

**Supporting Climate Neutrality of
Non-State Actors and Private Businesses:
The Case of the Climate Neutral Now Initiative**

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Supporting Climate Neutrality of Non-State Actors and Private Businesses: the case of the Climate Neutral Now Initiative

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Preface

The study presented in this research involves the comprehensive evaluation of the support extended by the Climate Neutral Now initiative to its participants. It delves into an analysis of the various barriers and enablers that non-state actors from around the globe encounter on their journey towards climate neutrality.

This assessment is underpinned by a robust combination of both theoretical and empirical foundations. These critical elements were acquired through direct engagement with the initiative itself and close collaboration with the dedicated team at the UNFCCC secretariat.

Completing this intricate assessment was made possible through the invaluable guidance of Dr. Sander Chan, who served as the supervisor of this research. His vast experience and consistent support provided essential direction and ongoing feedback as the study progressed.

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Abstract

In tackling the systemic threat of climate change, non-state actors have been acknowledged as a critical source of potential for climate action, leading to the adaptation of international governance to accommodate the rise of international voluntary initiatives. Building upon the expanding academic literature assessing non-state actors' climate action, it is crucial to evaluate to what extent initiatives are able to support their participants in achieving mitigation targets. In this regard, this research focuses on the case study of the Climate Neutral Now initiative orchestrated by the UNFCCC secretariat, assessing how the initiative has aimed at providing support to its participants through its mechanisms and overall design. Subsequently, the study provides for the identification of the most relevant barriers and enablers that participants encounter along their journey towards climate neutrality. The findings retain significant empirical implications, as they lead to recommendations on how similar initiatives could strengthen their support and overall design to better address the needs of their participants. The related analysis is based on a combination of both governance and social psychological theories, leading to an overall theoretical framework which is implemented through complementary methodologies for data collection including desk research, database analysis, semi-structured interviews, as well as the deployment of a survey.

Keywords:

Non-state actors; international cooperative initiatives; orchestration; climate change; mitigation.

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Acronyms

CDM: Clean Development Mechanism

CER: Certified Emission Reduction

CNN: Climate Neutral Now

GCAP: Global Climate Action Portal

GHG: Greenhouse Gas

HLEG: High Level Expert Group

ICI: International Cooperative initiative

IPCC: International Panel on Climate Change

ISO: International Organization for Standardization

NGO: Non-governmental Organization

NSA: Non-state Actor

SMEs: Small and Medium Enterprises

TPB: Theory of Planned Behaviour

UNFCCC: United Nations Convention on Climate Change

VCP: Voluntary Cancellation Platform

COP: Conference of the Parties

SBs: Subsidiary Bodies

UN: United Nations

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1 - Introduction to the research

1.1 - Research problem statement

The systemic threat represented by climate change has become an evident global challenge to be addressed (IPCC, 2018). As a result, society at large is called to act as an orchestrated collective to mitigate the effects of the crisis. Such effort is driven by the objective of limiting global warming to 1.5°C as envisaged by the Paris Agreement. In this regard, more and more actors have been involved in numerous voluntary initiatives aiming at cutting greenhouse gas (GHG) emissions to work towards climate neutrality. The term refers to a state in which human activities cause no net impact on the climate system by balancing residual emissions with emission removal (IPCC, 2018). Within a context of hybrid multilateralism, non-state actors (NSAs) have been identified as a critical source of potential for significant climate action (Bäckstrand et al., 2017). Notably, this specific governance architecture is embedded within the Paris Agreement, mainly revolving around the role of states to achieve climate goals as well as NSAs' direct contributions (Kuyper et al., 2018). Consequently, this overall setting has widened the consideration given to NSAs and their practices for GHG emissions reduction at the international level (van der Ven, 2017). In this regard, another implication related to the emergence of NSAs as climate players has been the rise of international cooperative initiatives (ICIs). Generally, ICIs serve as platforms to bring together and support the orchestration of NSAs willing to gather around a specific goal, and because of this crucial function they have started to play a central role with respect to global climate action (OECD, 2015).

Given the current context of climate change mitigation governance, and the significance of ICIs in stirring organizations' actions internationally, it becomes relevant to investigate to what extent ICIs are able to support NSAs in taking action towards climate neutrality. Such evaluation is based on the identification of the most relevant barriers and enablers that businesses and NSAs at large perceive in their climate neutral transition efforts. In fact, the commitment of these type of actors is crucial to be researched, as they may lack the resources and the expertise to ensure meaningful progress towards emissions reduction objectives (Johnson et al., 2023). For this reason, ICIs should also provide an enabling context for their participants, in order to strengthen capabilities, ambition, and capacities related to the actions that should be taken to achieve net-zero targets (Bulkeley et al., 2012). Under this regard, this study sets the participants of the Climate Neutral Now initiative (CNN) as the unit of research, in order to explore their perceptions related to the barriers and enablers they have experienced through their involvement within the initiative.

The CNN initiative serving as case study for this research was launched by the United Nations Framework Convention on Climate Change (UNFCCC) secretariat in 2015. Starting from May 2023 the initiative has entered its phase out process, as the recommendations of the Secretary General's High-Level Expert Group on Net-Zero Emissions Commitments of Non-State Entities (HLEG) have demonstrated its lack of alignment with newly set standards (UNFCCC, 2023; HLEG, 2022). Notably, due to its phase down trajectory, the 2023 calendar year is set to be the last year of monitoring of its participants (UNFCCC, 2023). This ICI has been focusing on climate change mitigation, by aiming at supporting non-party stakeholders to take all necessary actions towards a climate neutral world by 2050. Entities pledging to CNN are supposed to annually report on their environmental performance, notably by disclosing information regarding GHG inventories, emissions reductions, as well as offsetting (UNFCCC, 2015). The contextualization of the research within the case of CNN is motivated by the network of participants involved, its voluntary component for commitment, and the expectations linked to its annual reporting mechanism. In particular, the initiative has targeted NSAs

participation, therefore allowing the study to identify the barriers and enablers they perceive as they enter in contact with the initiative. Thanks to such a specific target audience, a more informed assessment of the support provided by the initiative has been obtained. These insights provide meaningful information to other ICIs with similar goals which aim to engage NSAs internationally. Furthermore, the voluntary basis regarding participation allows to research the elements driving climate action in the first place. Finally, the requirement of yearly reporting, aiming at holding participants accountable to their commitment, leads to a process in which businesses and organizations can directly perceive the impact of barriers and enablers along their path towards climate neutrality.

Overall, the research seeks answers related to how NSAs and the private sector can be supported in their efforts towards achieving climate neutrality applied to the context of CNN. As a consequence, the study puts emphasis on the barriers and enablers faced by these entities when acting upon GHG emissions, to inform how other initiatives and orchestrators can better provide for the needs of the actors they aim to engage.

1.2 - Research aim and research questions

This research is aimed at further contributing to the recently emerged field of NSAs' climate action within the context of ICIs in the international climate governance arena. The analysis focuses on GHG emissions reduction and offsetting, as supported by the CNN initiative to achieve a climate neutral world by 2050. Taking into account the target audience of the initiative, the most prominent subjects of the research are private entities within the broader realm of NSAs and their perceptions with respect to their path towards climate neutrality. Ultimately, the findings of this study aim at providing significant insights regarding what other ICIs and orchestrators can learn from the experience of CNN to improve their support to their respective stakeholders.

In this regard, the perceptions of CNN participants have been investigated in order to assess to what extent the initiative has been able to support them in acting towards climate neutrality. The objective of such evaluation is to provide crucial information regarding the challenges that signatories face when trying to achieve climate neutrality, which may be recurrent also beyond the settings of CNN. The insights that are to be provided by the results of the analysis retain meaningful relevance regarding how climate mitigation ICIs could adapt their overall design to eventually lower barriers and enhance enablers which participants face along the way. In fact, this analysis retains significance even beyond the specific case study, as the discussion of the results can be applicable to other similar net-zero ICIs such as the Race to Zero initiative and its partners including the CBN Expert community and the SME Climate Hub among many others.

1.2.1 - Research Question:

- To what extent has the Climate Neutral Now initiative supported NSAs in taking action towards climate neutrality?

The answer to the research question is achieved by exploring three additional sub-questions, which are to be seen as the operational steps towards the conclusions of the research. The extent to which CNN has successfully supported the participants in their journey towards climate neutrality is explained by first addressing how the initiative itself has intended to provide this kind of support. In fact, by taking into consideration the overall initiative design, the analysis initially focuses on how CNN has aimed at stirring

change, which specific shortcomings it has tried to tackle, and finally what kind of remedy it has strived to provide. After having thoroughly discussed the context of the ICI at stake, the analysis is shifted on the participants' perceptions and expectations, by investigating the barriers and enablers that ICIs should be considering. Finally, based on the categorized perceptions reported by actors that have been involved in CNN, the study aims at identifying what are the lessons to be learnt from the case of CNN and how they can be leveraged by other ICIs in the international community.

1.2.2 - Sub-Questions:

1. How has the Climate Neutral Now initiative aimed at supporting its participants to take action towards climate neutrality through its overall design?
2. What barriers and enablers do participants perceive in their efforts to take action towards climate neutrality?
3. What can other mitigation-focused initiatives learn from the experience of Climate Neutral Now to support non-state actors towards the achievement of net-zero emissions?

1.3 – Societal and scientific relevance of the research

This particular research retains significant societal relevance due to the role of ICIs in the current global climate governance settings, the focus on NSAs and private actors, and the facilitation of the achievement of global climate neutrality or net-zero targets. As ICIs have become increasingly prominent within the climate change governance ecosystem, it is crucial to investigate how their designs can be improved to support the organizations towards GHG emissions reduction. Notably, this research provides greater clarity and transparency with regard to how a climate change mitigation ICI operates in the international arena, by dealing with the detailed functioning that have characterized the design of CNN. Furthermore, the strong involvement of businesses within CNN allows to study this specific kind of actor, since their specific features may not be properly addressed when considering NSAs more broadly. Finally, the results of this study contribute towards international GHG emissions reduction, as NSAs' needs are discussed in order to suggest how their pathways can be facilitated. These insights could potentially be leveraged by similar climate-mitigation efforts both within and outside the UN spheres of operation. In fact, initiatives which may be informed by the findings include the Race to Zero campaign and its partners, the Fashion Industry Charter for Climate Action, but also the We Mean Business Coalition, and the SMEs Climate Hub among many others. As a result, this research holds meaningful societal relevance, since it contributes to the discussion of possible solutions to factors that hinder the progress towards the mitigation of the climate crisis.

With respect to the scientific relevance of the research, a significant contribution relates to the discussion about participation of private businesses and NSAs in international climate action practices, specifically addressing the barriers and enablers that participants of CNN face along their pathway towards climate neutrality. In fact, many studies have already analysed the engagement of NSAs at large, discussing their potential and importance for the future of climate action (Kuyper et al., 2018; Hale, 2018; Jernnäs & Lövbrand, 2022). Nevertheless, the literature focuses on the wide spectrum of NSAs, without acknowledging the individual characteristics of the different categories of NSAs. Consequently, the literature discussing the barriers and enablers faced by private actors in the implementation of actions to reach climate neutrality is

in need of continuous update and expansion (Schaltegger et al., 2012). Acknowledging such a knowledge gap, this research provides relevant insights to better understand the challenges faced by private organizations in their transition towards climate neutrality. Furthermore, the analysis of CNN contributes to the academic field of international climate governance by focusing on the functioning of ICIs, a topic which has only risen in the recent years within academic research, despite the increasingly relevant roles of these kind of partnerships (Bäckstrand et al., 2017).

2 - Literature review and theoretical framework

2.1 - Literature review

2.1.1 – Climate change mitigation and the role of non-state actors

Businesses and organizations are increasingly recognized as crucial NSAs concerning the achievement of climate mitigation goals at the global level (IPCC, 2014). They are considered to be pivotal contributors regarding the reduction of GHG emissions, which is a priority component to work towards the realization of global climate neutrality and net-zero targets (IPCC, 2018). Nevertheless, some authors are still hesitant regarding the extent of their actual contribution to mitigate the climate crisis (Michaelowa & Michaelowa, 2017). Moreover, others argue that their reliance on national processes and the related increase in climate governance fragmentation would hinder their position as a credible self-standing answer to the need for GHG emissions reductions (Kuyper et al., 2018; Roger et al., 2017; Andonova et al., 2017; Hickmann, 2017; Van Asselt, 2014). On the other hand, a growing share of studies vouches for the importance of NSAs' climate action at the international level (Hale et al., 2021; Roelfsema et al., 2018; Hsu et al., 2019; Tosun & Schoenefeld, 2017; Blok et al., 2012; Graichen et al., 2016), as the goal of limiting global warming to 1.5°C set by the Paris Agreement would be jeopardized by a lack of their of their potential contributions (Chan et al., 2019). On a similar note, the recognition of the relevance of non-state entities is also granted by the UNFCCC through the Global Climate Action Portal (GCAP), a specific repository in which the commitments and progress of NSAs are tracked at the internationally (UNFCCC, 2023).

A portion of academic literature has focused on identifying the barriers and enablers experienced by businesses and NSAs in their path towards the reduction of their environmental footprint. Both barriers and enablers towards climate neutrality and net-zero emissions discussed in this literature review are allocated across four main dimensions according to their nature, notably: the technical dimension, the economic dimension, the organizational dimension, and the social dimension.

2.1.2 – The barriers towards non-state actors' climate neutrality

The technical dimension includes several elements that affect the extent to which NSAs manage to effectively work towards climate neutrality and net-zero emissions. Notably, the complexity of GHG emissions estimation and measurement is a first challenge in the attempt to build GHG inventories, because organizations may lack pivotal resources with respect to expertise, knowledge, and capital availability (Marlowe & Clarke, 2022; Haslam et al., 2014). This primary complication in GHG accounting and management is also driven by the limited tools and standards for emissions measurement, often hindering NSAs' capacity to promptly initiate their path towards climate neutrality (Sala et al., 2015; Bowen & Wittneben, 2011). Following the successful estimation of the GHG inventory, entities need to develop a

transition plan for systematic emissions reduction, which can be a further obstacle as organizations may struggle to adapt their operations to attain their environmental targets (Cadez & Czerny, 2016; Chen et al. 2018). Once organizations have managed to overcome these initial barriers, the complexity of reporting and transparency mechanisms for GHG emissions accountability may represent an additional elaborate procedure to fulfil (Schäfer, 2022; Olson, 2010). Finally, within the technical dimension, also technological and infrastructural constraints limit the extent to which NSAs can make use of any lower carbon-emitting alternatives for their internal and overall supply chain processes (Okereke, 2007; Luo et al., 2017; Johnson et al., 2023).

Under the economic dimension, the most frequent issue is the limited amount of financial resources to be invested to develop a credible transition based on low-carbon innovation, as implementation can often be costly (Kumar et al., 2023; Lee et al., 2017; Kiefer et al., 2018). In fact, the costs related to low-carbon emitting alternatives to sustain business operations may represent another significant obstacle within climate neutral pathways (de Sousa Jabbour, 2019; Chu & Schroeder, 2010; Singh et al., 2022). These expenses may hinder the cost effectiveness and efficiency of business in the short term due to the need for relevant monetary investment for the set up of new technologies (de Sousa Jabbour, 2019; Zhang et al., 2012).

A further dimension of barriers towards climate neutrality and net-zero targets is identified within the entities' organizational settings (Johnson et al., 2023). Specifically, a relevant shortcoming is connected to the short-term prioritization mindset of many companies, as opposed to the potential long-term benefits of sustainable processes (Slawinski et al., 2017; Marginson & McAulay, 2008). However, the crucial elements obstructing climate action at the organizational level revolve around the lacks of expertise, knowledge, and awareness, since many NSAs may be unfamiliar with the available options to support an effective strategy for GHG emissions reductions within their sector (Muduli et al., 2020; Böttcher & Müller, 2015; de Sousa Jabbour, 2019).

Finally, under a social perspective within the market ecosystem, the lack of socio-economic incentives may be an additional factor undermining the motivation of firms and NSAs to undertake credible climate action (Ding et al., 2015). Specific examples of these incentives may range from carbon pricing, to reputational risks, and stakeholders' pressure, which often have a major impact on the decision-making process (Narassimhan et al., 2018; Dahmann et al., 2019; Herold & Lee, 2019).

2.1.3 – The enablers towards non-state actors' climate neutrality

According to the same allocation logic across the five dimensions which have been previously discussed, the key enablers promoting NSAs' behaviour towards climate mitigation targets can be identified throughout the literature in a similar manner.

Notably, within the technical area, the general technical support to entities along their transition towards lower emissions represents a critical point in empowering their success in taking climate action. This type of assistance may be related to the creation of GHG inventories, as well as the optimization of resources, or even working towards the achievement of international certifications (Leffel, 2022). In fact, SMEs often outsource these tasks to external consultants, as they need that kind of service to compensate for their potential deficiency of internal expertise (Baranova & Meadows, 2017; Kihiko & Kinoti, 2016). On a similar note, capacity building and training is considered as a further enabler to improve the limited knowledge of

NSAs, because if they cannot afford to work with external partners in the long term, then the needed expertise has to be built internally (Singh et al., 2022; Golub et al., 2009; Baranova & Meadows, 2017).

Under the economic perspective, even though in some cases the cost efficiency of low-carbon alternatives may be a challenge to be overcome, some organizations may actually find greener alternatives for production to be more profitable and less impacting on their managing costs (Johnson et al., 2023; Cadez & Guilding, 2017). This mainly depends on the availability of viable technological solutions, as well as on the sector in which the entity operates. However, the greatest and more direct enabler of climate action within the economic realm revolves around the availability of financial resources, which allows NSAs to make meaningful investments towards their emissions targets in the first place (Singh et al., 2022; Kiefer et al., 2018; Shi et al., 2008).

The organizational dimension is also affected by the presence of possible enablers for climate change mitigation operations. For instance, many entities are motivated to act upon the climate crisis because of the threat to the long-term resilience of their activities, as climate change may come to jeopardize their existence (Sindhvani et al., 2022). Furthermore, within the organizational network, collaborations and partnerships play a pivotal role in promoting credible transitions, as they prompt spillovers as well as providing examples of good practice to the various stakeholders (Singh et al., 2022; Kihiko & Kinoti, 2016; Janipour et al., 2022). These relationships may lead to the launch of awareness raising initiatives, both internally and externally, gathering stakeholders around common objectives while informing them about the most critical issues, and promoting corporate social responsibility as a whole (Amran et al., 2016; Bauer et al., 2022; Caritte et al., 2015).

Finally, the social sphere is also characterized by the presence of significant factors enhancing the extent to which NSAs act upon the climate crisis. Notably, public brand recognition and reputation is deeply affected by the environmental performance of the organization at stake, therefore pushing market and public actors to develop vested interests in communicating on their successful green practices (Dahlmann et al., 2019; Du et al., 2010; Saeidi et al., 2015). Their behaviour is also driven by stakeholders' pressures, which may become an incentive to promote the adoption of low-carbon alternatives within the decision-making process (Long et al., 2016; Gouldson & Sullivan, 2013; Seth et al., 2018; Cuerva et al., 2014; Hansen & Klewitz, 2012). Clearly, the overall aspiration to contribute to tackle climate change can be directly determined by ethical motivations and social responsibility within organizations, as NSAs are aware of the potential positive impact they might generate as sustainable practices spread across various sectors (Carfora et al., 2021; Ooi et al., 2020; Jabbour et al., 2020; Galbreath, 2014).

Within the hybrid context of international climate governance, the perceptions of NSAs regarding barriers and enablers in their pursuit of climate neutrality are deeply relevant for international orchestrators aiming at supporting them in the reduction and offsetting of GHG emissions. For this reason, it is crucial to expand the current knowledge about the specific challenges faced by these actors to better understand how their pathways towards climate neutrality can be facilitated within the international arena.

DIMENSIONS	BARRIERS	ENABLERS
Technical dimension	<ul style="list-style-type: none"> Complexity of GHG emissions estimation and measurement Lack of tools and standards to measure and manage GHG emissions Complexity of reduction of GHG emissions Complexity and unclarity of reporting and transparency mechanisms Technological and infrastructural constraints 	<ul style="list-style-type: none"> Technical support Capacity building and training
Economic dimension	<ul style="list-style-type: none"> Limited financial resources to be invested Cost inefficiency and cost ineffectiveness 	<ul style="list-style-type: none"> Cost efficiency Availability of financial resources
Organizational dimension	<ul style="list-style-type: none"> Short-term planning prioritization Lack of expertise, knowledge, and awareness 	<ul style="list-style-type: none"> Long-term business resilience Collaborations and partnerships Awareness raising initiatives
Social dimension	<ul style="list-style-type: none"> Lack of socio-economic incentives 	<ul style="list-style-type: none"> Public brand recognition and reputation Stakeholders' pressures Ethical motivations and social responsibility

Figure 1: Literature review of barriers and enablers towards climate neutrality and net-zero emissions for NSAs.

2.1.4 – ICIs' potential for international climate change mitigation

As the recognition of the potential impact of voluntary non-state climate action gained momentum, the need for greater orchestration and coordination also emerged within the climate change mitigation governance debate. Such development has been driven by the rise of ICIs as facilitators and supporters of climate action

within the private sector (Abbott, 2017). ICIs are defined as collaborations gathering multi-stakeholder groups across various sources, including the private sector, communities, cities, and regions operating both within and outside the UNFCCC (IPCC, 2022). This wide spectrum of different forms of ICIs is thought to be able to bring about relevant contributions with respect to the reduction of global emissions (Lui et al., 2021). To live up to the high expectations, ICIs need to actively support their participants in meeting climate mitigation targets (Andonova et al., 2017). To achieve this objective, ICIs should alleviate the barriers that businesses and NSAs face in pursuing climate neutrality, while also enhancing the elements that enable climate action.

However, despite the extensive academic literature highlighting the potential of ICIs, academic research seems to neglect the connection between existing challenges experienced by NSAs and the role of ICIs in addressing them. This study compensates for this literature gap by exploring and expanding the academic knowledge regarding NSAs’ barriers and drivers for emissions reduction targets, then connecting the findings to the extent of support provided by CNN to its signatories. Consequently, the results of this research can inform ICIs on how to better support effective climate action of their participants. In fact, by recognizing the perceptions of their target audience and acting upon them, ICIs could adapt their design and mission based on what organizations need to achieve successful net-zero transitions.

2.2 – Theoretical framework

2.2.1 – First theoretical foundation

A first theoretical underpinning which is deployed within this research is the theory of orchestration as a soft mode of governance (Abbott et al. 2012). This governance approach is aimed at creating incentives and support to stir targeted actors to align with specific goals or expectations set by a given orchestrator, as envisaged within the setting of international initiatives (Abbott et al., 2015; Chan & Pauw, 2014). In fact, international initiatives, as in the case of CNN, act as intermediate agents which are leveraged by a parent international organization seeking to engage with a given target audience (Chan & Amling, 2019). Leveraging on the approach envisaged by the orchestration theory supports a potential increase in coordination across the various layers of international climate governance (Hale & Roger, 2014), therefore substantiating the relevance of this theoretical setting in the analysis of the role of CNN and its impact.



