City Networks in Practice: City Deal Energieke Wijken and Local Energy Transitions in the Netherlands

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Abstract:

Cities play a crucial role in addressing climate change, both as significant contributors and as victims of its impacts. In the Netherlands, the City Deal "Energieke Wijken" aims to enhance the effectiveness of local energy transitions by fostering collaboration among municipalities, national government bodies, and other organisations. Despite the increasing focus on transnational municipal networks (TMNs) in urban climate governance research, there remains a notable gap in understanding the effectiveness of national city networks, especially those involving mid-sized and smaller municipalities. This study addresses this gap by investigating the influence of the City Deal on the effectiveness of local energy transition governance in participating municipalities. The research examines three key areas: the supportive functions provided by the City Deal, its influence on multi-level governance dynamics, and areas for potential improvement. Findings indicate that the City Deal significantly enhances municipal governance capabilities through extensive knowledge exchange, fostering a dynamic learning environment, and promoting vertical, horizontal, and cross-sectoral collaboration. The City Deal helps municipalities overcome structural challenges they encounter regarding energy transition governance in the Netherlands, by facilitating a platform in which they can share best practices, innovative solutions and collectively advocate for change in policies and schemes to the national government. Vertically, it improves relationships between municipalities and higher administrative levels, ensuring alignment with national policies. Horizontally, it fosters city-to-city collaboration and cross-sectoral integration, promoting integrated approaches that link environmental goals with social benefits. However, challenges such as capacity for smaller municipalities and network inclusiveness were identified. To address these issues the study recommends clearer formulated end goals, implementation guidelines, increased support for smaller municipalities and enchanted mechanisms for ensuring equal participation. In conclusion, the City Deal "Energieke Wijken" improves the effectiveness of local energy transition governance by providing essential support and fostering collaboration across different governance levels.

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I.   Introduction

Climate change resulting from increasing greenhouse emissions is a pressing concern for our planet and daily life. One of the most significant global challenges in mitigating climate change is the need to transition to more sustainable energy systems (Hofbauer, McDowall & Pye, 2022). Cities have increasingly recognized the risks posed by climate change and the need to adapt to more sustainable systems (Heikkinen et al., 2020). Cities are considered important actors in climate change mitigation and adaptation, with high expectations placed upon them to lead the transition towards sustainability (Acuto, 2016; Van der Heijden, 2017; Heikkinen et al., 2020; Heikkinen et al., 2022). While nation-states often struggle with major global issues such as climate change, local governments are emerging as alternative global actors and problem solvers (Haupt & Coppola, 2019). The 2015 Paris Agreement underscored the role of cities as essential in bridging the gap between global ambitions to reach the 1.5°C temperature reduction goal and the current commitments of nation-states (Davidson et al., 2019; Bulkeley, 2021; Coulombe, 2022). However, cities encounter several barriers in implementing their planned actions, including a lack of technical knowledge, available funds, and national guidance (Anguelovski & Carmin, 2011).

An approach to mitigating these challenges has been found in the voluntary coordination and collaboration among cities (Coulombe, 2022). Since the 1990s, city networks have become an essential mechanism for supporting cities' climate actions on a global scale (Smeds & Acuto, 2018). Since then, the number of city networks has increased in number and diversity, particularly in the area of environmental concerns, and includes ever more cities as members (Acuto & Rayner, 2016; Acuto & Leffel, 2020; Heikkinen, 2022). These networks facilitate various functions, including agenda-setting, information exchange, policymaking, and capacity building (Heikkinen, 2022). Furthermore, they play a crucial role in identifying, scaling up, and piloting innovative climate change strategies for national governments (Nguyen et al., 2023). These globally active network organisations dedicated to climate action are known in academic literature as transnational municipal networks (TMNs), or transnational municipal climate networks (TMCNs) (e.g. Busch, 2015; Busch, 2018; Haupt & Coppola, 2019). TMN members are mostly cities and municipalities that are situated in different countries, they are non-hierarchical, and membership is voluntary (Kern & Bulkeley, 2009). Researchers have highlighted the critical role of cities as key actors and primary sites for climate governance, as well as the importance of city networks within the broader framework of urban climate governance (Hoppe et al., 2016; Bansard et al., 2017). The concept of TMNs has emerged within this context. TMNs navigate and integrate through multiple governance levels, operating across European, national, and subnational policy arenas (Hooghe & Marks, 2001; Kern & Bulkeley, 2009; Mocca, 2018) This means that local climate actions become increasingly integrated in regional, national, and international policy frameworks. This multi-level governance (MLG) system enables city networks to bypass resistant national governments, while it also allows regional and national governments to stimulate and enforce climate action at the local level (Acuto & Leffel, 2021; Acuto & Rayner, 2016)

Energy and the energy transition is a multi-layered issue. Energy is a sector, but it is also a cross-cutting area from which numerous governance challenges arise (Melica et al., 2018). Research by the Dutch Environmental Assessment Agency (PBL) and the Dutch Institute for Social Research (SCP) concluded that achieving the needed goals of the energy transition would significantly impact Dutch citizens (Vringer & van den Broek, 2016). Involvement, acceptance, and participation of both citizens and businesses are prerequisites for achieving these policy goals. This echoes the global understanding that non-state actors, including local governments and civil society, play an essential role in climate governance (Bulkeley, 2021). The governance of the energy transition thus becomes a participatory multi-actor and multi-level process by definition. For problems that cannot be tackled decisively by a single actor, networks and network collaborations emerge as solutions (Van Bueren et al., 2003).

In this study, in-depth case research focuses on one of the Dutch City Deal networks. The Dutch City Deals are collaborative partnerships between cities, the national government, businesses, and other organizations aimed at addressing complex urban issues through innovative and integrated solutions.

This research concentrates on the City Deal Energy Neighbourhoods, a City Deal dedicated to the energy transition challenge and its connection to related social issues. This case is viewed as an example of a nationally operating city network with multi-level governance dynamics. In the following paragraphs of this introduction, the scientific and social relevance of this research is laid out, and the research questions are presented.

1.2 Aim of Research and Research Questions

The aim of this research is to assess how local governments can increase their energy transition effectively and make use of national municipal network participation to accelerate their local energy transition. The focus of this research is on participating municipalities of the Dutch national city network Agenda Stad City Deal; Energieke Wijken, as well as this network itself. By analysing the perceived effect from network participation, it can help future network collaborations in maximizing effect and value for their members. This research further aims to create an understanding of how participation in this national city network affects participating municipalities in their dynamics towards higher governmental levels and towards other municipalities. Lastly, this research aims to give specific recommendations to improve this City Deal, which can also be used by other, similar City Deals or city networks.

Therefore, the central question in the research is**; To what degree does the City Deal increase the effectiveness of governing the local energy transition in participating municipalities?**

This research question will be answered by supporting questions.

1. How does the City Deal support the participating municipalities?

2. How does the City Deal network affect multi-level governance dynamics in participating municipalities?

3. How could the performance of the City Deal be improved?

1.3 Scientific Relevance

City Deals can be seen as part of urban climate governance experiments. These serve as a primary means of testing and innovating sustainable solutions (Bulkeley & Castán Broto, 2013) A prerequisite for these experiments is to promote knowledge of collaborative processes among multiple actors. This is desirable due to the complexity and significant uncertainties associated with climate change and its innovative solutions (Sun & Yang, 2016). Collaborative networks, as an innovative form of governance, are more flexible than other forms of governance (Provan & Kenis, 2008). For this reason, it remains relevant to conduct research into forms of network governance. In addition to the flexibility of networks, the dynamics of relationships and individual actors or actor groups are not well understood in the scientific literature (Benedum & Becker, 2021).

Networked patterns of governance have progressively become prominent in the management of environmental issues (Andonova et al., 2009). Transnational Municipal Networks (TMNs), as a manifestation of these network patterns, have caught the attention of researchers from various disciplines since the early 2000s. TMNs and city networks have been studied in terms of their geographical scope, themes, structure, activities, number and type of members, and governance structure, among other conditions (Acuto & Rayner, 2016; Bansard et al., 2017; Busch, 2016; Castán Broto, 2017; Gordon & Johnson, 2018; Haupt & Coppola, 2019). Scholars have focused on individual city networks (Davidson et al., 2019), examined the diversity of commitments made by city networks (Bansard et al., 2017), the outcomes of these networks for their members (Heikkinen et al., 2020;

Woodruff, 2018), and on TMN functions (Bulkeley et al., 2003; Andonova et al., 2009; Busch, 2015; Papin, 2020; Haupt et al., 2019; Mocca, 2018)

The growing number of TMNs, and related research, shows that cities are increasingly looking to each other for answers (Acuto et al., 2017). Although national-based networks account for 49% and are the most dominant form of city networks (Acuto & Rayner, 2016), most research is focused on global and transnational operating city networks (Bansard et al., 2017). Furthermore, the literature on city networks not only primarily focuses on internationally operating municipal networks, but also tends to focus dominantly on larger cities (Woodruff, 2018; Heikkinen et al., 2020). This neglects the specific characteristics of national networks, in which mid-sized and smaller municipalities take part. Researching national networks is essential because they offer more collaborative opportunities between municipalities due to their geographical proximity and shared institutional context regarding the same legal framework and similar culture and language (Lee & Jung, 2018).

Furthermore, it remains uncertain whether the advantages identified in the context of TMN literature apply to various networks within multi-level governance, such as national city networks. Several studies indicated the importance of networking with nearby cities (Coulombe, 2022; Pitt, 2010) and breaking down organizational silos within cities (Lenhart et al., 2014). Preliminary evidence suggests that national-level networking helps municipalities reduce their emissions through mechanisms similar to those offered by TMNs (Karhinen et al., 2021). However further research is needed on the use of the TMN functions framework for national city networks to identify similarities between the different types of networks and to investigate if the TMN function framework can be used for the research on national city networks.

Lastly, research on assessing how city network membership influences local climate policies and governance is scarce (Hakelberg, 2014; Zeppel; 2013). City networks are still relatively poorly understood with regard to their influence and impact on outcomes in local areas (Fünfgeld, 2015). There is still a lack of evidence on the TMNs' impacts on the ground, for instance in the formulation of local climate policies (Bulkeley, 2010; Fünfgeld, 2015).

This research contributes to increasing knowledge and filling research gaps regarding the impact of national city networks on the effectiveness of urban climate governance and the local energy transition. It also enhances existing scientific understanding of the functions of city networks and the dynamics of multi-level governance.

1.4 Social Relevance

The societal relevance of this study is paramount, especially in the context of the urban challenges that today's society faces. An increasing urban population intensifies the pressure on existing systems (Artmann et al., 2019). Particularly, climate change and its effects are problems that are strongly felt in urban areas (Hoornweg et al., 2011). Cities, as epicentres of growth and development, face unique challenges in the transition to sustainable energy practices. This makes the role of municipal governments more crucial than ever as they become critical arenas for implementing climate change mitigation and adaptation strategies, such as fostering sustainable energy transitions (Bulkeley & Castán Broto, 2013; Reckien et al., 2018).

International and national targets, such as the reduction of emissions and transitioning to net-zero energy consumption necessitate multifaceted interventions in municipal policies and spatial planning. The effectiveness of addressing these challenges hinges on successful collaborations among a myriad of stakeholders. The shift from traditional top-down approaches to more networked and multi-actor-oriented planning and policymaking underscores the importance of broader knowledge sharing and the implementation of effective network functions (Matyas & Pelling, 2015).

The results of this research partly aim to enhance the quality and effectiveness of network collaboration by providing recommendations to improve the City Deal network. By expanding

scientific knowledge about the key functions of such networks, the outcomes of these networks can also be improved. Recommendations formulated based on this research are therefore applicable in society and can function as feedback for the organisation and operation of future networks as well as the implementation of network efforts and functions in participating municipal organizations.

1.5 Research Outline

The research is structured as follows. First, the literature review in *chapter two* presents the theoretical framework within which the research question and sub-questions will be examined. The *third chapter* will present the methodology, in which the research design and used methods are explained. The *fourth chapter* will present the results from the eight conducted interviews with municipal representatives and the City Deal orchestrator. The *fifth chapter* presents a discussion based on the findings of this study and will examine the interview results in relation to the theoretical framework. It further will present the limitations found in this research. The thesis will end with a conclusion in *chapter six* in which the main research questions and sub-questions will be answered and suggestions for future research will be made.

II.   Literature Review

In the following section the literature review and the relevant research frameworks will be illustrated. The first section (2.1) will focus on urban climate governance and the local scale of climate governance. In the second (2.2) and third (2.3) section of this literature review the two governance concepts of networks governance and multi-level governance will be discussed that are necessary to comprehend the mechanisms of transnational municipal networks that will be discussed in the fourth section (2.4). After this, the literature review will focus on the perceived functions and benefits of participation in such a network (2.5), and lastly the literature review will focus on national city network literature (2.6).

2.1 Urban Climate Governance

Since the 1990s, climate change has gained increasing attention on the agenda of not only national governments but also across a multitude of different sectors of society, including local governments, civil society organisations, media, and businesses (Picavet, et al., 2022). This collective mobilization aligns with global initiatives to achieve net-zero carbon emissions and bolster renewable energy adaptation, which are central to attaining the United Nations Sustainable Development Goals related to clean energy, sustainable urban environments, and proactive climate action (Derkenbaeva et al., 2022; Picavet et al., 2022). Cities have understood their significant function and position as focal points for activities and behaviour that contribute to climate change. However, at the same time, cities are also widely considered the best places for implementing and scaling up behavioural, economic, and technological interventions for climate change adaptation and mitigation (IPCC, 2018; van der Heijden, 2019). In seeking to utilise their climate mitigation and adaptation potential, cities have developed as places of innovative and experimental governance to spur climate action (Van der Heijden, 2019; Rosenzweig et al., 2018). As a result of these developments, scholarly interest in urban climate governance and the importance of cities and municipalities in urban climate governance has grown rapidly (Van der Heijden, 2019; Romero-Lankao et al., 2018; Bulkeley & Betsill, 2013).

Urban climate governance refers to "the ways in which public, private and civil society actors and institutions articulate climate goals, exercise influence and authority, and manage urban climate planning and implementation processes." (Anguelovski & Carmin, 2011, p. 169; Coulombe, 2022). Local governments have long been seen as merely executive branches of national governments, entangled in a patchwork of obligations and responsibilities from national and regional governments. Nevertheless, ongoing processes of decentralization and privatisation of public services have given city governments more autonomy across a range of policy areas, including climate change adaptation and mitigation policies (Van der Heijden, 2017; Pierre, 2011; Van der Heijden, 2019). Van der Heijden (2019) presents several strong arguments for the success of climate governance on the local level. Firstly, local governments, i.e. city governments, play a key role in implementing mitigation activities due to their responsibilities in, for instance, land use planning and public transportation. Secondly, cities and local authorities are the policy level with the closest relationship to civil society and are relatively easy to reach. Therefore, they may be the best suited to mobilize people's support and get them on board with societal and spatial transformation. Thirdly, because of the proximity to their surroundings, the city level allows for specific and tailored interventions that are based on local expertise and knowledge. Lastly, the high density in large cities can provide opportunities for technological innovation due to the high concentration of skilled people and businesses.

To integrate climate change into urban decision-making and planning processes, local governments have framed climate mitigation and adaptation as opportunities for improving liveability and well-being in cities (Shaw et al., 2014). Urban climate experimentation has emerged as a key approach for testing and reducing the risks associated with innovative and adaptable sustainable solutions. (Evans et al., 2016). The fundamental idea is that experimentation fosters collaborative learning processes

among various stakeholders, addressing the significant uncertainties and complexities of climate change and radical innovation (Bulkeley et al., 2016). Yet, it is also important to recognize that cities are not separated from the broader multi-level governance systems and political and social contexts in which they are embedded (Heikkinen, 2022).

