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Original research article

Why do stakeholders (not) participate in co-creation for energy access? A behavioural analysis of the Netherlands Energy Compact

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ABSTRACT

Multi-stakeholder collaboration platforms are widely promoted as a way to accelerate progress on global challenges such as ensuring universal access to affordable, reliable, and modern energy. Yet little is known about why individual stakeholders choose to participate (or not) in these arrangements, and what determines the depth of their engagement. Drawing on semi-structured interviews with 21 professionals associated with the Netherlands Energy Compact, this study applies the Capability-Opportunity-Motivation-Behaviour (COM-B) framework to explain variation in participation. We identify three levels of involvement: low (attending events), medium (contributing to working groups) and high (shaping collective decisions). Most participation occurs at the lowest level. While stakeholders possess strong personal capabilities and motivation, deeper engagement is constrained by external barriers, particularly limited access to finance and declining funding opportunities. The findings further suggest that the COM-B framework requires adaptation for multi-stakeholder settings, as single factors such as funding may simultaneously influence capability, opportunity and motivation. By adapting the COM-B framework to the context of multi-stakeholder co-creation, this study provides a behavioural lens for understanding differences in participation intensity. For practitioners, the results highlight actionable priorities, including strengthening financing mechanisms, improving cross-organisational coordination, and designing more effective collaborative processes to enable stakeholders to move from passive participation to active co-creation in initiatives addressing sustainable development goals.

1. Introduction

Achieving universal energy access is one of the Sustainable Development Goals (SDGs) in the global agenda 2030. Among these goals, SDG7 specifically targets the provision of affordable, reliable, sustainable, and modern energy for all [1]. The issue primarily affects low- and middle-income countries in the Global South, where, as of 2023, 666 million people lacked access to electricity and 2.1 billion relied on cooking practices harmful to both human health and the environment [1]. Addressing such far-reaching challenges requires societal transformations that any single actor cannot achieve. Instead of operating in isolation, meaningful progress depends on collaboration across disciplines and sectors [2], where diverse stakeholders can develop and scale solutions through co-creation processes.

Recognising the need for collective action, the SDGs explicitly encourage partnerships among diverse actors to mobilise resources and coordinate efforts for effective implementation. Strong collaboration is

central to the success of these partnerships, which operate not only between organisations but also among countries. Although implementation efforts are primarily directed toward the Global South, higher-income countries in the Global North continue to play a significant role through their scientific, technical, and financial capacities [3], making nations such as the Netherlands active contributors to the achievement of SDG7.

While the concepts of *partnership* and *co-creation* are closely related, they are not synonymous. This study highlights co-creation as the interactive process through which actors collectively work toward a shared goal. Essentially, co-creation can occur within formal partnerships as well as across broader networks of stakeholders [2]. Co-creation refers to active collaboration and innovative problem-solving among various stakeholders throughout all phases of an initiative, from identifying problems to evaluating outcomes [4]. This approach enhances the relevance and sustainability of solutions. It is therefore regarded as key to achieving the SDGs [2], as it mobilises resources and enables

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complex problems to be tackled through practical and actionable measures [2,5–7].

While much of the literature on sustainability and social innovation recommends co-creation [2,5,6,8,9] or discusses methods for its implementation [2,4,6,7,10–12], less is known about whether, when, and why it is effective in practice. Some studies have found that effective co-creation requires shared vision and supportive frameworks that align expectations, foster learning, mobilise resources, and establish governance structures to sustain engagement [2,6]. Yet there remains a critical gap in understanding why stakeholders choose to engage in these processes and how their participation manifests [10]. Addressing this question is essential as knowing the motivations and dynamics of participation can inform the design of more inclusive and impactful co-creation.

This study aims to examine the behavioural drivers and barriers that influence stakeholder participation in collaborative activities, using the Netherlands Energy Compact (hereafter referred to as the NL Compact) as an illustrative case. Specifically, it asks: *What behavioural factors shape stakeholder participation in multi-stakeholder energy access co-creation initiatives?* The NL Compact is a Dutch multi-stakeholder initiative with an ambition to accelerate progress toward achieving SDG7 by 2030 [13]. To provide context for the analysis, this study characterises the range of actors involved, the roles they assume, and the specific aspects of energy access they seek to address.

The NL Compact presents a noteworthy case of co-creation in a Global North context to address the pressing global challenge of universal energy access. This initiative directly addresses energy poverty, which disproportionately affects regions in the Global South. Following the co-creation typology proposed by Trencher et al. [14], the NL Compact can be classified as a form of high-intensity co-creation, as it aims to achieve societal transformation by implementing collective knowledge and solutions. The NL Compact's strong emphasis on co-creation—reflected in dynamic interactions and collaboration among diverse actors—is rooted in the Dutch governance model. As such, it offers valuable insights for both scholarly discourse and practical innovation in the field of sustainable energy access.

To analyse the behavioural dynamics of the NL Compact, this study applies the Capability-Opportunity-Motivation for Behaviour Change (COM-B) model, which conceptualises behaviour as the outcome of an individual's capabilities, the opportunities available to them, and their underlying motivations [15]. The framework posits that behaviour is shaped by the interaction between individual factors and the surrounding environment, particularly the opportunities available to perform the desired behaviour. It is well suited for systematically analysing the behavioural enablers and barriers that influence stakeholder participation in co-creation. In this study, the COM-B model is applied primarily at the individual level to explain how personal capabilities, perceived opportunities, and motivations influence stakeholder decisions to participate. However, these individual factors are also shaped by organisational priorities and the institutional norms within the broader ecosystem.

Recognising that the intended impacts of the NL Compact's co-creation efforts materialise in Global South contexts, this initiative also implies a transfer of a network governance model beyond its original setting. While this is not the focus of this study, the extent to which co-creation practices rooted in the Dutch context may be transferable in other contexts is briefly considered.

This study offers a twofold contribution. Empirically, it draws on insights from the NL Compact case to identify behavioural drivers and barriers influencing participation in multi-stakeholder co-creation. Conceptually, this study advances stakeholder co-creation literature by adapting the COM-B model as a behavioural framework to explain participation in multi-stakeholder energy access initiatives.

The remainder of this article is organised as follows. Section 2 provides background information, introducing co-creation as a governance strategy and the NL Compact as the case study. Section 3 outlines the

research methods, including a description of the COM-B model as the analytical framework. Section 4 presents the results, followed by Section 5, which discusses the findings and limitations. Finally, Section 6 presents the main insights and recommendations for future research.

2. Contextual background

2.1. Co-creation as a governance strategy

Originally introduced in the fields of business and marketing, co-creation has been extensively used to foster innovation and inclusivity through active collaboration between firms and consumers [16]. Over time, the concept has expanded beyond commercial applications to address public interest in broader societal challenges. Here, citizens and communities are no longer treated as passive recipients of public services but active participants in shaping them. This shift is reflected in the literature on public service co-creation, which examines collaborative processes between providers and users [17,18] with an emphasis on value generation [8].

Public value co-creation typically involves collaboration among governments, civil society, and citizens to enhance legitimacy, service quality, and collective well-being [19]. Its effectiveness is shaped by three interrelated dimensions: *authority*, referring to legitimacy and political or financial support from authorising bodies; *operation*, concerning the feasibility of proposed actions; and *stakeholder engagement*, which ensures that diverse needs and perspectives are meaningfully integrated into decision-making [18]. Meaningful engagement extends beyond participation; it requires structured processes that foster shared goals, co-learning, contextual knowledge production, open dialogue, and joint action [5,7]. A key distinction between co-creation and participation lies in decision-making power, with co-creation emphasising shared authority among actors [10].

Investigating stakeholder co-creation requires a clear conceptualization of the term *stakeholder*. There are many ways to define stakeholder and what it entails. In this study, we adopt the definition of stakeholder as “any group or individual who can affect or is affected by a process, issue, or objective” [10]. This definition is consistent with the stakeholder theory by Freeman et al. [20], which provides a framework for strategic management and ethical business practices. They distinguish between narrow and broad definitions of stakeholders. While the narrow view focuses on traditional actors such as customers, employees, and shareholders, the broad view extends to include non-traditional actors such as communities, non-governmental organisations (NGOs), and regulators.

In a review of 30 years of research on co-creation, Avila-Garzon & Bacca-Acosta [7] describe how co-creation has developed into a participatory process that bridges gaps among stakeholders by emphasising shared goals and mutual benefits. While underscoring the importance of methodologies that support stakeholder engagement, they also point to a lack of systematic co-creation frameworks tailored to sustainable development contexts.