Figure 2: Orchestration governance within Climate Neutral Now, adapted from Abbott et al. 2012.

2.2.2 – Second theoretical foundation

A second significant theoretical stance is the Theory of Planned Behaviour (TPB). This additional component enables the analysis of NSAs’ intentions with respect to actual achievements in their climate neutral transitions. TPB aims to predict the intentions of rational actors to perform a set behaviour based on three

specific influencing components: attitude towards the behaviour, subjective norm, and perceived behavioural control (Ajzen, 1991). Because of the interplay of these three factors, TPB identifies the intention to comply with the behaviour as the most reliable predictor of ultimate behavioural performance, since it reflects the actor’s willingness to conform. Nevertheless, TPB also acknowledges that intentions by themselves are not sufficient to always ensure consistency with the set behaviour. The inconsistency between compliance intention and the achievement of the set behaviour is due to the presence of external constraints which may limit the actor in aligning with the ultimate goal, notably being climate neutrality within this research (Ajzen, 1991). This kind of theoretical foundation effectively portrays the context in which CNN participants face barriers and enablers which are supposed to be addressed by the initiative to facilitate the journey towards climate neutrality, eventually empowering participants in matching their compliance intention with actual achievement.

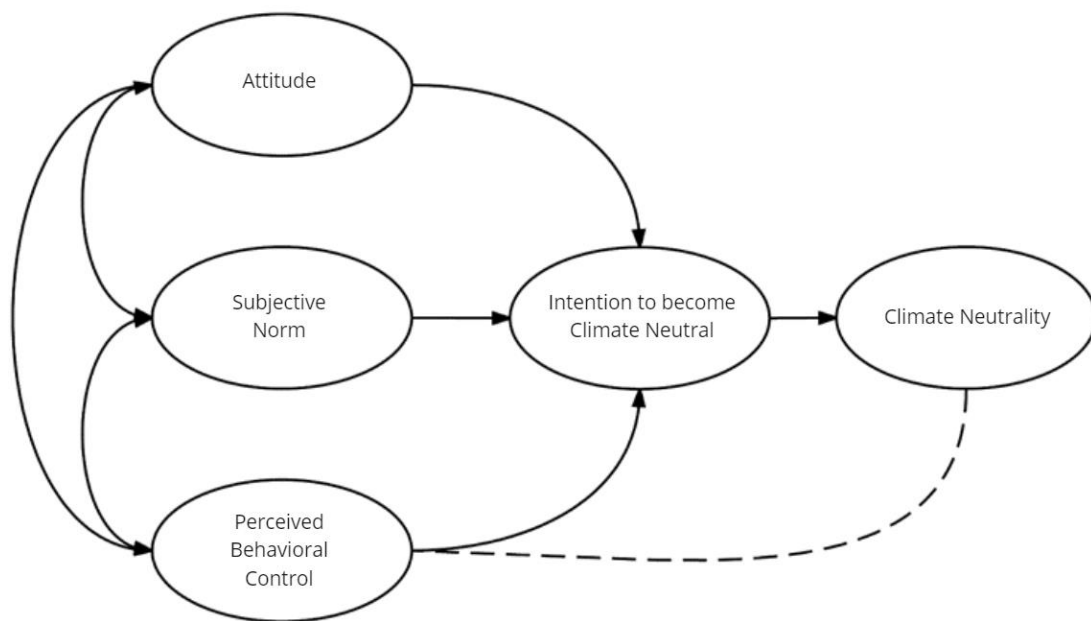


Figure 3: NSA willing to become climate neutral, adapted from Theory of Planned Behaviour (Ajzen, 1991).

2.2.3 – Theoretical framework of the study

By merging the previously discussed theoretical frameworks into one single comprehensive model, using TPB as a source of inspiration and overall contextualization, the research effectively investigates both the participants and the initiative levels of analysis, as embedded within the research question and sub-questions. Notably, orchestration theory allows the analysis of how CNN has aimed at supporting its participants towards climate neutrality, as well as portraying the governance structure through which the UNFCCC secretariat aims at engaging and stirring NSAs to take climate action. On the other hand, the inclusion of TPB allows to explain the reasons causing the gap between the participants’ intention of becoming climate neutral and the actual progress towards this goal. The presence of such a gap is to be explained by exploring the barriers and enablers that participants perceive in their path towards climate neutrality. By categorizing these barriers and enablers, the research seeks to assess to what extent CNN has effectively bridged the intention-behaviour gap and supported participants in taking action towards climate neutrality.

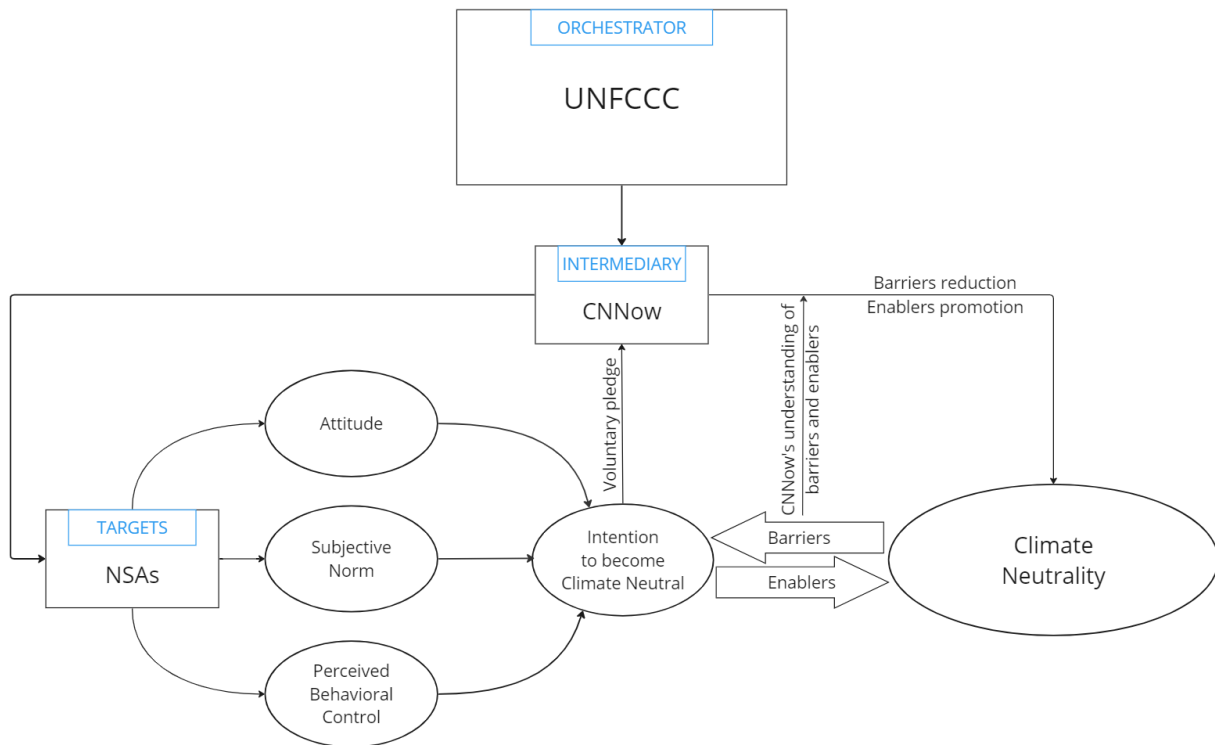


Figure 4: Theoretical framework for the assessment of CNN support, based on Abbott et al., 2012 and Ajzen, 1991.

Overall, as NSAs voluntarily pledged to CNN, they should receive the needed support to overcome their difficulties in becoming climate neutral. Within this kind of relationship, CNN has aimed at reducing barriers and promote enablers for the achievement of climate neutrality by the signatories. The extent to which the initiative has succeeded in serving its purpose is addressed through the lenses of both orchestration governance and TPB, as envisaged in the broader visualization of the theoretical framework.

2.3 - Operationalisation of theoretical concepts

The overall theoretical framework addresses the role of all the relevant concepts within this research. Notably, participants of CNN are those who pledge to the initiative even before reporting or taking any action towards the fulfilment of their transition, nevertheless they demonstrate their intention to achieve the goal of the initiative (UNFCCC, 2015). Intention is the most reliable predictor of alignment with climate neutrality within the theoretical framework (Ajzen, 1991), but the fact that participants might not be able to fulfil this target proves the presence of barriers hindering the direct connection between intention to comply and actual compliance. Acknowledging the gap between intention and compliance with climate neutrality, CNN aims at providing the needed support to overcome the barriers and enhance the enablers perceived by the participants, a function which is reflected both in its overall design and theory of change.

To provide an overall assessment of the initiative, the perceived barriers and enabler of participants' climate action, as well as the support provided by the initiative are explored and categorized. The qualitative component related to the assessment of the relevance of barriers and enablers is measured through a scoring system which allows a more accurate operationalization and subsequent assessment. In a second instance, the level of support offered by the initiative is to be measured by exploring to what extent CNN has addressed the barriers and enablers identified by the participants according to their own perceptions.

In broad terms, the qualitative nature of the feedback of CNN participants is turned into quantifiable data, allowing an accurate evaluation of the role played by the initiative in supporting climate action. In fact, by measuring the relevance of barriers and enablers, and comparing the findings with the extent of support provided by CNN, the operationalisation of the theoretical framework allows to effectively investigate the gap between the participants' climate neutrality intentions and actual achievement.

3 - Methodology

3.1 - Research strategy

The most appropriate research philosophy lens to be applied to the research is interpretivism, as it aligns with the type of analysis required by the overarching research question as well as the choice of a single case study analysis (Ricucci, 2010). This approach does not envisage a single empirical reality to be examined, rather it entails the presence of subjective perceptions and perspectives (Thiel, 2014). Consequently, interpretivism underlines the significance of the perceptions of CNN with respect to the necessary support to be provided, as well as the perceptions of CNN participants in their understanding of the barriers and enablers they experience in working towards climate neutrality. As a whole, the interpretivist research philosophy guarantees the essential subjective and qualitative component which has a major impact on the data collected.

Leveraging on such a relativistic standpoint, knowledge regarding how ICIs can better support their participants has been achieved by engaging the CNN participants themselves within the case study. In fact, by involving those who are committing to act to reduce their GHG emissions, the relevant insights are directly collected to inform initiatives as CNN about the presence of possible gaps regarding how support should be delivered. The direct participation of these actors within the study ensures the necessary conditions to bring about a relevant contribution both under the social and scientific dimensions of the research.

Overall, the combination of the interpretivist approach and the direct involvement of the participants of CNN leads to an appropriate research strategy, which is reflected in the methods for data collection and analysis. These foundational principles serve and support the analysis in the pursuit of the answers to the research question and the related sub-questions.

3.2 - Research methods, data collection and data analysis

This research makes use of multiple methods to carry out the data collection, as they aim at addressing three different levels of analysis. Firstly, an overall contextualization of ICIs and NSAs orchestration in climate governance along with the most prominent challenges and enablers of climate change mitigation action. Followed by the initiative setting of the case study of CNN, and finally the lower level of the CNN signatories and their perceptions of barriers and enablers towards climate neutrality.

The foundational basis to set the scene for the research has been elaborated through a detailed desk analysis of various academic and institutional sources related to the field of international climate change governance, specifically addressing NSAs. The extensive consulted material includes academic publications as well as scientific reports and online resources of international organizations. The sources for the literature review

have been retrieved from publicly available academic databases, as well as digital archives of various organization acting within the international governance arena. In addition to the overall context of orchestration theory and international climate governance, the theoretical analysis has also focused on the main barriers and enablers for NSAs to take climate mitigation actions. Such a method allows to gather the necessary theoretical and conceptual elements to contextualize the setting of the research both within the scientific and social realm. Finally, it also provides the knowledge that underpinned the empirical data collection through the semi-structured interviews and the survey, as they aim to fill the gaps that are not covered by the desk review.

The initiative level of analysis is investigated by implementing two complementary methods of data collection, notably an additional desk analysis of CNN's resources both public and internal to the UNFCCC secretariat, as well as filling knowledge gaps thanks to three individual semi-structured interviews with current and former CNN staff members. The exploration of the various sources of institutional knowledge regarding CNN guarantees a satisfactory coverage of the evolution of the initiative over time, while also ensuring that all the mechanisms targeting within its processes are appropriately captured through the analysis. Regarding the semi-structured interviews, the choice of engaging a limited amount of people is dictated by the fact that the initiative relies on a small standing team, often supported by additional short-term employees. Thanks to the three semi-structured individual interviews, the insights related to both the overall vision and the design of the initiative are further examined. This specific step is necessary as this kind of information might not be explicit when strictly referring to the publicly available material of the initiative. The interviews have been conducted online, and lasted around 30 minutes each, asking a total of 13 questions ranging from climate neutrality and the necessary actions for its realization in broad terms, then referring to specific barriers and enablers to work towards it, including the links with the sub-goals of CNN, and finally investigating the reasons for the phase out of the CNN project. The overall outline of the interview was flexible, allowing participants to add information as it seemed appropriate based on broad initial questions, while consistently aiming at examining the overall support provided to CNN signatories via the activities of the initiative.

Finally, the CNN participants' level of analysis has been studied both through the internal database of the initiative in which all yearly signatories' progress reports are stored, as well as through a survey which has been conducted cooperatively with the CNN team in order to collect data for the closing report envisaged in the initiative phase-down process. The drafting of the survey has been supported by a systematic review of academic publications and reports which discussed the main challenges and enablers for climate mitigation actors by NSAs, such as private businesses. Consequently, the review allowed a proper categorization of these barriers and enablers according to technical, economic, organizational, and social dimensions which supported the creation of the survey. Once finalized, including a total of 8 main questions with several sub-questions to be filled in, the survey was shared with the 838 participants of CNN, and came to count a total 70 responses, 65 of which was considered as valid within the setting of this research. In particular, empty submissions, duplications, and submissions that did not answer to at least 50% of the questions within the form were removed and therefore not considered within this research. The approach of the data collection process through the survey aimed at gathering qualitative information as quantitative data to accommodate a more systematic analysis. This was enabled by the broad use of scoring mechanisms based on the logic of Likert scales (Likert, 1932). As a result, the data was downloaded as an accessible database including both numerical values as well as qualitative additional information, to ensure flexibility of responses portraying the participants' perceptions, without imposing overly rigid and structured questions to be answered. In

particular, the survey asked participants to give a score to the relevance of potential barriers and enablers towards climate neutrality based on the list retrieved by the previously discussed literature review. This allowed the identification of these factors, while also allowing respondents to add free text responses to expand the available list on the basis of their experience. Following this first step, the respondents were asked to give a score to the support provided by CNN to address each barrier and promote each enabler, therefore gaining valuable insights regarding the overall effectiveness of the design of the initiative. In concluding the survey, the CNN participants were asked to give a general evaluation of the initiative, as well as suggesting possible recommendations to enhance the assistance offered by similar climate initiatives promoting climate action. This final topic referring to the suggestions for future improvements, has also been expanded to include more sources of data collection, such as further review of academic publications and some degree of reliance on the findings of the individual semi-structured interviews within this study.

The gathered data includes both qualitative and quantitative elements, as the semi-structured interviews focused on a descriptive component related to the initiative, while the survey aimed at categorizing and measuring participants' perceptions with respect to barriers and enablers towards climate action and the overall support provided by CNN.

The data analysis related to the interviews aims at finding evident patterns and consistency in the overall strategy deployed by the initiative over time, as it may lack from current public resources, in order to define how the initiative has meant to support its signatories. While, with respect to the survey of the participants, a more quantitative type of assessment can be obtained after the categorization of barriers and enablers, based on the evaluation of perceived relevance, despite the qualitative nature of perceptions per se.

Type of question	Question	Methodology
Research question	To what extent has the Climate Neutral Now initiative supported NSAs in taking action towards climate neutrality?	Desk analysis Semi-structured interviews Survey
Sub-question 1	How has the Climate Neutral Now initiative aimed at supporting its participants to take action towards climate neutrality through its overall design?	Desk analysis Semi-structured interviews
Sub-question 2	What barriers and enablers do participants perceive in their efforts to take action towards climate neutrality?	Desk analysis Survey
Sub-question 3	What can other mitigation-focused initiatives learn from the experience of Climate Neutral Now to support non-state actors towards the achievement of net-zero emissions?	Desk analysis Semi-structured interviews Survey

Figure 5: Types of data collection methodology associated with research question and sub-questions.

3.3 – Data processing

The data and the information gathered through the desk analysis of academic articles and publications was processed by using a literature matrix approach, in order to properly allocate the various sources that have been consulted. This process was particularly effective with respect to the identification and categorization of barriers and enablers for climate action which is thoroughly discussed in the literature review section.

With respect to the semi-structured interviews, the information was processed by relying on the transcripts of the interview sessions, as well as on the video recordings of these virtual meetings. Due to the manageable number of respondents, a manual data processing approach was employed, focusing on identifying recurring patterns and extracting complementary insights from the obtained transcripts. Then, after summarizing all the results, the overall information stemming from each interview was merged in order to allow a more comprehensive discussion regarding the data collected.

The final stage of the data collection process was represented by the survey targeting the CNN participants, in order to examine their experience within the initiative, as well as measure their perceptions about barriers and enablers towards climate neutrality. To process the lengthy information contained in each submission, all the responses were downloaded in a database format via Excel. Consequently, the raw data was structured and organized to allow a proper systematic analysis, including calculations relating to the quantitative components which were embedded within survey.

3.4 - Validity and reliability of the research

By following the fundamental principles identified in the research design literature, both validity and reliability are ensured within this study (Yin, 1994; Crowe et al., 2011). Notably, construct validity, internal and external validity along with accuracy and repeatability are guaranteed thanks to the defined theoretical foundations outlining the relation among the key concepts, the consistency of the data collection, and the extent of findings generalization applicable to the empirical dimension (Merriam, 1998; Thiel, 2014).

The construct validity is provided by a solid theoretical framework, which has been drafted based on various sources of scientific evidence (Ebneyamini & Sadeghi Moghadam, 2018). Consequently, the operationalization of the theoretical underpinning of the research ensures the necessary internal validity, thanks to the appropriate form of measurement of the involved variables (Thiel, 2014). Furthermore, external validity is guaranteed as well, since the broad scope of the research and the variety of analysed actors allow to generalize the findings in such a way that makes them applicable also to other mitigation-focused ICIs, because similar actors may face similar challenges.

The accuracy of the research relies on the sound forms of data collection and measurement of the variables which are described in the section discussing the methodologies. Finally, the repeatability of the analysis is based on the possibility of allowing other researchers to examine the same data again, and eventually re-assess the conclusions and findings that are included in the study.

3.5 – Limitations and recommendations

Despite the comprehensive approach deployed within the setting of this research, the study retains some potential limitations which could also serve as an input for a possible expansion or reinterpretation of the

contents discussed. Notably, setting the CNN participants as the unit of research implies that NSAs are treated as a broad and undistinguished group, since no differentiation is ensured according to the individual characteristics of the entities involved. For instance, SMEs and bigger organizations are addressed in the same manner, while in reality they might differ deeply from one another regarding needs and capabilities (Villegas et al., 2021; Álvarez Jaramillo, 2019). Such a stance is due to the management strategy embedded within CNN, which does not envisage any type of segmentation across its signatories. Because of this lack of differentiation, a possible recommendation for further research related to the topic could be a more sectorial analysis, therefore focusing on organizations that are appropriately comparable to one another according to more specific criteria.

Furthermore, given the case study strategy developed within the study, this research lacks a comparative analysis across the ecosystem of climate change ICIs focusing on mitigation. A comparative research approach could meaningfully contribute to expanding the knowledge regarding how initiatives can effectively support their participants in overcome the barriers for climate action, while also enhancing the enablers they experience. In fact, a comparative analysis of various ICIs' designs could allow these projects to learn from one another and understand what kind of best practices could be implemented in order to improve their activities, as well as increase the overall level of international coordination (Bakhtiari, 2018).

Finally, in order to establish an accurate scope for this research, the study does not address the actual reported environmental performance of the signatories of CNN regarding GHG emissions reductions and offsetting to evaluate the extent of success of the initiative. Rather, the assessment is limited to the extent of support provided according to the perceptions of the actors involved. Such a stance implies that an alternative research approach could be implemented to expand the gathered insights, notably by taking into account the actual progress of CNN signatories towards climate neutrality across time. In fact, this alternative performance-based indicator could also be considered as a credible logic to assess the extent of success of the initiative, nevertheless it is considered to be beyond the scope this research.

4 – The Climate Neutral Now initiative

4.1 – Climate Neutrality and Net-Zero targets

To contextualize the setting in which the case study initiative operates, it is necessary to address the crucial concept within its mission. Notably, the notion of climate neutrality has been defined by the IPCC Glossary as *a state in which human activities result in no net effect on the climate system* (IPCC, 2018). The achievement of this condition does not exclusively rely on GHG emissions reductions, rather it also envisages emissions offsetting to compensate for the residual amounts that have not been cut. Therefore, the combination of emissions reductions and GHG removals provides the basis for climate neutral pathways according to this definition.

The notion of climate neutrality is often associated with the concept of net zero emissions, since both involve GHG emissions cutting and removals in a similar manner. Nevertheless, the scope and emphasis of these two types of mitigation targets entails some slight differences.

Climate neutrality retains a greater focus on the cancellation of the overall impact of anthropogenic activity upon the atmosphere in the long term. In fact, as entities reduce their emissions, the realization of the effects

of offsetting projects to compensate for residual emissions will reveal itself in the longer term, still allowing some negative impact in the short term. On the other hand, the goal of net zero emissions can be seen as the fulfilment of the process embedded within the climate neutral pathway, since it is often related a more specific timebound (IPCC, 2018).

A further distinctive element between these mitigation targets is the variety of gases that are to be considered. Notably, net-zero transitions focus on the reduction and offsetting of carbon dioxide, whereas climate neutrality is not only based on carbon emissions, rather it envisages broader GHGs coverage adding methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride among others (SBTI, 2020; World Business Council for Sustainable Development & World Resources Institute, 2004). CNN participants are expected to report their emissions of all the GHGs listed by the 1997 Kyoto Protocol, but only if they are actually measured in the first place. Given this flexible approach to CO₂ equivalent accounting, the differentiation between climate neutrality and net-zero targets results to be blurred within the context of the initiative.

In fact, despite the minor differentiation between these fundamental concepts in the realm of climate action, CNN considers the two terms as synonyms within the settings of the initiative, as specified in its publicly available guidelines.