Literature shows that there is the risk that the potential of cities can be overestimated and that key challenges can be underplayed when promoting cities as the perfect scale for addressing global climate change (Khan, 2013). Governing cities involves constellations of a broad variety of actors across different policy sectors and jurisdictional levels; this can especially be seen in urban climate governance (Gerritsen, 2016). The way in which public, private, and civil society actors and institutions articulate, exercise influence and authority, and manage and implement urban climate planning to reach certain climate goals can affect processes and outcomes. Decision-making and policymaking in cities take place across various policy sectors, which may be fragmented and involve many other public and private actors, such as industries and civil society groups (Knieling, 2016; Gerritsen, 2016). Additionally, larger cities can be composed of multiple municipalities within the same metropolitan region and therefore be strongly influenced in their own policy and decision-making process. Thus, cities cannot be seen as singular, homogeneous entities that act in one way or another. Cities are complex and diverse entities composed of different interests, concerns, and powers (Bulkeley & Betsill, 2005). As a result, cities often face barriers in implementing their planned actions due to a lack of technical knowledge, available funds, and national guidance (Anguelovski & Carmin, 2011).

Although local governments have assumed a primary role in urban climate governance, a wide range of actors, including local communities, regional and national governments, businesses, and research institutes, play crucial roles in advancing climate action. These actors contribute by generating and integrating knowledge, experimenting with social, economic, and technological innovations, and organizing service provision in a self-organized manner (Corfee-Morlot et al, 2009). Because of the complexity to deal with environmental issues being embedded in multi-level networks that ensure solid vertical and horizontal coordination, finding agreement and understanding on ambitions, and processes between different layers of government, is considered key in creating a supportive environment for urban governance for climate action (Gerritsen, 2016). To start, vertical coordination between a city government, the regional government, and the national government can be difficult due to the separation of responsibilities and ambitions. As a result, organizations often take up the role of vertical coordinator (Gerritsen, 2016). This might be a dedicated national government body that is installed to 'orchestrate' climate actions across and between various levels of government (Bäckstrand & Jonathan, 2017). In addition to vertical coordination, horizontal coordination is also seen as a relevant condition in urban climate governance. Specifically, coordination across different departments, agencies, and organizations within a city is considered to be relevant (Knieling, 2016; Van der Heijden, 2017). Primarily, coordination between departments overseeing technical aspects (such as waste collection and transport) and those overseeing social aspects (such as education and employment), is important because traditionally they operate separately in their own silos. Similarly to vertical coordination, working groups, agencies or other coordinating entities often arise to break out of these siloes and create synergy in transitions at the local level (Van der Heijden, 2019).

Lastly, Stripple and Pattberg (2010) identified two key governance processes that pertinent to urban climate governance: multi-level governance, which is already briefly introduced above, a network governance. Streck (2002) highlights that global governance activities have shifted focus from strictly international levels to governance that addresses multiple levels and from a formalized, legalistic process to a more informal, participatory, and integrated approach. This emphasises the multi-level of the governance system. In terms of network governance, Andonova, Betsill, and Bulkeley (2009) suggest that governance in the transnational context is mainly organized though cross-border networks consisting of various actor configurations, underscoring the importance of network in governance. The following two section of this literature review will further elaborate on these concepts.

2.2 Network Governance for Local Energy Transitions

Having established the importance of urban climate governance, and building on the understanding of urban climate governance, it is essential to explore the underlying, foundational, frameworks that facilitate such collaborative efforts. Therefore, this chapter will briefly delve into the concept of network governance and its role in coordinating efforts among diverse actors.

The idea of network governance emerges from the typology of modes of governance arrangements, which refers to modes of coordination established between state and societal actors to achieve purposeful policy outcomes (Bednar et al., 2019). In scientific literature, governance modes are typically divided into three types: hierarchy, market, and network, each characterized by a distinct set of features (shown in figure 1).

	Hierarchy	Market	Network
Base of interaction	Authority and dominance	Exchange and competition	Cooperation and solidarity
Purpose	Consciously designed and controlled goals	Spontaneously created results	Consciously designed purposes or spontaneously created results
Guidance, control and evaluation	Top down norms and standards, routines, supervision, inspection, intervention	Supply and demand, pricing mechanisms, self-interest, profit and loss as evaluation, courts, the 'invisible hand of the market'	Shared values, analysis of common problems, consensus, loyalty, reciprocity, trust, informal evaluation, reputation
Role of government	Top-down rule-making and steering; dependent actors are controlled by rules	Creator and guardian of markets; purchaser of goods; actors are independent	Network enabler, network manager and network participant
Theoretical basis	Weberian bureaucracy	Neo-institutional economics	Network theory

figure 1: modes of governance (Bednar et al., 2019)

Network governance refers to the stable cooperative collaboration of multiple independent actors working together based on trust and reciprocity (Bednar et al., 2019). In principle, there is a level playing field in network governance, and the idea is that actors support each other by sharing resources and knowledge (Thompson, 2003). Jones et al. (1997) define network governance as the administrative process that is not solely guided by hierarchical authoritarian structures, nor primarily by legal commitments in the free market. Instead, network governance is driven by social mechanisms. These social mechanisms are also known as governance mechanisms based on mutual relationships and networks built on overarching goals (Capaldo, 2014). Due to the complexity of societal problems, it is argued, that governance networks are necessary to bring together different stakeholders with different perspectives, expertise, and resources to coordinate their efforts towards one common goal. (Bednar et al., 2019; Hertting & Vedung, 2012). Providing adaptation and mitigation solutions for climate change by local governments can be seen as a good example of the complexity governments encounter (Sun & Yang, 2016). Planners, who bear a large part of the responsibility in the Dutch planning practice, are insufficiently equipped to deal with such complex problems properly (Elmqvist et al., 2019). The network mode of governance can enhance solutions and stimulate more efficient and collaborative decision-making and enhanced learning across sectors and scales (Provan & Kenis, 2008). It brings together actors with a joint interest who, through a deliberative process of debate, bargaining, and mutual learning, can map out actions to address complex problems.

2.3 Multi-Level Governance

Multi-level governance (MLG) represents foundational framework for understanding the complex interplay between different layers of government in addressing complex policy challenges, such as climate governance and the local energy transition. The concept underscores the importance of interactions between national, regional, and local governance actors in shaping and implementing policies, such as energy policies. Hooghe and Marks (2001) define MLG as the redistribution of authority from centralized government entities to various levels and actors. This includes an upward shift to supranational entities, such as the EU, a downward delegation to subnational governments, and a lateral distribution to networks involving both public and private sectors. Therefore, MLG encapsulates both vertical and horizontal dimensions. Within this process of multi-level governance, decisions are made in collaboration between public and private actors, at various levels of scale (Maggetti & Trein, 2019). Past research has shown that MLG in an appropriate and promising framework to use in analysing policy complexity (Tamtik & Colorado, 2022). It specifically captures the range of power dynamics and relations between and within governments (Tamtik & Colorado, 2022).

2.3.1 The Dimensions of Multi-Level Governance

The dispersion of authority that defines multi-level governance, which is upward to the supranational level, downward to subnational jurisdictions, such as provinces, regions, and municipalities, and sideways to public/private networks involves a horizontal and a vertical dimension (Hooghe & Marks, 2001). All the possible horizontal and vertical interactions are displayed in figure 2.

First, the *vertical dimension* of multi-level governance illustrates the interactions between local authorities and higher-level governmental bodies across regional, national, European, and international scales (Lenhart, 2015; Gerritsen, 2016; Kern, 2019). This vertical dimension is crucial for aligning local actions with broader policy frameworks, ensuring coherence and integration across different governance scales. This alignment is particularly important in the context of energy transitions, where national policies provide the necessary resources and policy frameworks for local energy strategies, reinforcing the synergy between different governance levels (Jordan & Huitema, 2014; Kern & Bulkeley, 2009). Furthermore, vertical governance involves cities establishing direct connections with national and EU-level governmental actors. These connections can take the form of direct lobbying or the development of collaborative programs (Gerritsen, 2016). Such connections allow cities to bypass national governments, enabling them to directly influence EU policies. Collaborative programs, particularly when combined with national or EU funding, enable cities to undertake significant climate actions at the local level, recognizing the importance of local governance in addressing climate challenges (Kern, 2014).

Second, the *horizontal dimension*, this dimension delineates the collaboration between cities as local authorities, which can occur within the same region, or across borders. These collaborations are often facilitated by (trans)national city networks (Lenhart, 2015), to establish linkages with higher governing bodies such as the regional, national, or international level (Gerritsen, 2016). Horizontal climate governance improves possibilities for knowledge transfer and learning among cities (Kern, 2014). Within the realm of horizontal governance and networks in the EU, Kern (2014) distinguishes three distinct types of horizontal collaboration. First, bilateral collaboration between two cities, Second, project networking, in which a limited number of cities work together project based in tailer-made forms, often funded by national or EU programs. And thirdly, multilateral networking of cities (Kern & Bulkeley, 2009; Kern, 2014). These consist of multiple participating municipalities nationally or internationally.
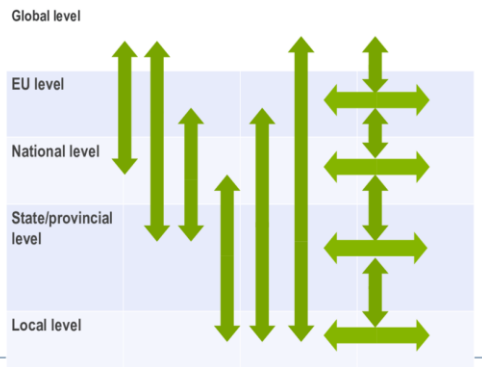
Figure 2: Multi-level governance: possible horizontal and vertical interactions (Jänicke, 2015)

In summary, multi-level governance (MLG) provides a framework for understanding the interactions between various government levels in urban climate governance and energy transitions. Hooghe and Marks (2001) define MLG as redistributing authority from centralized governments to various levels, including both a vertical and horizontal dimension (Magetti & Trein, 2019). The vertical dimension emphasizes interactions between local authorities and higher-level bodies, crucial for policy coherence and providing necessary resources, particularly in energy transitions (Kern & Bulkeley, 2009, Jordan & Huitema, 2014; Lenhart, 2015; Gerritsen, 2016; Kern, 2019). Horizontal collaboration involves cities working together within or across borders, most often facilitated by networks, such as transnational municipal networks (TMNs), that enhance knowledge transfers and learning (Kern, 2014). However, these networks can also provide a closer connection between different layers of government in the vertical dimension. As we transition to the next chapter on TMNs, it is thus crucial to recognize that they are a vital part of the dimensions of multi-level governance.

2.4. Transnational Municipal Networks

Network forms of organisation are frequently associated with the conceptual shift from government to governance, and the emergence of multilevel governance, as explained previously (O'Riordan & Church, 2001; Bulkeley et al., 2003). These networks come in various forms and involve a wide range of stakeholders, operating on different levels and address various issues, including environmental challenges such as the energy transition. One prominent type of municipal climate network that has gained prominence among scholars is the Transnational Municipal Network (TMN). First, there must be stated that this research focusses on a national city network. However, within the realm of urban climate governance the interactions among multiple individual municipalities and subnational regions can be referenced to with the term 'transnational municipal networks' (TMNs), denoting city networks of diverse sizes and at various levels (national, regional, global). This reference to TMNs as umbrella term is widely accepted among scholars. (Betsill and Bulkeley 2004; Kern and Bulkeley 2009; Giest and Howlett 2013; Bansard et al., 2017). Continuing, over the past two decades TMNs have seen significant growth in global membership, both in terms of quantity and scale (Betsill & Bulkeley, 2004). Most notably, local governments in developed nations (global north), particularly within the European Union (Giest & Howlett, 2013) have actively engaged in regional, national, and international municipal networks, as well as public-private partnerships. This active role of municipalities reflects their embrace of emerging modes of networked governance and the promotion of peer-to-peer learning and knowledge exchange. TMNs have transcended their initial roles in international advocacy and the global expansion of urban environmental governance. TMNs give cities a prominent position on the international climate change agenda (Fünfgeld, 2015). Additionally, TMNs can be considered organisations that represent and give local governments a voice on the national and international level (Haupt et al., 2019; Heikkinen, 2022). As a result, TMNs and other examples of municipal network memberships can be an important mechanism for enhancing and broadening the internal and external engagement of stakeholders (Fünfgeld, 2015).

TMNs serve as platforms for the exchange of information and the coordination of actions among local governments across national borders (Nielsen & Papin, 2020). These networks provide institutionalised spaces for cities from different countries to discuss pressing urban issues (Busch, 2015). TMNs offer participating cities access to valuable resources including funding, technical expertise, knowledge, and norms (Nielsen & Papin, 2020; Betsill & Bulkeley, 2004). By this, TMNs open new opportunities for participating municipalities, which can result in visible and conceivable potentials. For instance, by serving as platform, scholars, local and regional policymakers, government agencies, and non-governmental organisations get a closer understanding of each other and could function as a translator between disciplines (Feldman, 2012). As stated, by creating a platform it provides new political spaces for local governments. Thus, TMNs create opportunities to override territorial borders with their political systems and thereby give members an opportunity to challenge those present state structures and relations (Haupt & Coppola, 2019).

Kern and Bulkeley (2009) have identified three key characteristics of TMNs in their previous research: (i) TMNs are composed of autonomous cities and local governments that join voluntarily; (ii) they govern themselves and do not depend formerly on another official authority; and (iii) their members directly execute decisions made within the network. TMNs are considered public, inclusive, and self-governed institutions that challenge traditional global divisions and power relations (e.g. Andonova et al., 2009; Busch, 2015), emphasising a shift from traditional hierarchical and market-orientated governance practices towards networked governance.

Even though TMNs can enhance, facilitate, and support urban climate governance, they are far from perfect. Participating cities with lower administrative capacities may adopt more passive roles, and membership for such municipalities can often be mostly symbolic (Kern and Bulkeley, 2009). TMNs can offer much, such as (technical) information sharing, but when the capacities of a participating municipality are low members fall short of access to the benefits that are offered by the network (van der Heijden, 2018). Furthermore, although the phenomenon of TMNs is already in existence for a few decades, it is still not the norm to be part of such a network, and thus a large number of cities have not joined (van der Heijden, 2018). The academic literature however strongly focuses on global/transnational city networks, in which also larger cities tend to be more dominant (Bansard et al., 2017). This shows that there is a neglected focus on national networks in climate governance literature (Kern, 2019). This especially applies to smaller and medium-sized municipalities and cities in the global south. TMNs seem to be biased towards the wealthier Western countries. When studying cases and literature it has been found that cities in Europe and North America are overrepresented (Bansard et al. 2017). Additionally, the participating cities from wealthier countries seem to end up at the core of networks and TMNs and cities in less wealthy countries are often excluded (Kern and Bulkeley, 2009). An explanation can be found in that cities in wealthy countries tend to have larger overall administrative capacities to design policies as well as that they have higher implementation capacities. On the other hand, it must be said that cities that are lagging in climate action reap the greatest benefits from the networks (Busch et al., 2018). This most strongly applies when state-level action is lacking. Networks can step up and help by functioning as city advocates, shaping the political environment and legal frame (Heikkinen, et al., 2020).