Co-creation is often presented in three core phases: initiation, design, and implementation [8,12]. Other studies add evaluation as an important phase to include learning [2,9,11]. The purpose of co-creation often determines its intensity and the extent of actor involvement in the process [14]. Low intensity co-creation may involve bilateral collaborations focused on knowledge co-production. Medium intensity co-creation involves multiple actors collaborating on more complex tasks, such as technology development. High intensity co-creation seeks systemic change and societal transformation, requiring the engagement of a broad and diverse set of stakeholders.

In the energy transition domain, interest in co-creation has grown over the past decade. Researchers increasingly link it to themes such as value co-creation, innovation, stakeholder participation, citizen and end-user engagement, and energy justice [21–27]. This growing body of work motivates an exploration of the intersection between co-creation,

stakeholder participation, and energy access.

2.2. The Netherlands Energy Compact

Energy Compacts are voluntary, measurable commitments that bring together governments, businesses, international organisations, and other stakeholders to accomplish SDG7 and advance the global clean energy transition. The initiative was launched in 2021 to provide actionable blueprints to accelerate progress toward universal energy access and net-zero emissions and is coordinated by UN-Energy, the United Nations inter-agency mechanism under the UN Department of Economic and Social Affairs (UN-DESA) [28]. To date, 215 proponents have pledged to the Energy Compacts process by both state and non-state actors, collectively committing USD 1.6 trillion in financing and investment, with USD 292 billion already mobilised as of 2025 [28]. Since 2021, 61 UN Member States have participated in the Energy Compact process. Among them, 30 countries have established an individual Energy Compact, including the Netherlands [28].

The NL Compact was launched on 15 September 2021, bringing together Dutch-based organisations spanning government, private sector actors, financial institutions, civil society, and academia [13]. It operates as a collaborative network of stakeholders that collectively or individually implement programmes, projects, and activities aimed at supporting people in low- and middle-income countries, with the dual goals of contributing to achieving SDG7 by 2030 and net-zero emissions by 2050 [13,29]. The NL Compact is not a formal organisation with a defined institutional structure, nor does it involve legally binding agreements among its members. Instead, it represents the Netherlands' Energy Compact commitment supported by a coalition of stakeholders who contribute voluntarily. Coordination is facilitated by the Netherlands Enterprise Agency (RVO) under a mandate from the Ministry of Foreign Affairs (hereafter referred to as the Ministry).

The composition of the NL Compact follows the Dutch Diamond Approach. This approach, which evolved from the Triple Helix or Golden Triangle model, highlights the interaction among government, business, and academia, while extending the framework to include financial institutions and civil society organisations (CSOs) [30] (see Fig. 1). Originating from innovation theory, the Triple Helix model focuses on knowledge creation [31] and was later expanded to the Quadruple Helix to incorporate societal actors and user perspectives. The Dutch Diamond operationalises this logic within international cooperation and sustainable development, reflecting established Dutch approaches to inclusive governance and pragmatic problem-solving. It has been applied in sectors where Dutch expertise and resources can make significant contributions, such as water management, agriculture, and energy transitions.

This framework illustrates how multi-stakeholder arrangements can leverage the complementary strengths of different actors to advance the SDGs. However, it has a limited focus on end users, who are only indirectly represented by CSOs. In the context of the NL Compact, this

representation challenge is compounded by the fact that CSOs are predominantly international organisations with relatively limited local capacity.

The NL Compact's joint ambition is framed around five thematic priorities: (1) increasing universal access to clean cooking, (2) increasing universal access to electricity, (3) funding clean energy through investment and finance, (4) supporting displaced people due to conflicts, natural disasters, or climate change, and (5) empowering women and youth [32]. In its early phase, RVO invited Dutch organisations active in energy access efforts across the Global South to join the NL Compact. By April 2023, 30 organisations had pledged commitments aligned with their respective missions and operational capacities [29].

Members of the NL Compact can be categorised into five groups based on their roles [29,30], as shown in Fig. 2. According to a mailing list of NL Compact members provided in correspondence with an RVO staff member (personal communication, February 2025), the network includes approximately 63 organisations consisting of 32 businesses, 11 NGOs, seven knowledge institutions, seven financiers, two government organisations, and four multi-stakeholder coalitions or associations, such as Dutch Spark and GOGLA. Most businesses and NGOs are actively involved and maintain local presence in the Global South. In contrast, government organisations and knowledge institutions are primarily based in the Netherlands and contribute through coordination, research, and occasional collaborative activities with partners in the Global South.

This classification highlights how different actors bring distinct capabilities to the NL Compact. Notably, NGOs constitute a particularly active stakeholder group and are commonly regarded as CSOs within the Dutch Diamond framework. NGOs often occupy a hybrid space: while they engage in activities similar to businesses, they are not profit-oriented and typically rely on public funding to pursue social objectives. In the energy access sector, many NGOs promote market development, thereby supporting private-sector engagement. Positioned between companies and NGOs are social enterprises, which combine business models with explicit social missions and reinvest profits to advance their social goals.

In this study, the NL Compact is conceptualised as a co-creation platform that brings together stakeholders through networking and collaboration. It also serves as a space for members to share experiences and stay informed about each other's work. Regular interaction is facilitated through quarterly Compact Café meetings and biannual gatherings focused on identifying new opportunities. Together, these meetings provide forums for dialogue and knowledge exchange. Beyond regular meetings, the NL Compact has also facilitated larger initiatives. One example is SUSTAINED, a programme co-implemented by Mercy Corps, CARE, and Oxfam, aimed at enhancing access to clean energy for refugees in Uganda [33].

Levels of attendance and engagement in activities vary among members at both the individual and organisational levels. Although participation in events is relatively consistent, follow-up actions from workshops and exchange sessions remain suboptimal. At the same time,

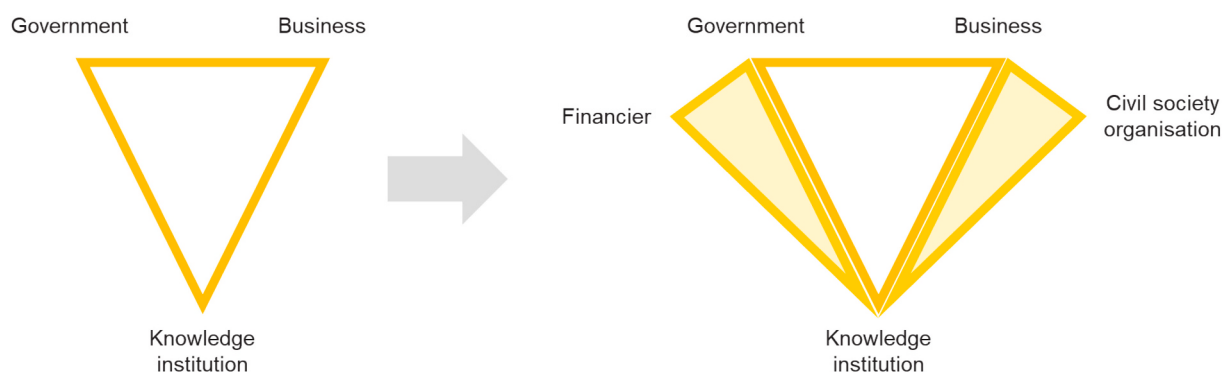


Fig. 1. The Dutch Diamond Approach in development cooperation [30].