4.2 – Background of Climate Neutral Now

As an initial response to the mandate of supporting voluntary cancellations through the Clean Development Mechanism (CDM), the UNFCCC secretariat launched the CNN initiative in 2015. The CDM is a framework within the Kyoto Protocol which promotes the reduction of GHG emissions in developing countries via specific projects which are to be financed by the global north. By purchasing Certified Emissions Reductions (CERs) in support of these projects, entities offset the residual emissions which are not directly cut, therefore contributing towards their climate targets (Gillenwater & Seres, 2011). Under this regard, CNN has promoted this GHGs removal mechanism by encouraging its participants to purchase CERs through the overall design of the initiative.

Moreover, the initiative also aimed at escalating climate action and commitments of non-Party stakeholders especially focusing on companies and organizations. Since its first appearance, the scope of the initiative has expanded to offer more direct support to its participants along their journey towards climate neutrality. The wider scope of the initiative entails signatories to directly pledge to the overarching goal of accelerating the transformative change needed to reach global net-zero GHG emissions by 2050 or earlier.

The broader facilitator role undertaken by CNN is reflected by its effort for awareness-raising, capacity building, collaborative development, promotion of carbon footprints estimation, reduction of footprints, and voluntary offsetting while providing external recognition (UNFCCC, 2015). Through its activity over the years, CNN has come to count 838 participants as of July 2023 when new participants were no longer accepted. The network of CNN participants includes several types of NSAs ranging from medium and small enterprises to multinational enterprises, sub-national governments, institutions, and NGOs. Moreover, CNN has established various collaborations in multiple sectors involving a variety of actors, while also developing tools to support climate action, such as publicly available GHG footprint calculators.

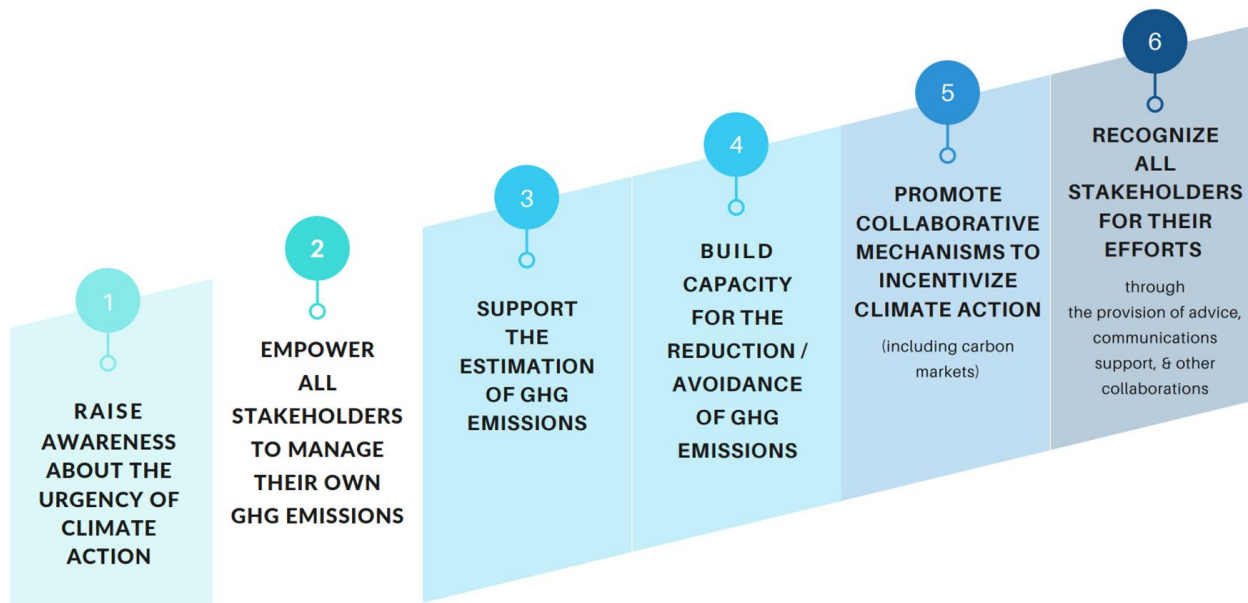


Figure 6: The goals of Climate Neutral Now.

The approach of the UNFCCC secretariat through the workflow of CNN reflects the dynamics embedded within the orchestration theory, connecting the leading organization to its target audience thanks to the presence of an intermediary to stir compliance towards a set objective. In fact, the UNFCCC secretariat represents the leading organization which sets the policy and direction of the initiative. On the other hand, CNN can be seen as one of the tools which enable the secretariat to pursue its objective involving outreach and NSAs involvement in taking climate action.

To engage NSAs, CNN has created factors of incentive which can be appealing to potential participants, as demonstrated by the recognition of climate action which can serve as a leverage for signatories' public communications strategy. Further potential benefits related to the participation to CNN include networking opportunities, building expertise and cost efficiency improvement among many others. These motivating factors have been created on the basis of the understanding of the potential difficulties that actors may encounter when setting net zero targets. Such approach supports the effort to fulfil the role of an initiative as the facilitator for climate action mobilization.

Despite its achievements and the expanding network which has been involved in CNN, the initiative started its phase-out transition in March 2023, as the decision was directly communicated to the participants. Along with this announcement, a gradual plan including relevant deadlines was also made public on the CNN website, which envisaged the closure to new participants after July 2023, while still accepting reports referring to 2023 in the first half of 2024. The UNFCCC secretariat, being the orchestrator of the initiative, opted to gradually cease the operations of CNN as its overall design and process were not aligned with the recommendations of the Secretary General's High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities, which have been listed within the Integrity Matters Report in November 2022 (McKenna, et al. 2022).

4.2.1 – Overview of the participants

The overall participation in the initiative has steadily grown since its first establishment in 2015, reaching 245 entities in 2019, expanding to 514 in 2021, and touching a total of 785 signatories in July 2023. As discussed,

CNN specifically targets NSAs at large, a category which includes several different types of actors ranging from sub-national entities, to organizations, companies and even individuals.

Nevertheless, private companies comprise the vast majority of CNN signatories, as the initiative has engaged close to 600 private businesses across all regions of the world, despite a dense cluster in Europe making up 54% out of the total amount of participants. The rest of the signatories are mainly categorized as organizations, with a total amount of 127 (as of July 2023), while other types of entities only represent a minority within the whole CNN network.

4.3 – The process of Climate Neutral Now

In order to join CNN, entities are expected to sign a pledge, therefore committing to the overarching goal of accelerating the transformative change needed to reach global net-zero GHG emissions by 2050 or earlier. Moreover, signatories commit to provide annual reports regarding their progress according to the overall design of the initiative. In fact, after signing the pledge, participants begin their involvement within the process of the initiative based on three complementary steps: firstly measuring their GHG emissions, then planning actions to reduce those emissions, and finally voluntarily contributing by offsetting them through the use of carbon credits. The third step related to emissions offsetting has been defined as optional within the process of CNN, therefore entities can still participate even if they might not make use of CERs.

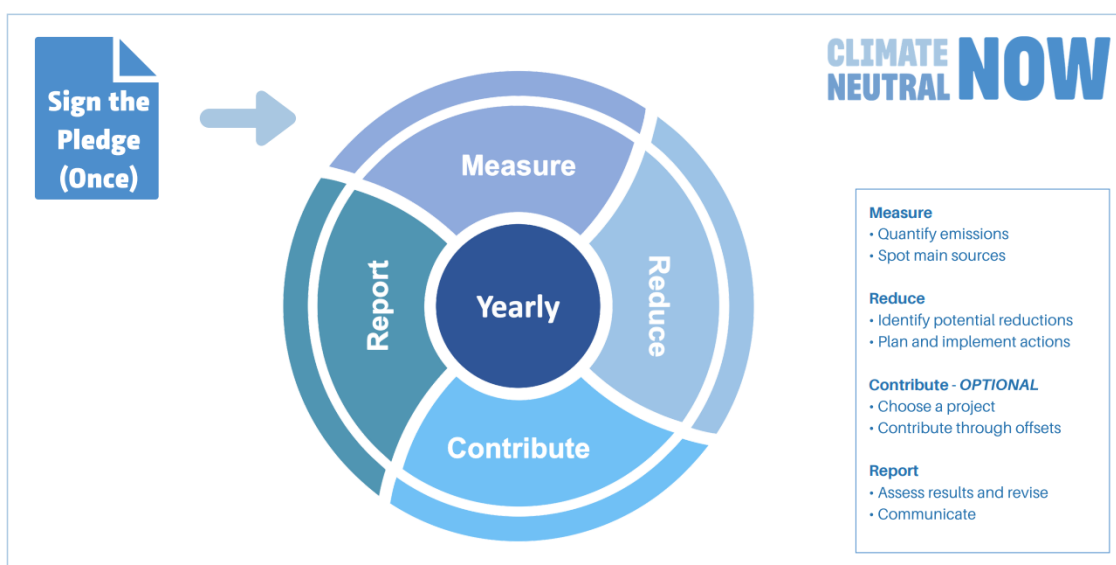


Figure 7: The CNN process.

Aiming at motivating even more credible climate action, CNN has introduced an internal tier mechanism to differentiate the various extents of ambition among participants. Notably, the yearly report of each signatory is internally assessed to recognize a level of achievement for each step (Measure, Reduce, and Contribute). Based on this assessment, each signatory is provided with a badge and achievement report which state the ambition of their actions following the criteria listed in Figure 6, to be granted the Bronze, Silver or Gold level.







	 Bronze	 Silver	 Gold
 Measure	Self-declared GHG inventory	Third-party verified GHG inventory, with incomplete scope 3	Third-party verified GHG inventory, including full scope 3
 Reduce	Target established, with incomplete or no reduction plan	Net Zero by 2050 or earlier & reduction plan with intermediate targets	As Silver, with at least 5% reduction year-on-year
 Contribute	Partial contribution	Full contribution with partial scope 3	Full scope 3, full contribution

Figure 8: Criteria and different levels that can be achieved in each step.

The CNN reporting and assessment infrastructure is mostly based on the three emissions scopes set out by the Greenhouse Gas Protocol, which serve to regulate the accounting and categorization of GHG emissions. Notably, scope 1 refers to direct emissions originated from sources that are owned or controlled by the organization. Scope 2 indicates indirect emissions stemming from the purchase of electricity, steam, heating and cooling that are consumed by the organization. Finally, scope 3 includes all residual indirect emissions which are not listed under scope 2 across the whole organizational value chain. Scope 3 emissions can be considered as partial or complete within the reporting process, due to the intrinsic broadness of the definition (World Business Council for Sustainable Development & World Resources Institute, 2004).

Scopes	Sources
Scope 1	<ul style="list-style-type: none"> • Generating electricity • Generating heat – non-electric • Business travel – owned company vehicles • Industrial processes emissions
Scope 2	<ul style="list-style-type: none"> • Purchasing of electricity • Purchasing heat • Purchasing steam
Scope 3	<ul style="list-style-type: none"> • Business travel – flights • Business travel – public transport • Waste & Wastewater • Transmission and distribution losses • Food consumption

Figure 9: Examples of significant emissions sources by scope.

According to this emissions categorization, CNN provides an evaluation of the performance of signatories across the three fundamental steps. The assessment of the Measure step depends on the extensiveness and solidity of the GHG inventory, which implies the full coverage of all three emissions scopes as well as third party verification. The evaluation of the Reduce step is instead focused on the extent to which the entity’s transition plan is in line with the targets of the Paris Agreement. Finally the Contribute step, related to GHG offsetting and removals, depends on the scopes coverage in accordance with the Measuring step as well.

On the basis of these criteria, CNN recognises the credibility of the claim of being climate neutral only if a signatory provides a third-party verified GHG inventory including full scope three, aims to be net zero by 2050 or earlier while having a reduction plan with intermediate targets, and offsets all residual emissions under scope three if any. Signatories which do not align with these expectations can only claim to be on track towards climate neutrality.

The CNN tier mechanism directly affects the degree of recognition that participants achieve by engaging with the initiative. In fact, the leverage on their communication strategy is determined by the level of ambition they manage to reach. Logically, a solid performance within the setting of CNN guarantees more appealing marketing assets to the wider public audience.

Overall, the process of CNN regulates the engagement with external entities both when aiming to become participants, as well as substantiating the management of signatories’ reports and the following assessments which are to be communicated yearly. Such a detailed process aims at coordinating the operations of the initiative in a systematic and efficient way despite the broad network interacting with CNN. Furthermore, it aims at providing guidance and support to the participants in their journey through the barriers they may encounter to achieve climate neutrality, as shown in the theoretical framework of this study.

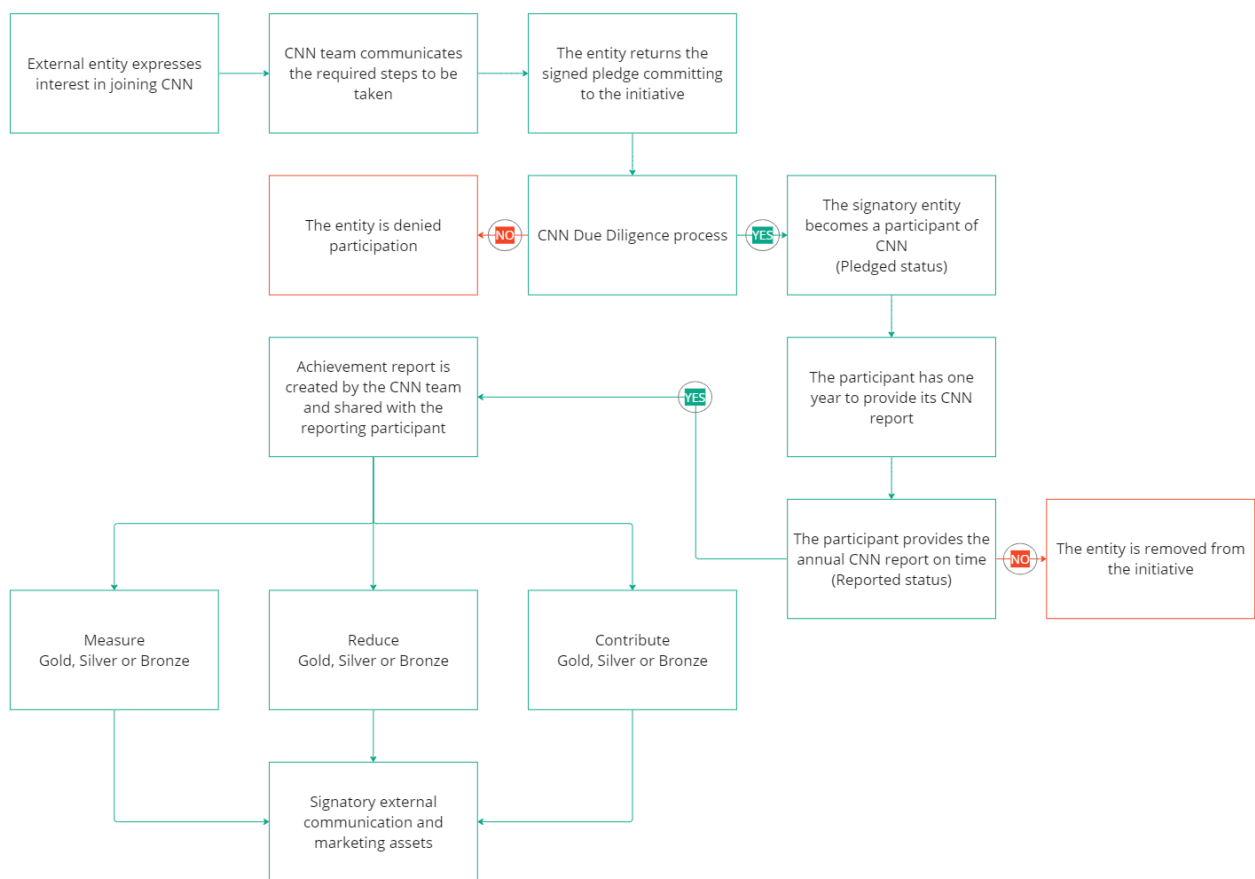


Figure 10: CNN participation and reporting process.

4.3.1 – The pledge

The CNN pledge document has always been publicly available on the initiative’s website, to ease global access. By submitting a signed copy of the document, any NSA formally enables its participation to the

initiative and the related commitments. The pledge has three fundamental elements to which signatories are held accountable through the CNN process: the contribution to the broader goal of the initiative, the commitment to the three steps around which signatories' actions are to be based, and the obligation to disclose information via annual reports.

Following the submission of a signed and properly filled pledge, the CNN team assesses whether the entity can be granted access according to an internal Due Diligence process. If the entity meets the required criteria for admission, then it officially becomes a pledged participant of CNN. At this stage participants are already granted the possibility of using CNN communication assets, and the name of the signatory is published on the initiative's website.

Often signatories provide the signed pledge along with their first CNN report, therefore leaving no gap between the moment they join the initiative and when they actually disclose information. Nevertheless, participants are granted one whole year to report from the moment they are admitted. As a result, the possible timespan between the initiation of the participation status and the provision of the first report implies that entities could potentially make use of the communication materials even before they disclose any data.

4.3.2 – The Measure step

The first action to be undertaken to work towards the completion of the annual report is related to the GHG inventory of the organization. The estimation of GHG emissions is to be based on a specific kind of methodology among those available, which is to be indicated in the completion of the annual report. The existing and reliable standards for emissions measurement are listed in the CNN guidelines as well as within the report itself, therefore providing relevant basic information to inexperienced participants. The list provided by the initiative refers to GHG Protocol and ISO standards among others, while also allowing to specify the methodology which has been used even though it might not appear in the set list.

The main function of this basic step is to quantify and categorize the emissions on the basis of the three scopes, but also to spot the significant sources of those emissions. In fact, the procedure of defining the GHG inventory serves as the basis to develop effective and informed transition plans.

The initiative retains flexibility related to the capacity and ambition of the reporting signatories, in fact self-assessed emissions inventories as well as third-party verified ones are recognized. Moreover, the initiative allows the participants to define the extent to which the three scopes are covered within their GHG accounting, even though the CNN guidelines suggest to measure all of them appropriately. In the effort to further facilitate the measuring process for its participants, CNN has also made available free GHG emissions calculators for individuals, organizations and events.

4.3.3 – The Reduce step

The second step of the CNN process is fundamental to work towards the goal of the initiative, as it focuses on the direct reduction of GHG emissions by the involved signatories. Following the identification, the accounting and the categorization of the emissions within the first step, the participants of the initiative are expected to take action to decrease their environmental footprint compared to the given reported base year. Furthermore, signatories are required to disclose their reduction targets and the actions they plan to implement to reach them.

With respect to the expectations related to the Reduce step, CNN has published a selection of recommendations for cutting GHG emissions to support its participants in making informed choices in the definition of their transition plan. The recommendations range from waste management, to energy management, supply chain management, and many more.

The overall flexibility of the initiative is embedded within this crucial step as well, since the extent of ambition that signatories wish to demonstrate is to be freely determined according to the completeness of the transition plan and the relevance of intermediary targets.

4.3.4 – The Contribute step

The third step of the CNN process is not mandatory for all participants, nevertheless the initiative encourages the signatories to take action under this regard as well within the public guidelines. The Contribute step refers to the offsetting of residual emissions after the development of a GHG inventory and the creation of a transition plan to reduce GHG emissions. However, in contrast with the previous steps, mandatory obligation was lifted from the Contribute stage in March 2021, from then on only being suggested through the initiative.

Its voluntary basis relies on the fact that organizations successfully measuring and cutting their emissions may come to the point in which they retain a very limited residual GHG footprint, making CERs less relevant for their case. However, the voluntary foundations of the Contribute step apply to all participants, regardless of their performance and ambition.

The participants voluntarily opting to include the third step in their transition are requested to submit the certificates of their contribution to the projects granting CERs. After the completion of the CNN process demonstrated by their annual report, signatories receive a badge and an achievement report which show their score against the CNN tier mechanism, the reporting year, and the year the joined the initiative. These individual communication assets can be freely used by entities for their marketing and promotion strategies, providing an incentive for credible ambition.



Figure 11: Example of CNN badge for each participant.

4.3.5 – The annual reporting

The annual reporting of participants, following the signing of the pledge, is based on a publicly-available report template which comprises a total of 31 questions reflecting the rationale and needed information

related to the three basic steps of the initiative. The reporting period does not have to follow the calendar year as long as it always refers to a timespan of twelve months.

The reporting component is crucial for the functioning of the initiative as it holds signatories accountable to their commitments, while also recognizing their success or ambition. Acknowledging this importance, the design of CNN envisages that non-reporting signatories are to be removed from the initiative, allowing them to join again only if they submit the required report with no chronological gaps. A further relevant point related to the reporting obligation is its role in ensuring transparency of the entities involved, as a copy of the latest report of each participant is published on the initiative's website.

5 – Results

5.1 – Results of the CNN current and former staff members' interviews

In order to expand the insights provided in the preceding section, which delineated the comprehensive structure and operational outline of the initiative, semi-structured interviews were conducted within this research, with the intent to further investigate the overall design and setting of CNN. These interviews of current and former CNN staff members aimed at clarifying the broader context of climate neutrality, explore the understanding of CNN of the barriers and enablers experienced by NSAs in their pursuit of climate neutrality, describe the links with the sub-goals of CNN, and examine the rationale behind the decision to phase out the initiative.

5.1.1 – Needed actions for climate neutrality and support provided by CNN

The overall approach of the semi-structured interviews envisaged introductory general questions related to climate neutrality from the perspective of CNN, by starting with the identification of the most relevant necessary actions to work towards the overarching goal of the initiative.

All the interviewees converged in expressing the importance of three initial basic actions, which were described as the estimation and measurement of emissions, followed by the reduction of the measured emissions, and the provision of quality removal options to allow compensation for those that could not be cut.

In particular, emissions estimation and measurement was emphasized as the first step towards climate mitigation action to be taken, as it allows organizations to understand the main sources of their environmental footprint. Under this regard, the GHG emissions are to be allocated according to the boundaries set within the three scopes of the GHG Protocol. Such categorization enhances the organization's capacity for a comprehensive evaluation of its environmental performance.

Following the initial measurement of the GHG emissions, the consequent action to be taken is the reduction of the emissions that have been measured. The interviewees stressed the centrality of this process in order to work towards climate neutrality. In fact, the realization of climate neutral pathways has to be driven by a great extent by GHG emissions reductions. For this reason, transition plans and long-term strategies to manage the organization's environmental footprint represent a crucial component to achieve climate neutrality.

The third necessary action that was mentioned, in particular within the setting of CNN, refers to the provision of quality removal options, especially related to the CDM and carbon credits projects at large. This is entailed by the target of climate neutrality per se, which envisages the offsetting of the emissions that were not or could not be reduced by the organization or its supply chain. However, the interviewees emphasized that the provision of offsetting options is not only about easing access to carbon credits and share information to promote them, rather it also has to be centred around the credibility and overall quality of carbon credits projects.