This also leads to the key drivers for municipalities to have interest in taking part in city networks. The strong presence of TMNs in Europe can be mainly related to the unique multi-level governance system of the EU (Gerritsen, 2016; Niederhafner, 2012). The division and allocation of power and competences creates unique challenges that translate into the main drivers for municipalities to participate in city networks.

2.4 Functions of Transnational Municipal Networks

Local governments are increasingly expressing interest in becoming part of Transnational Municipal Networks (TMNs). However, a fundamental question remains: What are the perceived benefits of local governments' involvement in these municipal governance networks, and what specific roles do

TMNs play in supporting local governments? Numerous conceptualizations have emerged regarding the functions and impacts of TMNs within the realm of local climate governance.

Assessing the diverse impacts of municipal networks is a highly intricate task. Establishing causal relationships between stakeholder participation in the network and the effectiveness in achieving objectives poses a significant challenge. Moreover, evaluating the outcomes attained by the network or individual actors within often involves normative considerations (Provan & Kenis, 2008).

Previous literature has connected various functions and benefits of city networks and city-to-city networking. One of those are the three theoretical frameworks of Bulkeley (2003), Andonova et al. (2009), and Busch (2015). These frameworks collectively centre on delineating the effects resulting from interactions between networks and their members, with the city as the primary analytical unit. by Coulombe (2022) combined these three frameworks and found four overarching functions that consistently emerge. These are: (1) the horizontal exchange of information among cities; (2) functions focused on policy implementation; (3) the formulation of rules and member adherence to them; and (4) the influence exerted by networks on higher levels of government through lobbying (Coulombe, 2022; Bulkeley, 2003; Andonova et al. 2009; Busch, 2015). To provide more clarity the functions found by Coulombe (2022) are presented in the figure below (figure 3).

Functions	Theoretical framework		
	Bulkeley et al. (2003): 4 ways climate governance is affected	Andonova et al. (2009): soft use of governance instruments	Busch (2015): 4 functions of trans-municipal network impact on local climate governance
1 (Horizontal flow of information)	Knowledge dissemination	Information sharing	Platform for members
2 (Implementation and policies)	Implementation of EU policies	Capacity building and implementation	Consultancy
3 (Rules and commitment)	Policy initiation	Rule setting	Commitment brokering
4 (Lobbying)	Lobbying	–	Advocacy and lobbying

Source: Adapted from Fenton and Busch (2016).
Figure 3: Functions table from Coulombe (2022)

Research of Heikkinen (2022) further identified other network benefits i.e. functions that can be found in city networks and included the previous work of the three frameworks discussed above (figure 3)

Transnational Municipal Networks (TMNs) serve several critical functions that contribute to urban governance and climate action. One of the primary roles of TMNs is facilitating the exchange of information among participating cities. This involves knowledge dissemination and information sharing, which are crucial for enabling local governments to learn from each other's experiences and best practices (Bulkeley et al., 2003; Andonova et al., 2009). TMNs provide forums where cities can meet, discuss, and exchange knowledge directly through facilitated events or indirectly by processing and disseminating collected experiences as best practices (Kern & Bulkeley, 2009). The importance of information sharing is well-documented, with numerous studies highlighting its central role in the networks' effectiveness (Lee & van de Meene, 2012; Bansard et al., 2017; Oppowa, 2015; Busch et al., 2018). Despite the recognized benefits, the effectiveness of information exchange within TMNs is debated. Some scholars argue that knowledge exchange fosters innovation and capacity building (Fünfgeld, 2015), while others contend that the implementation of shared knowledge varies significantly among member cities due to differing local contexts and capacities (Keiner & Kim 2007). The role of network coordinators in managing or steering information also remains underexplored, which could influence the equitable distribution of knowledge (Keiner & Kim, 2007).

Networking also helps cities secure funding, workforce, and other resources necessary for their development and sustainability efforts. This support can come through direct financial aid, shared services, or joint initiatives that pool resources from various municipalities (Kern and Bulkeley, 2009; Andonova et al., 2009; Kern and Alber 2009; Busch et al., 2018; Haupt et al., 2019; Karhinen et al.,

2021). Additionally, networking aids cities in building and enhancing their brand, positioning them as leaders in specific areas such as sustainability, climate action, or innovation. Effective city branding through TMNs can attract investment, additional funding, and talent by projecting a positive image and showcasing the city's achievements and potential (Mocca, 2017; Busch et al., 2018; Haupt et al., 2019).

Furthermore, formalized networks help create informal networks among experts working in the participating municipalities. These individual connections can foster collaboration, peer support, and the sharing of expertise and innovative solutions, enhancing the overall capacity and resilience of the participating cities (Busch et al., 2018). Networking helps cities get inspired, develop new solutions, or apply the successful strategies of other cities in their own contexts. This exchange fosters innovation and continuous improvement across the network (Bulkeley et al. 2003; Kern & Bulkeley 2009; Andonova et al. 2009; Lee & van de Meene 2012; Busch, 2015; Busch et al., 2018; Mocca, 2018; Haupt et al., 2019; Karhinen et al., 2021). Networking also helps build the legitimacy of climate actions among politicians and other stakeholders involved, thereby creating motivation for taking action. This support can be crucial for gaining political and public backing for ambitious climate policies (Kern & Bulkeley, 2009; Lidskog & Elander, 2010; Lee & Koski 2015; Busch et al., 2018; Karhinen et al., 2021). Networks further help cities lobby for their perspectives in national and international forums, influencing broader policy frameworks and legislation on climate action. This advocacy ensures that the interests of cities are represented in higher-level decision-making processes (Bulkeley et al., 2003; Busch, 2015; Busch et al., 2018).

Another significant function of TMNs is supporting the implementation of policies at the local level. TMNs often act as intermediaries, helping translate broad policy frameworks into actionable plans tailored to specific municipal contexts. Bulkeley et al. (2003) highlighted that TMNs serve as implementing agencies for EU policies, ensuring that local actions align with overarching regional and national goals. This role is particularly vital in energy transitions, where coordinated efforts across governance scales are necessary for effective implementation (Andonova et al., 2009). TMNs also build capacity within cities by providing the necessary tools and knowledge to execute climate and energy policies effectively. This includes financial resources, expertise, labour, technology, and monitoring, which allow cities to enhance their access to resources (Andonova et al., 2009; Busch, 2016). However, the effectiveness of TMNs in this role can vary widely, with some scholars arguing that the impact is limited by the differing capacities and resources of member cities (Bulkeley & Newell, 2015).

TMNs play a critical role in setting rules and ensuring member compliance. According to Busch (2015), TMNs can establish standards and guidelines that member cities must follow, fostering a sense of accountability and uniformity in climate actions. This function involves creating and promoting policy initiatives, as identified by Bulkeley et al. (2003), and developing rules that members adhere to, which Andonova et al. (2009) referred to as rule-setting. Establishing these rules helps harmonize efforts across different municipalities, ensuring that all members work towards common goals. Finally, networks assist in the creation of policy initiatives and the setting of goals for urban climate action. They also provide tools for monitoring progress, ensuring that cities can track their performance and make necessary adjustments to achieve their objectives (Bulkeley et al., 2003; Kern and Alber, 2009; Busch, 2015; Busch et al., 2018; Rashidi and Patt, 2018; Karhinen et al., 2021).

Networking benefit:	Definition:	Earlier references (theoretical and empirical):
Access to resources	Networking helps the city to secure funding, a workforce, or other resources.	Kern and Bulkeley, 2009; Andonova et al., 2009; Kern and Alber 2009; Busch et al., 2018; Haupt et al., 2019; Karhinen et al., 2021.
City branding	Networking helps the city to build its brand, e.g., as a Green City or climate actor.	Mocca, 2017; Busch et al., 2018; Haupt et al., 2019.

Individual networks	Formalised networks help to create informal networks, e.g., between the experts working for the cities.	Busch et al., 2018.
Information sharing	Networks support information sharing between members.	Bulkeley et al., 2003; Kern and Bulkeley, 2009; Andonova et al., 2009; Lee & van de Meene, 2012; Bansard et al., 2017; Busch, 2015; Oppowa, 2015; Busch et al,. 2018; Mocca, 2018; Haupt et al., 2019; Karhinen et al., 2021.
Learning and new ideas	Networking helps the cities to get inspired, develop new solutions or apply the solutions of others in their own context.	Bulkeley et al. 2003; Kern and Bulkeley 2009; Andonova et al. 2009; Lee and van de Meene 2012; Busch, 2015; Busch et al., 2018; Mocca, 2018; Haupt et al., 2019; Karhinen et al., 2021.
Legitimacy of action/motivation	Networking helps to build the legitimacy of climate action, e.g., among politicians, or creates motivation for taking action.	Kern & Bulkeley, 2009; Lidskog and Elander, 2010; Lee and Koski 2015; Busch et al., 2018; Karhinen et al., 2021.
Lobbying/city advocacy	Networks help cities to lobby for their point of view, e.g., in meetings, whether on the national or EU level, when broader frames of climate action, such as legislation, are discussed.	Bulkeley et al., 2003; Busch, 2015; Busch et al., 2018.
Policy initiative creation/goal setting and monitoring	Networks create (or help to create) policy initiatives and set (or help to set) goals for urban climate action. They require and/or offer tools for monitoring climate action.	Bulkeley et al., 2003; Kern and Alber, 2009; Busch, 2015; Busch et al., 2018; Rashidi and Patt, 2018; Karhinen et al., 2021.

Table 1: Functions of TMNs (adapted from Heikkinen, 2022)

2.4.1 National Municipal Networks

With the rise and growing numbers of TMNs for sustainable transformations, it demonstrates that cities are increasingly turning to each other for answers (Acuto et al., 2017). However, national-based networks are the most predominant form of city networks representing 49% (Acuto and Rayner, 2016). National networks are thus important to research since they are underrepresented in the academic literature. Especially considering that national networks offer more opportunities for collaboration between municipalities because of their close geographic proximity and the share of institutional context, regarding the same legal framework, culture, and language (Lee and Jung, 2018). This can benefit primarily smaller and medium-sized towns that are neglected by TMNs and would benefit more from national networks than transnational municipal networks (Coulombe, 2022; Hoppe et al., 2016; Kern, 2019).

However, cities differ in terms of size and socioeconomic development. Furthermore, political contexts and party affiliations can create barriers to collaboration among municipalities in the same country (Atkinson et al., 2017). Working together with similar cities with similar trades and contexts can help overcome these challenges. Additionally, aligning local authorities with national governments for efficient resource allocation can reduce external threats and maximize opportunities (Atkinson et al., 2017).

III. Methodology

This chapter will present the research design and the method used to answer the research questions in this thesis. The objective of this research is to contribute to a better understanding of the role of nationally operating city networks in the governance of the local energy transition and to provide valuable insight for both academics and policymakers. This contribution will be delivered by analysing the impact that participating has on municipalities, which in existing literature has been neglected. The framework for analysis is primarily based on literature on key supporting functions of Transnational Municipal Networks. This will also result into insights in differences that might be seen in national city networks and international city networks.

In order to accomplish the research objective, the main research question is; To what degree does the City Deal increase the effectiveness of governing the local energy transition in participating municipalities?

This research question will be answered by the following supporting questions:

1. How does the City Deal support the participating municipalities?

2. How does the City Deal network affect multi-level governance dynamics in participating municipalities?

3. How could the performance of the City Deal be improved?

3.1 Research Design

As shown in the literature chapter above, a systematic investigation on multi-level governance, TMNs impacts for municipalities, and policy has been made. Thus far, research on impacts of city networks, like TMNs, has primarily focused on networks themselves instead of participating municipalities. Furthermore, most research on city network impacts is done in the light of climate adaptation measurements. However, the energy transition as case is less researched. A study with a solid empirical basis is missing. This research attempts to address this research gap by applying explorative qualitative research. The research is deductive in nature, but also has inductive characteristics. Literature research has been deployed to build a framework by which the impact that the researched city network (Agenda Stad, City Deal Energieke Wijken) has on participating municipalities can be examined. Because of the heterogeneity of city networks and the abundance of different aspects that can be researched in these networks and network collaborations, it remains difficult to fully understand the studied case on forehand. Therefore, the deductive nature of this research functions as a starting point to categorize the possible ways in which city networks can impact participating municipalities. However, when results present additional insights then these can be added to the existing literature and thereby the research also becomes more inductive in nature.

In this qualitative research design, semi-structured interviews are employed to gain in-depth understanding of insights into the experiences and perceptions of stakeholders involved in this network. This research focuses on the impact in participating municipalities. Therefore, the municipality is the object of this research. The approach of this research allows for the exploration of complex social phenomena and the identification of underlying themes and patterns (Bryman, 2012).

In the following paragraphs the way in which this research is operationalized, and how data is collected and analysed is explained more thoroughly.

3.2 Case Study

This section explains why a case study has been chosen for this research and presents the studied case.

A single case study was chosen for this research design due to its ability to provide a deep, comprehensive understanding of the subject, being the municipality and the impact that a national city network has on the municipality. The case study method is particularly effective on 'how' questions and testing existing theories (Yin, 2014; Eisenhardt & Graebner, 2007). This corresponds with the research questions of this research and the tested analytical framework of TMNs functions. Single case studies allow for an in-depth analysis, maximizing the information gathered from the units studied, providing detailed insights into the perspectives of individuals working on the energy transition within municipalities (Flyvbjerg, 2006). This approach can reveal insights that might be overlooked in a broader study (Baxter & Jack, 2008). Furthermore, the flexibility of case studies allows the researcher to adapt the structure of the study accordingly to new findings, for instance by adapting an interview topic list or coding structure, this is crucial for complex and dynamic topics such as urban climate governance and energy transitions (Perri & Bellamy, 2012). It also must be mentioned that single case studies are often more practical than multiple case studies due to constraints in time, cost, and resources, what make single case studies a more feasible option (Gustafsson, 2017). This is also partly the case in this research. Although the main reason for one case study is based on the fact that it includes multiple (12) municipalities which therefore in a way makes it almost a multiple case study because of the fact that the municipality is the studied object, this will prove a multi-faced understanding of the phenomena of the impact of national city networks on municipalities.

Concluding, while single case studies may be criticized for a lack of generalizability, they can offer detailed contextually rich analysis. This can provide strong, reliable evidence that supports the findings and conclusions. (Baxter & Jack, 2008; Yin, 2009). In the following part this research will provide more contextual insight into the studied case.

3.2 Data Collection

This research employs a qualitative approach to investigate the impact of the City Deal Energieke Wijken on member municipalities. Qualitative research is chosen for its exploratory nature, which helps uncover and understand the subjective thoughts, believes, and interpretations of people's experiences, as well as the dynamics of social processes (Pawson & DeLyser, 2016). This method is particularly well-suited for examining the subjective perceptions of participants within a network governance structure, such as the City Deal.

3.2.1 Interviews

The data collection was conducted through eight semi-structured interviews, six of whom where with municipality representatives, one with a city-region representative, and one with the City Deal orchestrator, the latter one was an externally hired employee of the knowledge institute Platform31. The interviews were conducted via Microsoft Teams and recorded using recording software on mobile phone. As a test one was also recorded directly in Teams. All interviews took between 40 and 60 minutes in length depending on the amount of information that the responded has to share. A more thorough explanation on the choice for the participants in this research is provided in the chapter on research participants (section 3.2.3).