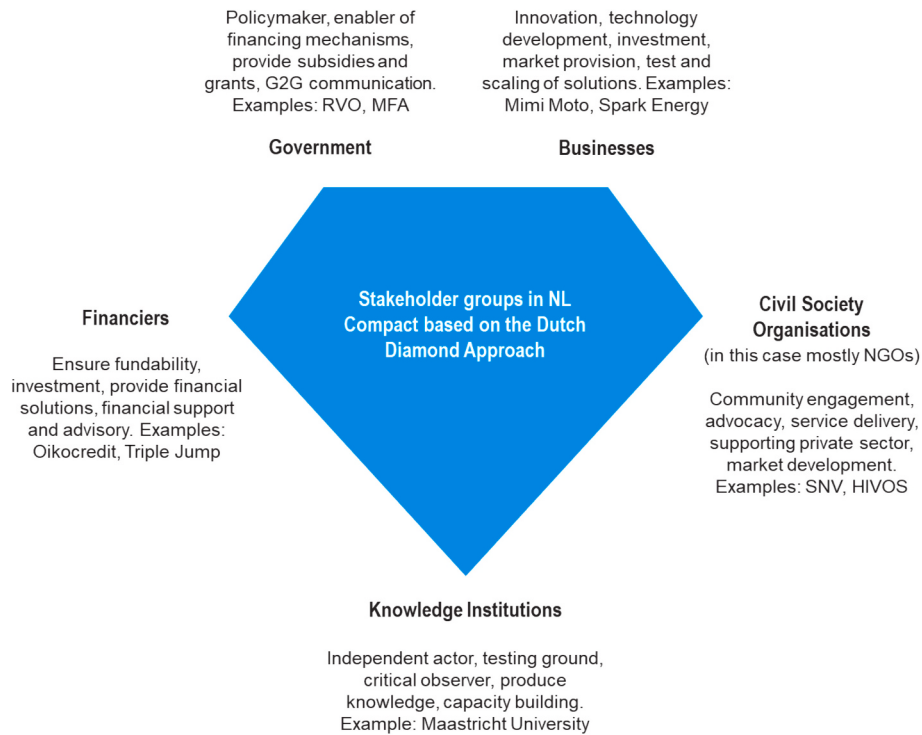


Fig. 2. Stakeholder groups in the NL Compact, their roles, and examples of participating organisations.

recent shifts in Dutch foreign policy priorities have reduced the prominence of energy cooperation within the broader foreign policy agenda [34], creating uncertainty among stakeholders about the future direction and continuity of energy-related collaboration. This development makes it timely to reflect on the NL Compact's functioning, identify key challenges, and explore opportunities to strengthen collaboration among members. Addressing these challenges may require changes in how actors engage, interact, and participate in collaborative activities.

3. Methods

3.1. COM-B model

The COM-B model is the core of the Behaviour Change Wheel (BCW), a framework developed by Michie et al. [15] to design behaviour change interventions. The COM-B model conceptualises a behaviour system (B) shaped by three interacting elements (Fig. 3): capability (C), opportunity (O), and motivation (M). Capability refers to an individual's physical and psychological capability to perform a behaviour. It is an inherent attribute of the individual, encompassing the knowledge and

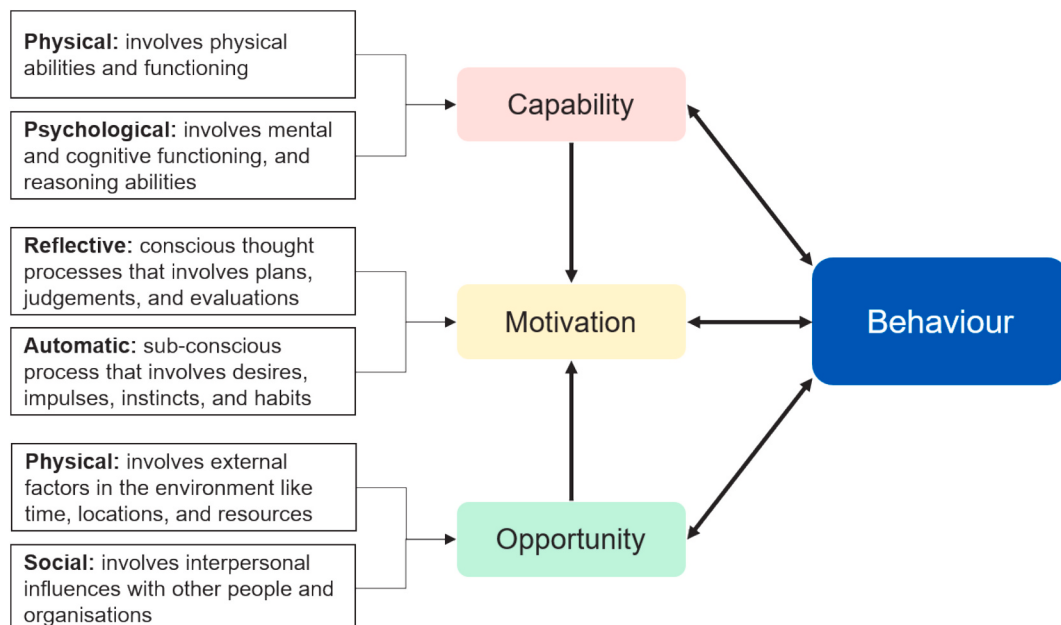


Fig. 3. The COM-B model and constructs [15].

skills that can be developed through education and training [15].

Opportunity, by contrast, comprises all factors external to the individual. It includes the physical and social conditions in the environment that enable or hinder behaviour. Institutional and structural conditions are therefore also relevant, as they shape stakeholders' ability to participate in collaborative activities. Examples identified in a study of energy-efficiency behaviour include access to subsidies or grants and the availability of products in shops [35].

Motivation refers to brain processes that drive and sustain behaviour, including reflective (conscious) and automatic (subconscious) processes. It is the underlying driver that makes people act, influenced by capability and opportunity. Recognising certain capabilities and opportunities present in the network can stimulate reflective motivation, encouraging them to adopt more proactive behaviours.

Together, these three components provide a systematic framework for diagnosing what needs to change to achieve the desired behaviour.

Since its introduction, the COM-B model has been utilised in diagnosing the need for behaviour change and designing interventions in a variety of subjects, such as improving compostable plastic disposal [36], reducing disposable diaper waste [37], dentists' behavioural response to COVID-19 [38], partner involvement in dietary practices during pregnancy [39], and motivational drivers of healthcare professionals to participate in collaborative projects [40]. Within the energy field, the model has been applied in various topics such as analysing people's capabilities, opportunities, and motivations for adopting energy-efficiency practices [35], developing a taxonomy for understanding the drivers of fuel-stacking habits among households [41], understanding the extent to which fuel stacking interventions can facilitate a transition to clean cooking [42], and identifying factors that influence the social acceptance of district heating networks [43].

The COM-B model is effective in identifying behavioural drivers and barriers at the individual level, particularly those related to capability and motivation. However, it is less suited to analysing opportunities in complex fields such as sustainable development, where multi-stakeholder dynamics and broader external factors influence individual behaviour [44,45]. To address these limitations, several extensions have been proposed, including the SeCOM-B model, which incorporates systemic influences [44], and the Behaviour Change Ball (BCB) framework, which distinguishes organisational from individual behaviours [46].

In this study, the SeCOM-B model informs the identification of broader opportunity factors influencing member behaviour, while the BCB framework helps refine the definitions of the COM-B constructs. The original COM-B model is applied in its unmodified form; however, its construct definitions are adapted from Hendriks et al. [46] and Onencan and de Koning [47] to better align with the energy transition context. This adaptation enables the analysis to capture institutional factors shaping the behaviour.

3.1.1. COM-B model application in this study

Capability refers to whether actors possess the necessary knowledge and skills to perform a given behaviour, where the original model distinguishes between physical and psychological capability [15]. While this definition is suitable for behavioural studies in other domains, such a distinction is less straightforward in the context of multi-stakeholder collaboration [46]. The kinds of behaviour expected in the NL Compact, such as engaging in discussions, lobbying, and negotiating, are primarily intellectual and relational rather than physical. We operationalised this by examining whether members possess the necessary knowledge and skills, including relevant expertise and the ability to work with diverse stakeholders.

Opportunity refers to the external environment that enables or facilitates a behaviour [15]. The distinction between *physical* and *social opportunity* offers analytical clarity in many behavioural contexts, but it does not map neatly onto the realities of initiatives like the NL Compact. Opportunities in stakeholder co-creation can span conditions that can be

social, political, and organisational [46]. This includes not only recognising enabling conditions, including institutional factors, but also explicitly accounting for threats and constraints as integral components of the external environment. By adapting COM-B in this way, the framework can provide a more balanced assessment of the factors that influence collaboration.

Motivation refers to the factors that drive individuals to engage with the NL Compact. The COM-B model distinguishes two types of motivation: reflective and automatic. Reflective motivation operates through conscious thought processes, built with intentions, deliberation, and some degree of planning. In contrast, automatic motivation operates at a subconscious level, shaped by past experiences and associated with emotions, impulses, and habitual responses.

The COM definitions used in this study and illustrative examples are presented in Table 1.

The COM-B model offers not only a tool for understanding behaviour but also a foundation for developing strategies to influence behavioural change. When integrated with the BCW framework (Fig. 4), the identification of COM factors provides a systematic way to analyse and select suitable interventions. A study by Kaffel & Stok [48] demonstrates the use of the COM-B model and BCW framework in Dutch policy contexts, showing how behavioural insights can extend beyond the individual level to include organisational and institutional dimensions. Within the BCW framework, there are nine intervention functions: education, persuasion, incentivisation, coercion, training, enablement, modelling, environmental restructuring, and restrictions [15].