In order to prompt these three basic necessary actions, which were mentioned across all the interviews that have been conducted, additional activities were indicated to support the overall trajectory which leads to the achievement of climate neutrality in the long term. In fact, the majority of the additional elements that were identified generally feed into the promotion of GHG emissions measurement, reduction, and offsetting as a whole.

For instance, the promotion of knowledge and access to technologies, techniques, and methods has been recognized as a fundamental supporting factor in order to empower entities to engage with the three basic actions, which are also embedded within the CNN mechanism itself. This particular necessity is practically crucial, as it is not sufficient to simply know about the existence of the various technologies with the related methods and techniques. Rather, the pivotal factor to empower NSAs' action upon the climate crisis is providing the access to those tools and build capacity for their usage.

On the other hand, on the formal side of the spectrum of essential actions, a further necessity is the creation of tools to ensure that any claims of achieving or moving towards climate neutrality are credible. The mechanisms determined by this specific objective are to be based on monitoring, review, and verification which create a proper procedure to ensure the credibility of both actions and claims of NSAs.

In general terms, the phase out of fossils fuels usage was mentioned as an additional essential trend feeding into the overall reduction of GHG emissions. In order to incentivize these two strictly connected mitigation measures, policies which put forward a strong price on carbon were also identified as needed factors when striving to achieve climate neutrality. Such a strategy is thought to strengthen the externalities upon those retaining a more impactful environmental footprint, therefore giving them the price signal to become more efficient and switch to more sustainable energy sources.

The policy strategies, often implemented at the national level, are of course embedded within the wider regulatory framework which stirs the management of GHG emissions by organizations under the same jurisdiction. Therefore, price signals are to be combined with the standards that encourage or mandate lower emissions.

The public sphere has an impact on organizations not only under the regulatory perspective, rather it also affects them under the social dimension. Notably, peer pressure and awareness enhancement represent a further component which pushes NSAs to take climate change mitigation actions. In fact, emissions reductions should be baked into the daily running of business within organizations, a process which has to be based on the availability of information provided through awareness raising activities or initiatives.

Finally, referring to the internal dimension of organizations of various sizes and market strengths, the promotion of the availability of resources, money and capital was also mentioned as a relevant component to support actions towards climate neutrality at large. In fact, the presence of monetary capacity allows organizations to take full advantage of their possibly expanding knowledge and related methods to become more sustainable in the way they operate.

NECESSARY ACTIONS TO WORK TOWARDS CLIMATE NEUTRALITY
Emissions estimation and measurement
Emissions reductions
Provision of quality removal options
Promotion of knowledge and access to technologies, techniques, and methods
Tools to ensure credibility of climate neutral claims
Phase out fossil fuels usage
Setting a strong price on carbon
Appropriate regulatory framework
Strengthening of peer pressure and awareness
Promotion of the availability of resources, money and capital

Figure 12: Necessary actions to work towards climate neutrality as identified by the former and current CNN staff members.

Following the identification of the most pressing actions to work towards climate neutrality, current and former CNN staff members were asked about how the initiative has supported the undertaking of these actions by its participants, or more broadly how they have been addressed within the context of CNN. Such a research approach serves to expand the available knowledge regarding the mechanisms embedded within the initiative, which are to be analysed in combination with the previous section referring to the introductory information about CNN based on publicly available sources.

Regarding the support provided by CNN for the estimation and measurement of emissions, the initiative has implemented many projects and strategies to empower its participants to take action. Notably, CNN created and granted free public access to three different GHG emissions calculator tools to be used depending on the type of entity at stake, setting up one for organizations, another for events, and finally one for individuals. These calculators, eventually following some basic training, could be used by all NSAs to get an estimation of their overall GHG footprint. Nevertheless, the results provided by their use cannot substitute a tailored calculation, as they are thought to produce an initial estimation considering the complexity of various organizational structures. Furthermore, CNN published on its website additional information, tools and resources which participants and the wider public could access to improve their capacity autonomously. Finally, the initiative took a more directly involved approach by organizing webinars and, in certain instances, collaboratively conducting initial GHG emissions estimations with participants.

According to the same logic, the initiative also provided support regarding the reduction of emissions of its participants. In fact, information was provided online through the CNN website under this circumstance as

well, for instance including recommendations and a checklist of possible actions to be taken that could be applicable to NSAs at large. In addition to the previously mentioned resources and webinars which also dealt with emissions reductions, the CNN staff engaged with participants via email as well, in order to address any possible query or need they might have. These specific measures also served as sources of information and best practices to reduce the use of fossil fuels for both internal organizational processes, as well as across supply chains.

With respect to the provision of quality removal options for GHG emissions, CNN has played a critical role in creating offsetting opportunities for its participants. The initiative was initially created in 2015 to promote the use of carbon credits within the CDM, then it eventually expanded its scope across time to cover even more specific aspects of climate neutrality, as offsetting eventually became optional within CNN. In order to facilitate NSAs' access to credible carbon credits, the initiative supported the creation of the Voluntary Cancellation Platform (VCP), which gathered many different projects under the CDM and made them available for investment and certification to an increasingly wider audience. Finally, under the awareness side of the issue, the initiative even shared information regarding the importance of carbon credits in order to engage more and more stakeholders.

The measures discussed so far, each of which supporting the three basic steps of the CNN process, also acted as the strategy of the initiative to promote knowledge and grant access of its participants to the most relevant technologies, techniques, and methods. Cumulatively, all the resources and tools that were made available by CNN aimed at empowering NSAs to take the most appropriate actions based on the latest practices known within the climate change mitigation ecosystem.

To ensure the credibility of both actions and climate neutral claims, the initiative introduced the levels of achievement mechanism. The overall evaluation of the performance portrayed within the annual reports of participants was mainly determined by emissions scopes covered by the organization, the presence or lack of third-party verification, and the amount of credits to compensate for the residual footprint. Such an approach in combination with the role played by the VCP with respect to the reliability of offsetting projects, promoted the transparency and credibility of the actions taken within CNN concerning GHG emissions compensations.

To a great extent, the focus of the initiative was on the awareness raising component related to the achievement of climate neutrality. In fact, CNN was thought to include as many participants as possible, in order to engage a consistently growing audience of actual and potential participants. This was mainly supported via the organization of events, including presence as several COPs, as well as all the measures that have been previously mentioned, such as webinars, online information, etcetera. This strategy also fed into the strengthening of peer pressure to stir NSAs to act more promptly upon their emissions.

Despite the extensive discussion related to the activities implemented by the initiative to provide support to its participants, some of the identified necessary actions to work towards climate neutrality were not linked by the respondents to a direct measure or strategy under CNN. Notably, setting a strong price on carbon, the development of appropriate regulatory frameworks, and the promotion financial resources, money and capital were not directly addressed by the initiative. This is mainly due to the institutional limits established within the mandate of the UNFCCC, as the majority of these needs are to be addressed at the national level.

Nevertheless, some of the activities carried out by CNN may have indirectly contributed to address these needs as well in broader terms.

NECESSARY ACTIONS TO WORK TOWARDS CLIMATE NEUTRALITY	SUPPORTING MEASURES IMPLEMENTED BY CNN
Emissions estimation and measurement	GHG calculators, Online information, Tools, Resources, Webinars, Collaborative GHG emissions estimations
Emissions reductions	General recommendations applicable to all NSAs, Checklist of possible actions to be taken, Guidelines, Online information, Resources, Webinars, Answers to queries via email
Provision of quality removal options	Direct link to the CDM, promotion of the use of carbon credits, Creation of the VCP, Online information
Promotion of knowledge and access to technologies, techniques, and methods	GHG Calculators, Access to VCP, Tools, Online information, Resources, Webinars, Guidelines
Tools to ensure credibility of climate neutral claims	Achievement levels mechanism, Annual reporting, VCP
Phase out fossil fuels usage	General recommendations applicable to all NSAs, Checklist of possible actions to be taken, Guidelines, Online information, Resources, Webinars
Setting a strong price on carbon	No particular direct measure under CNN
Appropriate regulatory framework	No particular direct measure under CNN
Strengthening of peer pressure and awareness	Events, Webinars, Online information, Guidelines, Answers to queries via email
Promotion of the availability of resources, money and capital	No particular direct measure under CNN

Figure 13: Necessary actions towards climate neutrality and the related measures adopted by CNN to support them.

5.1.2 – CNN’s understanding and support of NSAs’ challenges towards climate neutrality

After answering the questions related to climate neutrality at large, the former and current staff members of the initiative were asked more specifically about the challenges faced by NSAs that have been addressed

by CNN. In many respects, the barriers that were identified are inherently interconnected with the results discussed in the preceding section, in which the necessary actions to be taken to support the participants of the initiative are thoroughly described.

The respondents identified several barriers that have the potential to impede the achievement of climate neutrality by the participants in the initiative. Notably, the initial challenges associated with the calculation of the GHG footprint may pose a significant obstacle to be overcome, particularly for NSAs that possibly lack both knowledge and resources to implement a comprehensive GHG emissions estimation.

A further challenge that has been recognized is the struggle by smaller NSAs, such as SMEs, to access credible offset options to purchase carbon credits. Such difficulty in accessing the carbon market was also linked to the lack of awareness with respect to the proper use of carbon credits and offsets. This general lack of information often creates an additional challenge to NSAs' climate neutral transitions, mainly leading to the lack of internal knowledge as well as the limits to the overall available resources of these entities.

However, even though an organization may retain the capacity to undertake credible climate action, another challenge which was flagged is related to the possible lack of a fully engaged leadership, which may hinder any type of ambition from the very beginning.

MAIN NSAs' CHALLENGES TOWARDS CLIMATE NEUTRALITY
GHG footprint calculation
Lack of access to credible offset options
Lack of awareness
Lack of knowledge
Lack of internal resources
Lack of fully engaged leadership

Figure 14: Main challenges towards climate neutrality according to CNN perspective.

The majority of the measures undertaken by CNN to facilitate the necessary actions towards climate neutrality also served to address and mitigate the challenges encountered by NSAs during their transitions. In fact, many activities carried out by the initiative were based on an overarching logic which aimed at providing a satisfactory level of support across all the aspects related to the achievement of climate neutrality by the participants.

As previously discussed, relevant tools such as the three GHG emissions calculators, as well as the VCP, and the link to the CDM were thought to be used by participants to overcome barriers such as the struggle in footprint estimations and the difficulty in accessing credible offset options. The lack of knowledge and awareness regarding the various insights to achieve climate neutrality were again tackled thanks to webinars, online resources, one on one support, guidelines, and presence at strategic events. While regarding the organizations' need for resources, CNN acted as a link between participants and external professionals for the entities which were interested in hiring any kind of third-party consultants, therefore implying a degree

of available financial resources to be invested. The overall awareness raising focus of the initiative also aimed at increasingly engaging the leadership of a growing number of entities, in the effort to incentivize climate action from the higher end of hierarchies as much as possible.

CHALLENGES TOWARDS CLIMATE NEUTRALITY	SUPPORTING MEASURES IMPLEMENTED BY CNN
GHG footprint calculation	GHG calculators, Online information, Tools, Resources, Webinars, Collaborative GHG emissions estimations
Lack of access to credible offset options	Direct link to the CDM, promotion of the use of carbon credits, Creation of the VCP, Online information
Lack of awareness	Tools, Online information, Resources, Webinars, Guidelines, Events
Lack of knowledge	Tools, Online information, Resources, Webinars, Guidelines, Events, Answers to queries via email
Lack of internal resources	Links to external professionals
Lack of fully engaged leadership	Events, Webinars, Online information, Guidelines, Answers to queries via email

Figure 15: Identified challenges towards climate neutrality and the related measures implemented by CNN.

5.1.3 – CNN’s understanding and support of NSAs’ enablers towards climate neutrality

Following the identification and categorization of the support provided by CNN to overcome the possible barriers towards climate neutrality, the respondents were asked to list the elements that enable climate action according to a similar logic. The results of this section again show a degree of interconnectedness among necessary actions, barriers, and enablers, as the initiative itself aims at providing an overarching type of support within the institutional limits set by the context of the UNFCCC.

In fact, many of the listed enablers once again reflect the general actions which were deemed to be pivotal in the achievement of climate neutrality that were included within the overall operational framework of CNN. These factors include the access and development of tools for GHG footprint estimations, the facilitation of access to the carbon market and credible offset options, as well as the need for awareness raising and capacity building through the provision of relevant information, and the importance of recognition mechanisms. However, the respondents also mentioned aspects that were not fully included within the

settings of CNN, such as the relevance of the availability of financial means, and the need for strong carbon pricing within regulatory frameworks.

MAIN NSAs' ENABLERS TOWARDS CLIMATE NEUTRALITY
Access to tools for GHG footprint estimation
Access to credible offset options
Awareness raising and capacity building
Provision of information
Recognition mechanisms
Availability of financial means
Strong carbon pricing policies

Figure 16: Main enablers towards climate neutrality according to CNN perspective.

As previously stated, the majority of these enablers fit into the overall support provided by CNN to its participants, as demonstrated in the preceding sections. Notably, the creation and public availability of the GHG emissions calculators serve to enhance the access to these kinds of tools by the participants of the initiative. While the provision of access to credible offset options was ensured by the initiative thanks to the VCP and the solid link to the CDM, which was a central component within the concept that led to the creation of CNN in the first place.

Another substantial factor at the roots of the origins of the initiative was its role as an intermediary for awareness raising and information sharing which was orchestrated by the UNFCCC secretariat. This objective was mainly fulfilled thanks to the provision of online information, resources, guidelines, as well as the organization of webinars and presence at specific events, as already mentioned. With respect to the creation of recognition mechanisms, the initiative made sure to motivate climate action by rewarding its participants with the different levels of achievement which were to be used for their communication strategies, along with the CNN logo and badge.

Despite their importance in enabling significant climate action towards climate neutrality, the availability of financial means and the need for strong carbon pricing policies were not directly embedded within the mechanisms of the initiative. In fact the respondents, despite recognizing their role as potential sources of additional motivation for NSAs, did not mention any specific measure or strategy implemented by CNN to directly sustain them.

ENABLERS TOWARDS CLIMATE NEUTRALITY	SUPPORTING MEASURES IMPLEMENTED BY CNN
Access to tools for GHG footprint estimation	GHG calculators, Online information, Tools, Resources, Webinars, Collaborative GHG emissions estimations
Access to credible offset options	Direct link to the CDM, promotion of the use of carbon credits, Creation of the VCP, Online information
Awareness raising and capacity building	Tools, Online information, Resources, Webinars, Guidelines, Events
Provision of information	Tools, Online information, Resources, Webinars, Guidelines, Events, Answers to queries via email
Recognition mechanisms	Levels of achievement, Badge, Use of the CNN logo
Availability of financial means	No particular direct measure under CNN
Strong carbon pricing policies	No particular direct measure under CNN

Figure 17: Identified enablers towards climate neutrality and the related measures implemented by CNN.

5.1.4 – Activities working towards the achievement of CNN’s sub-goals

In order to provide additional insights regarding how CNN has aimed at supporting its participants to take action towards climate neutrality, the respondents were asked about the activities which have been carried out in order to achieve the six sub-goals of the initiative. This section again relies upon similar findings as the ones that have been previously discussed, since the CNN sub-goals were elaborated on the basis of the understanding the necessary actions to be taken from the perspective of the initiative, as well as the related barriers and enablers towards climate neutrality.

The first sub-goal focuses on raising awareness about the urgency of climate action, which has been thoroughly addressed in the preceding sections, as it is at the centre of the functions of the initiative. In this regard the respondents once again put emphasis on the networking component of CNN, referring to the presence of the team at several events (including conferences such as Climate Weeks, SBs, and COPs), the various collaborations with partners which also entailed attending their own events, public presentations, webinars, freely available information, a former newsletter that used to be sent to participants, and CNN communication efforts at large.

In order to address the second sub-goal which entailed empowering all stakeholders to manage their own GHG emissions, CNN has made sure to implement specific measures and strategies, which have been presented in the previous sections as well. The main activities to provide support regarding this matter included the availability of the templates for annual reporting, the possibility of asking for guidance via email, capacity building and training on how to measure emissions, the provision of open GHG emissions calculators with the related methodologies, as well as the possibility to perform the first measurement collaboratively if requested by the participant at stake. These standardized practices provided by CNN also ensured the achievement of the third sub-goal, notably the support for the estimation of GHG emissions.

With respect to the necessity of building capacity for the reduction of GHG emissions, which represents the fourth sub-goal of CNN, the initiative relied on the various sources of information across its overall mechanisms. Notably, the main tools that have been used to improve the capacities of its participants include showcasing best practices at events as well as online, organizing webinars, the presence of dedicated pages for emissions reductions on the CNN website, generally applicable recommendations, links to the main sources of standards (such as the GHG Protocol), and the possibility of one on one support.

The promotion of collaborative mechanisms to incentivize climate action, with particular emphasis on carbon markets, was listed as the fifth sub-goal under CNN. The activities connected to the establishment of these collaborative mechanisms included working with project developers and organizations with similar mandates in order to increase participation, the promotion of the VCP to ease the offsetting of emissions, and the link to the CDM, which was a central component of the narrative of CNN to boost the use of carbon credits since its launch in late 2015.

The last sub-goal of the initiative focuses on the recognition of all stakeholders for their efforts, which was also identified as a relevant enabler for NSAs' climate action. To serve this purpose, CNN established the recognition mechanisms which relied on the badge, the use of the CNN logo, and the levels of achievement which were allocated after every annual report submitted by each participant. Furthermore, the entities taking part in CNN were listed on the website, therefore ensuring some extent of recognition by a UN entity, which retains a strong appeal upon the public opinion when it comes to marketing communication strategies.

These activities only prove the fact that CNN has worked towards the achievement of the six sub-goals listed under the guidelines of the initiative, which were made available on the CNN website. Nevertheless, they do not fully demonstrate the extent to which the sub-goals have been satisfactorily attained. In fact, the respondents clearly underlined that CNN has never had any sort of key performance indicators or quantitative targets in the first place, therefore only allowing a general estimation of the extent to which the six sub-goals of the initiative have been achieved.

In particular, the interviewees deemed the obtained results to be especially positive in the accomplishment of the empowerment of stakeholders to manage their own GHG emissions, the support of the estimation of GHG emissions, the awareness raising component, as well as the promotion of collaborative mechanisms to incentivize climate action. The remaining objectives of capacity building and stakeholders' recognition were not specifically described in similar terms with respect to their attainment. Nevertheless, the overall amount of activities listed by the respondents were suggested as an indicator of significant commitment from the management of CNN with respect to these two remaining sub-goals as well.

CNN SUB-GOALS	ACTIVITIES CARRIED OUT BY CNN
Raise awareness about the urgency of climate action	Tools, Online information, Resources, Webinars, Public presentations, Guidelines, Events, Collaborations with partners, CNN newsletter
Empower all stakeholders to manage their own GHG emissions	GHG calculators, General recommendations applicable to all NSAs, Checklist of possible actions to be taken, Guidelines, Online information, Resources, Webinars, Answers to queries via email, Template for annual reporting
Support the estimation of GHG emissions	GHG calculators, Online information, Tools, Resources, Webinars, Collaborative GHG emissions estimations, Template for annual reporting
Build capacity for the reduction of GHG emissions	General recommendations applicable to all NSAs, Checklist of possible actions to be taken, Guidelines, Online information, Resources, Webinars, Answers to queries via email
Promote collaborative mechanisms to incentivize climate action (including carbon markets)	Direct link to the CDM, promotion of the use of carbon credits, Creation of the VCP, Online information, Collaborations with partners
Recognize all stakeholders for their efforts	Levels of achievement, Badge, Use of the CNN logo, Showcasing of best practices

Figure 18: List of CNN sub-goals and the related activities towards their achievement.

In addition to the evaluation of the overall achievement of the set of sub-goals listed by the initiative, the respondents were asked about any alternative manner or indicator to assess the performance of the initiative with respect to the support provided to its participants. The current and former staff members of CNN focused on the general actions taken by the participants within the initiative, suggesting that the amount of aggregate GHG emissions reductions along with the overall volume of offsets purchased via the VCP could

represent solid indicators to assess the success of CNN. Nevertheless, this performance-focused dimension is outside of the scope of the research, which instead aims at assessing the overall support provided, rather than the achievements per se. On the other hand, under the perspective of awareness raising for climate action, the number of participants and their general regional distribution were also raised as possible insights serving the purpose of evaluating the achievements of CNN. Finally, with respect to the empowerment component embedded within the design of the initiative, a further possible indicator which was discussed is the amount of users of the GHG emissions calculators which were created and promoted by CNN.

5.1.5 – The phase down process

Following the comprehensive discussion on all the CNN processes referring to necessary actions, barriers, enablers towards climate neutrality, and the question regarding the extent of achievement of the initiative's sub-goals, respondents were asked about the factors that contributed to the phase out of CNN.

In broad terms, the initiative has heavily relied on the support of the CDM Executive Board, since the offsetting component has always been central within the mission of the initiative. However, following many criticisms and the developments in the international climate change governance ecosystem, the CDM dimension as a whole has been slowing down. In fact, the supply of CERs has also been reducing, as no new projects are being added to the CDM, with limited development or update of the related methodologies. This trend shows an overall downward trajectory of the CDM which is also being phased out to be transitioned into the mechanisms of Article 6 of the Paris Agreement.

The general criticisms towards compensation and offsetting practices were formalised within the High-Level Expert Group Report on the Net-Zero Emissions Commitments of Non-State Entities (also known as Integrity Matters Report). Notably, with this new set of standards, the UNFCCC has demonstrated a greater commitment to GHG emissions direct reductions, rather than removals and offsetting as broadly envisaged within CNN. The overall lack of alignment of the initiative in comparison to the new rising ambition of the UNFCCC has ultimately led to the decision of phasing out CNN. The choice of even refraining from any kind of revamping or redesigning of the initiative was mainly dictated by the presence of alternative initiatives within the UNFCCC ecosystem that are already more in line with the new standards. Therefore, the phase out of CNN was also triggered by the possibility of developing unnecessary duplications.

It is evident that the Integrity Matters Report has played a significant role in the considerations that caused the phase down of CNN. Consequently, it became relevant to investigate through the interviews why the initiative was not considered to be in line with those specific expectations, which are listed as recommendations within the report itself.

Notably, Recommendation 1 of the report requires net zero pledges with near-term targets in accordance with 1.5 degree pathways, which refers to 50% emissions reduction by 2030 then achieving net-zero emissions by 2050. Under this regard, CNN does not require any net-zero pledge specifically, rather participants pledge to take all necessary actions to achieve climate neutrality by 2050, which is a less specific commitment per se. Furthermore, CNN never envisaged the need for any near-term targets, since the overall emissions reductions were evaluated annually according to the allocation of the levels of achievements for each reporting participant. The requirements for greater specificity, which were not satisfied within the setting of CNN, are also included in Recommendations 2 and 5 of the report.

