dinner with somebody or whatever, it's just that much easier to call them."*
> *(P2) "So we have regular online meetings, but we try and meet face-to-face. We're trying to do that once every third or fourth meeting. Okay, yeah. And again, that just facilitates you know relationships, and so we have maybe a longer meeting."*
> *(P2) "So for example, when we were doing the work planning for this year for the Housing Alliance… And that was actually, you can't do that kind of work online too easily. So there was a practical reason to kind of meet and to have a longer meeting."*

Transnational knowledge exchange should be exploited more: Several interviewees noted that transnational knowledge exchange remains underutilized, even though it offers significant potential to improve affordable housing strategies across countries (P1; P4; P7-P9). An academic underscored the need for more extensive knowledge exchange, adding that the scale of exchange might never feel sufficient due to the continuous learning involved (P1; P9). The Housing Agency also called for expanding the reach of shared insights, emphasizing (P4), "*…because I think more could be done and in terms of that sharing piece. I think it is being done. I think it's just, I want to say whatever UCD[35] might be sharing, that's not necessarily then shared with us and not through anyone not sharing. But it's just, it's all well and good just being in Housing Europe events, but if we don't come back and share that with our networks here then what's the point?*":

> *(P1) "I think the whole exchange knowledge and housing policy is absolutely amazing. I mean, there should be more."*
> *(P9) "And to be honest, and maybe this is unrealistic: But I don't think it's ever sufficient."*

Two interviewees emphasized that both positive and negative lessons should be shared more broadly. Despite differences in context, culture, and funding models across European countries, each has valuable insights that could prevent others from repeating the same mistakes (P7). As one AHB interviewee noted (P9), "*Yeah, the context is different. The culture is different. The funding streams are different. The economies are different scales and different sizes. But they all have elements that you can see where it has worked better or where things you could learn from with doing it.*". Reflecting on Ireland's introduction of cost rental housing, another AHB interviewee questioned whether the country had truly maximized the potential learnings from other nations, particularly from models like Vienna's. They reflected (P8), "*Because it's all there, and it's been done, and it's being done, and it's just trying to find it out. And like we're probably sitting in Ireland with our cost rental policies, and how cost rental works, and you know what we're doing, and yeah we've looked abroad and you mentioned the Vienna model, and yeah we've been looking at the Vienna*

[35] UCD here stands for University College Dublin.

model for years, and it's fabulous. But have we really implemented any of that within cost rental? I don't know and so practical, practical things we could things we could take from [other countries]". Later in this chapter, the opportunity to capitalize on European consensus on housing affordability will be discussed, underscoring another avenue to amplify transnational knowledge exchange:

> *(P9) "I don't think we do enough transnational stuff , which is why I'm a member of the HPUKI and the IHP because I believe that they offer that opportunity."*
> *(P7) "And it doesn't have to be just Irish. I think we could do it at a European level because you're capturing a lot across Europe and the world, international bodies as well."*
> *(P7) "So trying to, particularly in Europe anyway, look at the European connection to them. I think we could do a lot more. I think it would be really interesting to see if we could do more collaboration in learning from how has this worked in other countries and what mistakes or lessons could we learn."*
> *(P9) "Okay, we won't all do the same thing because we can't. Cultural funding, everything is different. The environmental context is different even, but we can learn from each other to do better and I don't think we do enough of that."*

Incorporating transnational KE strategies more deeply could ensure that countries, despite their differences, leverage shared insights to strengthen housing solutions across borders. A proactive approach to transnational knowledge exchange thus holds the promise of enriched practices and collaborative progress in tackling housing challenges.

Seize opportunity of EU consensus on affordability: Several interviewees highlighted the potential to leverage the growing European consensus on housing affordability for increased knowledge exchange efforts across member states (P4; P7; P8). The new political guidelines from the European Commission echo this priority, with plans for the 'First-ever European Affordable Housing Plan' and a 'Pan-European investment platform for affordable and sustainable housing' (von der Leyen, U., 2024). Even before these guidelines were published, interviewees noted that a shared commitment to addressing housing challenges across Europe could catalyze significant research and collaborative learning. The ICSH interviewee noted (P4), "*I think there might be more of it now after the last European elections. I think like the European Commission and others there have realised that. There's a huge problem with housing for young people across all of not just young people, but I suppose that would be the predominant issue around all of Europe. Yeah. So I think they finally realised that they need to do a bit more around this sort of stuff. So I know they've said, like: Affordable housing is a big, going to be a big, push for the next kind of parliamentary term there, which is great.*":