3.2. Research design and case study

This research adopts a qualitative case study approach to examine the behavioural drivers and barriers that influence stakeholder participation in collaborative energy access initiatives. It is based on semi-structured, in-depth interviews with professionals working in the energy access sector, who are involved in the NL Compact [29].

The process began with defining a specific problem relevant to achieving the NL Compact's desired impact. The target behaviour was then determined based on four criteria: potential impact, likelihood of change, possibility of spillover effects, and ease of measurement for evaluation [49]. The selected target behaviour was confirmed through

Table 1
The COM constructs and definitions tailored for this study.

COM-B dimension	Definition (adapted from [15,46,47])	Examples
Capability	The individual's ability to perform a behaviour or facilitate it. Capability involves mental processes like understanding and reasoning. It is closely tied to competence, including possessing the necessary knowledge and skills.	Engineering, business development, providing financial services, advocacy, driving change, project management
Opportunity	Conditions external to the individual actor that enable or hinder behaviour, including social, political and organisational resources within a specified system that interact with the stakeholders.	Connections and contacts, access to finance/funding, new markets, new technology, local operations, global initiative
Motivation	Motivation is a collection of mental processes that guide and influence behaviour, either conscious or subconscious. Reflective motivation involves conscious, deliberate decision-making. Automatic motivation arises from emotions, impulses, and habits, often functioning without conscious awareness.	Business interest, societal impact, personal development

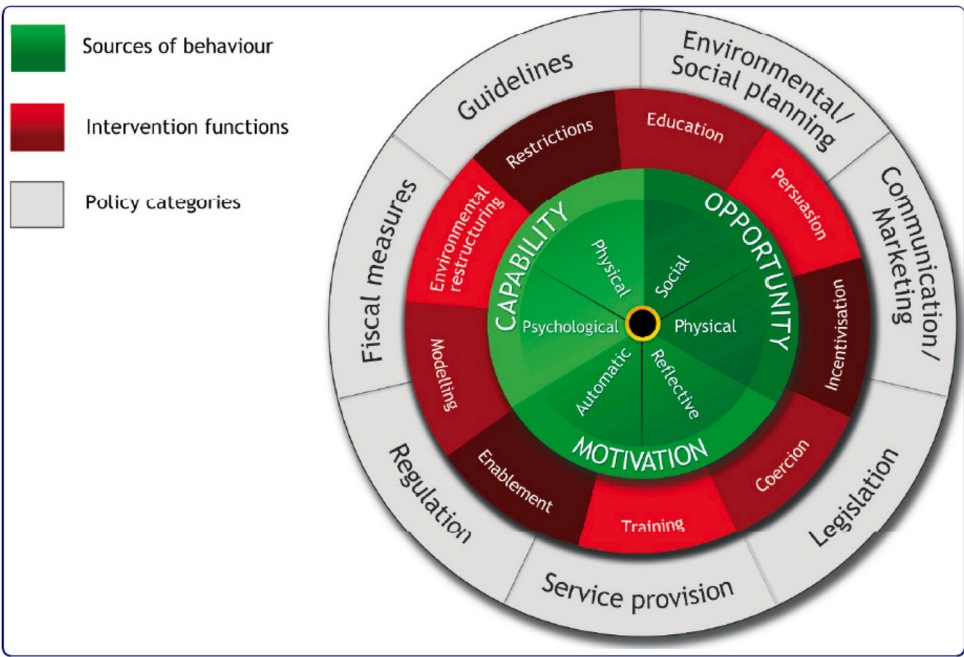


Fig. 4. The BCW framework with the COM-B model at its centre [15].

participants' responses and is defined as follows:

Target behaviour: NL Compact members actively engage in collaborative activities within the network to realise the Compact's ambition.

Collaborative activities are interactions in which members collectively contribute to achieving the NL Compact's objectives. They include participation in meetings, knowledge exchange, relationship-building, and the co-development and implementation of joint initiatives. During the data collection phase, it became evident that these activities varied in their level of participation. For the analysis, activities were therefore disaggregated into three levels of intensity based on the degree of participation: engagement (low intensity), involvement (medium intensity), and influence (high intensity).

Subsequently, a behavioural diagnosis was conducted to identify the drivers and barriers influencing stakeholder participation in co-creation processes within the NL Compact. Insights from interviews were synthesised with relevant documents. The research framework is illustrated in Fig. 5.

3.3. Data collection

The data were collected between January and March 2025 through semi-structured interviews conducted in English via video calls. Prior to the interviews, an initial consultation with RVO staff provided background on the NL Compact's inception, structure, membership, and relevant research interests. This consultation also informed the sampling approach, as RVO provided practical insights into which organisations were more actively engaged. Based on these indications, the outreach strategy took these considerations into account, while still aiming to capture a diversity of perspectives across the network.

Participants were selected from the contact database compiled by RVO in its role as Compact secretariat. At the time of the study, the NL Compact included 135 individuals representing 63 organisations. Interview invitations were sent by email to 47 individuals from 39 organisations, resulting in 21 participants from 20 organisations (see Table 2). Participants held a range of professional roles, including founders, directors, managers, department heads, professors, advisors, and consultants, with most occupying senior positions within their respective organisations. Considering the overall network size and

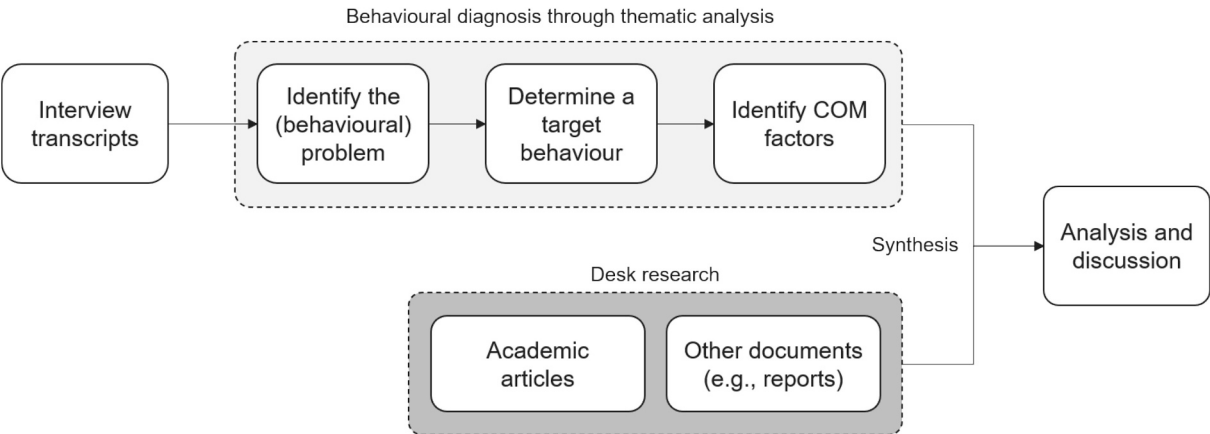


Fig. 5. Analysis framework.

Table 2
Distribution of participants across stakeholder types.

Stakeholder type	Participants ID
Government	P17, P18, P20
Business	P2, P3, P4, P5, P7, P8, P12, P16
Financial institution	P15
CSO and NGOs	P1, P13
Knowledge institutions	P10, P11, P19
Coalition of organisations	P6, P9, P14, P19

typical Compact Café attendance (40–50 participants), this sample was deemed sufficient for a qualitative study.

Selection criteria for research participants included: (1) current membership in the NL Compact, (2) experience in energy access initiatives, and (3) affiliation with organisations operating in the Global South. To qualify, participants needed to fulfil at least two of these criteria to ensure relevant expertise. All participants were familiar with the NL Compact and had attended its quarterly Compact Café events.

The interviews employed semi-structured and exploratory questions to capture participants' experiences and perceptions of the NL Compact, as well as their work in the energy access field. The interview protocol was organised around four themes: behaviour, capability, opportunity, and motivation.

All interview data were handled in accordance with the Chatham House Rule. Participants were free to use the information shared, but neither their identity nor their affiliation may be revealed. Quotations included in the text are referenced using anonymised participant codes. While readers may infer the stakeholder group from the content, no further identification is possible.