Regarding the offsetting component and the overall use of carbon credits, Recommendation 3 of the report forwards that offsets should not be counted towards interim emission reduction required by net-zero pathways. Notably, only NSAs meeting the interim targets of their net-zero pathway can balance out the rest of the annual unabated emissions by purchasing high integrity carbon credits. This specific recommendation sets restrictions to the amount of possible offsets that entities can use. While CNN has never limited the amount of CERs that participants could purchase to claim climate neutrality, meaning that no matter how significant the emissions of an organization are, they can still offset as much as they need to claim climate neutrality.

Additional lack of alignment can be found within Recommendation 4 of the report, since it expresses the requirements for transition plans that are to be disclosed and even updated every five years. With respect to this matter CNN, despite accepting transition plans from participants, has never made such disclosure compulsory within its overall mechanism. As a result, the submission of transition plans from the CNN participants was not regulated and was only happening on a fully voluntary basis.

Finally, Recommendations 7 and 9 of the report focus on people, nature, and just transitions, which were topics that were never included in the narrative promoted by CNN. In fact, the activities carried out by the participants to reduce and offset their emissions were never assessed on the basis of the possible impacts they could have on ecosystems or the economic development of the region of operation.

Considering the various sources of misalignment between CNN and the recently established UNFCCC standards for NSAs' commitments, the UNFCCC has made the strategic decision to initiate the phase down of the initiative. This choice reflects a more stringent effort to embrace an approach that places greater emphasis on achieving GHG emissions reductions in a more direct manner, therefore moving away from prioritizing the carbon market and the use of CERs to stir NSAs' climate change mitigation actions.

5.2 – Results of the CNN participants survey

The data collected through the survey serves as transition point within this research, shifting from the overarching standpoint of the initiative level of analysis, to a more individual approach regarding the perceptions about climate action of the individual CNN participants. Notably, the primary objective of the survey was the identification of the relevant barriers and enablers towards climate neutrality as perceived by the CNN signatories. Furthermore, following the categorization of these factors, the respondents assessed the extent to which the initiative has managed to actively mitigate barriers and enhance enablers for their climate neutral transitions. The full list of barriers and enablers listed within the survey to allow structured and systematic responses is shown in Figure 1 as previously discussed in the literature review of this study.

As a whole, the results of the survey substantiate a comprehensive evaluation of the support provided by CNN to empower NSAs to take climate action. The results are rooted in the feedback collected from the participants themselves, including potential recommendations for improvements of future initiatives within similar domains.

5.2.1 – Identification and relevance of the barriers to act towards climate neutrality

The results of the first part of the survey allow the identification of the most relevant sources of barriers towards climate neutrality according to the perceptions of the CNN participants. The average scores of each barrier that was listed within the survey range between 1,97 and 2,92 as shown in Figure 19, therefore suggesting a qualitative range from *somewhat relevant* to *moderately relevant*. The results retain consistency across all the barriers, since no particular data point stands out as any sort of outlier within the structured database.

The findings prove that the lack of expertise, knowledge, and awareness on average was perceived as the least relevant barrier to act towards climate neutrality. While the complexity of reduction of GHG emissions and the limited financial resources to be invested were identified as the most relevant factors in hindering NSAs’ climate mitigation actions.

The rest of the barriers present little difference in their average scores, as they tend to cluster towards an average value of 2,50 which implies a qualitative evaluation in between *somewhat relevant* and *moderately relevant*. While the aggregated mean value of the scores shown in Figure 19 amounted to 2,49 therefore indicating an overall relevance of all the listed barriers in between *somewhat relevant* and *moderately relevant*.

BARRIERS TOWARDS CLIMATE NEUTRALITY	AVERAGE RELEVANCE SCORE
Complexity of reduction of GHG emissions	2,92
Limited financial resources to be invested	2,91
Technological and infrastructural constraints	2,69
Complexity of GHG emissions estimation and measurement	2,60
Complexity and unclarity of reporting and transparency mechanisms	2,46
Lack of socio-economic incentives	2,43
Lack of tools and standards to measure and manage GHG emissions	2,36
Cost inefficiency and cost ineffectiveness	2,31
Short-term planning prioritization	2,26
Lack of expertise, knowledge, and awareness	1,97

Figure 19: Average score of relevance for each barrier according to CNN participants.

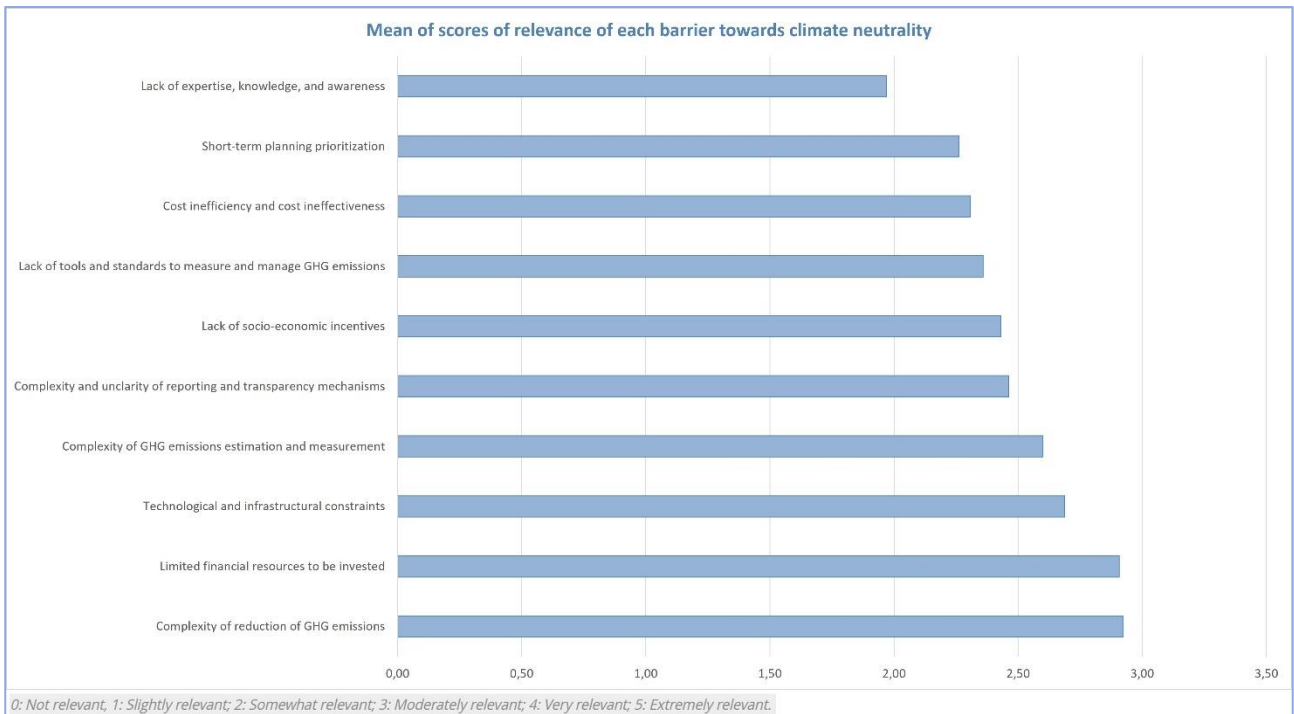


Figure 20: Bar chart of average score of relevance for each barrier according to CNN participants.

The consideration of the frequency of responses is also appropriate to maintain a less overarching approach to discuss the results of the data collection process. In fact, the variety of NSAs involved in this research needs to be acknowledged by taking into account the perspective of individual actors as well, while still aiming at a more aggregated analysis for greater generalization and applicability. To provide more specific information for each collected data point, figure 21 shows the frequency of responses via bar charts for each barrier that was assessed by the participants.

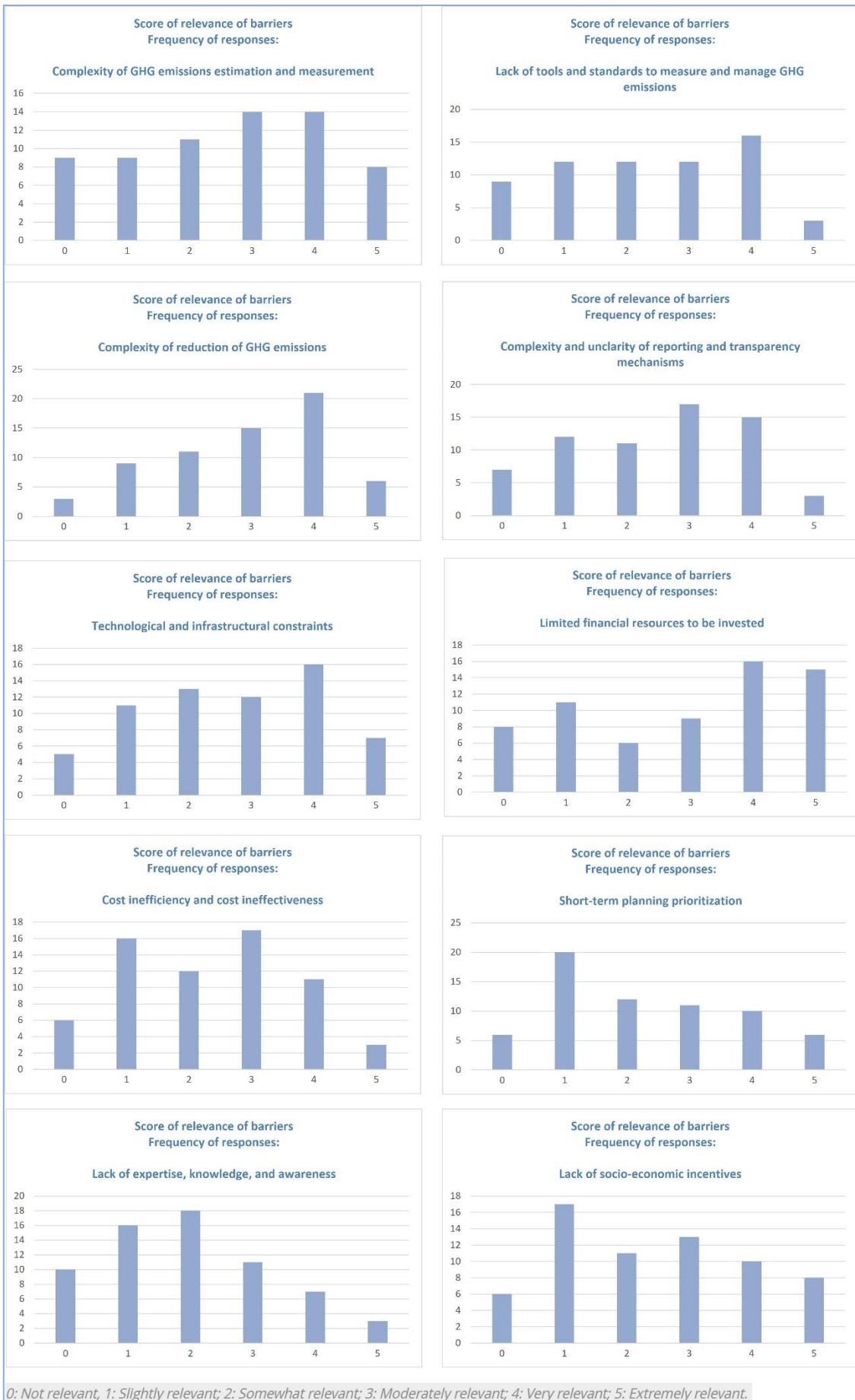


Figure 21: Bar charts of frequency of responses for relevance scoring of barriers towards climate neutrality.

In addition to the barriers that were listed within the survey based on the literature review, the form also allowed respondents to add supplementary barriers they might have experienced, in order to address any possible missing element within the available options for scoring. As a result, the majority of the free text additions were closely linked to the broader scope of the barriers that were already listed within the form. However, some additions of further relevant barriers included the lack of a unified entity for emissions reporting, the lack of good quality climate data from suppliers, criticisms towards offsetting practices, and the lack of ad-hoc support to SMEs.

5.2.2 – The extent of CNN’s support in addressing barriers to act towards climate neutrality

The results of the first section of the survey led to a hierarchical order of relevance of the most common barriers faced by NSAs in the pursuit of their climate change mitigation targets. According to a similar logic, the respondents were subsequently asked to give a score to the extent to which CNN has addressed each of the barriers they previously ranked. Notably, the parallel setting of the questions related to the assessment of the relevance of each barrier, then followed by the evaluation of CNN support to overcome the same barriers, was arranged to allow comparison and estimate whether the most prominent barriers according to CNN participants were appropriately addressed by CNN.

The findings, as illustrated in Figure 22, show that the lack of expertise, knowledge, and awareness on average was deemed to be the most appropriately addressed issue by the initiative, followed by the lack of tools and standards to measure and manage GHG emissions, the issue of complexity and unclarity of reporting and transparency mechanisms, and the challenging complexity of GHG emissions estimation and measurement. The participants generally considered these elements as *moderately addressed* on the basis of their experience and engagement within CNN. Furthermore, the complexity of reduction of GHG emissions and the lack of socio-economic incentives were slightly less tackled by the initiative according the participants’ perceptions, as they reached an average value of 2,56 and 2,29 respectively. Whereas, the technological and infrastructural constraints, the question of short-term planning prioritization, the issue of limited financial resources to be invested, as well as cost inefficiency and cost ineffectiveness were all given on average a score close to 2, therefore indicating that they were perceived to be only *somewhat addressed* by CNN and its activities.

As a whole, the range of the obtained values is again limited for each listed barrier within either *somewhat addressed* and *moderately addressed*, as no lower or higher average values are present in the findings. Such a trend was also reflected in the results of the average scores for the relevance of barriers that has been previously discussed.

BARRIERS TOWARDS CLIMATE NEUTRALITY	AVERAGE CNN SUPPORT SCORE
Lack of expertise, knowledge, and awareness	2,97
Lack of tools and standards to measure and manage GHG emissions	2,84
Complexity and unclarity of reporting and transparency mechanisms	2,84
Complexity of GHG emissions estimation and measurement	2,81
Complexity of reduction of GHG emissions	2,56
Lack of socio-economic incentives	2,29
Technological and infrastructural constraints	2,11
Short-term planning prioritization	2,08
Limited financial resources to be invested	2,02
Cost inefficiency and cost ineffectiveness	1,97

Figure 22: Average score of CNN support for each barrier according to CNN participants.

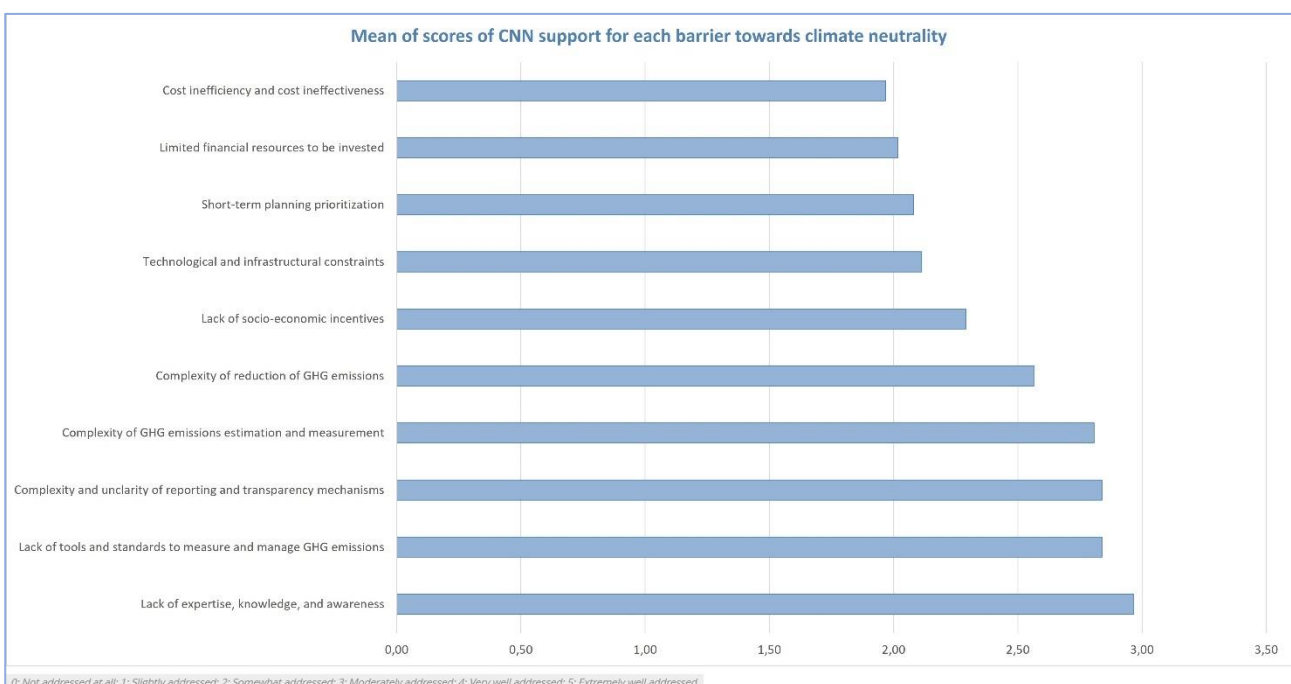


Figure 23: Bar chart of average score of CNN support for each barrier according to CNN participants.

As similarly mentioned in the previous section, Figure 24 shows the graphs for the frequency of responses for each listed barrier towards climate neutrality, in order to ensure the transparency related to the data collected. In fact, thanks to such a more case by case lens, it is noticeable that despite the limited range of the data of the average scores of CNN support related to the barriers, some participants still argued that some of the challenges were *not addressed at all* by the initiative, as some evaluations with a score of 0 were submitted. This is not noticeable through the analysis of average score values, since those negative feedbacks are diluted by the higher values with which they are mixed. Nevertheless, the same logic is also applicable to the cases in which the barriers were *extremely well addressed* according to the participants' perceptions, as each entry received a score of 5 at least once.

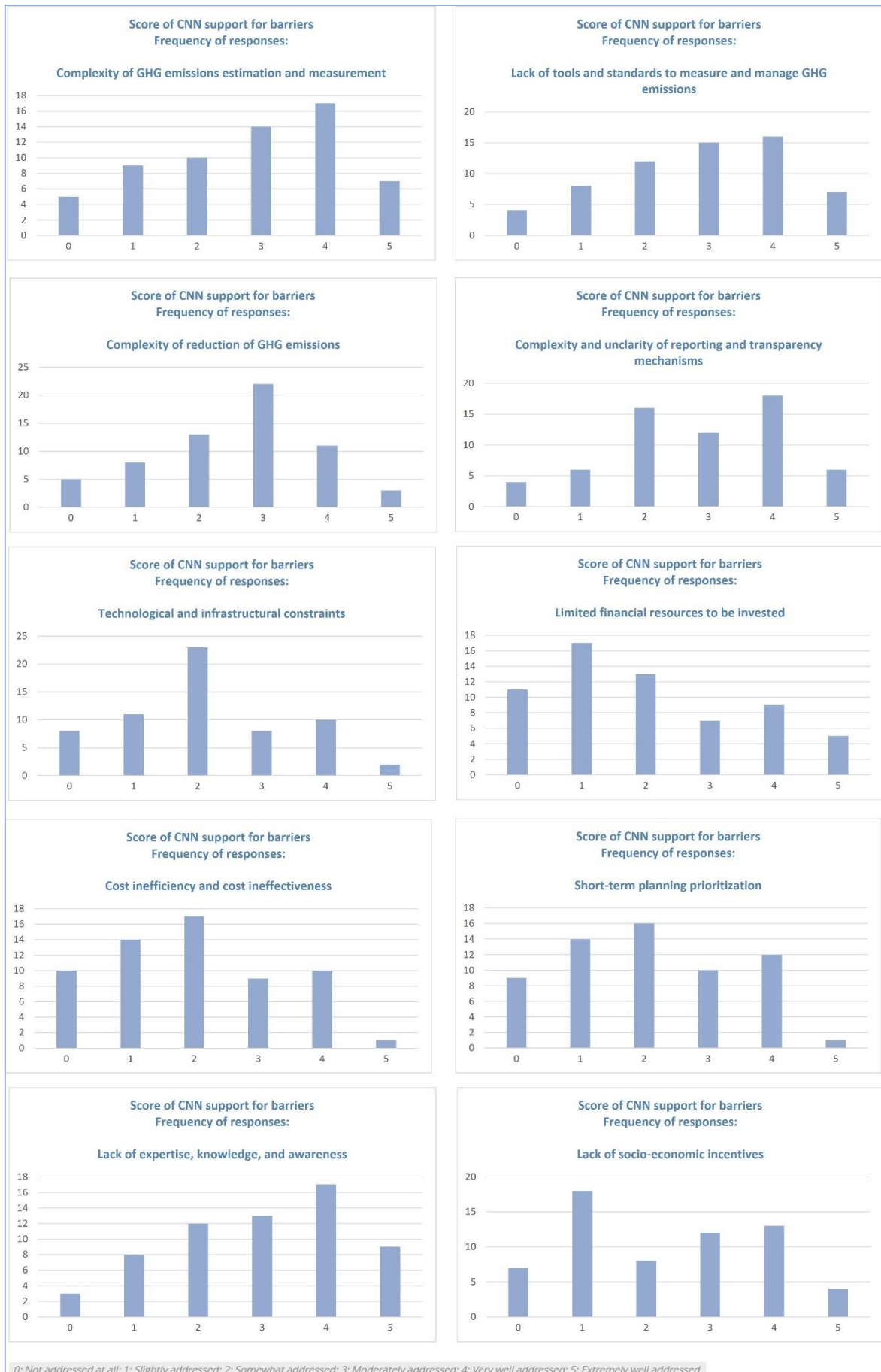


Figure 24: Bar charts of frequency of responses for CNN support scoring of barriers towards climate neutrality.

Overall, the graphs of responses frequency are characterized by spread out data distributions, which then lead to intermediate values within the scoring scale, as they are embedded into mean calculations to provide a general picture of the results of this first section related to the barriers to climate neutrality.

5.2.3 - Identification and relevance of the enablers to act towards climate neutrality

Transitioning from the dimension of barriers to the focus upon the enabling factors towards climate neutrality, the respondents were asked to score the relevance of these elements according to their perspective with respect to the extent of taking climate action. The mechanism embedded within this section of the survey mirrors the methodology that was deployed in the previous section as well, in order to ensure consistency as well as allow some degree of comparability within the analysis.