Semi-structured interviews offer flexibility and allow for in-depth exploration of specific phenomena that are not widely documented (Lenhart, 2015). An interview guide was built upon the literature review in this research and ensured that all relevant topics were covered, maintaining procedural reliability (Oppowa, 2015). This approach facilitates capturing detailed insights from the participants, providing a rich understanding of their experiences within the network governance structure (Yin, 2003). Conducting interviews as part of qualitative research is particularly beneficial for obtaining the interpretations and perspectives of others, revealing new insights and understandings (Yin, 2014). This

method is useful for accessing comprehensive data on complex internal processes that are difficult to observe or survey (Eisenhardt & Graebner, 2007). The semi-structured format also allows for comparability and reliability of results, which is crucial for case studies (Cope, 2016). Additionally, the use of a topic list and a semi-structured for offers the flexibility to adapt questions based on participants' responses, facilitating deeper exploration of the subject matter (Cope, 2016). Active listening and a careful review of transcripts between different interviews ensure the accuracy of the data collected (Hancock & Algozzine, 2006). The information gathered is then used to draw conclusions about the participants' experiences and perspectives within the network governance structure.

Lastly, although many of the former studies on in the impact of TMNs and city networks relied mostly on interviews (Keiner & Kim, 2007; Kern & Bulkeley, 2009; Zeppel, 2013; Oppowa, 2015; Coulombe, 2022, Busch et al., 2016; Gerritsen, 2016; etc.) they all still produced some valuable insights into the mechanisms of TMNs membership and how it was used by representatives in the investigated cities (Busch, 2016). Therefore, this study still found the relevance for conducting semi-structured interviews as method of research.

3.2.2 Document Review

Throughout the research, a variety of document sources and websites were consulted and analysed. This included the City Deal starting text (Deal Tekst), government policies and subsidy schemes on the energy transition, a City Deal evaluation report, and news on the City Deals. These document reviews offered information and insights on the context of the City Deal and relevant Dutch energy transition context. The document reviews served four main purposes: it complemented the interviews by providing additional data, helped to validate and cross-check information, offered background context on the research participants, and it was a useful method for gathering data on workshops and meeting that could not be directly observed. This aligns with the benefits of document review as stated by Bowen (2009).

3.2.3 Research Participants

The studied case consists of eighteen participants. Of all participants a selection is made to whom will be involved in this research. This determination of the appropriate number of research participants hinges on achieving data saturation. This can be explained as the point at which no or little new information is being extracted from the data (Guest et al., 2013). The point of saturation consists of five factors. These are instrument structure, sample homogeneity, complexity and focus of topic, study purpose, and analyst categorization style (Guest et al., 2013).

The instrument structure for this research consists of interviews following a semi-structured format, necessitating a higher count compared to structured interviews. The sample, though relatively heterogenous due to municipality diversity, is partially addressed by selecting municipalities based on size and participation. Furthermore, many studies on TMNs have focused on the networks that include large cities, (Gordon, 2013). However, the entire local level, including middle and small municipalities, is part of the adaptation and mitigation to climate change. Especially in the Netherlands, where the number of megacities is relatively low, the role of these middle and small municipalities is increasingly important. However, the studied City Deal primarily consists of large and medium sized municipalities. Therefore, a selection made on size of the participating municipality is of relative low importance. The complexity of this study is relatively low, considering that only one specific city network is researched, and most participants consist of municipalities. The study purpose is finding abductive explanation, which elevates the saturation threshold due to the myriad explanations required. The analyst's categorization style falls between general and specific.

Next to the factors of data saturation, the resources of the researcher must be taken into account. Time constraints and access to research participants are also factors that determine the number of interviewees. Although these factors provide a basis for establishing the saturation point, it remains

challenging to determine to estimate if the number of research participants is sufficient. Therefore, this study starts with the selection of six municipalities chosen on a diversity of size. The selection will consist of the smaller sized municipalities (<80.000), two middle sized municipalities (75.000-200.000), and two large sized municipalities (>200.000). For the last group of two large sized municipalities a selection will be made of the largest participating municipality and the smallest of the large municipalities. After contacting the facilitator of the City Deal, Platform31, they discussed the research in one of their meetings. A certain number of municipalities replied positively on participating in the research. From those has been made a selection, the selection of interviewed participants can be found in table 1. The municipality of Amsterdam has been contacted but they replied that they had a lack of knowledge on the City Deal and therefore could not participate in this research. Next to the selection of municipalities this research will also conduct an interview with the facilitative leader of the network, by interviewing a representative of Platform31 concerning the researched City Deal. If it appears in the analysis that more interviews are needed to reach the point of saturation more municipalities will be interviewed.

Research Participant	Size (rounded to 1000)
Gemeente Zeist	67.000
Gemeente Tilburg	217.000
Gemeente Breda	188.000
Gemeente Rotterdam	670.000
Gemeente Arnhem	168.000
Gemeente Roosendaal	78.000
Regio Parkstad-Limburg	257.000
Platform31	-

Table 2: Overview of the research participants (own work)

All respondents are anonymous for ethical reasons. A list of corresponding respondents to their numbers can be found at the start of the interview transcript document.

3.3 Data analysis

In conducting this research, a comprehensive and systematic data analysis was employed. The data that was retrieved by conducting semi-structured has been converted into verbatim typed transcripts. For the conversion from speech to text the possibility of uploading audio files into Microsoft Word, to let it automatically transcribe them for you, has been used for seven of the eight interviews. The last one has been automatically transcribed in the Microsoft Teams meeting. All eight automatically generated textual transcripts where then reread with the audio of the interview on and errors discovered in the transcript were changed manually. After this phase, to gain familiarity with the data, multiple readings and re-readings of the transcripts have been executed to gain a comprehensive understanding of the content. This process is critical as it forms the foundation for subsequent coding and analysis (Braun & Clarke, 2006). For coding, NVivo is utilized due to it numerous benefits. Firstly, it offers enhanced flexibility in categorizing rich text data, which subsequently improves the quality of the results. Secondly, it significantly reduces the time and effort required for manual data analysis. Additionally, NVivo aids in identifying trends and cross-examining information to uncover the most pertinent themes, thereby facilitating better conclusions (Wong, 2008). Lastly, NVivo is capable of analysing, classifying, and categorizing large volumes of data from interview transcripts, which is useful concerning the large amount of written text that had to be analysed (Welsh, 2002).

The coding structure has been derived from the operationalization of the dimensions that have been identified in literature (see section 3.5.1). All interviews are coded based upon this operationalization. In practice, some interview parts were selected for a certain code not primarily based upon the specific indicator but based on specific similar elements. This mostly include detailed rich examples that were

given by representatives. This process is of analytical nature and requires rereading, reviewing, interpreting, and summarizing the information without misrepresenting its meaning (Walliman, 2006). After the first round of coding a second round of coding was applied as a control and to look if certain difficult to code interview parts showed similarities and could be compromised into an additional code.

3.3.1 Operationalization

The themes that emerged in this qualitative research are listed below in the operationalization table (table 1). The themes are divided into dimensions and indicators, structured around the different sub-questions of this research. The contents of the table were created using the concepts in the theoretical review these represent the different dimensions on which this research analysis the impact that participating in the City Deal, as a national network, has on the member municipalities. The indicators were drafted by analysing the semi-structured interviews. They partly derive from key words found in literature and partly derive from the analysed transcripts. The indicators mentioned in the table down below are not exhaustive, often following the indicator let to part of the transcript that give additional information to the dimension that are difficult to formulate as indicator.

Corresponding question	Dimensions	Indicators
Sub-question 1: How does the City Deal support the participating municipalities? (Functions TMNs)	Access to Resources	- Resource allocation - Funding/Financial support - Resource sharing - Resource pooling - Capacity building - Technical assistance
	City Branding	- City identity - City reputation - Branding strategies - Attractiveness - Competitiveness
	Individual Networks	- Personal connections - Informal relations - Networking - Peer-to-peer support - Colleagues
	Information Sharing	- Knowledge (exchange) - Information (flow/sharing) - Best practices - Platforms - / Workshops/(digital) meetings - Communication - News/Media
	Learning and New Ideas	- Interactive sessions - Brainstorming - Learning (platform)
	Legitimacy of action/motivation	- Stronger together - Internally sharing - examples of others - In the right direction

	Lobbying/city advocacy	- Lobbying - Advocacy - Signalling - Influence	
	Policy initiative creation/goal setting and monitoring	- Co-writing - Monitoring - Initiative - (shared) Ambitions - (shared) Goals	
Sub-question 2: How does the City Deal network affect multi-level governance dynamics in participating municipalities?	Vertical dimension	- Administrative level - Upward influence - Intergovernmental relations - National-municipal collaboration - EU - National government	
	Horizontal dimension	- Networks - City-to-City - Joint initiatives - Contact with other municipalities	
Sub-question 3: How could the performance of the City Deal be improved?	Critique	- Critique - Problems - Drawbacks - Weaknesses	
	Recommendations	- Recommendations - Improvements - Advice - Future directions - Tips	

Table 3: Operationalization table for this research (own work)

3.4 Validity and reliability

Core values for robust scientific research include the sufficient presence of validity and reliability. Furthermore, it is also important for the quality of the research and the research institute on whose behalf the study is conducted to adhere to ethical guidelines.

Validity is relevant for sound research in order to demonstrate that the measurement methods align with what is being measured. The literature distinguishes between two variants of validity: internal and external validity (Bryman, 2012). Internal validity pertains to whether the researcher measures what they claim to measure in their study. Central to this is whether the researcher employs the appropriate research methods and instruments for their intended measurements. In this study, internal validity is explained through the operationalization in the same chapter and the delimitation of theoretical concepts upon which the research is based. Theory plays a central role in forming the operationalization of this study. The semi-structured interview questions are formulated based on the theory, and the results of the interviews have also been linked back to the existing theories applied in this study. Additionally, the results in this research are analysed in conjunction with the knowledge of the researched network its context by examining relevant documents of the City Deal, its website, and an evaluation document on City Deals. This contributes to the internal validity of this research.

External validity relates to the generalizability of scientific research. Achieving generalizability in qualitative scientific research is challenging due to its detailed nature and the interpretations provided by the researcher regarding certain explanations and phenomena. Carefulness and transparency are two important requirements for enhancing generalizability in the qualitative research. The choice of research location, unit of analysis, research methodology, as well as the interpretations provided in the results, are explained and described as accurately and comprehensively as possible. However, some subjectivity is inevitable due to the interpretations during the interviews. For this reason, statements in this study should be understood as statements specific to this research its case study. Nonetheless, insights from this case can be incorporated into further research as well as policy recommendations for other locations and networks.

The reliability of this research is ensured through the meticulous description of the steps taken in this study. The interview topic list is employed to ascertain that the topics researched are covered during the interview and account for procedural reliability. After this all interviews have been transcribed literally and reread to look for mistakes. The technique of coding all transcripts through the same method by making use NVivo also improves the reliability of this research. Lastly, all steps undertaken in this research are carefully described in this methodology chapter. Lastly, this study has extensively considered applicable ethical research standards. All interviewees are well-informed about the research. In cases of potential confusion regarding the interpretation of certain statements, contact has been made to obtain accurate explanations for the incorporation into the results. Additionally, it is stated that the names of interviewees will not be openly disclosed in this document. In tables and figures where the names of interviewees are included, they are omitted in the public document received by participating parties.

IV. Results

The following section presents the findings from the document analysis and interviews conducted with various municipalities regarding their participation in the City Deal. The research aimed to uncover relevant information on the Dutch energy transition and the City Deal. The interviews present results on the support that the City Deal provides to its members, the governance dynamics, and the pitfalls and ways in which the City Deal can be improved.

4.1 Context of the Energy Transition in the Netherlands

The Dutch energy transition is progressing with an increase in the share of renewable energy and a reduction in reliance on fossil fuels. In 2023, 17% of Dutch energy consumption was derived from renewable sources, up from 15% in 2022, largely due to the expanded use of wind and solar energy (CBS, 2023). The Dutch government aims to transition 1.5 million households from natural gas to sustainable alternatives by 2030, this is supported by policies such as the Climate Agreement and the Heat Transition Vision (PBL et al, 2023; Rijksoverheid, 2019).

A key challenge in this transition involves making neighbourhoods gas-free and improving home insulation, often referred to as the heat transition. The closure of the Groningen gas field has accelerated the replacement of natural gas with district heating and electricity, focusing on enhancing energy efficiency in residential areas. Municipalities are pivotal in this process, developing local strategies to phase out natural gas and implement sustainable energy solutions (PBL et al., 2023).

To facilitate these changes, several subsidies and funds have been introduced. The Sustainable Energy Production and Climate Transition (SDE++) scheme offers long-term subsidies for renewable energy production and CO2 reduction techniques (Netherlands Enterprise Agency, 2023). The Sustainable Energy Investment Subsidy (ISDE) provides partial compensation for installing devices such as heat pumps and solar boilers, promoting energy-saving measures for private homeowners and businesses (Netherlands Enterprise Agency, 2023). Additionally, The Demonstration Energy Innovation (DEI+) subsidy supports projects that contribute to energy efficiency and CO2 reduction, including initiatives to make homes and neighbourhoods gas-free (Netherlands Enterprise Agency, n.d.).

Despite these initiatives and subsidies, the National Energy Outlook indicates ongoing challenges in meeting renewable energy targets and reducing greenhouse gas emissions. Continuous and enhanced policy measures are necessary to achieve the goals set for 2030 and beyond (Rijksoverheid, 2019).

4.2 Agenda Stad and City Deals as Tools

City Deals are part of the Agenda Stad program under the Ministry of the Interior and Kingdom Relations (BZK). Established in 2015, Agenda Stad aimed to capitalize on the population growth in Dutch cities to foster economic development, recognizing the underutilization of this potential (Strik et al., 2019). A key principle of Agenda Stad is that cities can effectively contribute to transitions in the field of economy, innovation, and liveability. Simultaneously, the national government is positioned to facilitate these contributions by establishing the necessary legal, financial, and administrative frameworks and granting cities the flexibility they require. Agenda Stad's objective is to expedite transitions in these domains. Achieving this entails dismantling obstacles rooted in current relationships, practices, laws and regulations, fostering new opportunities, empowering innovators, motivating organizations to transcend their individual interests, and creating experimental environments where conventional rules can be bypassed, and novel ideas explored. The program sought to consolidate urban knowledge, identify challenges, and devise solutions to overcome these

obstacles (Hamers et al., 2017; Denktank Agenda Stad, 2015; Ministry of BZK, 2016; Ministry of BZK, EZ & IenM, 2015).

City Deals differ by focusing on activating local networks and creating room for innovation through targeted coalitions, often consisting of frontrunners on a specific City Deal theme, rather than broad sectoral agreements (Scherpenisse et al., 2017). The goal of the City Deals is to drive innovation in societal issues and local transformation challenges (Haer & Kroesbergen, 2022). The challenge is the focal point, the approach is tailored accordingly. City Deals provide the flexibility for this by enabling collaboration within networks both horizontally (e.g., between cities), vertically (e.g., between municipalities and the national government), and cross-sectoral (across policy domains). (Hamers et al., 2017) City Deal are in progress and participants are currently gaining experience with this novel way of working, which is inherently a learning process. It is not a case of simply applying a policy instrument and directly measuring its effects. Each Deal appears similar in nature, despite the difference in specific thematic focus, with cities committed to a certain social transition forming agreements with the national government and other member municipalities. However, the practical implementation and management of these Deals cannot be defined uniformly (Scherpenisse et al., 2017). The agreement is formed by signing the deal text, the covenant, which formalizes the commitment and ambition of the parties involved. However, the collaboration process to achieve goals is not rigidly defined, allowing actors time and flexibility to develop their own approach (Scherpenisse et al., 2017).