3.4. Behavioural analysis

The analysis followed a behavioural diagnosis using the COM-B model to identify behavioural drivers and barriers influencing participation in collaborative activities within the NL Compact. Interview data were analysed in relation to capability, opportunity, and motivation factors that shape stakeholder behaviour.

The analysis combined inductive thematic analysis with deductive mapping onto the COM-B model. First, interview transcripts were coded inductively using open coding, allowing themes to emerge from the data without being forced by the COM-B framework. This process generated themes, such as *lack of funding*, *unclear roles*, and *knowledge sharing*. These emergent themes were then mapped onto the COM-B components guided by the conceptual definitions of the COM factors (see Table 1). Capability-related themes were grouped according to the types of knowledge and skills identified among participants. Themes related to opportunity and motivation were organised based on shared characteristics, such as whether they were technical or financial by nature. These groupings served as an organisational tool for analysis rather than a rigid coding structure, allowing for a context-sensitive interpretation of the COM-B constructs.

All interview transcripts were analysed and coded by the first author using the Atlas.ti software version 25 and later reviewed by all co-authors of this study.

4. Results

Co-creation practices within the NL Compact can be distinguished into three levels of participation, based on their underlying objectives, required effort intensity, anticipated scale of societal transformation, and the types of activities involved [10,14,50]. Low-intensity participation focuses on engagement, medium-intensity participation is associated with involvement, and high-intensity participation centres on influencing outcomes. At each level, the target behaviour (i.e., active engagement in collaborative activities) is shaped by the specific

demands of the co-creation processes. The analysis draws on insights from interview data and supporting documentation, enabling a comparative reflection of the drivers and barriers associated with different levels of participation intensity within the NL Compact. Table 3 outlines the three levels of participation intensity and their corresponding characteristics.

The following COM-B analysis reflects these varying levels of participation intensity, acknowledging that the capability, opportunity, and motivation factors may differ across the types of collaborative activities undertaken within the NL Compact.

4.1. Capability

The findings indicate that Compact members possess diverse capabilities in terms of knowledge, skills, and expertise. These capabilities are grouped into nine categories: individual inherent knowledge, collaborative capability, management capability, technical capability, business capability, policy capability, thematic capability, financial capability, and leadership capability.

For low-intensity participation, such as attending events organised by the NL Compact, networking and event organisation capabilities are essential. At this level, an individual's existing knowledge is generally present but may not play a central role in their participation. Medium-level engagement, such as contributing to thematic working groups, requires more specialised and deliberative capabilities. This may include, for example, idea generation within innovation processes and conducting research. For even stronger high-intensity activities, such as implementing joint projects, more substantial effort and hands-on skills are required in addition to theoretical knowledge. Examples mentioned in the interview include competencies related to financial services and manufacturing. Fig. 6 presents the capabilities necessary for different levels of participation intensity. The chart suggests that capabilities

Table 3
Differing participation intensities in the NL Compact.

Level (Intensity)	Engage (Low)	Involve (Medium)	Influence (High)
[10,50]			
Aspect [10,50]	Information-oriented, understanding, consultation	Process-oriented, deliberation, collaboration	Co-creation oriented, collective design and decision-making
Objective of collaboration [14]	Knowledge sharing	- Knowledge production - Development of solutions - Demonstration of innovation	- Implementation of knowledge and solutions - Transformation of society
Transformational impact on society [14]	None	Limited impact	High impact
Key activities [10,14]	- Knowledge sharing - Network building - Visioning and planning	- Development of products or processes - Dialogue and mutual learning	- Infrastructure development - Capacity building
Examples among NL Compact members	Participate in Compact Café, annual meeting, knowledge sharing sessions, and workshops	- Form and work collaboratively in thematic working groups - Joint publication by 4TU academics	- Dutch Spark for Clean Cooking Solutions - SUSTAINED project
Collaborative activities entail, among others:	Communicate, inform perspectives, share knowledge and experiences	Participate actively in dialogues, generate or elaborate ideas, collaborate in product/process development	Mobilise tangible resources, share responsibility and power, participate in decision-making processes, implement projects

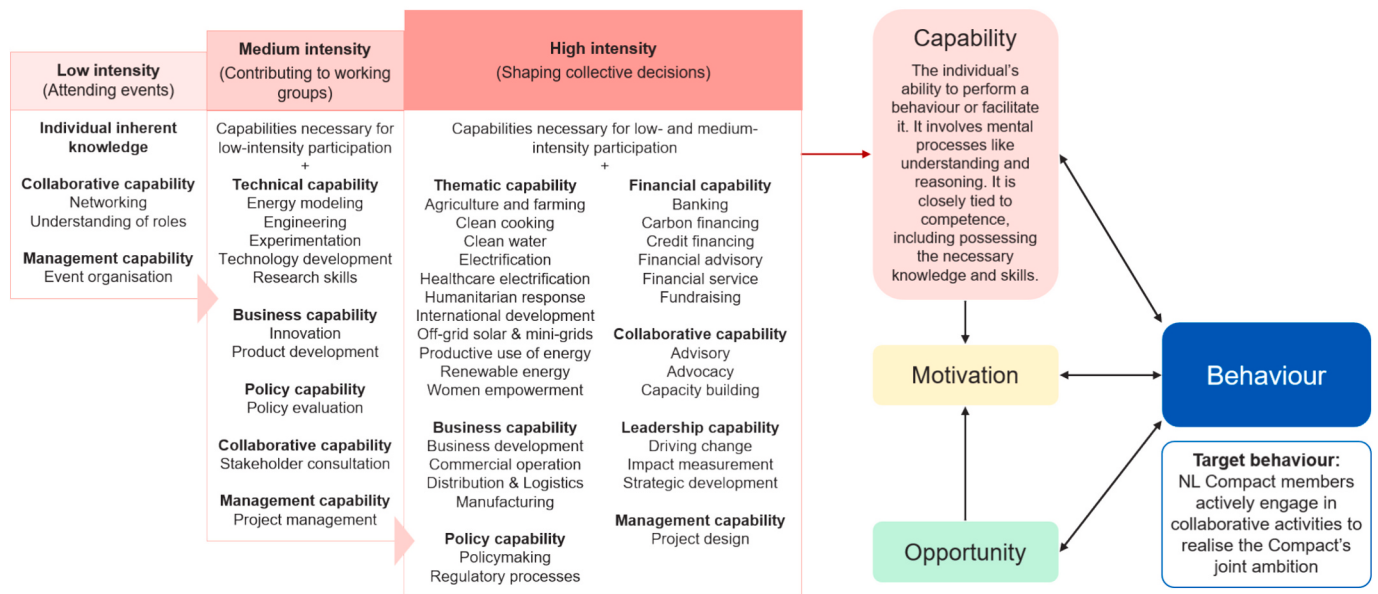


Fig. 6. Capabilities necessary for the target behaviour in different participation intensities.

required for low-intensity participation are also necessary for higher-intensity participation.

Participants expressed positive self-assessment of their capabilities, suggesting strong confidence in their credibility to contribute collectively to the NL Compact. From a technical standpoint, the group brings specialised know-how in technology, science, and engineering, including academic research, energy modelling, experimentation, and technology development. Participants also possess sector-specific knowledge in areas such as agriculture and farming, clean cooking, productive use of energy, humanitarian response, and women's empowerment. This breadth of capabilities provides a solid foundation for tackling the challenges of universal energy access.

Business capability relates to knowledge and skills in business and operations, including manufacturing and product distribution. Regulatory and policy capability encompasses expertise in policymaking, knowledge of policy frameworks, and the ability to navigate regulatory processes. The inclusion of government organisations and financial institutions within the NL Compact strengthens financial capabilities, which involve the ability to mobilise, manage, and deliver financial resources.

This diversity of expertise highlights the need for strategic alignment and coordination to ensure that capabilities are mobilised in a complementary rather than fragmented way. For example, although trade instruments exist to support energy access initiatives, they remain underutilised, indicating a gap between available tools and mechanisms for effective integration and deployment. Addressing this gap requires leadership capabilities to align and influence stakeholders, as well as management capabilities to plan and coordinate actions.

As the chart in Fig. 6 indicates, the capabilities identified reflect the collective competence of NL Compact members. Participants conceptualise capability not only at the individual level but also in relation to the organisation they represent. This outward-looking self-assessment is particularly relevant in collaborative efforts to tackle wicked problems such as energy access, where individual capability is often seen as reflective of organisational capability, and vice versa.