The overall range of the values regarding the identification of the most prominent enablers is wider on average, if compared to the data collected for barriers. In fact, the most relevant enabler according to the respondents is the push to action due to ethical motivations and social responsibility, which reached a mean value of 4,15 out of all responses, meaning that it came to pass the threshold for being considered as an *very relevant* enabler. Below this leading factor, with values close to one another, the findings show that the activities of awareness raising initiatives, the need for long-term business resilience, and the establishment of collaborations and partnerships retain meaningful enabling relevance, since they just came short from being assessed as *very relevant*, as shown in Figure 25. Moving down the ranking, public brand recognition and reputation reached a mean relevance value of 3,60 therefore resulting to be assessed as in between *moderately relevant* and *very relevant*. While the access to technical support, the development of cost efficiency, capacity building and training opportunities, as well as the availability of financial resources tend towards a qualitative description as *moderately relevant* enablers towards climate neutrality. However, the only factor that did not reach a value of at least 3 was stakeholders' pressures, which is matched with an average value of 2,51 in between *somewhat relevant* and *moderately relevant*, therefore being considered as the least relevant enabler by CNN participants. Overall, the enablers listed within the list reached an average relevance value of 3,44.

ENABLERS TOWARDS CLIMATE NEUTRALITY	AVERAGE RELEVANCE SCORE
Ethical motivations and social responsibility	4,15
Awareness raising initiatives	3,77
Long-term business resilience	3,72
Collaborations and partnerships	3,71
Public brand recognition and reputation	3,60
Technical support	3,37
Cost efficiency	3,23
Capacity building and training	3,20
Availability of financial resources	3,18
Stakeholders' pressures	2,51

Figure 25: Average score of relevance for each enabler according to CNN participants.

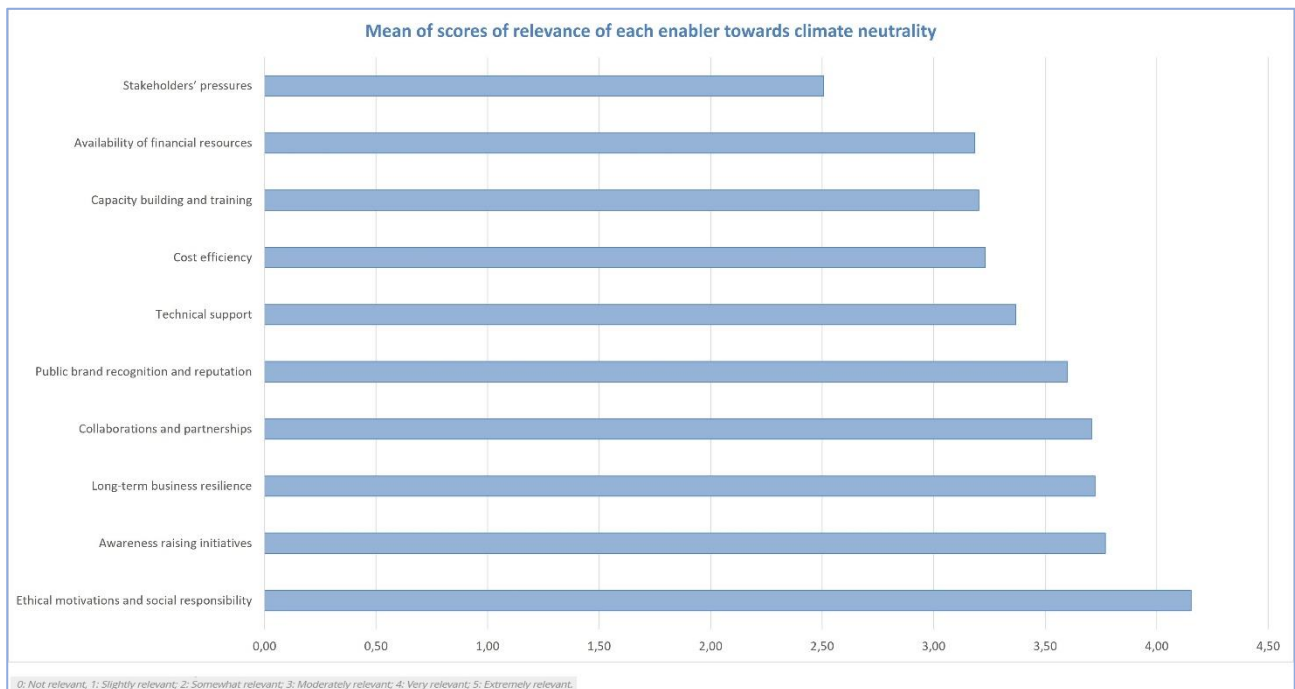


Figure 26: Bar chart of average score of relevance for each enabler according to CNN participants.

The responses frequency graphs, according to the approach discussed in the previous sections, serve to include a viewpoint with respect to singular perceptions of the respondents involved, therefore avoiding to miss any kind of insight by exclusively looking at aggregate values. As illustrated in Figure 27, no respondent gave a score of 0 to the relevance of awareness raising initiatives and ethical motivations and social responsibility as enablers. The frequency values of responses allow to retain a critical understanding of the data that has been collected, while avoiding generalizations which may be misleading if only relying on average values and aggregated findings.

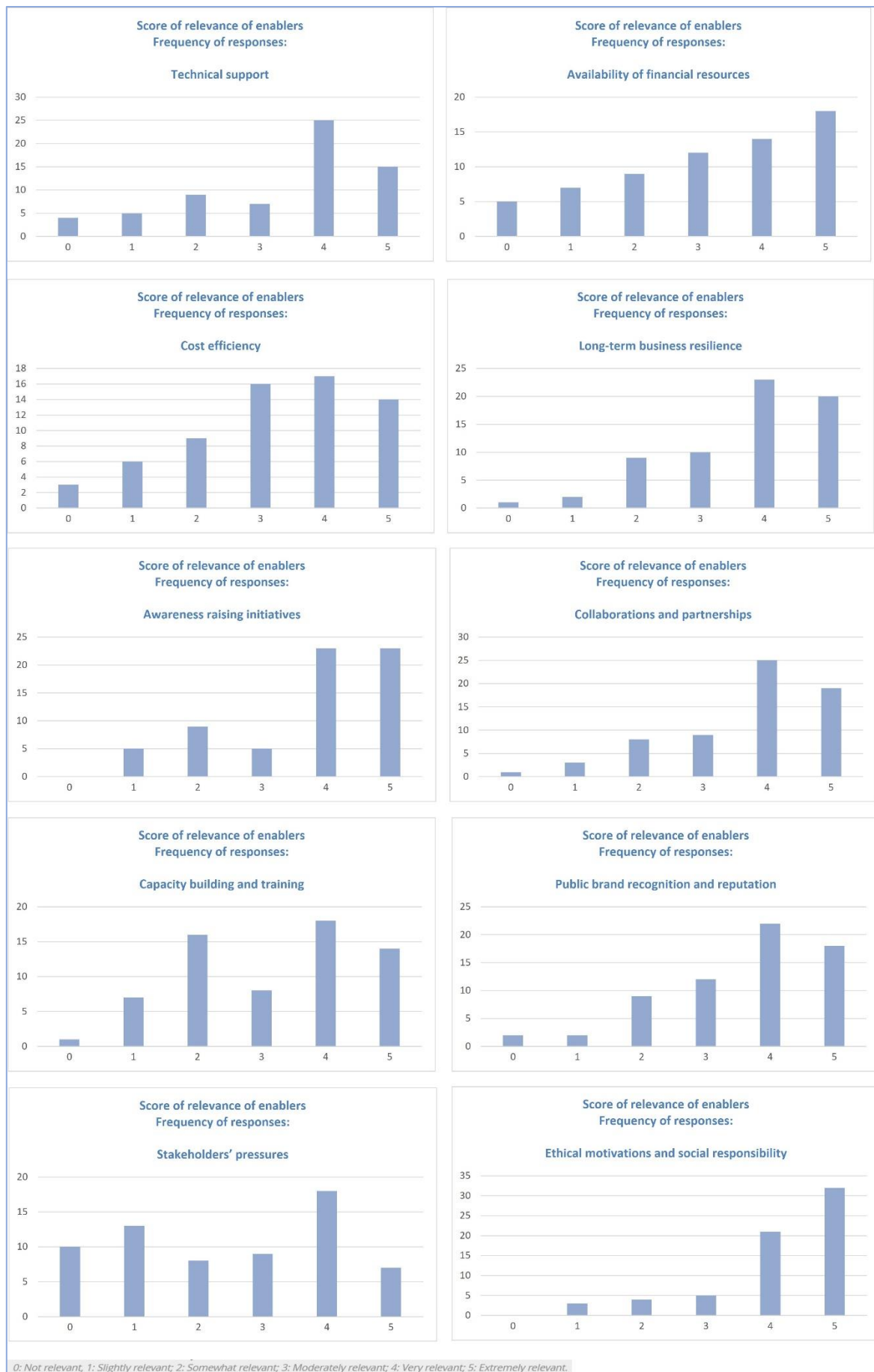


Figure 27: Bar charts of frequency of responses for relevance scoring of enablers towards climate neutrality.

On top of the enablers that were listed within the survey on the basis of the literature review, the respondents were also invited to mention any possible further enabler they might have experienced along their transition towards climate neutrality. As witnessed with the case for barriers, the additional enablers that were mentioned within this free-text based section were generally in line with the ones listed within the survey itself. Nevertheless, some respondents expanded the list of empowering elements for climate action by referring to the possibility of an engaged staff regarding climate issues, the role of government support, the need for satisfying additionality, as well as the positive impact of greater alignment and integration of climate action and reporting bodies. These individual responses provide some extent of extension to what the enablers are perceived to be according to CNN signatories, despite the general alignment with the enabling elements that have already been discussed throughout the study.

5.2.4 – The extent of CNN’s support for enablers to act towards climate neutrality

After the assessment and the resulting ranking of the enablers according to their relevance, the respondents were asked to evaluate the extent to which CNN has enhanced those very enablers to reach climate neutrality. Notably, the results shown in Figure 28 demonstrate that public brand recognition and reputation, awareness raising initiatives, as well as ethical motivations and social responsibility were the ones that have been supported the most by the initiative as they all reached an average value in between *moderately enabled* and *very well enabled*. The last average value above 3 is associated with the establishment of collaborations and partnerships, which can therefore be described as *moderately enabled* within the settings of the initiative, amounting to a mean score of 3,15. On the other hand, technical support, long-term business resilience, stakeholders’ pressures, as well as capacity building and training were not as much supported by the initiative according to the participants’ feedback, since their average scores range from 2,48 to 2,76. Approaching the qualitative value of *somewhat enabled*, the results of the survey show the extent of support of CNN to promote cost efficiency to be assigned a score of 2,29. While the least supported element among the ones listed is the availability of financial resources which was only *slightly addressed* according to the respondents involved.

ENABLERS TOWARDS CLIMATE NEUTRALITY	AVERAGE CNN SUPPORT SCORE
Public brand recognition and reputation	3,47
Awareness raising initiatives	3,46
Ethical motivations and social responsibility	3,40
Collaborations and partnerships	3,15
Technical support	2,76
Long-term business resilience	2,52
Stakeholders’ pressures	2,48
Capacity building and training	2,48
Cost efficiency	2,29
Availability of financial resources	1,74

Figure 28: Average score of CNN support for each enabler according to CNN participants.

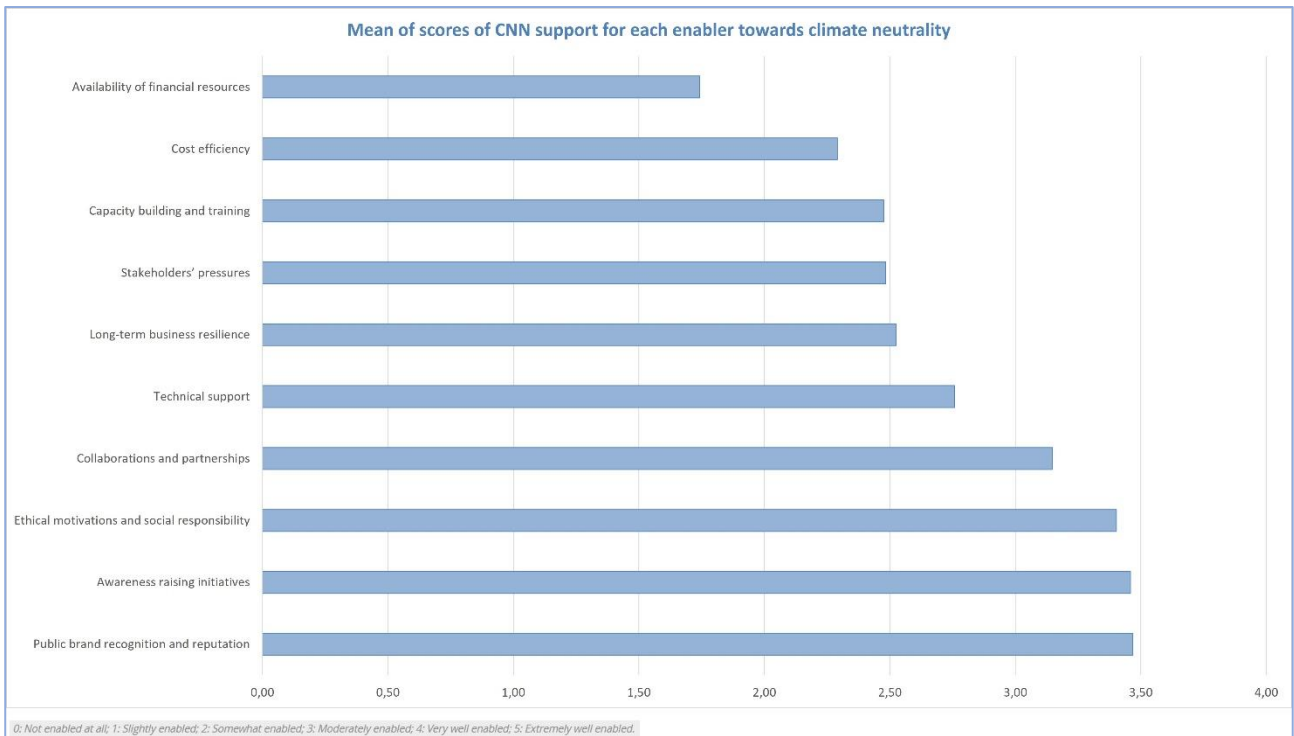


Figure 29: Bar chart of average score of CNN support for each enabler according to CNN participants.

The graphs of frequency of responses related to the evaluation of the support provided by CNN with respect to the enablers for climate action, as illustrated in Figure 30, allow to focus on the more isolated feedbacks of the single participants. For instance, it is noticeable that the respondents were very critical regarding the enhancement of the availability of financial resources, as 20 of them gave a score of 0 out of 5, meaning that according to their experience this factor was *not enabled at all* within the settings of the initiative. Other than this specific case, the rest of the frequency data is quite consistent throughout the various listed enablers, showing some extent of common consensus regarding the general scoring, which is then reflected by the average values.

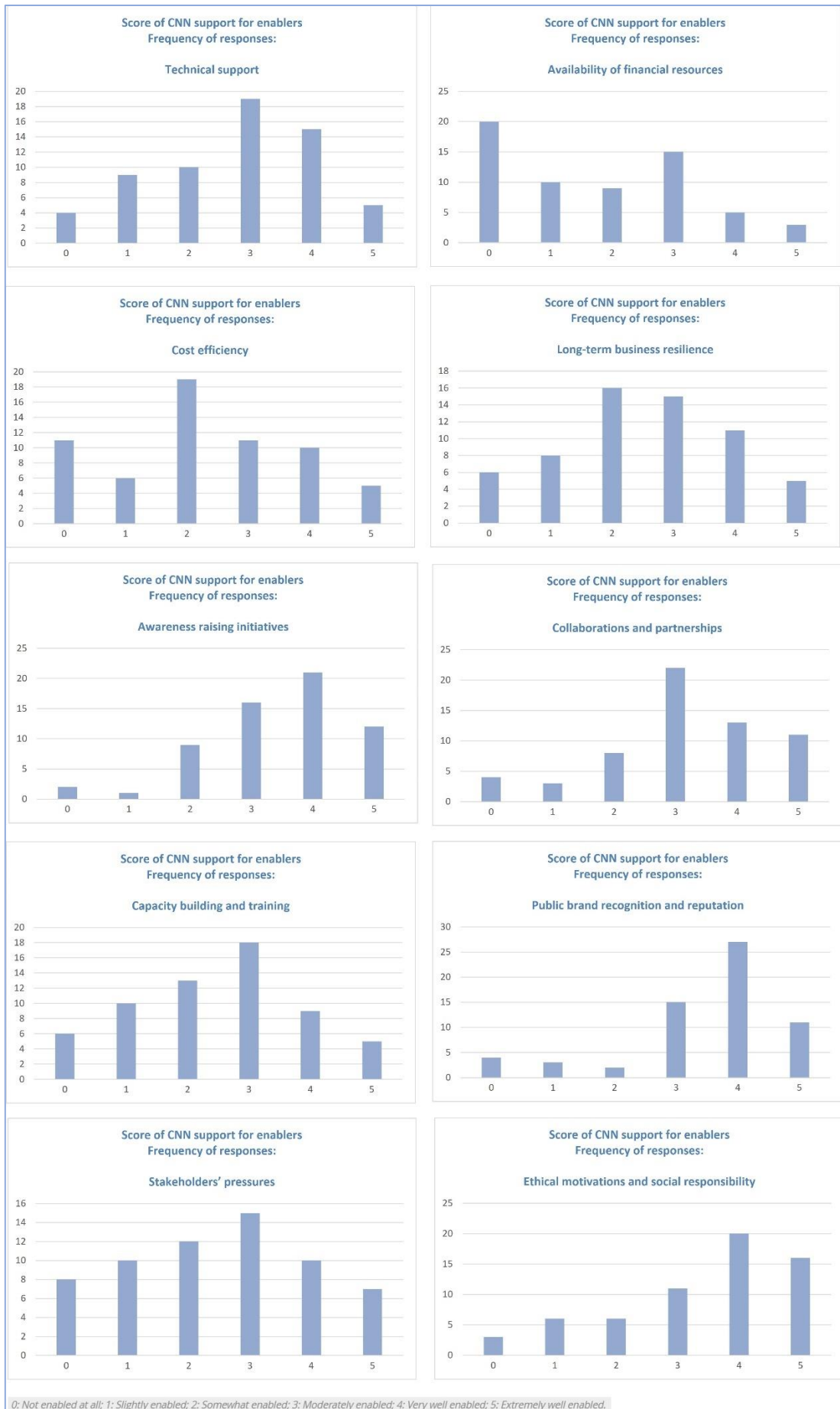


Figure 30: Bar charts of frequency of responses for CNN support scoring of enablers towards climate neutrality.

5.2.5 – Overall evaluation of the support provided by CNN

Thanks to the coverage of the extent of support provided by CNN for both barriers and enablers for climate action, an overall evaluation of the performance of the initiative can be retrieved within these two dimensions. Notably, the average value of all the CNN support scores with respect to each barrier amounts to 2,45 out of a maximum of 5 within the scale. Parallely, the average value of all the CNN support scores related to each enabler amounts to 2,78 within the same scale. Reaching an even more aggregated level of analysis, it can be affirmed that the overall support of CNN between barriers and enablers reaches an average value of 2,61 out 5, which indicates the mean between the two values that have been mentioned above.

Nevertheless, in order to provide a second check against this kind of calculated assessment, the survey also directly asked respondents to give an overall score to the support provided by CNN, without any specific reference to the barriers or enablers that have been thoroughly discussed. In this regard, Figure 31 illustrates the frequency of responses related to the general scores of the performance of the initiative in providing support to its participants in broader terms. The mean value retrieved from the data collected regarding this overarching scoring amounts to 2,95 suggesting that the initiative has provided *moderate support* according to its own participants.

Overall, the results of the answers related to the initiative’s performance in ensuring support in broader terms present a slightly higher value if compared to the calculations based on the extent of support for barriers and enablers. This sort of consistency within the findings reinforces the credibility of the assessment as well as checking for possible biases that may have developed in the submissions of the survey from participants.

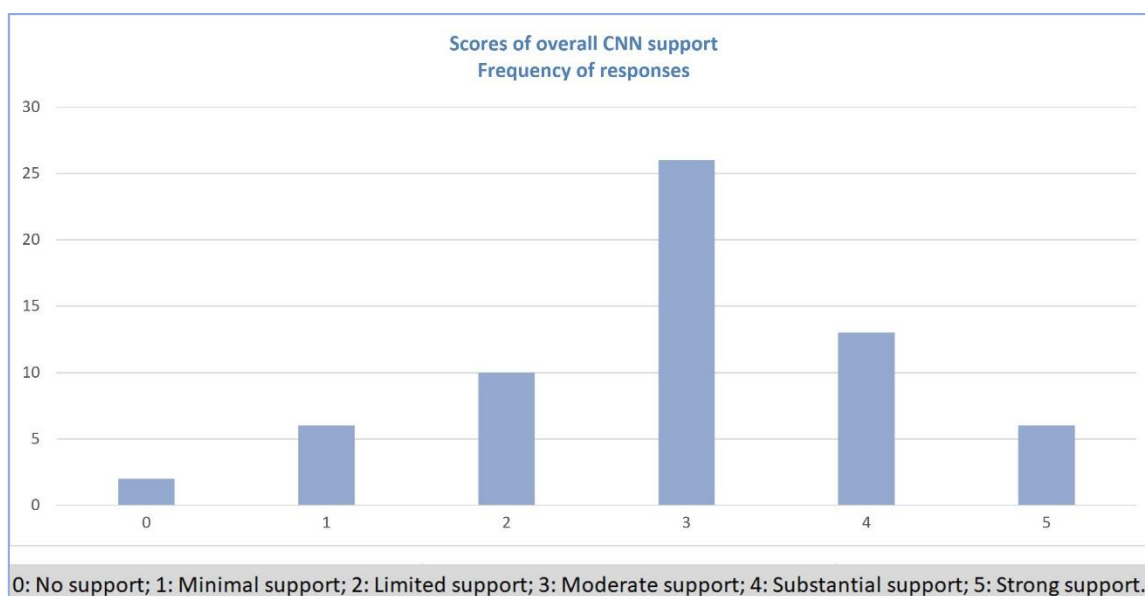


Figure 31: Bar chart of frequency of responses for overall support provided by CNN towards climate neutrality.

In order to further elaborate on the scoring of the overall support of CNN, the respondents also included a text based description that motivates the value they picked within scoring the scale. This section allowed the survey to collect more detailed information regarding the experience of each respondent and their involvement within the initiative. Such elaboration retains significance as the NSAs involved within CNN are diverse in nature, coming from different sectors as well as having various sizes and economic strengths.

Notably, almost 29% of the respondents expressed a more critical feedback regarding the overall support provided by CNN, as they assigned a score ranging from 0 to 2, suggesting that the initiative ensured *no support, minimal support, or limited support*. With respect to the explanation of their general assessment, they provided meaningful comments that allow to further understand their perceptions regarding CNN. Specifically, references were made to the fact that some organizations were already completing GHG emission inventories annually, therefore CNN did not significantly change their approach. In these cases, NSAs primarily joined the initiative to show that they were part of something larger and to demonstrate their commitment. Furthermore, some argued that the information shared by the initiative was fairly limited, even coming to criticize the offered level of engagement, as some participants argued that engagement needs to be planned, reviewed, formulated and properly executed. Another point that was touch within this section was related to the capacity of enabling proactive action and creating incentive for businesses to act, which was deemed to be insufficient within the initiative. Moreover, reinforcing this claim, other participants mentioned that investment costs when compared to the return are still too high. However, some respondents still included some degree of positive considerations, despite an overall low score of the support offered by CNN. In fact, even though they claimed that they did not receive satisfactory support in how to reduce their emissions, they still acknowledged that being part of CNN helped them to establish a path towards climate neutrality, leading them to understand the steps that they had to take to start this journey.