Since the start in 2015 over 30 City Deals have been formed on a variety of topics, such as mobility, climate adaptation, crime, and energy transition. The results will now transition into the results for the City Deal case studied in this research by first describing this City Deal.

4.3 City Deal Energieke Wijken

The results on the objectives, working methods, and composition of the City Deal Energieke Wijken arise from an analysis of the Deal Text of this City Deal. This Deal Text is the starting document that all participating parties have signed (Agenda Stad, n.d.).

The City Deal Energieke Wijken primarily focuses on integrating the energy transition with social challenges and improving the liveability of vulnerable neighbourhoods. The goals and workflow of this City Deal are pivotal in understanding its impact and implementation.

The primary goals of the City Deal include developing and experimenting with innovative linkages between the energy transition, social challenges, and liveability in vulnerable areas. This involves creating new approaches that directly benefit both the energy transition and the residents in these neighbourhoods. Additionally, the City Deal aims to identify and resolve existing barriers within policies and regulations that hinder these innovative approaches. Another significant goal is the formation of smart coalitions among the involved parties, fostering a collaborative environment where experiences and ideas can be shared, and innovations can be scaled up and applied in other regions.

The workflow of the City Deal is structured around specific work lines that integrate and enhance efforts in both energy transition and social improvement. The first work line focuses on creating opportunities for vulnerable households, engaging residents in the energy transition process by addressing social issues such as safety, loneliness, and financial difficulties, thereby creating cognitive space and encouraging participation in the transition. The second work line leverages the energy transition to create job opportunities, particularly for youth and individuals in vulnerable positions, by aligning education and training programs with the needs of the energy sector. Supporting private homeowners is the focus of the third work line, which involves developing mechanisms to assist private homeowners, especially those with limited financial resources, in participating in the energy transition through financial arrangements and reducing administrative burdens. The fourth work line uses the energy transition as an opportunity to enhance public spaces, aiming to make them greener,

safer, and more conducive to community interaction and physical activities. Overall, these work lines create a comprehensive approach to addressing immediate energy and social challenges while setting the groundwork for sustained improvements in urban liveability and resilience.

4.3.1 Governance of the City Deal Energieke Wijken

The governance structure of the City Deal is characterized by a multi-level approach, involving local, regional, and national government bodies in a coordinated effort to align with the overarching goals of the Dutch energy transition and to translate national objectives into effective local strategies.

4.3.1.1 Partnerships and Duration

Currently, The City Deal Energieke Wijken comprises fourteen partners, including ministries, municipalities, housing corporations, knowledge institutions, and private entities. The collaboration commenced in 2021 and will continue until at least March 2024. However, at the moment of conducting this research, in late spring 2024, the City Deal is still continuing for an undetermined period of time. The municipalities participating in this City Deal are Rotterdam, Amsterdam, Arnhem, Breda, Groningen, Utrecht, Zeist, Tilburg, Roosendaal, and regional cooperation Parkstad-Limburg. They are joined by the ministries of the Interior and Kingdom Relations (BZK), in specific the by the National Program Leefbaarheid en Veiligheid and the National Program Lokale Warmtetransitie, the ministry of Social Affairs and Employment (SZW). In addition to the ministries and municipalities, Platform31 as external organisational party and housing corporations Wonen Limburg, and Tiwo are also part of this City Deal collaboration, of which the latter two in a different position because they are not full, paying, members. The municipalities of 's Hertogenbosch, Weert, and Nijmegen ended their participation on the 1st of April 2024.

One distinctive aspect of the City Deal is its open nature, allowing other municipalities to participate if they commit to the criteria of endorsing the City Deal's goals and investing time and resources into the initiative as described in the Deal Text that they have to sign.

4.3.2.1. Governance Structure

The governance structure of the City Deal as presented in the Deal Text includes several key components that facilitate both horizontal and vertical coordination. These include:

1. **Project Leader and Secretary:** Responsible for overall coordination, fostering connections among involved parties, develop work plans, communication plans, and budgets.
2. **Steering Group:** comprised of directors-general from the national government, mayors or aldermen from local governments, and executives from other involved organizations. This group meets biannually to review the City Deal's progress, open new opportunities, and make key decisions to steer the initiative towards its goals.
3. **Core Group:** A smaller, flexible group of representatives from the most involved parties, plays a pivotal role in the day-to-day management of the City Deal. This smaller, flexible group prepares decisions, oversees the execution of tasks, and ensures that milestones and goals are met. The core group organizes several exchange meetings annually, inviting all parties to share insights, discuss progress, and collaboratively resolve issues.
4. **Coalition Meetings:** Regular meetings where all participating organizations share insights, progress, and address challenges collectively.
5. **Ambassadors:** Experts who provide critical feedback and help refine the approaches and innovations within the City Deal

The research focused primarily on the components of the project leader, the core group, and the coalition meetings. There has been no information provided during the interviews on the steering group and ambassadors. The core group consist out of the platform31 orchestrator, a representative from BZK, and the municipalities of Arnhem, Rotterdam, Tilburg, and Groningen.

4.4 Functions provided by the City Deal "Energieke Wijken"

This section examines the sub-question: How does the City Deal network support the participation municipalities? The City Deal Energieke Wijken has provided a framework to support members in their efforts to advance the energy transition, particularly focused on vulnerable neighbourhoods. The results concerning these functions are structured based on the functions of the City Deal as described in the Deal Text and supported by results from the interviews held with the municipal respondents and the respondent of Platform31.

4.3.1 Promotion of Linkages Between the Spatial-Economic and Social Domain

The first function is the promotion of innovative linkages between energy transition initiatives and social challenges within vulnerable neighbourhoods. By integrating these aspects, the City Deal did not only aim to enhance environmental sustainability but also thrives to create socio-economic benefits for inhabitants. This approach stimulates member municipalities to look beyond traditional municipal silos and explore synergies that can lead to comprehensive community improvement.

Respondents highlighted the linkage between the energy transition initiatives in their municipality and social challenges frequently. The cross-departmental nature of the City Deal was seen by member municipalities. They stated that the energy transition is not mere a physical/environmental challenge but also has clear social components. In this regard, energy poverty was named frequently, for instance by respondent 2: "*There is movement at the management level towards forming more integrated teams between the social and physical domains on specific themes. That could also be beneficial. For example, for energy poverty and the sustainability of vulnerable neighbourhoods.*" In the majority of participating municipalities, the energy transition and its potentially related social components remained segregated into distinct spatial-economic and social domains. Employees from both departments remained physically and mentally distant from one another. Respondents indicated that the City Deal has actively contributed to overcoming obstacles preventing the collaboration of both domains. Participating municipalities reported that the City Deal has increased awareness of linking these departments, primarily by requesting to member municipalities to involve employees from the social domain in workshops and meetings organized by the City Deal. There have been specific workshops, or workshops that also focused on the issue of how the two domains can be better interconnected. During these meetings, a platform was provided for participating municipalities that had already gained experience in this area, enabling them to share their insights with other partner municipalities in the City Deal.

> Those involved in the City Deal are all from the energy side, let us say the sustainability side of the municipality. And, they all realized, yes, we need to include our colleagues from the other side. We organized a number of those meetings in Zeist and Rotterdam and here in Arnhem. And here in Arnhem, for example, we invited many colleagues from the social domain or from the neighbourhoods to get acquainted with what other municipalities are doing." (Respondent 4)

4.3.2 A Dynamic Learning Environment

In addition to fostering innovative linkages, the City Deal established a dynamic learning environment where member municipalities can exchange experiences, insights, and innovative practices. This function enabled municipalities to learn from each other's success and challenges. By sharing knowledge and best-practices, participants have refined their approaches and incorporate proven methods to their own contexts.

Respondents regularly referred to the City Deal as being a platform. This platform primarily manifested as a place where municipalities with similar challenges could connect and engage. This was mainly facilitated through the workshops and meetings that have been held. Participating municipalities indicated that these gatherings were educational in nature. This because frontrunner municipalities on specific issues took the lead during the workshops, and the participating municipalities were, among other activities, taken into the neighbourhood and project areas to gain a comprehensive understanding of their approach to the specific issue.

The City Deal created a platform that enabled municipalities to share best-practices, learn from others' successes and challenges, and collaboratively develop solutions to common problems. For instance, respondent 5 noted, *"Learning from other municipalities allows us to apply their insights, which in turn accelerates our own progress."* The interactive nature of the workshops facilitated brainstorming and the generation of new ideas. An example from respondent 1 highlighted the value of interactive workshops:

> It was specifically about a neighbourhood-focused approach hosted by Berenschot. We were divided into groups to discuss various issues, look at the current status of each municipality, what they had done with the funds from the national government, the obstacles they had encountered, and their successes. It was very much about sharing and interaction. (Respondent 1)

Respondents further indicated a willingness to learn from one another. They noted that sharing the same vision and working on similar challenges increased their desire to learn from each other. *"That is because we have noticed that we collaborate with organizations that have similar questions and challenges... Yes, there are a few municipalities that are less active... We have the same vision, the same dream, you could say."* (Respondent 4). The participating municipalities frequently referred to a dynamic of exchange, involving the sharing and receiving of knowledge, experiences, and best-practices. During the interviews it was noted that smaller participating municipalities often felt they were primarily on the receiving end. However, respondent 1 among others, mentioned that they also contributed, while larger municipalities like Rotterdam perceived themselves as being more on the giving end. This perception, according to representative 5, is due to their role as a frontrunner in many areas, which is attributed to the greater municipal capacity.

Finally, not all experiences were positive. Respondent 3 expressed dissatisfaction.

> The first time in Utrecht, I felt like I could have just stayed home because no new information was presented. Despite being relatively new, the only benefit was networking and hearing about other municipalities' challenges. But content-wise, I did not gain any additional insights, making it less relevant. (Respondent 3)

4.3.3 Encouraging and Facilitating Experiments and Projects

In relation with the creating of a learning environment a following function derived from the starting document of the City Deal. This is the encouragement and facilitation of concrete experiments and projects.

It first must be stated that the City Deal itself does not create or co-creates experiments and projects. However, by providing a platform where municipalities and other partners can connect, new projects and experiments are shared. As previously mentioned, the City Deal consists of frontrunners within the physical-social approach of the local energy transition. Several participating municipalities are conducting unique experiments and have initiated new projects that they share within the network. This sharing primarily occurs during the workshops and meetings, as well as through contact within

the core-team. Municipalities collaborate particularly along the four work lines established within the City Deal. Along these lines, workshops have been organised a few times a year. Allowing municipalities connected by these themes to exchange knowledge and insights on their experiments and projects.

Examples of experiments and projects shared within the City Deal include: opportunities for integration of the physical-economic domain and the social domain and methods for overcoming obstacles and setting up cross-domain work experiments, engaging local residents in the energy transition by providing education to individuals with distance to the labour market to become energy coaches, promoting sustainability in small homeowner associations (VvE's), and experimenting with geothermal energy. The large number of experiments and projects shared by respondents in the interviews showed that the promotion of their experiments and projects is an important part of the City Deal. Respondents stated that experiences of frontrunner experiments are much appreciated and that other member municipalities were actively integrating these experiments into their own municipality. This sharing of these experiments is exemplified by respondent 6:

> We have experimented with that, and we share those experiences. In my opinion, with those other municipalities, you should give back at a slightly higher level. Not just by having people join the neighbourhood visit by chance, but in a way that all municipalities can benefit from. (Respondent 6)

And the incorporation of insights from other member municipalities their experiments and projects is, among others, illustrated by respondent 4: *"We are still somewhat behind in our approach to homeowners' associations compared to cities like Amsterdam, Rotterdam, and Tilburg, but we are also leveraging their knowledge to improve our own approach"*.

In relation to this, respondents highlighted the importance of legitimizing their actions through the input they received from the City Deal. This legitimacy helped municipalities to reinforce their policies and make informed decisions. Respondent 2 noted the value of referencing similar municipalities working on similar initiatives:

> It was very helpful if you could refer to similar municipalities, partner municipalities, that are also working on it and approaching it in a certain way. That actually strengthens your story, reinforces it, and makes it easier to decide whether to go left or right. (Respondent 2)

4.3.4 Navigating Regulatory and Policy Landscapes

Support in navigating regulatory and policy landscapes is another function provided by the City Deal. National authorities (primarily the Ministry of the Interior and Kingdom Relations, BZK) collaborate with local participants to identify and address regulatory obstacles that could hinder the progress of local initiatives.

Member municipalities addressed that a significant part of the City Deal's functions for them involves increasing knowledge about relevant laws and regulations and addressing problems encountered with certain laws and regulations. "*Laws and regulations, certainly. I mean, attention is definitely given to identifying where you encounter obstacles in laws and regulations*" (Respondent 1). "*Changes in legislation and regulations, changes in subsidies, new legislation and regulations, new subsidies, and monitoring advice. I see added value in that for the City Deal*" (Respondent 3). By sharing knowledge between member municipalities and by the City Deal providing knowledge that derives from the national government the navigating through regulatory and policy landscapes was seen.

This navigating was also seen the other way around, in which member municipalities addressed issues concerning laws, regulations, and subsidies to the national government. Member municipalities saw

this as ´signalling and putting on the agenda´. The City Deal network provided the connections with and entries to contact the right people on higher administrative levels to address certain issues, which gave member municipalities the opportunity to collectively raise their voice. *"So, we always try to think, if we want to get something done, can we take that step with a larger group? Because then yes, you will be listened to much more"* (Respondent 5). An example that was given numerous times by most of the respondents was that of the ISDE-subsidy. In short, municipalities could get a subsidy that they could hand out to private homeowners after they had made their home more energy sustainable. However, this led to the problem that they could not provide private homeowners the certainty about the provision of the subsidy. The City Deal municipalities indicated that they preferred to receive the subsidy in advance. Together they pointed this out and placed this on the agenda of the ministry concerned with this subsidy (BZK).

4.3.5 Financial and In-Kind Contributions

The document analysis of the Deal Text shows that the City Deal and its members contribute to the network both in kind and financially. Additionally, there is a call for al parties jointly organize extra funding for specific components or projects when necessary and seize opportunities by jointly applying for (European) subsidies.

In the interviews, respondents from the member municipalities stated that the participation in the City Deal has not led to gaining additional funding or subsidies. To the contrary, to become part of the City Deal, municipalities must pay an annual contribution of ten thousand euros. Furthermore, there were no examples given that the City Deal networks has submitted any joined subsidy applications, nor that individual member municipalities joint forces in attracting additional funding. Multiple respondents indicated that this was not a function of the City Deal. Respondent 4 replied that they already had enough financial resources, and that for them it was about the provision of knowledge as a resource.

> Well, to be honest, no. Look, it is not that the City Deal has ensured that the department I work in, sustainability, received more resources for the energy transition. That is not the case, as we already have more than enough resources. What it has led to is that the tasks we are working on are becoming more effective, right? (Respondent 4)

Regarding in-kind contributions within the City Deal, there has no evidence been found of labour sharing, collaborative drafting of policy documents and initiatives, or the further development of implementation strategies for other participating municipalities. Respondent 8 commented: *"It was never the intention for the national government or the City Deal to provide direct hands-on assistance in the municipality.".* Member municipalities themselves also did not partake in cross-municipal working.

However, the municipal respondents did mention that participation in the City Deal has led to the accessibility of additional knowledge and information. The City Deal actively gathered knowledge and information from participating municipalities to disseminate within the network. Additionally, Platform31 created reports of workshops and other meeting, which were shared with participants. This dissemination of documents primarily occurred through a restricted section of the City Deal website and via email. Municipalities individually also shared documents, practices, and other forms of relevant knowledge and information with partner municipalities. However, this sharing mainly occurred based on individual efforts and within the establishment of individual networks within the City Deal.

