

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Carl Xavier Jules Caliva
Student number	6020461

Studio		
Name / Theme	Value & Valuation in the Management of the Built Environment	
Main mentor	Dr. ir. Michael U.J. Peeters	Assistant Professor ESG – Sustainable Finance, Smart Building & Valuation – MBE Department
Second mentor	Dr. Zac J. Taylor	Assistant Professor, Architecture and the Built Environment, Urban Development Management
Argumentation of choice of the studio	High interest in research of real estate investment processes and valuation.	

Graduation project	
Title of the graduation project	North American Investors' Engagement with Eurocentric Sustainability Reporting, Guided by CSRD – Its Role in Real Estate Investment Decision-Making
Goal	
Location:	Netherlands
The posed problem,	Climate change necessitates sustainable development, requiring collaboration between the public and private sectors. While the private sector plays a crucial role in mobilizing capital for sustainable investments, ensuring these funds are directed toward genuinely impactful projects remains a challenge. Corporate sustainability reporting, particularly under the EU's Corporate Sustainability Reporting Directive (CSRD), provides transparency into ESG (Environmental, Social, and Governance) practices, helping investors align decisions with sustainability goals. However, gaps remain in how reports meet investor expectations, particularly in credibility, transparency, and the inclusion of ESG-related data.

	<p>The real estate sector, as a significant contributor to global emissions, offers both challenges and opportunities in addressing sustainability. With increasing cross-border real estate investments in the EU by international actors, understanding how they engage with CSRD-mandated disclosures is critical. This research explores how investors perceive and utilize these reports, focusing on credibility, decision-making, and alignment with sustainability objectives.</p>
<p>research questions: Main and Sub-questions</p>	<p>How do large North American institutional investors perceive and utilize European sustainability reports, guided by CSRD, in their decision-making processes for real estate investments?</p> <p>Sub-questions:</p> <ul style="list-style-type: none"> (1) What specific parameters/elements in European sustainability reports do North American institutional investors focus on when evaluating real estate investments? (2) To what extent do these sustainability reports influence the internal (investment firm) investment proposal? (3) In the future, when investors are choosing asset managers/brokers, what factors are being assessed for selection? (4) What additional information or specific data do N.A. investors require in European sustainability reports to build trust and support their decision-making process?
<p>design assignment in which these result.</p>	<p>No design.</p>
<p>Process</p>	
<p>Method description</p>	
<p>This study is an exploratory qualitative research project employing Constructivist Grounded Theory, particularly suited for examining under-researched areas such as sustainability reporting in real estate investments. By emphasizing co-construction of meaning and theory generation grounded in real-world data, this methodology accommodates the dynamic and evolving nature of the research context. The study</p>	

integrates systematic processes, including literature review, memo writing, and data analysis, to generate actionable insights.

The literature review establishes the foundational knowledge on sustainability reporting and real estate investment decision-making, drawing on peer-reviewed sources identified through Scopus and Google Scholar. Sensitizing concepts guide the research process, ensuring flexibility and adaptability to new findings. Data collection relies on semi-structured interviews with stakeholders such as institutional investors and asset managers. Sampling is conducted purposively and theoretically to ensure data richness, with interview protocols refined iteratively based on participant feedback.

I am actively seeking an internship to serve as a case study. This would allow for an in-depth exploration of the organization's practices, as well as access to their network for interviews with clients, internal employees, and management relevant to the research topic. Dissemination efforts are also being materialized with ULI, RICS, and another firm, providing broader engagement and validation of findings.

Data analysis follows a constant comparison method, employing open, axial, and selective coding to identify patterns and generate theory. The process continues until theoretical saturation is achieved. Reflexivity, triangulation, and audit trails ensure trustworthiness, while ethical considerations prioritize participant confidentiality and informed consent. The study also employs tools like Atlas.ti for systematic data organization and analysis, ensuring rigor and transparency throughout.

For further, more detailed information please refer to the P2 report.

Literature and general practical references

Literature review and market research is currently being conducted. The aim is to finish it at the end of January, 2025 (directly after p2), the narrative is summarized as follows:

The literature review and market research begin by addressing the broader issue of climate change, exploring its anthropogenic causes and global frameworks like the SDGs and the European Green Deal, which aim to transition industries toward sustainability. It transitions into examining the pivotal role of the private sector, particularly in financing sustainable initiatives and implementing sustainability reporting as a tool for transparency and accountability. The review highlights challenges in reporting, such as inconsistent standards and limited capabilities, which the European CSRD seeks to address through comprehensive ESG disclosures.

The narrative then focuses on geopolitical differences, contrasting Eurocentric mandatory sustainability reporting practices with North American voluntary approaches, emphasizing the CSRD's global influence on cross-border investments. The literature highlights real estate as a critical sector for sustainability, contributing

significantly to global emissions and facing unique challenges like data inconsistencies and greenwashing risks.

Finally, the study contextualizes these insights by identifying key stakeholders, such as institutional investors and asset managers, and their diverse information needs. It highlights the gap in understanding North American institutional investors' engagement with Eurocentric frameworks like the CSRD, framing the research focus on the interplay between regulation, investment decision-making, and sustainability practices in the real estate sector.

Regarding foundational theories for the research, the following are currently being examined for its relevancy:

Economic Principles: legitimacy theory, stakeholder theory, agency theory.

Psychological Principles: attribution theory, signalling theory, affect-as-information theory.

For further, more detailed information including references of literature used please refer to the P2 report.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

This thesis aligns with the Management in the Built Environment (MBE) master track by investigating how Eurocentric sustainability frameworks like the CSRD influence real estate investment decisions, valuations, and ESG strategies. It explores the impact of these frameworks on valuation methods, investment strategies, and corporate priorities, highlighting the value of aligning real estate assets with sustainability goals. By bridging management, sustainability, and real estate processes, the research reflects MBE's core focus and leverages the architectural faculty's context to examine how sustainability reporting shapes financial and strategic planning outcomes.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The relevance of my graduation thesis lies in multiple dimensions: (a) Socially, it seeks to innovate sustainable practices and offer actionable recommendations to both private and public actors in addressing climate and sustainability challenges. (b) Professionally, it addresses the critical issue of balancing sustainable innovation with profitability, acknowledging that businesses must remain financially viable while pursuing sustainability goals. (c) Academically and scientifically, the research highlights gaps in the current understanding of sustainability reporting, offering meaningful insights and directions for future studies to strengthen this emerging field.