The remaining 71% of the respondents submitted a more favourable evaluation of the overall support ensured by CNN, in fact the scores they gave range from 3 to 5, implying that the initiative offered *moderate support, substantial support, or strong support* to empower its participants in taking all necessary actions to achieve climate neutrality. Those who indicated an overall *moderate support* suggested some constructive criticisms, mainly referring to the need for more consistent relationships, a general limited ability in addressing all barriers, the necessity of adapting to smaller structures, while also demanding more examples of use of the available tools and resources. The rest of the comments within this section of the collected data generally present positive feedbacks regarding the experience of participants within CNN. Notably, some participants wrote about the strong out-reaching support and regular newsletter coverage, as well as praising the clarity of resources about offsetting procedures, the effective partnerships and collaboration methods, as well as the accessibility of the program for being cost effective. Others made reference to the incentivising prestige of engaging with the UNFCCC to which CNN has been linked and the related recognition for progress, therefore encouraging stakeholders to share data via reports and support the cause. Moreover, some participants referred to the opportunity of joining CNN as a stepping stone towards creating data to visualize the sustainability mechanisms their organizations, paving the way for roadmaps towards net-zero targets. This kind of enabling role played by the initiative was also reflected in other comments that acknowledged the relevant support provided in finding a good direction for climate action, as well as motivating organizations to initiate change and provide clear goals on how to attain it.

5.2.6 – Recommendations for similar initiatives

The final section of the survey was meant to have respondents propose recommendations on how to enhance the assistance offered by similar climate initiatives promoting climate action across the ecosystem of international governance. The free text based responses were allocated into four broad categories in order to accommodate an effective analysis of the data collected. The first category was the most frequently mentioned across the responses, as it relates to the need for greater collaboration and networking, not only

at the initiative level, but rather enabling relations and possible cooperation among participants themselves. A second relevant category originated from the need of more significant tailored support to the individual actors involved in any kind of initiative. A further topic that was recurrent in the data collected refers to the financial component and the affordability of the processes related to climate mitigation targets achievement. Lastly, the dimension of capacity building for emissions reductions as well as the related reporting mechanism was also frequently mentioned within the recommendations submitted by CNN signatories.

With regard to the first category of collaboration and networking, the respondents focused on the need for more effective platforms to connect with companies and organizations in similar industries or comparable in size in order to learn from one another. The development of this networking opportunities was deemed to be extremely relevant, especially for SMEs and the related partners, in order to accommodate the diffusion of best practices and enable the faster scaling of successful projects, mainly by connecting them to service providers and to investors. Within the setting of this collaboration empowerment, the respondents also mentioned the voluntary component, which would motivate strongly driven organizations to actively contribute by sharing their experience through these networking mechanisms.

The following category of recommendations focuses on the demand for greater tailored support, which was put in relation with the diversity of actors that are involved within climate initiatives, with respect to size, financial capacity, as well as the level of internally available expertise. Notably, the respondents argued that the support offered by ICIs should be more consistent, especially when dealing with SMEs. This implies that an overarching one-size-fits-all approach may not be sufficient to empower credible climate action by a deeply diverse target audience. The need of a case by case approach was also embedded in the demand expressed within the recommendations of publishing resources and offer support in other languages, rather than exclusively in English. Furthermore, the overall designs and requirements of to join ICIs may be complex to be understood by potential future participants, eventually pushing them to hire external auditors to make sure that they align with what is expected of them, an expense which may hinder climate action in the first place. Overall, according to the respondents, a more tailored kind of support could significantly increase the stirring capacity of initiatives, as it may trigger credible climate change mitigation action from a variety of organizations.

A further dimension that was mentioned across the recommendations collected refers to the financial aspect as well as the issue of low affordability of the processes related to net-zero targets in long-term. Some respondents in fact claimed that they do not get a business return on their greenhouse gas emissions program, coming to argue that sometimes even the marketing aspect is not worth the time and effort. The financial struggle was mainly evident with respect to the issue of affordability of certifications, which creates a substantial barrier for smaller organizations. This is why economic support is seen as a factor key to ensure meaningful climate action. In order to provide a potential solution to the issue, some respondents suggested that the development of private and public partnerships for financial resources could play a significant role.

A final aspect that was recurrently present in the responses is connected to the capacity building for emissions reductions as well as the related reporting expectations. Some respondents argued that CERs should be the central driver to reduce the environmental footprint of organizations participating in ICIs. Others focused on the necessity of unified calculations and certification bodies for accurate calculations and reporting, which would avoid any kind of duplication within the ecosystem as well as serve for greater harmonization and standardization. Furthermore, with respect to reporting periods, some references were

to the possibility of increasing the frequency with which data regarding GHG emissions is disclosed, in order to ensure more accurate verification and recurrent updates for ICI's monitoring activities.

6 – Discussion

6.1 – How CNN has aimed at supporting its participants

To gain a comprehensive understanding of how CNN has aimed at assisting its participants, the initial phase of data collection within this study, engaging current and former staff members of the initiative, was structured to encompass an extensive examination of all CNN mechanisms and the underlying rationales that gave rise to these procedures. The results list specific actions that were deemed to be necessary in order to achieve climate neutrality, as well as all the most relevant barriers and enablers to be addressed according to the perspective of CNN. However, within the setting of orchestration as a soft mode of governance, CNN acts as an intermediary between the UNFCCC as the orchestrator and the target audience represented by the NSAs the initiative is trying to engage (Abbott et al., 2015; Chan & Pauw, 2014). Consequently, all the measures implemented by CNN, as well as its overall mission, are deeply influenced by the stirring capacity exerted by the UNFCCC as the parent organization (Chan & Amling, 2019).

In fact, the results clearly show that CNN has a solid understanding of what is to be done to achieve climate neutrality, and it also proves that the initiative has acted upon the vast majority of those issues in order to support its participants. Nevertheless, when referring to additional elements such as the availability of financial means, the necessity of strong carbon pricing policies, and the development of appropriate regulatory frameworks, no particular direct measure was captured through the data collection. This is due to the limits set by the mandate of the UNFCCC, which does not envisage this kind of support to be under its direct dominion as an international organization (Kyoto Protocol, 1997; Paris Agreement; 2015). Consequently, being the orchestrator of CNN, these restrictions also apply to the initiative, despite the overall ambition to cover as much as possible of what is needed to achieve the CNN goal through the engagement of the participants (Hale & Roger, 2014).

The comprehensive extent of the support provided by CNN is proved by the various activities which have been related to each necessary action, barrier, and enabler which was identified according to the perspective of the initiative, as described in the results section. This interplay between the general ambition of the initiative, and the boundaries set by the mandate of UNFCCC, along with the amount of available resources it provided by the secretariat to run the project itself are the elements that deeply define how CNN has aimed at supporting its participants.

The direction of the policy of the UNFCCC also has a significant spillover effect upon the initiative itself, in fact as criticisms regarding offsetting practices and CERs mounted, the initiative was increasingly pulled away from its initial scope of promoting the CDM through the VCP (Cames et al., 2016). This implication again unveils the clearly orchestrated structure which characterizes the activities under CNN, as the UNFCCC eventually came to the decision of phasing out the initiative in order to raise the standards for direct GHG emissions reductions, while reducing the reliance on offsetting and compensations.

Overall the initiative served to gain momentum and raise awareness, as well as build capacity for credible climate action, but when the overarching policy of the orchestrator changes, its re-alignment may be

insufficient to ensure the continuity of the project itself. The re-design of the overarching policy of the UNFCCC with respect to NSAs' net-zero pledges is thoroughly defined in the HLEG Report, which provided the formal conditions to phase out CNN because of lack of consistency with the newly established standards and expectations (McKenna et al., 2022).

The support that CNN has aimed at providing to its participants can be seen as extensive as the setting of the UNFCCC allowed, therefore vastly covering a great extent of what is understood to be needed to achieve climate neutrality. Nevertheless, the setting of the UNFCCC itself, and the way international climate change governance rapidly evolves based on scientific evidence were the elements that led to the phase out of its activities.

6.2 – Identification of the relevant barriers and enablers for climate action

The approach deployed within this study to investigate the barriers and enablers for climate change mitigation action combined an academic component with an empirical collection of data from the participants of CNN. Consequently, the literature review regarding the most recognized barriers and enablers was connected to the feedback of actual NSAs who are trying to achieve climate neutrality within the setting of CNN. Such an association allows the study to expand the academic knowledge as well as the empirical implications of this kind of information.

Notably, all the barriers and enablers that were listed within this research were also recognized by the CNN participants within their individual settings, varying on the extent of their relevance from case to case. Therefore, it can be argued that all the barriers and enablers that have been discussed within the literature review are to some extent perceived by the CNN participants, but each of them retains different salience as demonstrated by the results of the survey. In fact, the findings of this research substantiate a strong connection between the barriers and enablers retrieved from the literature and the experience of CNN participants across their transition.

Despite the acknowledgement of all elements as either barriers or enablers, it is crucial to look into how relevant each of these factors has been for CNN participants, as it can inform future ICIs on how to better address the needs of their target audience. With respect to barriers towards climate neutrality, complexity of reduction of GHG emissions, the limits of financial resources to be invested, as well as technological and infrastructural constraints were deemed to be the most prominent elements hindering climate action, since their average score tended to indicate them as *moderately relevant*. The importance of these barriers was also found in several studies which explored the topic in a similar way (Marlowe & Clarke, 2022; Haslam et al., 2014; Kumar et al., 2023; Lee et al., 2017; Kiefer et al., 2018; Okereke, 2007; Luo et al., 2017; Johnson et al., 2023). On the other hand, considering the role of enablers, ethical motivations and social responsibility, the role of awareness raising initiatives, the concern regarding long-term business resilience, along with the establishment collaborations and partnerships were evaluated as the most relevant factors in enhancing climate change mitigation action according to CNN participants. In fact, these four elements were on average considered to be *very relevant* along the climate neutral transitions of NSAs. Similar findings were also discussed across the literature as described in the literature review with respect to the relevance of these components (Carfora et al., 2021; Ooi et al., 2020; Jabbour et al., 2020; Galbreath, 2014; Amran et al., 2016; Bauer et al., 2022; Caritte et al., 2015; Sindhvani et al., 2022; Singh et al., 2022; Kihiko & Kinoti, 2016; Janipour et al., 2022).

BARRIERS TOWARDS CLIMATE NEUTRALITY		AVERAGE RELEVANCE SCORE	
Complexity of reduction of GHG emissions	2,92	(Moderately relevant)	
Limited financial resources to be invested	2,91	(Moderately relevant)	
Technological and infrastructural constraints	2,69	(Moderately relevant)	
Complexity of GHG emissions estimation and measurement	2,60	(Moderately relevant)	
Complexity and unclarity of reporting and transparency mechanisms	2,46	(Somewhat relevant)	
Lack of socio-economic incentives	2,43	(Somewhat relevant)	
Lack of tools and standards to measure and manage GHG emissions	2,36	(Somewhat relevant)	
Cost inefficiency and cost ineffectiveness	2,31	(Somewhat relevant)	
Short-term planning prioritization	2,26	(Somewhat relevant)	
Lack of expertise, knowledge, and awareness	1,97	(Somewhat relevant)	
ENABLERS TOWARDS CLIMATE NEUTRALITY		AVERAGE RELEVANCE SCORE	
Ethical motivations and social responsibility	4,15	(Very relevant)	
Awareness raising initiatives	3,77	(Very relevant)	
Long-term business resilience	3,72	(Very relevant)	
Collaborations and partnerships	3,71	(Very relevant)	
Public brand recognition and reputation	3,60	(Very relevant)	
Technical support	3,37	(Moderately relevant)	
Cost efficiency	3,23	(Moderately relevant)	
Capacity building and training	3,20	(Moderately relevant)	
Availability of financial resources	3,18	(Moderately relevant)	
Stakeholders' pressures	2,51	(Moderately relevant)	

Figure 32: Summary of CNN participants' assessment of the relevance of barriers and enablers towards climate neutrality.

Figure 32 provides the response to one of the crucial questions of this research, by identifying and categorizing according to their relevance the main barriers and enablers CNN participants perceive in their efforts to take action towards climate neutrality. Additionally, some further hindering elements that were individually mentioned in the responses included the lack of a unified entity for emissions reporting, the lack of good quality climate data from suppliers, criticisms towards offsetting practices, and the lack of ad-hoc support to SMEs. While regarding additional enablers individual CNN signatories referred to the potential of an engaged staff regarding climate issues, the role of government support, the need for satisfying additionality, as well as the positive impact of greater alignment and integration of climate action and reporting bodies. All these factors would need to be explored empirically in a more comprehensive way to be compared to the rest of the listed elements, nevertheless they provide significant input for further research within this realm.

As suggested by the theoretical framework deployed for this research, the factors that have been discussed are the elements that have a major impact in the interplay between the intention to become climate neutral and the actual achievement of climate neutrality. By acquiring more knowledge regarding these empirical insights, ICIs can learn about how they can better mitigate the barriers while enhancing the enablers towards climate action, therefore ensuring a more effective support to their target audience within the orchestration form of governance (Kumar et al., 2023; Abbott et al., 2015; Chan & Pauw, 2014).

6.3 – Comparative analysis of barriers and enablers relevance with respect to the support provided by CNN

In order to appropriately assess the extent to which CNN has supported the NSAs that have participated in the initiative, the evaluation has to be based on the perceptions of CNN participants themselves. In fact, the comprehensive description of all the mechanisms and activities deployed by CNN is not sufficient to prove an overall strong support, rather it is necessary to analyse whether the initiative has managed to effectively address the identified barriers towards climate action, while also managing to promote the enablers. Therefore, the answer to the research question is to be achieved through a comparison between the average relevance scores of both barriers and enablers with respect to the associated average score of support provided by CNN to each individual element, as it has been shown in the results.

BARRIERS TOWARDS CLIMATE NEUTRALITY	AVERAGE RELEVANCE SCORE	AVERAGE CNN SUPPORT SCORE
Complexity of reduction of GHG emissions	2,92	2,56
Limited financial resources to be invested	2,91	2,02
Technological and infrastructural constraints	2,69	2,11
Complexity of GHG emissions estimation and measurement	2,60	2,81
Complexity and unclarity of reporting and transparency mechanisms	2,46	2,84
Lack of socio-economic incentives	2,43	2,29
Lack of tools and standards to measure and manage GHG emissions	2,36	2,84
Cost inefficiency and cost ineffectiveness	2,31	1,97
Short-term planning prioritization	2,26	2,08
Lack of expertise, knowledge, and awareness	1,97	2,97

Relevance score: 0: Not relevant, 1: Slightly relevant; 2: Somewhat relevant; 3: Moderately relevant; 4: Very relevant; 5: Extremely relevant.
 Support score: 0: Not addressed at all; 1: Slightly addressed; 2: Somewhat addressed; 3: Moderately addressed; 4: Very well addressed; 5: Extremely well addressed.

Figure 33: Average relevance score of barriers and the related average CNN support score.

Figure 33 accommodates the analysis by showing all the associated values collected within one single visualization. Notably, the complexity of reduction of GHG emissions was recognized on average as the most significant barrier towards climate neutrality by CNN participants, as it was considered to be *moderately* relevant, and CNN was able to *moderately address* the hindering impact of this barrier. This first comparison shows a good extent of alignment between the needs of the participants and how they have been addressed by CNN, for instance through online resources as well as events and webinars.

Nevertheless, with respect to the issue of limited financial resources, another barrier which was highly ranked with respect to its relevance, the findings show greater divergence, since CNN only managed to *somewhat address* the question according to its participants. In fact, within the overall design of the initiative there have been no specific direct measures to raise funds for climate action or increase the availability of financial means. However, the participation in CNN may create greater appeal to investors, eventually indirectly affecting the access to financial resources of the NSAs involved, since commitments to sustainability generally tend to improve the reputation of organization (Gomez-Trujillo et al., 2020).

Regarding the difficulties related to technological and infrastructural constraints, the findings show little evidence of any specific measure to mitigate the limiting effects of the issue within CNN. In fact, according to CNN participants the barrier was only *somewhat addressed*, while it was considered to be moderately relevant as a whole. In this case, the relative mismatch between the needs and the support provided may be

due to the impossibility to directly act upon those constraints as far as the initiative is concerned, while organizations may be prevented from exploiting opportunities because of these rigid limitations (Johnson et al., 2023).

In some cases, the support provided by CNN retains a higher value than the actual relevance acknowledged by the participants for those specific barriers. This could still be interpreted as an effective or satisfactory extent of support by CNN, as the initiative still contributed to limiting the impact of these challenges. The findings suggest that this peculiar condition applies to the issue of complexity of GHG emissions estimation and measurement, which was a crucial point in the overall design of the initiative, as it was tackled thanks to the GHG calculators, as well as collaborative estimations among many other measures. The initiative managed to *moderately address* this first obstacle within climate neutral transitions, which often creates strong disincentives for NSAs to take climate action in the first place (Marlowe & Clarke, 2022; Haslam et al., 2014). Furthermore, the CNN support average value is also higher than the relevance of the barrier for both the complexity and unclarity of reporting and transparency mechanisms, as well as the lack of tools and standards to measure and manage GHG emissions, since both of them were considered as *moderately addressed*. The former was mainly mitigated thanks to specific guidelines and template which helped participants to report as expected, while the latter was mainly acted upon by giving access to the GHG calculators.

Similarly, but with a greater gap between the two values, the lack of expertise, knowledge, and awareness witnessed a higher CNN support average value if compared to the relevance it retains according to the respondents. Such finding suggests that one of the crucial components of the design of the initiative could not be as pivotal as expected, since it was considered to be the least relevant barrier with an average value of 1,97 out of 5. However, it was the barrier that has been best addressed by the initiative according to the participants, still reaching a qualitative assessment defining it as *moderately addressed*. The greater support provided with respect to this specific issue is due to the focus of CNN on awareness raising and capacity building as embedded within its design and sub-goals. The lower relevance of the dimensions of expertise, knowledge, and awareness is in contrast with many studies that argued for its importance, nevertheless within CNN and the audience it involved there seemed to be a great extent of misalignment with what the academic literature would predict (Muduli et al., 2020; Böttcher & Müller, 2015; de Sousa Jabbour, 2019).

In general, the remaining barriers were assigned close average values for both their relevance and the extent to which CNN has been able to address them. In particular, the lack of socio-economic incentives was *moderately addressed* within the initiative, mainly thanks to the recognition system ensured by the levels of achievement as well as the CNN logo and badge. Once again, this kind of marketing strategies based on green commitments enhances the reputation of organizations, therefore leading to both social and economic advantages (Gomez-Trujillo et al., 2020). The issue of short-term prioritization was instead mainly tackled through the requirement of annual reporting, which pushed participants to create credible transition plans setting the pathway to be followed across time to become climate neutral, therefore promoting a long-term approach (Slawinski et al., 2017). Finally, regarding the issue of cost inefficiency and cost ineffectiveness, the findings show no evidence of any direct measure to tackle the issue within CNN, in fact it has been considered the least addressed barrier, since it just came short from reaching the threshold to be described as *somewhat addressed* without approximation.

As a logical consequence of this analysis, it can be argued that CNN was more successful in addressing some barriers rather than others, as comprehensively visualized in Figure 33. Furthermore, a more aggregated feedback regarding the support provided to participants with respect to these barriers can be obtained by calculating the average value of the mean scores of CNN support. Notably, as discussed within the results section, this value amounts to 2,45 indicating that overall the barriers have been considered as in between *somewhat addressed* and *moderately addressed* by CNN.

According to a specular approach, the same logic can be applied to the extent to which the initiative has managed to support the enablers towards climate action, as illustrated in Figure 34. The analysis of the individual cases for both barriers and enablers allows a comprehensive assessment of the extent to which CNN has supported NSAs in taking action towards climate neutrality, before shifting towards a final and more aggregated evaluation.

ENABLERS TOWARDS CLIMATE NEUTRALITY	AVERAGE RELEVANCE SCORE	AVERAGE CNN SUPPORT SCORE
Ethical motivations and social responsibility	4,15	3,40
Awareness raising initiatives	3,77	3,46
Long-term business resilience	3,72	2,52
Collaborations and partnerships	3,71	3,15
Public brand recognition and reputation	3,60	3,47
Technical support	3,37	2,76
Cost efficiency	3,23	2,29
Capacity building and training	3,20	2,48
Availability of financial resources	3,18	1,74
Stakeholders' pressures	2,51	2,48

Relevance score: 0: Not relevant; 1: Slightly relevant; 2: Somewhat relevant; 3: Moderately relevant; 4: Very relevant; 5: Extremely relevant.
Support score: 0: Not enabled at all; 1: Slightly enabled; 2: Somewhat enabled; 3: Moderately enabled; 4: Very well enabled; 5: Extremely well enabled.

Figure 34: Average relevance score of enablers and the related average CNN support score.

Notably, ethical motivations and social responsibility emerged as the most prominent enabler according to the perceptions of CNN signatories, since these elements were on average described as *very relevant*. Furthermore, this particular enabler was matched with a score of 3,40 regarding CNN support, suggesting that the initiative has facilitated its development within a qualitative range from *moderately* to *very well*. The greater relevance of ethical motivations and social responsibility is caused by the fact that organizations become interested in sustainable transitions because they may feel the urge to make their own contribution to contrast the climate crisis (Carfora et al., 2021; Ooi et al., 2020). In fact, it may act as the initial input that sparks the intention of entities in acting upon their emission, which is then followed by the actual considerations with respect to feasibility as well as economic and social advantage. The relatively high extent of support provided by CNN under this regard is strictly connected to its role of raising awareness about the urgency of climate action, which has been promoted through publications, events, collaborations and webinars among many other activities, as previously discussed. Nevertheless, the significant gap between the two values suggests that there is still room for improvement with respect to the possible measures to be taken at the initiative level to promote ethical motivations and social responsibility.