4.3.6 An Open Network

Interviews with respondents clearly indicated that the City Deal network is characterized as an open network. Earlier in this result chapter, it was noted that respondents perceive the network as a

platform. Creating a space for the open sharing of information and knowledge and a space for meeting colleagues from different municipalities to build closer relationships.

The open sharing of information is one of the most valued benefits for all participating municipalities. The availability of knowledge within the networks is a primary reason municipalities join the City Deal. During its establishment, the City Deal identified knowledge gaps in workflows and projects. Municipalities reported that they often lacked in-house expertise and experience on specific practical challenges such as challenges with diverse property types, engaging with residents, and coordinating with municipal employees from different domains. The City Deal addressed these gaps by identifying frontrunner municipalities that had experience in dealing with these specific issues. The frontrunners shared their information and knowledge on working with these issues through workshops, reports, and meeting organised by the City Deal.

> You have the existing work lines where everyone contributes their knowledge and skills. But what the City Deal does is delve into specific issues, leveraging frontrunners who can share what works and what does not, guiding us on the right path. (Respondent 2)

Member municipalities that are part of the core-team often acted as frontrunners in the network, these are municipalities with higher municipal capacities that have more than one employee connected to the City Deal. They often contributed more than that they received from other, smaller, participating municipalities. However, these larger municipalities also ended up on the receiving part in their collaboration with the other core-team municipalities or with their contacts in the City Deal with higher administrative levels. Nevertheless, not all members were equally active in this open network, leading to uneven distribution of information and knowledge as respondent 4 stated: *"But you do see that some partners had hardly any input. Yes, they would sometimes get a call from … (orchestrators). But then, you know, what is that anyway? Are you still participating or not, right? So that's it."*

Furthermore, respondents stated that other information, besides more practical project related information consists of the sharing of new laws and regulations (as mentioned 4.3.4) *"I mean, if there is a new law coming out, or if there is a new regulation comping up, or whatever. it is shared. Often also at an early stage"* (Respondent 1), documents and reports, related news, events and workshops of third parties on related topics, and the contact information of members in the network.

By organizing numerous workshops, (core-team) meetings, and by freely sharing the contact information of participating partners, municipalities involved in the City Deal were enabled to establish relations with other municipalities within the network. These connections occurred in particular with those facing similar contexts or specific challenges. Respondents noted that while their primary contacts were within their own municipality, they were all well aware of the experiences, expertise and challenges of other member cities. *"I also think about the collaboration with Breda. As Tilburg, we work quite a lot with Breda. We exchange valuable experiences between the different municipalities about what is going well and what isn't."* (Respondent 5). Informal interactions, such as dinners and drinks during workshops, were particularly valued for building personal connections. *"It is fantastic to be part of a substantial program. In the evenings, we have dinner together and share a beer. A tremendous amount of knowledge is exchanged during these moments, and you work on the network, which is very valuable."* (Respondent 6).

In most municipalities respondents stated that these individual relations were important for the sharing of information. However, some respondents noted limited interaction due to time and capacity constraints. For example, respondent 1 illustrated this:

> But they are minimal for me, purely due to time constraints. I mean, I would have liked to engage more, but at some point, you have to make choices and do what you can at the moment. But I am convinced that those who are in the core group are much more intensely involved, and it goes beyond just meeting occasionally, I think. (Respondent 1)

Respondent 1 mentioned here that partners of the core-team are more involved and have closer bonds to other member municipalities. This was indeed seen. Core-team municipalities addressed more often their specific ties with another member municipality based around a shared challenge. Nevertheless, also smaller municipalities and non-core-team municipalities addressed the supporting function of providing opportunities for individual networks. Respondent 3 gave a practical application of this:

> So, I eventually looked at the participant list. Okay, who did I speak with again? Then I contacted him about that topic. This way, I find it really useful because it expands your network and makes it easier to access information without having to send an email to a standard mailbox. (Respondent 3)

4.4 Diverse Interactions in the City Deal.

The results in this section are presented briefly. A significant portion of the interactions with various actors in the City Deal has already been described in the previous results chapter (4.1). The specific focus of this section is on the interactions of participating municipalities with other actors. The first section focuses on to interactions between cities in the City Deal. The second section focuses on the interaction between member municipalities and higher administrative level. Finally, the third section will focus on the interaction within the member municipalities their different domains.

4.4.1 City-to-City Contact

Throughout the City Deal, municipalities have engaged with member cities in extensive peer-to-peer learning, shared best practices, and coordinated joint efforts in putting shared problems on the agenda of higher governmental levels. The respondents emphasized the role of regular meetings and exchanges between municipalities. These gatherings, held approximately once every four months, provided a platform for cities to discuss various topics and share their experiences and strategies. *"The most effective aspect of the City Deal is the meetings. So, the fact that you occasionally go somewhere, about twice a year or so, to another city and then discuss certain topics."* (Respondent 4). The results from the interviews showed that in several instances, these meetings have led to closer contact between municipalities and have stimulated further collaboration among participating municipalities. Furthermore, several municipalities indicate that participation in the City Deal facilitates easier contact and navigation in finding other municipalities to obtain specific knowledge and information, as respondents 4 and 3 illustrated; *"I just send an email to all participants of the City Deal. 'Hello! Are there any municipalities also working with private landlords?' It turned out that several of them were."* (Respondent 4), and; *"So yes, I eventually looked at the participant list. Okay, who have I spoken with again? Then I contacted him."* (Respondent 3).

However, a notable observation made by respondent 4 was about the inherent isolation in which municipalities in the Netherlands operate.

> My experience is that municipalities do not actually collaborate. The fact is, in the Netherlands, municipalities do not work together. Each municipality operates independently with its own administration and direction. We barely collaborate, even with our neighbouring municipalities. (Respondent 4)

On the other hand, multiple respondents indicated that city networks and other forms of city collaborations, like the City Deal, have long been a part of the interactions that participants have outside their own municipalities. As showed by respondent 3 and 5. *"Those partnerships already existed. I think I have just joined multiple partnerships myself."* (Respondent 3)*."As Tilburg, and like many of the other municipalities, we are part of the City Deal and we are also members of the G40, a collaborative partnership."* (Respondent 5). Partnerships such as the G40 (40 largest Dutch

municipalities), as well as the G4 (four largest municipalities) were among the various collaborations and city networks mentioned by respondents that exist alongside the City Deal. It is noteworthy that larger participating municipalities were mentioning other municipal collaborations more often than smaller participating municipalities.

Lastly, it was addressed by respondent 3 that interactions with other municipalities can become overwhelming, which may jeopardize the relevance of various collaborative partnerships. This is especially the case when there are insufficient resources to invest time in all the different partnerships in which a municipality is involved. *"I think the relevance is there, but... we are somewhat tired of collaborative partnerships. Speaking for myself when I look at my schedule..."* (Respondent 3).

4.4.2 Relations with Higher Administrative Levels

Respondents frequently highlighted the strong relations towards the national government provided by the City Deal. In particular the contact with the Dutch ministry of the Interior and Kingdom Relations (BZK) was addressed. This focus is unsurprising given that the supporting frameworks for the City Deal Energieke Wijken, include the national programs Agenda Stad, Aardgasvrije Wijken, and Liveability and Safety, as well as the Housing Fund. These programs illustrate the network's close relationship with the national government, which was a critical factor for many municipalities' participation in the network. For example, respondent 6 addressed challenges in making small homeowners associations more sustainable: "*The person responsible for the VvE (Owners' Association) used to be someone at the national government*" (Respondent 6).

Initially, the tight connections between the City Deal and the national government were not always the focal point of the city network. As respondent 6 noted: *"In the beginning, in my opinion, there was too much emphasis on the network and too little on the connection with the ministry or national government and the municipality."* (Respondent 6). Despite this initial focus on the local network, the relevance of connections with BZK and other national ministries became increasingly apparent during the research. Municipalities often encountered problems related to laws, regulations, and funding possibilities that where poorly understood by 'The Hague' i.e. the national government. Collaborative efforts within the City Deal often necessitated change in laws and regulation. One respondent expressed this sentiment:

> What I still feel is that many schemes are devised in The Hague, and only afterwards do they look at them within the City Deal to see how they can be improved. It would be so much better if we could be more prominently involved in setting up schemes from the start. (Respondent 2).

This perspective highlights the importance of involving municipalities early in the policy-making process to ensure that schemes are practical and effective from the outset. Respondent 4 further illustrated this point by the bureaucratic challenges faced by municipalities due to national regulations: "*The main reason is the assumption that there are laws, legal issues, or regulations set by the national government that hinder us in implementation. These regulations often hinder our vision."* (Respondent 4).

The City Deals, initiated by BZK, reflects a concerted effort address sustainability challenges collaboratively: "*The City Deal is of course started by BZK. It's no coincidence, because BZK also sees the need for sustainable development."* (Respondent 1). Additionally, the City Deal facilitated contact between municipalities and BZK (and other less prominent ministries) policymakers. With the exception of the municipality of respondent 6, other municipalities indicated that getting in touch with

the national government was complicated due to a lack of direct contact and the difficulty of determining the appropriate department or person to approach. Rotterdam, as a larger participating municipality, noted that the G4 partnership in particular already facilitated direct lines of communication with the national government.

Lastly, this research also looked at the interactions with the EU, and EU policies and schemes. However, this was not mentioned by member municipalities in regard to the City Deal. The orchestrator of the City Deal from Platform31 confirmed that the City Deal is not connected to European programs and funding streams. It was stated by the respondent from Platform31 that member municipalities did participate in European programs or networks but that this was not related to the City Deal

4.4.3 Cross-Domain Interactions in Member Municipalities

The City Deal addresses the energy transition as not merely a spatial/sustainability transition, but also as a social transition. In each participating municipality, spatial and social issues are separated into different domains. The most common division among member municipalities is between the physical-spatial domain and the social domain. Often, these departments are further subdivided into smaller segments that focus on specific themes. In several member municipalities, the respondent concerned with the energy transition was placed within the sustainability department that falls under the physical-spatial domain. The City Deal plays a role in connecting these two domains, particularly through projects addressing energy poverty. Municipalities reported that they increasingly engaging with staff from the social domain and, following the City Deal's recommendations, are bringing employees from the social domain to City Deal workshops. Respondents indicated that colleagues from the social domain are positive about cross-domain collaboration on such initiatives: "*But that has almost never happened, I think, that these two domains suddenly have cross-connections. Suddenly, they are explicitly seeking each other out, and we also see that people from the social domain are really happy.*" (Respondent 2).

However, interviews with municipal respondents highlighted obstacles in cross-domain collaborations between the spatial and social domains. *"However, I do notice that as soon as I have to work more within the social domain... I get stuck."* (Respondent 3). Respondent 5 pointed out: *"Then you would think it should be straightforward to communicate with each other. But I found out that the social domain is organized quite differently, with all sorts of earmarked funds and separate accounts."* (Respondent 5). This is further illustrated by the fact that employees tend to think from the perspective of their own departments and are focused on their own projects and objectives. *"But in practice, this turns out to be very difficult because you are so entrenched in your own world with your own objectives that you are already committed to."* (Respondent 6). So, for respondents in the City Deal the integration of the two domains was more challenging than initially assumed: *"It was not as easy as I initially thought, but it was also a good learning point to understand what is and isn't possible."* (Respondent 5).

Furthermore, the nature of these cross-domain collaborations was often temporary and project-specific. As respondent 5 described:

> We meet briefly in a project to see what we can do together, then we go our separate ways. It is like kisses at the project level, but a real marriage, a comprehensive plan to roll out across the whole municipality—that is not happening. (Respondent 5)

4.5 Recommendations and Critique

The third sub-question is on how the City Deal can be improved. An important aspect of this sub-question is derived from the contact that was made in an early stage with the orchestrators of the City Deal. They had a specific request for this research, focusing on how results from the City Deal could be safeguarded. Therefore, this section focuses on the recommendations and critiques on the City Deal, with a specific focus on the safeguarding of the results from the City Deal.

First, the critique, for some member municipalities the goal of the City Deal and the unique character of the City Deal were quite vague and therefore they did not feel a strong connection to the City Deal. One respondent said: "*Perhaps additional communication about what exactly the goal of the City Deal is.*" (Respondent 3). This critique was mostly heard from smaller municipalities and municipalities that did not take part in the core team. Related to this was the mentioning that not all partners have always been equally involved. "*So, it the case that for some themes, only a few parties were present, wile the overall City Deal is much larger*" (Respondent 4). The exploration and startup phases took a relatively long time, and at a late-stage questions about the end goal of this City Deal and how results will be ensured for the future will be answered. Further was mentioned that results and lessons from the City Deal were not well documented and that improvements in this regard could be made to safeguard results and knowledge in the City Deal. "*I don't have the impression that lessons from the City Deal are really formulated and written down very precisely*" (Respondent 5). Multiple respondents stated that it was up to the municipality themselves to find out what they can do with the acquired knowledge.

Recommendations that have been made by member municipalities often connected to the critique that was given. Respondents talked about better communicating goals and relevance of the City Deal for their municipality, more workshops and meetings, and one of the most rooted recommendations can be linked to the challenge of guaranteeing the results and knowledge collected within the City Deal. The respondent from municipality 5 for instance, addressed this by recommending that one of the end goals should be to create guidelines and 'packages´.

> Well, we set up a kind of guideline to ensure that… and that is somewhat the end result: these are the lessons we have learned from different municipalities… These are the different choices we have, their pros and cons, you can choose, but these are the options. (Respondent 5)

This is a common recommendation made by respondents and where they see added value for the City Deal.

Recommendations by the City Deal to the member municipalities have also been made. The primary recommendation is the importance of active participation in the City Deal. Participants noted the value of sharing insights gained from the City Deal beyond the immediate attendees to involve a broader range of colleagues. Active participation by the member municipality has influenced fostering a positive response and greater involvement of municipal staff.

> We have now organised several meetings in municipalities, such as in Groningen, Arnhem, and Breda, where many colleagues from those municipalities attended. They were all really enthusiastic about such a meeting. So, just make sure that what you learn in the City Deal is also carried forward within the municipality. Only then can it have value and truly impact what you do (Respondent 8)

Finaly, this research addressed the challenge of making sure that results are safeguarded for the future. As mentioned previously the City Deal and its members are currently in the process of finalizing on how knowledge and experiences in the City Deal can be ensured for the future. Components have already been mentioned in the criticism and recommendations earlier in this paragraph. But the main findings in this regard are that member municipalities are ensuring results from the City Deal by implementing those and experimenting with these in their own municipalities. However, this is not formalized, and it remains often unclear what the specific contribution of the City Deal is in this regard. Municipalities stated that they would like to see clear end-goals and are looking into producing guidelines and other practical and insightful documents that reflect the lessons learned in the City Deal.

V. Discussion

In the following sub-sections, the results of this study will be discussed in relation to the literature framework that was build around the TMNs functions and key theoretical concepts, as presented in the literature review. The different functions of TMNs will be discussed to what degree it increases the effectiveness of municipal energy governance of the City Deal member municipalities. Following this, the research will discuss how membership of the City Deal

5.1 TMN Functions and Support in the City Deal

In the results chapter, the supporting functions of the City Deal network are described. The literature review on Transnational Municipal Networks (TMNs) and their functions provides a framework to examine the extent to which functions perceived by participating municipalities can be linked to the framework of Heikkinen (2022). Therefore, this chapter begins with an interpretation of the functions from the City Deal in light of the TMNs functions framework.