At the same time, participants identified capability-related barriers, mainly described as individual and collective deficiencies. These perceived gaps highlight areas where the NL Compact's potential is constrained by knowledge or resource limitations. One prominent gap is financial capability, particularly in terms of mobilising funding [P3, P13, P16] and possessing the skills needed to access or manage

financing, such as fundraising [P1].

Additional barriers to co-creation include limited familiarity among participants [P1, P10], a disconnect between the overarching vision and its translation into concrete activities, and uncertainty regarding the roles of the NL Compact and its members [P8, P16], which, according to the COM-B model, signals a lack of knowledge.

4.2. Opportunity

NL Compact members generally engage actively in dialogue and knowledge-sharing sessions; however, these discussions often fail to translate into concrete actions. Some participants attributed this gap primarily to a lack of funding for collaborative activities [P8, P16], while others pointed to insufficient leadership to move ideas toward implementation [P13, P14]. Participants further argued that the network's loosely coordinated structure provides limited pathways for concrete initiatives. Some also observed a tendency among members to wait for direction rather than proactively initiating actions. This pattern is exemplified by the limited response to the Ministry's open invitation to join the coordination team [P20].

These barriers suggest that opportunities for co-creation are shaped not only by individual capabilities and motivations but also by external factors operating beyond the individuals. Participants identified organisational, institutional, and structural conditions that influence opportunities for collaboration in ways that extend beyond the physical/social dichotomy within the COM-B model. To capture this complexity, the inductive approach allowed opportunity-related themes to emerge organically from the data. This process resulted in six opportunity categories: organisational, partnership, finance and funding, market development, technical, and policy opportunities.

Fig. 7 shows that low-intensity participation is facilitated by organisational and partnership opportunities, which enable individual members to attend events such as the Compact Café. The current organisation of the NL Compact, along with manageable workloads within members' respective organisations, enables them to participate. Personal connections and contacts also play an important role, as individuals are often recommended by their partners or colleagues to attend these events [P3, P5, P10, P21]. Moreover, the synergies and complementarities among members present opportunities for collaboration on initiatives, such as thematic working groups. On the other hand, high-intensity activities typically involve broader engagement within the energy access system.

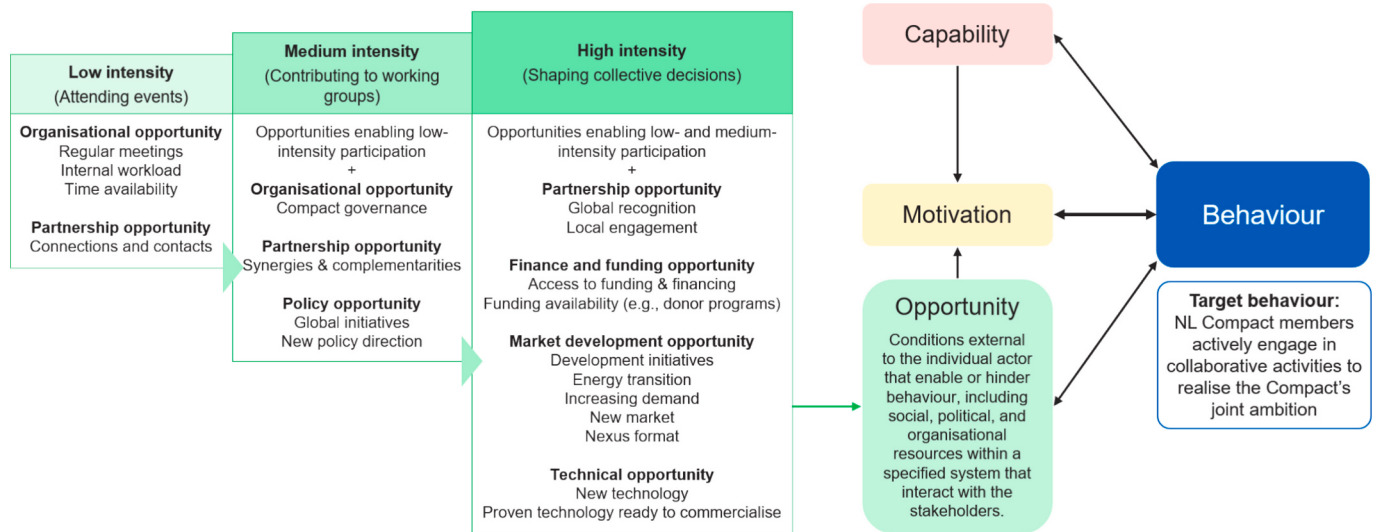


Fig. 7. Opportunities enabling the target behaviour in different participation intensities.

These opportunities include access to finance and funding, market development, and technology commercialisation.

Organisational opportunities identified in the interviews relate to the NL Compact's governance structure and the extent to which member organisations enable or constrain participation through the allocation of time and resources. High workloads were frequently cited as a limiting factor, preventing individuals from attending events or contributing to activities [P1, P2, P5, P12, P16]. While the regular Compact Café was widely appreciated as an opportunity to exchange ideas and experiences, some participants also highlighted a lack of clear structure and coordination from the Ministry to translate ideas into actions. In contrast, the Ministry emphasises the NL Compact's bottom-up nature, positioning itself as a facilitator rather than a central decision-maker and supporting member-driven initiatives instead of directing them [P17, P20].

Participants identified several factors shaping partnership opportunities, including whom to collaborate with and how to build relationships. These involve leveraging broad networks and strengthening local engagement. However, while increasing the visibility of local partners within the NL Compact was sought [P10, P11], structurally involving Global South actors in activities was considered challenging [P13] due to limited resources for international coordination.

Enabling concrete actions requires greater availability and accessibility of diverse financing and funding mechanisms [P6, P8, P16, P20]. These may include carbon credits, co-financing arrangements, concessional loans, equity investments, and results-based financing. Donor programmes—such as grants, subsidies, and funding for both early- and later-stage innovation—were also identified as enablers within the external environment.

Access to finance and funding emerged as the most frequently cited bottleneck to high-intensity stakeholder participation within the NL Compact. Participants highlighted several unresolved issues, including the limited presence of relevant financial actors, significant funding gaps for later-stage innovation, shrinking public budgets, a preference among financiers for larger-scale projects, and the near absence of equity investments.

Small businesses and NGOs reported difficulty in accessing finance from large institutions, citing a mismatch between what is considered “investable” and the realities of operating in remote, low-income markets with high logistical risks [P1, P16]. This situation creates a vicious cycle, in which small enterprises struggle to demonstrate their viability, leaving them dependent on donor funding and subsidies. As a result, participants raised concerns about the sector's long-term sustainability.

Overall, participants identified limited finance and funding opportunities for joint initiatives as a key challenge, reflecting not only a scarcity of resources but also insufficient mechanisms to channel them effectively. They emphasised the need for more pragmatic and innovative financing approaches to enable collaboration and scaling. They also underscored the importance of risk-sharing instruments and alignment between public and private investment.

Looking ahead, the direction of using energy for productive purposes, such as agriculture and cold chain systems, presents new opportunities to expand energy access beyond household consumption. These emerging markets, combined with growing demand, offer promising prospects for businesses. Furthermore, recent global initiatives such as Mission 300 [51], which aims to connect 300 million people to electricity in Sub-Saharan Africa, highlight opportunities for greater alignment and collaboration with international partners. Several participants viewed such initiatives as potential entry points for developing more concrete joint actions [P3, P4, P8, P19].

4.3. Motivation

The interviews revealed shared motivational factors among participants, primarily linked to the perceived benefits of engaging in the NL Compact. These benefits spanned both individual and organisational levels, although the distinction between the two was often blurry. Members were more motivated to engage actively in the NL Compact when they encountered opportunities that aligned with their own or their organisation's interests.

Fig. 8 maps the motivations influencing participation in NL Compact initiatives, distinguishing between low-, medium- and high-intensity participation. Social and personal motivations have strongly driven low-intensity participation. This was indicated, among other factors, in the participants' appreciation of the sense of community among NL Compact members [P3, P10] and the opportunity to enhance individual or organisational visibility through regular event attendance [P1, P21]. Most participants agreed that attending events serves mainly to stay abreast of developments in the sector and to maintain and expand professional connections.