Moving down the values ranking, the importance of awareness raising initiatives, the concern of long-term business resilience, along with the establishment of collaborations and partnerships tend to cluster towards the same level of relevance according to the respondents. In fact, these three enablers were all close to be considered to be *very relevant* according to the experience of CNN signatories. However, the extent to which they have been promoted by CNN changes significantly when compared to one another. In particular, the partnership with awareness raising initiatives was supported by CNN up to a value of 3,46 out of 5, a result which is due to the networking component of the initiative which aims at connecting various stakeholders, as well as organizations with similar objectives. These networks play a significant role, as they serve to exchange information eventually leading to further collaborations that enhance climate action internationally (Johnson et al., 2023). In fact, reinforcing this argument, similar results can be found for collaborations and partnerships, since the two enablers are often linked to one another (Singh et al., 2022; Kihiko & Kinoti, 2016), and CNN has been able to *moderately enable* both of them according to the respondents. However, with respect to the driver of long-term business resilience, the results show greater divergence between the relevance of the enabler and the support provided by CNN. In particular, this factor was described in between *somewhat enabled* and *moderately enabled* according to the participants. In this case, the results suggest that the initiative should have enlarged the extent of focus on this matter, since it still ranks quite high in the relevance ranking regarding the enablers for climate action. The relevance of this enabler is due to the uncertainty it creates across markets, as the climate crisis worsens along with its devastating impact (Steen et al., 2023).

Regarding the case of public brand recognition and reputation, the results illustrate a general alignment between the relevance of the enabler and the support provided by CNN. Such association is characterised by the presence within CNN mechanisms, as well as its sub-goals, of the aim to recognize all stakeholders for their efforts. The execution of this task was ensured by the levels of achievement system, along with the use of the CNN logo and badge. These activities were considered to provide a satisfactory level of support for public brand recognition and reputation of CNN participants as they were associated with the initiative and indirectly to the UNFCCC as well. In fact, the overall level of relevance of this component is dictated by the fact that organizations can leverage on their environmental performance through marketing and communication strategies to appeal consumers and stakeholders (Gomez-Trujillo et al., 2020).

The majority of the enablers in the second half of the overall ranking based on relevance tend to cluster within the range of values from 3,18 to 3,37. Notably, technical support, cost efficiency, capacity building and training, along with the availability of financial resources fall under this segment of the collected data, therefore being listed as *moderately relevant* enablers according to the respondents. In particular, technical support was *moderately enabled* by CNN, mostly thanks to its online resources as well as the responses to queries via email among many others implemented measures. This score regarding the support provided can be explained by the overall approach of the initiative, which has aimed at providing a broad and overarching assistance which could be applicable to the majority of the NSAs involved, rather than focusing on tailored forms of support. Such choice was mainly due to the limits of resources and capabilities that have been made available within the setting of the initiative, as they directly influence the approach to signatories management (Bulkeley et al., 2014). Focusing on cost efficiency, CNN has not provided a dedicated measure to enhance this factor within its design, in fact the respondents considered cost efficiency to be only *somewhat enabled* according to their experience within the initiative. Therefore, this feedback suggests the possibility of improvement at the initiative level under this regard. The extent to which CNN has supported

capacity building and training obtained a similar result as well, however this specific enabler was central in the overall design of the initiative, as it was supposed to be promoted through webinars, events, online resources and many other activities which were deeply present within CNN. Despite its prominence in the overall design of the initiative, the results suggest that this activities could be potentially strengthened. Moving to the last enabler within the range taken into account, the availability of financial resources again attracted strong criticisms, because as previously discussed CNN does not envisage this kind of support to its participants in a direct manner. In fact, no fund-raising opportunities were directly created, however stakeholders could be potentially attracted by the environmental performance of CNN participants, eventually indirectly attracting investments (Eccles et al., 2014). This lack of focus on the financial component, due to the limits set within the mandate of the UNFCCC, caused the initiative to only *somewhat enable* this specific element.

Finally, stakeholders' pressure has been considered to be the least relevant enabler, but CNN still managed to provide a relatively satisfactory support since the two values are very close to one another. The initiative and its broad engagement strategies were the main source of significant awareness raising which may have eventually led to some extent of increase of stakeholders' concerns.

As similarly observed in the case of barriers, within the dimension of the enablers for climate action, CNN was more effective in promoting some elements with respect to others across the list, as comprehensively illustrated in Figure 34. A broader and more general score regarding the support provided with respect to the listed enablers can again be obtained by calculating the average value of all the mean scores of CNN support for enablers. As indicated in the results section, this value amounts to 2,78 out of 5, suggesting that generally CNN has *moderately enabled* the support for the factors discussed.

Furthermore, the results show that CNN has performed better in supporting the enablers if compared to the barriers, since the overarching mean value for enablers support is slightly higher. In order to mathematically obtain an overall assessment of the extent to which the initiative has supported NSAs in taking action towards climate neutrality, the average between the two general mean values of support for barriers and enablers can be calculated, notably amounting to 2,61 out of 5, which tends to indicate a *moderate* extent of support as a whole.

However, the respondents were also directly asked about the extent to which CNN has supported them as participants in taking action towards climate neutrality, an assessment which was again to be expressed on the basis of a scale from 0 to 5. The average of the responses collected led to an overall score of CNN support equaling to 2,95 which indicates a similar finding to the one that has been indirectly retrieved from the calculations derived from the data collected, again confirming the *moderate* extent of the support provided by the initiative.

These findings provide an empirically based answer to the research question of the study, as well as fitting into the theoretical framework that has been deployed. In fact, the analysis aims at emphasizing the role of the initiative as the intermediary actor which stirs the actions of the target audience (Chan & Amling, 2019; Abbott et al., 2015; Chan & Pauw, 2014; Abbott et al. 2012), in order to empower the connection between the intention of becoming climate neutral and the actual achievement of that objective by the participants.

6.4 – Recommendations for similar ICIs and lessons to be learnt from CNN experience

The respondents of the survey were also asked directly about what recommendations could be proposed to enhance the assistance offered by similar climate initiatives promoting climate action. Figure 35 illustrates the main feedbacks expressed by the participants, allocating them across the four categories as discussed in the results section.

CATEGORY OF RECOMMENDATIONS	RECOMMENDATIONS
Tailored support	<p>More consistency and resilience in providing in providing tailored support.</p> <p>Greater focus on SMEs' needs.</p> <p>More direct support and guidance based according to sectors.</p> <p>Provide detail guidance to collect information for reporting to prevent organizations from hiring auditors or consultants.</p> <p>Avoid a one-size-fits-all approach.</p>
Collaboration and networking	<p>More consistency in virtual and physical gatherings.</p> <p>More coordination among similar initiatives to scale up resources and capacities.</p> <p>Creation of platforms to connect with similar companies in similar industries to learn from one another.</p> <p>Publication of resources in various languages.</p> <p>Creation of brainstorming opportunities among stakeholders.</p> <p>Creation of a network for collaboration to enable faster scaling of successful projects and connection of good projects to service providers and investors.</p> <p>Creation of a voluntary networking blog where participants accept to meet and provide guidance to one another.</p> <p>More group engagement of participants.</p> <p>Collective informative sessions on according to country of origin to learn from one another.</p>
Financial component and affordability	<p>Greater focus on making the GHG emissions reduction process more affordable.</p> <p>Creation of databases for funding opportunities.</p> <p>Stronger economic support.</p> <p>Provision of more information regarding financial resources.</p> <p>Creation of connections for private and public partnerships for financial resources.</p>
Emissions reductions and reporting	<p>Carbon offsets should be the driver to achieve GHG emissions reductions.</p> <p>Creation of unified reporting and certification bodies for greater harmonization.</p> <p>Shorter monitoring periods for verification of reduction plans.</p>

Figure 35: CNN participants' recommendations for similar ICIs.

The recommendations regarding the provision of tailored support retain significant prominence within the gathered results. In fact, CNN has always deployed a broad and general approach for the management of the support to be provided to the participants, despite the variety of the actors involved in the initiative. Notably, this overarching model of support provision was thought in order to accommodate as many participants as possible, therefore serving the goal of the initiative to raise awareness and promote climate action. Nevertheless, due to this strategic design, the initiative could not provide a strong and consistent tailored support to individual participants, which may then find themselves in need of hiring external consultants or auditors in order to comply with the expectations regarding annual reporting (Leffel, 2022). Because of the limits to the extent to which CNN was able to ensure personalized assistance to its participants, in particular with respect to those smaller in size and economic power, the higher participation of NSAs does not necessarily lead to a more sustainable environmental performance of signatories. Rather, the greater engagement of NSAs has contributed to the awareness raising component of the initiative, while the actual achievement of significant GHG emissions reductions depends both on the capacity of every single signatory, as well as on the extent to which the initiative is able to provide appropriate support. These insights are at the roots of the reason why respondents focused on the need for greater tailored assistance, and this is also generally applicable to other ICIs with similar objectives, since the provision of personalized support really empowers organizations to improve their environmental performance (Bocken et al., 2014; Leffel, 2022).

However, when acknowledging the issue of limited tailored support as a lesson to be learnt from the experience of CNN, it is also appropriate to clarify that the delivery of the requested assistance would be a very ambitious and resource demanding task for ICIs across the world. Still, this recommendation retains significant relevance for possible improvements within the ecosystem of international climate governance for NSAs. In fact, a more customized kind of support for single actors could potentially bridge the gap between the intention of becoming climate neutral and the actual achievement of that goal, as illustrated in theoretical framework of this research.

A second salient dimension of suggestions for similar ICIs is related to the networking component, which within CNN was mainly developed around the initiative level action, as CNN aimed at leading the capacity building and empowerment process for the reduction of GHG emissions. However, the findings show that participants feel the need to have access to spaces where they can learn directly from one another, therefore moving the leading role of these sessions from the initiative itself, to an almost self-managed network of participants engaging with one another. Such proposal is particularly relevant when taking into account the variety of actors involved, as it could gather participants on the basis of similar characteristics such as size and sector of operations. This second recommendation retains greater ease of implementation, while also compensating for the struggle of ICIs in providing tailored support as auditors or consultants do, since organizations would be able to learn from one another thanks to these collaborative models.

The issues related to the financial capabilities and availability of organizations aiming at net-zero targets have been comprehensively discussed throughout the study. In fact, because of its importance in sustaining credible climate action (de Sousa Jabbour, 2019; Chu & Schroeder, 2010; Singh et al., 2022), this topic is also central to the recommendations submitted by the participants. As previously mentioned, CNN has never had any direct measure to provide climate finance to its participants, this was also reflected by the results gathered and discussed in the previous sections. Nevertheless, initiatives could still find indirect ways to provide greater financial capabilities to its participants, rather than simply funding their transitions without

any kind of reassurance. Notably, some proposals from CNN participants included the creation of databases with investors that could reward successful projects, as well as creating more partnership opportunities which revolve around funding and financial support. Starting from these general inputs, ICIs with similar objectives could develop specific mechanisms which may sustain the economic strength of their participants as they take action towards their climate change mitigation targets.

The fourth category of recommendations for ICIs across the international arena refers to the components of emissions reductions and reporting. In particular, making carbon offsets the driver to achieve GHG emissions reductions holds a great extent of controversy, since the new standards provided by the HLEG report are very critical towards CERs, as they envisage direct GHG emissions reductions to be the main objective for NSAs. Notably, this was one of the core reasons that led to the phase out of CNN, in order to focus on ICIs that are or are going to be more in line with the new level of ambition set by the UNFCCC as the orchestrator within the system. On the other hand, the need for greater harmonization and the possibility of the creation of a unified body of reporting finds greater consensus across the ecosystem. However, this would need effective cooperation among organizations with similar objectives, which still retain individual interests which could undermine the extent to which this harmonization can actually be achieved (Bebbington et al., 2014).

In addition to the four broad issues that have been discussed, further level of analysis for the lessons to be learnt from the CNN experience can be explored by focusing on the results of the scoring of the relevance of barriers and enablers for climate action. This should be done in order to prioritize the elements that are perceived to be more significant by NSAs. Notably, these elements are deeply connected to what has been discussed so far, since the two most relevant barriers towards climate neutrality have been identified as the complexity of reduction of GHG emissions, which relates to the need for tailored support, and the issue of limited financial resources to be invested, which was also strongly present in the recommendations that have been analysed. Furthermore, the ranking of the relevance of enablers visualized in Figure 25 sets awareness raising initiatives as well as collaborations and partnerships in the higher portion of the table. This proves once again the appetite of participants for greater networking opportunities, both at the initiative and signatories level, as previously discussed.

Overall, the findings discussed in this section according to the insights illustrated in Figure 35 provide meaningful inputs with respect to what other mitigation-focused ICIs can learn from the experience of CNN to support NSAs towards the achievement of net-zero emissions. The implementation of these suggestions can vary depending on the setting of the given ICI, however these recommendations can be seen as a starting point to develop more supportive programs on the basis of the knowledge gathered through the experience of CNN.

7 – Conclusion

The results and the related analysis within this research provide a comprehensive assessment of the support provided by CNN according to the perceptions of the participants of the initiative. Such thoroughly evaluation was initially enabled by a meticulous examination of the mechanisms embedded within the design of CNN, which led to the understanding of how the initiative has aimed at supporting its participants to take action towards climate neutrality. The activities, measures, goals and mission of CNN demonstrate an overarching approach to ensure appropriate support, which was designed to include as many NSAs as possible, therefore

creating a form of macro-management of the signatories based on the capability and resources provided by the UNFCCC for the functioning of the initiative.

The overall design of CNN was outlined according the understanding of what is needed to achieve climate neutrality as a NSA, so that the obtained framework of the initiative could effectively support the participants towards the achievement of this goal along their transitions. Under this respect, this research has provided greater clarity regarding what barriers and enablers NSAs perceive along their journey towards climate neutrality, not only by identifying these factors, but also by categorizing them according to their relevance.

Such process ensured the necessary conditions to obtain a comprehensive and credible assessment of the extent to which CNN has supported NSAs in taking action towards climate neutrality. Notably, the initiative was found to have provided a moderate extent of support according to the feedback of its own participants. This finding demonstrates that despite the success of CNN under many aspects with respect to its mission, there was still room for possible improvement which could be leveraged by other ICIs with similar objectives across the international arena.

In fact, the study also provides significant insights regarding recommendations for other ICIs, as well as lessons that could be learnt from the experience of CNN as the initiative enters its phase out stage. In particular, the need for greater tailored support, the creation of further collaboration and networking opportunities, the necessity to ensure greater affordability for climate change mitigation actions, as well as the harmonization of reporting represent crucial inputs upon which other ICIs could build their designs to ensure even greater support to their participants.

The way ICIs are thought and designed should revolve around the needs of the target audience they aim to engage, since they act as intermediaries that stir climate commitments and actions on behalf of their parent organizations. The findings of this research serve the purpose of expanding the knowledge regarding what NSAs need to be successful in their net-zero transitions, and how ICIs should always strive to address all the barriers and promote all the enablers that organizations perceive when working towards their net-zero targets. If the nexus between these two dimensions is strengthened, then ICIs will increase their potential in leading international climate action in an even more credible manner.

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Appendix

Appendix I: Template for semi-structured interviews of current and former CNN staff members

Study on the support to non-state actors to achieve climate neutrality within the Climate Neutral Now initiative

Research project conducted by Giacomo Suera under the supervision of Dr Sander Chan.

In affiliation with the Climate Neutral Now team & Radboud University.

**CLIMATE
NEUTRAL
NOW**

Radboud Universiteit



Title of the study:

Supporting Climate Neutrality of Non-State Actors and Private Businesses:
The Case of the Climate Neutral Now Initiative

Master's Thesis for the Environment and Society Studies programme
Nijmegen School of Management
2022-2023

Giacomo Suera

Contact:
giacomo.suera@ru.nl

Consent Statement Form for the Participant

Acknowledging the phase out of the Climate Neutral Now initiative, the study aims at assessing to which extent the initiative has supported non-state actors in taking action toward climate neutrality. Furthermore, the study aims at identifying the lessons learned in order to inform present and future climate mitigation focused initiative throughout the ecosystem.

The interview will approximately take an hour and will take place online via video-call. If requested anonymity can be guaranteed through the whole extent of the study. The interview session will be recorded for note-taking purposes only and the recording will not be made public. The transcript of the interview will be uploaded to the Radboud University portal as first sources of data collection in support of the study for archiving purposes and will not be used for other purposes if not commonly agreed by the researcher and the interviewee.

Excerpts from the interview may be included in a final report and dissertation and later peer-reviewed publications. The participation to the study is fully voluntary, therefore the interviewee is free to refrain from answering questions on an arbitrary basis. A separate release form would be sent to you if biographical data were relevant to a publication at a subsequent date.

Any personal information that could reasonably identify the interviewee will be removed or changed before files are shared with other researchers or results are made public. Other genuine researchers may request access to de-identified data in the future. Access will only be granted if they agree to preserve the confidentiality of the information as requested in this form. Their access will also require approval from the original research team.

By signing this consent statement form the interviewee agrees to take part in this research.

Should you have questions, please do not hesitate to reach out (Giacomo Suera; giacomo.suera@ru.nl).

- I agree that research data gathered for the study may be published or made available, provided my name or other identifying information is not used.
- I understand that the research data may be shared with others without any personal information that could identify me (not linked to me).

Date:

Name and signature of the participant:

Questions for the Climate Neutral Now team

A – Introductory questions

1. What is your role within the initiative?
2. How long have you been working or when did you work for the CNN initiative?

B – Questions on climate neutrality

1. What are the needed actions to work towards climate neutrality?
2. How has CNN supported the undertaking of these actions by its participants?

C – Questions on non-state actors' challenges towards climate neutrality

1. What are the main challenges for NSAs to become climate neutral which have been addressed within the context of CNN?
2. How has CNN aimed at providing support to overcome each one of these challenges?

D – Questions on non-state actors' enablers towards climate neutrality

1. What are the main enablers to support NSAs in achieving climate neutrality?
2. How has CNN aimed at providing support to enhance each one of these enablers?

E - Questions related to the sub-goals of the Climate Neutral Now initiative

1. What activities have been carried out in order to achieve each of the six sub-goals of the initiative as specified within the Climate Neutral Now Guidelines?

Please provide an answer for each listed statement:

- Raise awareness about the urgency of climate action.
- Empower all stakeholders to manage their own GHG emissions.
- Support the estimation of GHG emissions.
- Build capacity for the reduction and avoidance of GHG emissions.
- Promote collaborative mechanisms to incentivize climate action (including carbon markets).
- Recognize all stakeholders for their efforts.




2. To what extent has the initiative succeeded in attaining its six sub-goals?

F - Questions on the phase out of the initiative

1. What are the indicators that can be used to measure the success of the initiative?
2. What are the reasons that led to the initiative phase out?
3. Why is the initiative considered not to be in line with the recommendations of the Secretary General's High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities?

Appendix II: Survey of CNN participants

Climate Neutral Now - Survey

  United Nations Climate Change  Radboud University																																																																													
<p>Participation in the survey is voluntary. Anonymity is guaranteed. Any identifying information will be removed or altered before any files are shared or the results are disclosed. Aggregated data will be used in the UNFCCC's evaluation report, Radboud University's research and, potentially, peer-reviewed publications. By confirming below, you indicate your agreement to take part in the survey. *</p> <p><input type="radio"/> I agree that the data collected by the following survey will be confidentially archived, and may be published or made available, provided that identifying information is hidden.</p>																																																																													
<p>1) Entity name.</p>																																																																													
<p>2) What barriers has your organization faced in taking action towards climate neutrality? Please assign a score from 0 to 5 to each statement in the list below on the basis of their relevance to your case. <small>0: Not relevant; 1: Slightly relevant; 2: Somewhat relevant; 3: Moderately relevant; 4: Very relevant; 5: Extremely relevant.</small></p>																																																																													
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Lack of tools and standards to measure and manage GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Complexity of reduction of GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Complexity and unclarity of reporting and transparency mechanisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Technological and infrastructural constraints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Limited financial resources to be invested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Cost inefficiency and cost ineffectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Short-term planning prioritization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Lack of expertise, knowledge, and awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							
Lack of socio-economic incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																							

If the organization has faced specific barriers which are not included in the previous list, please indicate them and assign a score in the same manner.

-	Type a title for each additional barrier in the boxes below	Score from 0 to 5
First additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Second additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Third additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5

3) To what extent has the Climate Neutral Now initiative addressed each barrier to provide support to its participants? Please assign a score from 0 to 5 to each alternative in the list below.
 0: Not addressed at all; 1: Slightly addressed; 2: Somewhat addressed; 3: Moderately addressed; 4: Very well addressed; 5: Extremely well addressed.

Barriers:	0	1	2	3	4	5
Complexity of GHG emissions estimation and measurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of tools and standards to measure and manage GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complexity of reduction of GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complexity and unclarity of reporting and transparency mechanisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technological and infrastructural constraints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limited financial resources to be invested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost inefficiency and cost ineffectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Short-term planning prioritization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of expertise, knowledge, and awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of socio-economic incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent has Climate Neutral Now addressed any possible further barrier you added in your response to question number 2? Please give a score from 0 to 5 to each additional barrier you listed.

-	Type a title for each additional barrier in the boxes below	Score from 0 to 5
First additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Second additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Third additional barrier		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5

4) What enables your organization to take action towards climate neutrality? Please assign a score from 0 to 5 to each alternative in the list below on the basis of their relevance to your case.

0: Not relevant; 1: Slightly relevant; 2: Somewhat relevant; 3: Moderately relevant; 4: Very relevant; 5: Extremely relevant.

Enablers:	0	1	2	3	4	5
Technical support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of financial resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost efficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-term business resilience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborations and partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awareness raising initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capacity building and training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public brand recognition and reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stakeholders' pressures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical motivations and social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If the organization needs specific enablers which are not included in the previous list, please indicate them and assign a score in the same manner.

-	Type a title for each additional enabler in the boxes below	Score from 0 to 5
First additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Second additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Third additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5

5) To what extent has the Climate Neutral Now initiative enabled the following factors to provide support to its participants? Please assign a score from 0 to 5 to each alternative in the list below.

0: Not enabled at all; 1: Slightly enabled; 2: Somewhat enabled; 3: Moderately enabled; 4: Very well enabled; 5: Extremely well enabled.

Enablers:	0	1	2	3	4	5
Technical support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of financial resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost efficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-term business resilience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborations and partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awareness raising initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capacity building and training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public brand recognition and reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stakeholders' pressures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical motivations and social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent has Climate Neutral Now contributed to any additional enabler you mentioned in your response to question number 4? Please provide a score from 0 to 5 for each additional enabler you listed.

-	Type a title for each additional enabler in the boxes below	Score from 0 to 5
First additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Second additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
Third additional enabler		<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5

6) Overall, to what extent has the Climate Neutral Now initiative supported you as a participant in taking action towards climate neutrality? Please assign an overall score from 0 to 5.

- 0: No support
- 1: Minimal support
- 2: Limited support
- 3: Moderate support
- 4: Substantial support
- 5: Strong support

Please explain the reasons for the overall score you assigned to the support provided by the Climate Neutral Now initiative.

7) Climate Neutral Now is phasing down, where 2023 will be the last reported year. Do you plan to continue taking climate action? *

- Yes
- No
- I do not know yet

8) What recommendations would you propose to enhance the assistance offered by similar climate initiatives promoting climate action?