5.1.1 Function 1: Information Sharing

One of the most highlighted functions of the City Deal is facilitating the sharing of information among participating municipalities. This has not been seen as surprising since previous studies already reported that the sharing of information is an important function in city networks and TMN (Heikkinen, 2022; Busch et al., 2018; Mocca, 2018; Papin et al., 2020). The information shared in the City Deal included the dissemination of knowledge, best practices, new laws, regulations, and other relevant updates. Workshops and meetings have been organized to allow participants to discuss specific topics, share experiences, and address practical challenges. This function is crucial for municipalities to access expertise they lack and to learn from the successes and failures of others.

In the literature the role of network coordinators in managing or steering information is underexplored, which could influence the equitable distribution of knowledge (Keiner & Kim, 2007). This study showed that the equal distribution of information is difficult. Not all member municipalities were equally active and engaged with the City Deal. This study found a difference in the distribution of information to actively engaged municipalities, most often part of the core-team, and less active or new member municipalities. The City Deal coordinator did actively try to extract information from and send information to every member municipality. However, the observed differences in contacts and familiarity with participating municipalities and their projects indicated that the distribution of information is not entirely equal. This observation fits with the result of Kern and Bulkeley (2009). In which they found that most active core members of TMNs are often the founding members or those who join in an early stage, while cities joining later adopt more passive roles.

Finally, it remained complex throughout this research to separate the sharing of information and learning from this information. The framework provides little points of reference to clearly distinguish between the two. Furthermore, it can be noted that respondents often said they have learned from other because it sounded more desirable, while in fact, it only amounted to receiving information from others. This corresponds to the result of Haupt et al. (2019), that networking is often limited to the sharing of information that cannot be considered actual learning.

5.1.2 Function 2: Learning and New Ideas

Bridging from the first function of TMN to the second function in the framework, the learning and creation of new ideas. The City Deal promotes learning and the generation of new ideas as mentioned by almost all respondents. Municipalities engage in sharing best practices and collaboratively developing solutions to common issues. Interactive workshops and group sessions are key in this process, allowing members to brainstorm and exchange innovative ideas. This function helps municipalities to apply new insights effectively and improve their own practices. Examples of this were given by respondents of municipalities, in which they explained how acquiring knowledge and

insight information on other municipalities their experiments helped them in improving or laying out new experiments themselves.

However, it must be noted that the studies of Haupt et al. (2019), Stead (2012), and Nagorny-Koring (2018) showed that the sharing of best-practices hardly resulted in city-to-city learning and mostly sticked to raising awareness or giving inspiration. They are sceptical about the applicability potential of best practices. Furthermore, as mentioned under function one, the distinction between the sharing of knowledge and actual learning can be fluid and differentiating is not always possible. Haupt et al. (2019) does highlight that learning visits organized by TMN could initiate a collective learning process. These learning visits were also brought forward in the City Deal and were much appreciated by the members.

Lastly, this research and the research of Haupt et al. (2019) showed that attention in city networks tend to focus on pioneering or frontrunner cities and learning of their experiences, this is often done uncritically. The danger in this lies in that other members might not have the appropriate capacity and resources to follow their example.

5.1.3 Function 3: Individual Networks

The creation of individual networks is another important function of the City Deal and mentioned by multiple respondents in the interviews. Personal connections have been formed in the network, although primarily between core-member municipalities. Informal interactions during workshops and meetings helped build these networks, which are essential for ongoing collaboration and support among municipalities facing similar challenges. It was evident in this research that individual networks arise between municipalities within similar context and projects. This research therefore suggests that when information sharing becomes true learning individual networks will be formed. This thus stresses the individual. Heikkinen (2022) mentioned in his research that formalised networks are networks of individuals and that personal connections seem to affect the usage of the network. This research supports that result. Individual efforts and the connections between individuals in a network relate to the outcomes for member municipalities in the network. This further aligns with the following statement by Haupt et al. (2019): *"ultimately, the social and personal skills of the involved stakeholders will determine the success and evolution of City-to-City learning. Essentially, being a TMN-member is not per se beneficial for a city. It is rather about who is chosen to represent a city."*

5.1.4 Function 4: Accessibility to Resources

The City Deal has provided access to various resources, though not necessarily financial. Furthermore, direct funding or workforce assistance and assistant in policy writing was not offered. However, the network enhanced the availability of knowledge and information. Similar to this result Papin (2020) found that TMN mainly enabled information sharing and establishing norms, direct action in the form of funding or providing tailored-made solutions or policies was an almost non-existing feature. There has been found evidence in previous studies that networks offered direct support in the form of financial resources or tailor-made solutions (Heikkinen, 2022; Heikkinen 2018; Karhinen et al., 2021) Heikkinen stated that there possibly must be made a distinguish between networks that provide a platform and networks that aim for a more direct impact, this separation is made by Nielsen & Papin (2020) (Heikkinen, 2022). In relation to this, respondents addressed to the City Deal numerous times as being a platform for municipalities to primarily share knowledge and learn from each other. This corresponds with the division suggested by Heikkinen (2022) and Niels and Papin (2020), that networks as platforms often do not support by providing financial resources and tailored-made solutions and policies.

5.1.5 Function 5: Lobbying and Advocacy

Lobbying and advocacy by TMNs or city networks on higher levels of governance such as the national government or the EU has been underscored as one of the most important functions of these networks in various research. Therefore, it has been one of the key functions in previous frameworks of TMN (Bulkeley et al., 2003; Busch, 2015; Heikkinen, 2022). Only contrary to the findings of Busch (2018),

in which he stated that lobbying was not seen as an important function by TMNs and that it seemed irrelevant or not visible to actors on the local level.

In this research lobbying and advocacy has been mentioned by all respondents. The City Deal have served as a platform for collective lobbying and advocacy. Municipalities have leveraged the network to address common issues at higher administrative levels, increasing their influence on policy changes. This collective voice helped municipalities to achieve results they might have not obtained individually. Prime example is that of the change in the ISDE-subsidy.

However, contrary to the clear results of collective lobbying and advocating efforts in the City Deal network. Both the representative of Platform31 as well as the municipalities, report that the City Deal should not be seen as a lobbying instrument.

> The City Deal is not by definition a lobbying instrument, but it is an instrument that, due to its size and the presence of a number of large municipalities, is a representative part of the Netherlands at an urban level. The masses you have in the City Deal effects the contacts with the departments (ministries), and that means that you are taken seriously. (Respondent 8)

The participants preferred to refer to lobbying as 'signalling and putting it on the agenda.' In the way that when a participating municipality encountered a problem, they would contact colleagues of other municipalities in the City Deal whether this problem is also observed within their municipality, if that were the case then they would address this within the City Deal network. *"So, we always try to think, if we want to get something done, can we take that step with a larger group? Because then yes, you will be listened to much more"* (Respondent 5). This fits to the results of Bulkeley (2003), Keiner and Kim (2007), and Nielsen and Papin (2020), that creating a strong network can impact policies at different levels and that certain solutions can be advocated for.

5.1.6 Function 6: Legitimacy of Action/Motivation
Legitimization of actions and motivation was mentioned by multiple respondents in the City Deal. Participation in the City Deal enhanced the legitimacy of municipal actions. By referencing similar initiatives from other municipalities, members could reinforce their policies and make more informed decisions. This function also motivates municipalities to pursue ambitious projects with greater confidence, supported by shared experiences and best practices.

Heikkinen (2022) found that networks were important for getting mayors and other leading politician engaged. In this research this was mentioned twice directly. However, municipalities often addressed indirectly that provide evidence-based solutions helped to motivate and legitimize actions in their own municipalities. In similar research by Busch et al. (2018) and Coulombe (2021) this function is addressed to as the internal mobilisation. Busch et al. (2018) identified this as the most important function in his research.

In addition, Heikkinen (2022) found that this function also relates to the internal mobilisation within the municipality to engage people in the city organisation to work across different departments. This was also an important aspect of this research. Examples of connecting both departments by the motivation of the necessity to work cross sectoral and by legitimizing actions based on insights of other municipalities that are doing the same were considered valuable in the City Deal.

5.1.7 Function 7: Policy Initiative Creation/Goal Setting and Monitoring
This function consists of multiple elements. The first two, policy initiative creation and goal setting were not mentioned as a support function of the City Deal. Different respondents mentioned monitoring. *"Monitoring advice. I do see added value in that for the City Deal."* (Respondent 3). During this research, Agenda Stad launched a monitoring dashboard that provides insight into financial flows in neighbourhoods. They collectively worked on this dashboard with the municipalities

of Arnhem, Rotterdam, and Tilburg. Later in 2024, the dashboard will be available for all City Deal municipalities. The dashboard should support municipalities in substantiating, adjusting, and prioritizing their (sustainable) approaches in neighbourhoods (City Deal energieke wijken, n.d.)

In regard to goal setting Heikkinen (2022) noted that some TMN affected the goal setting of the city. Setting goals collectively of the City Deal affecting goals of its members is not evident in the City Deal. Members were all working on their own projects that are linked to the City Deal and were already well aligned. *"In that regard, we were really on the same line as the City Deal and what the City Deal wanted to achieve, so it actually aligned very nicely with our own goals"* (Respondent 5). *"We have the same vision, the same dream you could say"* (Respondent 4). *"I can't say that the objectives and goals have changed as a result of the City Deal's contribution"* (Respondent 1). This can be explained in existing literature as the some TMNs (or in this case national city network) as perceived as networks of "pioneers for pioneers" (Kern & Bulkeley, 2009; Busch et al., 2018). This aligns with the results that most members described themselves as frontrunners i.e. pioneers. Also, the City Deal it self stated in their Deal Text that the City Deal is a network for frontrunners (Agenda Stad, n.d., p.9)

5.1.8 Function 8: City Branding

Contrary to the findings of Mocca (2017), but in line with the results from Busch (2018), city branding was not mentioned by the respondents, and therefore, was not perceived as a supporting function of the City Deal. Networks could offer multiple channels and opportunities, such as newsletters, homepages, or conferences, to market their energy transition policies and sustainable achievements. Members felt that their participation in the City Deal was primarily driven by their existing frontrunner status in various initiatives rather than to enhance their external image. The City Deal is perceived as more internally focused, with the primary goal of addressing challenges and sharing solutions among members rather than promoting themselves externally. In regard of city branding respondent 8 stated: *"No, and I haven't actually heard that within our City Deal either"*.

5.2 Multi-Level Governance dynamics in the City Deal

Urban climate governance is often described as having a multi-level character, decisions are shaped at different levels of governance. This research on a national city network analysed with the TMN function framework choose to specifically also address the multi-level dynamics, because most literature on TMN stress that city networks are embedded in multilevel governance systems or underscore the need to apply a multi-level analysis (Bestill & Bulkeley, 2006; Kern & Bulkeley, 2010; Oppowa, 2015; Davies; 2005). Therefore, this study applied the multi-level framework to assess the dynamics of the city network in relation to the functions perceived in the City Deal. MLG literature is diverse and can be complex. This study did not aim to delve deeply into the various debate surrounding MLG literature but found it useful to examine the influences of a city network based on the multi-level interactions that participating municipalities had according to the MLG literature. This insight could also be applied to further explain the observed functions in the City Deal in relation to the types of interactions in the multi-level system. As Heikkinen (2022) stated, 'It remains unclear whether the benefits recognised in the context of TMNs apply to different networks in multilevel governance'. This study continues to assess the results of this research in relation to the literature on the dimensions of multilevel governance.

5.2.1 Horizontal Climate Governance: Peer-to-Peer Learning and Collaboration

In the horizontal governance dynamics perceived in the City Deal mainly focused around providing a platform for municipalities to interact with one another. The City Deal provides this platform through workshops, conferences, meetings, and through their website, this aligns with multiple studies (Betsill

& Bulkeley, 2004; Keiner & Kim, 2007; Busch, 2016). In these studies, this is mostly associated with creating a learning process and environment. The findings of this research agree to that statement, however, the role of individual networks in this process is not addressed. Differences in the level of activity and engagement among municipalities within the City Deal can affect the benefits derived from participation. The City Deal is a flexible network where municipalities and municipal officials are expected to actively contribute. Municipalities with limited capacity, those that have recently joined, and those that perceive limited benefits from the City Deal are thus disadvantaged within the network. This has also been seen in the study of Mocca (2018), where networking seems to encourage dynamics in which cities pictured as role models/frontrunners are presented within the network, instead of equal horizontal learning. The role of the core-team in the City Deal seems to represent this image. As a nuance, it must be considered that many of these municipalities have the capacities to place themselves in that role, while other member municipalities struggle more and lack the time and resources to contribute significantly to the network This was also illustrated before by the statement of respondent 3, that mentioned: *We are somewhat tired of collaborative partnerships. Speaking for myself when I look at my schedule..."* (Respondent 3).

5.2.2 Vertical Governance: Relations with Higher Administrative Levels

The significance of vertical governance in city networks is evident from the research findings, particularly the interaction between member municipalities and the national government. The City Deal has provided a platform which offered interactions between municipalities and the national government. This embeddedness in a multi-level city network that ensured vertical interactions and coordination between municipalities and the national government is considered pivotal in creating a supportive context for urban governance for energy transitions (Knieling, 2016; Bulkeley et al., 2013; Van der Heijden, 2019). This was seen in the City Deal in how lobbying and advocating were identified as instruments of vertical coordination actions to improve experiments and projects within the City Deal. These advocating efforts are seen as important aspects in the alignment of national policies and local implementation, which reinforces the synergy between different government levels (Jordan & Huitema, 2014; Kern & Bulkeley, 2009). Furthermore, Bulkeley (2010) suggests that urban climate governance should not be viewed solely from the perspective of municipal authorities but should consider on how other actors seek to govern climate through the city. This perspective aligns with the findings of this research, where respondents highlighted the importance of involving municipalities early in the policy-making process on the national level to ensure practical and effective schemes. For example, respondent 2 emphasized the need for early involvement: "It would be so much better if we could be more prominently involved in setting up schemes from the start" (Respondent 2) This further aligns with Corfee-Morlot et al.'s (2011) statement that vertical governance includes the influence of local authorities on national or international governing bodies.

The City Deal as discussed previously can be seen as a platform primarily for municipalities. However, the organisation of the City Deal, by platform31, can be seen as an organisation that, among other roles, took up the role of vertical coordinator that provided the interactions with the national government. The orchestration of this network has also been initiated by the national government. The instalment of networks by national governments was also seen in research of Abbot et al. (2016) and Bäckstrand and Kuyper (2017) (Van der Heijden, 2019).

Finally, this research highlighted the obsolete connection between the City Deal and European programs and funding streams. Despite the potential benefits of EU frameworks, this disconnect suggests that the City Deal may not fully leverage these opportunities. Bulkeley and Betsill's (2013) emphasise on the need for multilevel governance to incorporate influences from all relevant levels, including the EU. EU funding or collaborative programs with the EU have enabled cities to undertake significant climate actions at the local level as stated by Kern (2014). The primary reason for the obsolete connection with the EU in the City Deal might be found in that municipalities were already working along existing policies and projects and therefore did not feel the need to complicate their

work. It also shows that the City Deal has a strong focus on the national level and does not have transnational components in this regard.