As the intensity of participation increased, motivation became more deliberate and oriented toward active contribution to collaborative activities. These motivations ranged from altruistic drivers, such as contribution to the greater good, to more self-interested considerations. The latter include achieving business goals, accessing financial resources, pursuing professional development, expanding networks,

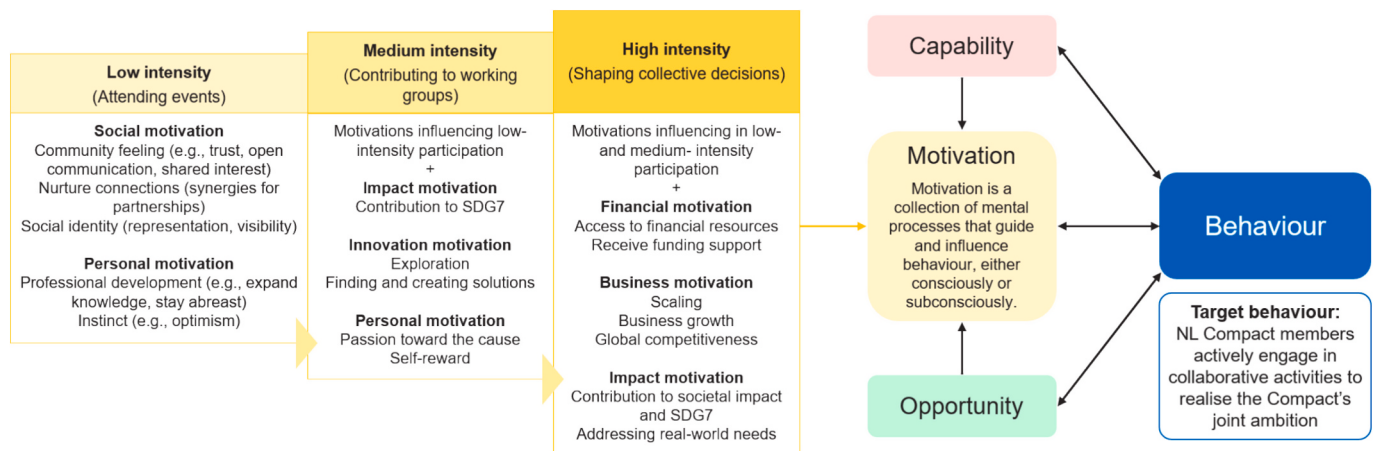


Fig. 8. Motivations influencing the target behaviour in different participation intensities.

identifying innovative solutions, and leveraging synergies for collaboration.

A notable finding was the exceptionally high motivation expressed by private-sector actors. Their engagement appeared to be driven by a strong sense of purpose and passion for contributing to the SDG7 impact. This motivation was shaped by their educational and professional backgrounds, as well as the sense of community grown through interactions with other Compact members.

Financial considerations and business interests constituted strong motivators. Many sought access to funding, investment opportunities, and financial mechanisms to support business goals, including scaling operations, improving competitiveness, and entering new markets. Additionally, participants indicated a strong interest in co-creating solutions and exploring innovations collaboratively within the NL Compact.

Professional development also emerged as a motivation for collaboration, as participants could expand and exchange knowledge through the process. They valued the established connections and increased visibility among stakeholders, viewing participation as an opportunity to strengthen their credibility through association with a global energy-access initiative. These benefits were seen as stepping stones for building partnerships and expanding networks beyond the NL Compact.

Regarding the origin of the NL Compact, participants stressed its political dimension. The NL Compact was seen as an instrument for political visibility at the UN High-Level Dialogue on Energy [P6], contributing to its perceived legitimacy as a global champion of SDG7. This political positioning was also identified as a motivation for high-intensity participation.

5. Discussion

This section discusses the results of the behavioural analysis. The implications sub-section highlights the research limitations and provides recommendations for future research.

5.1. Key drivers and barriers to participation

The framework applied in this study identified behavioural factors influencing stakeholder participation in co-creation activities, which were classified into three levels of participation intensity: engage (low), involve (medium), and influence (high). Low-intensity participation mainly involves attending events to exchange information and develop mutual understanding. Medium-intensity participation entails more active collaboration that generates outputs, with members proactively contributing ideas or working on joint initiatives. High-intensity participation gives members greater opportunity and authority to shape decisions and influence outcomes. The NL Compact currently

witnesses most participation at the low-level intensity, as evidenced by regular networking events and consistent engagement in these activities. However, the NL Compact faces challenges in fostering deeper involvement in co-creation processes. This is indicated by the limited realisation of concrete joint actions, which most participants attribute to insufficient funding and suboptimal governance arrangements as barriers to opportunity.

Many participants view the NL Compact as an external entity, rather than a platform they actively co-create. This perception reinforces the assumption that responsibilities within the network rest with “someone else,” without recognising that meaningful transformation requires individual and collective behavioural change. It also points to gaps in understanding one's own roles in relation to others.

In practice, the NL Compact has served as a platform for engagement, bringing together government, businesses, financiers, NGOs, and academia. However, its ambiguous structure is perceived to underpin both its convening value and limitations in delivering concrete outcomes. Moving forward, the challenge lies in determining how much formality is necessary to ensure credibility and effectiveness, and how much informality is desirable to maintain inclusivity and responsiveness.

A hybrid governance model may offer a solution, in which government retains its role as the formal pledge-holder to UN-Energy, while leadership is distributed to enable co-creation. One option is a steering committee with shared leadership, where members take turns as drivers for a defined period. This approach would distribute responsibility across the network, encourage ownership, and avoid reliance on a single actor. As suggested by Ansell et al. [2], leadership of co-creation tends to be horizontal and informal, often shared among motivated members. Such a committee could provide strategic direction, mediate diverse expectations, and ensure decisions are legitimate and actionable. A structured yet flexible governance arrangement with shared leadership could help the NL Compact balance its bottom-up nature, while addressing the need for credibility and inclusivity.

Turning to high-intensity participation, activities at this level offer the greatest potential to contribute meaningfully to the NL Compact's ambition. Participants generally reported sufficient capabilities and strong motivation to engage at this level. However, key constraints were perceived to lie beyond their direct control, pointing to limitations in the opportunity dimension. Emerging market developments, including the ongoing energy transition and rising demand for sustainable energy solutions, create new opportunities. However, the participants also identified structural barriers, particularly related to access to finance and funding, which can directly influence their participation or affect their motivation to engage actively in collaboration. Compact members expressed growing concerns amid the shifts in global development cooperation, further intensified by the recent changes in Dutch policy

[34]. Addressing these opportunity constraints is therefore critical to enabling high-impact stakeholder participation.

The findings suggest that most drivers relate to reflective motivation and perceived capabilities to contribute to the NL Compact. In contrast, most barriers stem from external factors that constrain members' opportunities to participate. These include institutional and structural constraints, such as limited access to finance and funding, which may in turn lower members' motivation to engage more actively. Given the prominent role of these external factors, further research could provide a more in-depth analysis of how such conditions shape stakeholder participation.

5.2. Adaptation of COM-B model

Applying the original COM-B model in the context of stakeholder co-creation requires adaptation to capture the complexity of stakeholder behaviour in co-creation processes. The findings of this study reinforce the argument to modify the model to improve its applicability to wicked problems [44,46]. We did so by adapting the definitions of the COM constructs to reflect the dynamics of multi-stakeholder collaboration.

We acknowledge the Theoretical Domains Framework (TDF) [52] that provides a more granular approach to mapping behavioural determinants. TDF can be viewed as an expansion of COM—B, offering detailed diagnostic insights into factors that shape the behaviour. Several factors identified in this study align with the TDF domains, including knowledge, cognitive and interpersonal skills, and behavioural regulation. In this context, interpersonal skills refer to abilities that facilitate interaction and collaboration among stakeholders, such as communication, trust-building, empathy, leadership, networking, and adaptability.

It is important to note that the identified capabilities are based on self-assessment provided by research participants. As such, these perceived qualities are prone to availability bias. For example, even though some participants acknowledged leadership capability within the NL Compact, others identified a lack of effective leadership as contributing to stagnation and limited progress. Similarly, participants reported capabilities in the agriculture sector, which raises a critical question regarding productive use of energy projects that are often implemented as technology-push interventions rather than demand-pull solutions [53].

Opportunities are conditions external to the individuals that extend beyond the physical or social environments outlined in the original COM-B model [15]. Findings from this study indicate that stakeholders perceived opportunity more broadly, encompassing not only social and physical contexts but also economic and political dimensions. Within the TDF, physical opportunity is defined as environmental context and resources [52], which offers a more comprehensive lens for capturing external factors. This expanded interpretation reflects the nature of multi-stakeholder collaboration, in which systemic conditions like market dynamics, policy developments, and financial ecosystems play a critical role in enabling or constraining action.