> *(P4) "I think we'll see what comes out of this new Commission stance around: "Yes, housing is so important to us we need to do that like..."*
> *(P4) "And after the last elections in Europe I think there's scope there,... that we've realised how disenfranchised young people are around politics and around their own futures and everything else so I think they've realised there needs to be a push there."*
> *(P8) "Because it's especially as Ireland tries to kind of move, and with the recent Housing Commission report, we are trying to move towards a more European model."*

One practical suggestion from a Housing Agency interviewee was to apply flexible financial tools and emergency resources to housing affordability, similar to the EU's response to the COVID-19 pandemic (P4). Increased funding for affordable housing research and comparative studies could be an outcome of these new EU initiatives. Additionally, interviewees proposed that a European housing conference (P7) could serve as a vital forum for knowledge exchange, supported by EU

funding, as another interviewee suggested (P4), "*But if there was money there, we're supposed to it would become available. That if you could apply say to the European Commission or whatever and say: "Look, we want to do some more research on the viability of cost rental across six member states and do a comparative study, will you give us 50,000 euro for someone for part-time for two years to do this?". And then we'll present that work, we'll submit that work, we'll do whatever you want with that work. But would that be there? And that would take so much burden off, like so much of a burden off organizations.*". Such initiatives could greatly reduce the resource burden on individual organizations while expanding the potential for transnational knowledge exchange around Europe. By exploiting these proposed EU initiatives, countries across Europe could exchange more actionable insights on affordable housing, increasing learning and enabling the development of innovative solutions that could mitigate affordability issues:

> *(P4) "Kind of like, I know Covid was a different thing, but like that it is an emergency. That housing provision affordable housing is a huge problem and that needs to be more flexibility of the, the tools or the implement instruments that are there in Europe that member states can have a bit more flexibility in using them."*
> *(P7) "I think it would be really good to have a housing conference for Europe. I mean, that's something that the Council of Europe or the European Commission could possibly help fund, that we have research coming from all of the countries together to share and learn about housing practice, housing theory, because we did that."*

Involve financial institutions in transdisciplinary knowledge exchange efforts: The involvement of financial institutions is a last essential insight for advancing transdisciplinary knowledge exchange on housing affordability (P1; P3). Financial actors, who play a decisive role in housing policy outcomes through their influence on investment values and mortgage systems, appear to be often absent from the knowledge exchange landscape. One Irish academic emphasized the gap between housing policy and finance policy stakeholders, noting (P1), "*At the end of the day: It's the finance policy people who make the final decisions, and they [housing and finance] don't always talk to each other… nobody's asking… how do they work together to make sure we have lower housing costs?*". This lack of integration creates a disconnect between housing affordability goals and the financial realities that impact them:

> *(P1) "Well, yeah, there's a bit of a disconnect, you see. I mean, the housing policy people are very good. But actually, at the end of the day: It's the finance policy people who make the final decisions, and they don't always talk to each other. Partly because the whole finance thing is about banking regulation, financial regulation, financial services industries. It's a different department for a start. It's a different part of the European Commission. You have the European Central Bank, who had a major role in this now in the European area. And, you know, you have the whole mortgage market system, you have the whole mortgage lending system, which is very much linked with investment values. And then housing policy doesn't look at that at all. It doesn't talk to those people. It just doesn't relate to that whatsoever. They live in two different worlds. So you have on the one side housing policy people saying we need more investment in social housing, subsidized housing. And on the other side of the fence, you're having people saying this is good because it keeps up asset values: It keeps them up. This is good. But nobody's asking, well, okay: So how does these two things work together to make sure we have lower housing costs? Nobody's talking that question." Author: "So, maybe we need to bridge that gap?" (P1) "Well, I've been talking to central bank people for a long time, and they completely understand this. And they go, well, nobody actually ever talks to us about this because they don't see us as important."*
> *(P3) "…and then you have the finance people who are a little bit you know very focused on the finance side."*

Interestingly, the academic revealed that the European Central Bank and other finance entities recognize their exclusion from housing knowledge exchanges but often lack the opportunity to contribute meaningfully. The proposed pan-European investment platform offers an ideal opportunity to bridge this gap by integrating financial institutions into discussions on affordable housing solutions (P1; P3). By engaging these institutions, knowledge exchange efforts could incorporate a broader understanding of economic drivers and financial regulations, leading to more holistic, sustainable solutions. Incorporating financial actors could deepen the impact of knowledge exchanges by connecting economic perspectives with housing policy goals. Bridging this divide can provide a pathway toward more integrated strategies that address affordability challenges across multiple dimensions.