External factors function as both opportunities and threats. While opportunities typically refer to conditions that facilitate action, threats denote conditions that hinder or constrain progress. The COM-B model tends to frame opportunity in a positive and enabling sense; however, the findings of this study suggest that opportunity-related factors may also be experienced as insufficient or restrictive. Examples include regressive policy shifts and shrinking donor programmes. Participants also identified broader threats to collaboration among Compact members, including economic and political instability (e.g., unrest or civil war) in countries of operation, budget cuts, and business bankruptcy. Such factors can impede Compact members' ability to implement concrete actions.

A key methodological challenge in applying the COM-B framework to interview data is that individual responses often reflect multiple theoretical domains concurrently. Following Atkins et al. [52], we coded

each response across all relevant domains rather than assigning it to a single category. For example, the theme of *finance and funding* emerged frequently throughout the interviews. Upon closer examination, this theme was associated with multiple COM-B domains: it relates to *capability* through the financial expertise and resources available within financial institutions; to *opportunity* through the availability of external funding and access to financial support sought by businesses and NGOs; and to *reflective motivation* by influencing stakeholders' willingness to engage more in network activities. In this case, access to *finance and funding* operate as both opportunity- and motivation-related drivers of behaviour, which may also affect the NL Compact's broader effectiveness. This finding exemplifies the interconnected nature of the COM-B domains and demonstrates how capability and opportunity can shape motivation.

The original COM-B model [15] conceptualises behaviour as the result of interactions between capability, opportunity, and motivation. In the version applied in this study, capability and opportunity are shown as influencing motivation, while all three COM domains maintain bidirectional relationships with behaviour (see Fig. 3). This reflects the interconnected nature of the COM-B components, where certain factors may reinforce multiple elements simultaneously.

Alternative variants of the COM-B model propose more complex interrelationships among COM-B domains [54,55]. For instance, a version that includes a bidirectional arrow between opportunity and motivation suggests that these domains mutually influence and reinforce one another. As this study demonstrates how opportunity influences members to participate, the inverse relationship is more complex. For example, higher motivation to engage in collaborative efforts to improve the NL Compact's governance may in turn enhance opportunities for collaboration.

A similar dynamic can be observed between capability and motivation. Possessing relevant knowledge or skills may increase an individual's motivation to participate in activities, while active participation can, in turn, enhance capabilities and further motivate continued engagement.

5.3. Implications

The findings suggest that participation in the NL Compact is shaped by the interaction between individual and organisational capabilities and motivations, as well as the opportunities available around the network. Rather than acting independently, these factors reinforce one another. For example, organisational expertise enables actors to engage in activities, while the Compact Café provides opportunities for coordination and exchange. At the same time, individual commitment to the SDG7 agenda motivates continued involvement. Together, these dynamics explain how co-creation is operationalised within the NL Compact network.

Even though the interviews were conducted with participants in their personal capacity rather than as formal representatives of their organisations, individuals inevitably speak from the standpoint of their professional roles, responsibilities, and experience when expressing their views. These perspectives could not be fully separated from the organisational context in which participants work. For this reason, the findings should be interpreted as insights from individuals reflecting their professional judgment rather than the official stance of their organisations.

Assessing COM-B factors can inform the design of interventions to influence the desired behaviour change [15]. Although intervention design was not the focus of this study, the findings point to several directions for future research on strengthening capability, opportunity, and motivation to participate in co-creation initiatives.

With regard to capability, future research could examine the role of *education* in increasing knowledge through capacity-building interventions to foster a more equal level playing field among members. Another potentially relevant intervention is *enablement*, particularly

through the appointment of a dedicated business developer as a change agent who could help translate collaborative discussions into concrete joint initiatives. While RVO currently serves as facilitator and coordinator for the NL Compact, several participants suggested that a more specialised role may be needed to support implementation processes.

To increase motivation, future studies could investigate the potential of *persuasion*, *incentivisation*, and *modelling* functions. *Persuasion* may support the engagement of new individuals within organisations already affiliated with the NL Compact, as well as additional actors such as development banks and philanthropic foundations. *Incentivisation* need not rely on financial rewards; non-financial mechanisms, such as public recognition of contributions or opportunities for professional visibility and collaboration, may also encourage participation. Beyond addressing motivation, *persuasion* and *enablement* may help overcome the opportunity-related barriers within the NL Compact by facilitating broader engagement and creating a conducive environment for collaboration.

A question remains whether improved engagement would lead to more effective contributions to achieving SDG7. While participants suggest a solid understanding of local contexts through representation and experience of Compact members, inclusion of direct local partner perspectives would enrich insight into how the NL Compact outcomes are experienced across the Global South. This limitation does not affect the core analysis, which centres on the participation of Dutch actors. Rather than assessing the NL Compact's effectiveness in achieving SDG7 outcomes, the study deliberately focuses on behavioural factors that enable or constrain participation within a voluntary, multi-stakeholder coordination.

While questions of transferring such approaches across Global North-South contexts lie beyond the scope of this study, the behavioural insights remain relevant. The identified capability, opportunity, and motivation factors may inform similar co-creation platforms, including the wider ecosystem of Energy Compacts. Understanding how these behavioural drivers interact can support the design of collaboration in similar networks, even if the specific context differs.

6. Conclusion

This article examined behavioural drivers and barriers influencing stakeholder participation in co-creation in the context of energy access, using the NL Compact as a case study. In this setting, co-creation refers to the collaborative efforts among diverse stakeholders to actively shape and implement strategies for achieving universal energy access. Rather than perceiving stakeholders as primarily implementers of predefined actions, the co-creation approach positions them as active participants in agenda setting, policy development, implementation, and evaluation. The main findings from the behavioural analysis are as follows:

- Collaborative efforts within the NL Compact range from low to high levels of participation intensity, shaped by the objectives, required effort, anticipated scale of societal transformation, and the types of activities involved.
- Participants generally agreed that NL Compact members possess strong technical and collaborative capabilities but highlighted a gap in leadership capacity in mobilising and coordinating resources for high-intensity participation. Existing financing tools, such as trade instruments, remain underutilised, indicating the need for enhanced stakeholder coordination and mechanisms that translate capabilities into effective action.
- The lack of finance and funding opportunities emerged as the most significant external barrier to high-intensity participation, largely reflecting broader national and global political dynamics. On a positive note, participants identified emerging opportunities for collaboration, particularly in market development and technological innovation.

- Many participants showed strong intrinsic motivation, driven by a passion to contribute to global impact. When acting on behalf of their respective organisations, motivations were primarily driven by business interests and access to both financial and non-financial resources.
- Behavioural factors may be interpreted in multiple ways, depending on how participants articulate their experiences. The findings highlight the interrelated nature of the COM-B domains, in which factors do not operate independently. For example, *access to funding* can be understood as an opportunity condition that directly influences stakeholders' motivation to engage.

Applying the COM-B model to stakeholder co-creation, such as in the NL Compact, requires adaptation. It is essential to move beyond rigid categorisation and acknowledge that some factors cannot be confined to a single COM-B dimension, as they reflect the interdependent nature of stakeholder co-creation.

Although based on a single-case design, the findings offer insights with relevance beyond the NL Compact. The capability, opportunity, and motivation factors identified in this study reflect generalisable dynamics that shape stakeholder participation. Addressing these COM factors can enhance multi-stakeholder co-creation processes in other regional or sectoral contexts. The exploratory nature of this study has revealed behavioural factors that provide a foundation for further research in other domains of sustainable development. Future studies are encouraged to apply and refine this approach in different contexts, building upon the categories presented here. Moreover, further research should focus on designing and testing practical interventions to address persistent challenges, such as constraints related to the availability of financial resources for energy access.

CRedit authorship contribution statement

Amalia Suryani: Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Nihit Goyal:** Writing – review & editing, Methodology, Investigation, Data curation, Conceptualization. **Niek Moonen:** Writing – review & editing, Supervision, Investigation, Data curation. **Jelena Popović:** Writing – review & editing, Supervision, Methodology, Investigation, Data curation, Conceptualization.

Ethics approval and consent to participate

Ethics Committee/Domain Humanities & Social Sciences (HSS) of the Faculty of Behavioural, Management and Social Sciences at the University of Twente under Application Nr. 240942.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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manuscript.

Appendix A. Supplementary data

The supplementary materials include the interview guide and examples of the coding process. Supplementary data to this article can be found online at <https://doi.org/10.1016/j.erss.2026.104936>.

Data availability

Data will be made available on request.

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