5.2.3 The Addition of Cross-Sectoral Interactions

The usage of the MLG framework was used in a simplified matter to identify the functions of the City Deal in correlation to the dynamics between different actors in this so-called multi-level governance domain. The literature on MLG did not provide insight on cross-departmental or cross-sectoral dynamics. Important to understand is that with these cross relations is referred to the dynamics within the municipality between different department or domains. In this research this was seen in the cross relations between the physical-economic domain and social domain. Research of Oseland (2019) shows that a lack of consensus-reaching across departments can be an obstacle to holistic sustainability transformations. She further states that: *Collaborative approaches between different departments contributing to environmental and social dimensions of sustainability could help to identify and address incoherent priorities, as well as promote a more integrative approach to transform societies toward sustainability.* (Oseland, 2019).

The case study in this research showed that in the Dutch context municipalities are aware of this potential and are experimenting with more integrated approaches. The horizontal coordination in the sharing of experiments between municipalities on this matter during workshops in which employees from both domains are attending, and the upscaling by legitimizing actions based on frontrunner municipalities can stimulate this approach.

5.3 Improvements for the City Deal

The analysis in the results reveals important insight on improving the City Deal network. One of the findings was that there was a non-equal distribution of engagement by member municipalities. A possible explanation for this can be the sub-division in the City Deal of different work lines concerned with different issues. Cortes et al. (2022) suggests that sub-networks in city networks can be overly complicated to its members, preventing them from finding the programs most beneficial, and thus hindering engagement. This suggestion can be applied to this study, but the impression from the interviews was that members were well aware of the different work lines, and which fitted them best. Another explanation can be found in that the sub-networks hindered active engagement between members because of capacity, size, context, or strategy (Cortes et al, 2022; Capello, 2000; Kern & Mol, 2013). This suggestion is found to be relevant for the studied case in this research. Municipalities who addressed to have a large municipal capacity were seen active in more work lines than smaller municipalities.

Furthermore, although the City Deal consist of frontrunners on issues related to the social interpretation of the energy transition, there is, as mentioned above, a variety of types of municipalities active in the network, with differences in size, capacity, and financial means. This can lead to a concentration of power among elite groups, as stated by Haupt et al. (2019). Marginalizing smaller les capable municipalities. As Fünfgeld (2015) states it ''*there is a risk that activities focus on leading cities with high levels of capacity to be involved, while excluding other network members who are unable to engage in activities at the level offered'*. This was also seen in the research by the dominance of individual networks that tended to be more present in core-team municipalities and municipalities with higher capacities. To address this challenge, Fenton and Busch (2016) state that networks must balance the representation between average and highly ambitious local governments.

Kern (2019) provides evidence that balanced TMNs are in existence and that effectiveness of local climate governance relies on the interplay between frontrunners, followers, and those lagging behind.

Finally, national networks and TMNs can commit members to clear goals, this stimulates actions to reach those goals and can help monitor progress (Kern & Alber, 2009). It is even suggested that networks could set up benchmarking systems to assess their progress. The progress and formulation of end-goals has been mentioned as being unclear in the City Deal.

5.4 Limitations of This Research

First this research presents some of the practical limitations. The first of this study's limitations is that only one representative has been interviewed for each selected municipality. This can create a risk of biased opinions into the research. Conducting interviews with more than one representative from each selected municipality could have functioned as a control for such biased opinions. However, it may have been non-feasible because there was limited time available for this research to enlarge the empirical research and in some member municipalities it became clear during the research that there was only one municipal representative well-informed enough on the City Deal to conduct an interview with. A second limitation of the execution of this study relates to the ways in which the interviews were conducted. All interviews were conducted online via Microsoft Teams. Interviewing in person may have been of influence on the course and outcomes of the interviews. A third limitation was that only one representative other than a municipal representative has been interviewed as part of this study. This choice was made as municipalities were seen as the object of this research. However, interviewing few of the other remaining participants could have given a more complete picture of the functioning of the City Deal and interaction with their member municipalities. This, in turn, may have been of influence on the study's analysis. Lastly, since all interviews were conducted in Dutch, some statements by respondents may have lost their original meaning during translation. This also accounts for the translation of English literature into a Dutch topic list for conducting the interviews.

Second the limitations of the choice of frameworks. The choice of a framework to analyse the supporting functions of the City Deal as a national city network was based on the comprehensiveness of the framework, that it was one of the newest additions to the debate surrounding TMNs functions, and because of the absence of a theoretical framework for specifically analysing national city networks. Function analyses of TMNs are abundant and can influence the direction of the analyses. Other corresponding frameworks, such as those proposed by Busch et all. (2018), could also have been utilized. A notable example of this is the study by Coulombe (2022).

Furthermore, while this study highlights the benefits of cross-sectoral collaboration, it my not fully capture the complexity and potential conflicts that arise from integrating efforts across different sectors. Understanding these intricacies would require a more detailed examination of the interactions between various stakeholders involved.

Lastly, the research may have had a tendency to focus on positive aspects and successes due to the nature of self-reporting by municipal representatives. Negative experiences or criticism might be underreported, which could skew the overall assessment of the City Deal's effectiveness. By also focussing on improvement through specifically asking for critique and recommendations helped to also shed light on the more negative aspects.

VI. Conclusion

The overarching aim of this research was to better understand to what degree participating in a national city network can increase the effectiveness of municipal energy governance. This was done by providing empirical findings on research gaps in the assessment of national city networks, also by making use of TMN frameworks and assessing how participation leads to different interactions in a multilevel system in light of the underrepresentation of research on national city networks in multi-level governance. Lastly, from a more social perspective this research aimed to provide insights in how networks like these can be improved for more effectiveness, so that practitioners can benefit from this research. This overarching aim and gaps identified have resulted in the following research questions that were addressed:

6.1 Revisiting the Sub-Questions

SQ 1: How does the City Deal network support the participating municipalities?

The analysis of this study on the case of the City Deal Energieke Wijken showed that it provided support to participating municipalities by fulfilling several key functions, which align with the framework of TMNs as described in the literature. The results show that the most important functions for support in the City Deal are: information sharing, creating a learning environment, offering a platform for the creation of individual networks, creating a base for the legitimization of actions/motivating of municipal representatives, and lobbying/advocating. The support that the City Deal delivered arose primarily through the coordination of workshops and meetings and by creating a platform where likeminded municipalities could give a boost to projects and experiments in their own municipality by making use of the functions mentioned.

SQ 2: How does the City Deal network influence the multi-level governance dynamics within participating municipalities?

The City Deal network influences and has effect on multi-level governance dynamics in participating municipalities through horizontal, vertical, and cross-sectoral interactions.

Horizontal dynamics: The City Deal has provided a platform for municipalities to interact with one another through workshops, meetings, and conferences. This platform fostered city-to-city learning and intensify collaborations on energy transition governance, by sharing best practices and address common challenges. For some members, this has led to the creation of individual relationships cross-municipality. However, the horizontal dynamic in the City Deal were not the only intermunicipal relations for member municipalities. Differences in the level of activity and engagement among municipalities have been found in which overall capacity for municipalities played a central role.

Vertical dynamics: The City Deal facilitated interaction between municipalities and the national government, by ensuring vertical coordination. The City Deal helped municipalities to lobby and advocate for changes in national policies and subsidy schemes, which enhances the alignment between local initiatives and national objectives. In particular the relations and short lines of communication with the ministry of the Interior and Kingdom Relations were strongly used and appreciated among member municipalities. However, the City Deal did not provide interactions with the EU-level and some municipalities indicated that they would like to see further intensification in their connection with the national government to be involved in the process of shaping national policies at an early stage.

Cross-Sectoral dynamics: The City Deal also promoted cross-sectoral interactions within municipalities, encouraging collaboration between different departments. This has been seen as particularly important for addressing the social impacts of the energy transition, such as energy poverty. Workshops and meetings organized by the City Deal have been instrumental in bringing together employees from various domains to work towards integrated solutions. Despite this, some municipalities find it challenging to maintain sustained cross-sectoral collaborations beyond initial meetings.

SQ 3: How could the performance of the City Deal be improved?

This research also assessed the potential for improvement of the City Deal by asking respondents about recommendations and critique on the City Deal. This practical question can be important for the City Deal and future similar networks. The answering of this sub-question will be done in the form of recommendations to both the City Deal and the member municipalities.

Recommendations for the City Deal:

- **Enhancing engagement**: There is a non-equal distribution of engagement among member municipalities, in which larger municipalities and core-team municipalities being more active. To address this the City Deal could offer targeted support, capacity-building initiatives, and more direct communication to municipalities that are lagging in engagement. A suggestion would be to invite these municipalities to join in on the core-team meetings once in a while.

- **Strive for continuity:** Municipalities that joined in a later stage or municipalities that have change in who is linked to the City Deal have to be contacted and thoroughly informed about the narrative, urgency, and history of the City Deal.

- **Further stimulate interactions:** Knowledge sharing, learning and the creation of personal networks have been the most important functions of the City Deal. A further investment in these functions would be beneficial.

- **Formalizing results**: Ensure that the results and insights gained from the City Deal are formalized and safeguarded for future use. This could involve creating guidelines, best-practice documents, and other practical resources that reflect the lessons learned and can be used by other municipalities.

- **Communicate clear end-goals:** Formulate end-goals of the City Deal. The City Deal is temporary of nature, to commit members that are lagging in engagement it would be beneficial to have a clear image on what to expect of the City Deal and how to use the City Deal in that regard.

6.2 Answering the Main Research Question

The research question set out to answer the question: "To what degree does the City Deal increase the effectiveness of governing the local energy transition in participating municipalities?". In order to do so, this study has examined municipalities in the Netherlands that are member of the City Deal Energieke Wijken.

The City Deal has significantly influenced the participating municipalities in governing their local energy transition. This influence is manifested through various supportive functions that the City Deal has provided. These functions include information sharing, creating a learning environment, offering a platform for building individual networks, legitimizing actions and motivation municipal representatives, and lobbying and advocating. The City Deal has supported participating

municipalities by facilitating the exchange of knowledge and best practices. This helped municipalities to learn from each other's experiences and apply these lessons to their own contexts, enhancing overall governance effectiveness.

Moreover, the City Deal strengthens multi-level governance dynamics, which is pivotal for the success of local energy transitions. Vertically, the City Deal effected the relationships between municipalities and national government bodies. This alignment has ensured the change of the ISDE subsidy scheme, which has led municipalities to further maximize the effectiveness of their local initiatives. Horizontally, the City Deal fostered city-to-city collaboration and cross-sectoral integration, both are key to effective governance. The City Deal has provided a platform for municipalities to interact with one another facilitating city-to-city learning and collaboration. These interactions have enabled municipalities to share best practices and address common challenges together. The latter was used to collectively form a voice in the vertical interaction to lobby for changes such as with the ISDE scheme.

The City Deal also promoted cross-sectoral interactions within municipalities, encouraging collaboration between different departments. This cross-sectoral approach is seen as an interesting and essential link for the multifaceted nature of the energy transition, which impacts not only spatial-economic domains, but also the social domain. This holistic approach enhances the effectiveness of energy transition governance by scaling up the energy transition and making it a more central focus within the municipal organization, thereby make energy transition efforts more comprehensive and sustainable. To promote these interactions the City Deal has facilitated workshops concerning this topic and recommended inviting employees from different departments to join and participate.

However, the City Deal also faces challenges that have effect on its overall effectiveness. One significant issue is that smaller municipalities sometimes lag behind because they do not have the capacity to fully make us and benefit from the City Deal's offerings. This disparity can lead to an unequal distribution of advantages. Addressing this challenge by providing targeted support to smaller municipalities could enhance the City Deal's overall effectiveness. Additionally, there is a need for clear guidelines and structured support to help municipalities implement the innovative solutions within the City Deal. Proving detailed step-by-step guides and good documentation of best practices will improve the implementation of these solutions, further enhancing energy transition governance effectiveness.

In summary, the City Deal significantly improves the effectiveness of local energy transition governance by fostering key supportive functions and enhancing multi-level and cross-sectoral collaboration. Addressing challenges related to formulating goals and results, inclusiveness, and implementation support can further enhance its positive impact, ensuring that all participating municipalities can equally benefit from the City Deal.

6.3 Suggestions for Further Research

This section provides several recommendations for future research.

First of all, future research similar to this, with a municipal-centric approach to assess the influence of city network membership can be done in different countries with different contexts, such as a federal state or a less decentralized state as the Netherlands. Furthermore, the sample size could be enlarged by analysing multiple City Deals or national city networks to further investigate the functions perceived and the influence they have on member municipalities. Comparative analysis studies would be interesting, this counts for both national networks as object of study as well as municipalities.

Second, the framework used in this study was useful to assess the function of the City Deal. However, frameworks on TMN functions are constantly in development, therefore it would be beneficial to keep

further investigating this topic to improve the understanding of the impact and influences of these networks. A specific suggestion would be to pay attention to the entanglement of national and transnational networks in literature. Comparative studies on the role and functions of national and transnational networks would be needed.

Third, this study focused on the municipality as object. However, during the research it became clear that municipalities and municipal representatives can not be separated. Networks like the City Deal are networks of individuals. Understanding the position of the municipal representative can be key in assessing the impacts and influences that city networks have on its members. A recommended framework for this can be found in the policy entrepreneurship theory.

Fourth, the influence of city networks in relation to member municipality size would also be relevant. In relation to this specific study but also for other similar studies on city networks. The governance capacity framework could be implemented to further asses to role of municipal capacity and the influence of city networks on the municipality.

Finally, this study identified that city networks can have a stimulating effect on integrating cross-sectoral working in municipalities. Further research on investigating the mechanisms for effective cross-sectoral collaboration within municipalities for effectively working together on social issues, such as energy transitions, would be needed.

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Appendix

Appendix I: Topic List Interviews Municipalities

The following text gives an overview of the interview questions. The questions functioned as a starting point per topic. Follow up questions were formulated according to the nature of the interview.

Introductievragen:

- Wat is uw functie binnen de gemeente?
- Hoe bent u betrokken bij de City Deal?
- Hoe is uw gemeente betrokken geraakt bij de City Deal?

Vragen energietransitie:

- Zou u mij inzicht kunnen geven in hoe de energietransitie binnen u gemeente speelt?
- Hoe ziet u de rol van de City Deal tot uw lokale energie transitie opgave?

Functies city network:

- Op welke wijze ziet u een bijdrage van de City Deal aan uw gemeente?

    - Zou u een voorbeeld van een ervaring kunnen geven?

- Heeft u de indruk dat doelstellingen binnen de gemeente met betrekking tot de energietransitie zijn veranderd sinds deelname aan de City Deal?

- Heeft de City Deal jullie handvaten geboden in de vorm van bijvoorbeeld strategie documenten en beleidsdocumenten?
    - Zo ja: Kunt u voorbeelden geven en zijn deze documenten nu nog in gebruik?

- Wat voor informatie wordt er binnen de City Deal met elkaar gedeeld?

-

- Heeft u persoonlijk contact met partners uit de City Deal buiten de gezamenlijke workshops en vergaderingen om?

- In hoeverre is er meer financiële ruimte ontstaan voor de energietransitie binnen uw gemeente sinds deelname aan de City Deal?

- Heeft u gezamenlijk met de City Deal of met gemeenten in de City Deal aanvragen ingediend voor meer financiën?

- Heeft u namens de City Deal ergens gesproken?
    - Heeft u met collega's binnen de gemeente of andere gemeente gesproken over uw ervaringen met de City Deal?
        - Zo ja: kunt u z'n ervaring met mij delen?

Multi-Level Governance:

- Is het contact met andere gemeente met betrekking tot de energie transitie toegenomen sinds deelname aan de City Deal?
    - Op welke wijze heeft u contact met andere partners van de City Deal en wat zijn uw ervaringen daaromtrent?

- Op welke manieren heeft de City Deal de samenwerking tussen verschillende gemeentelijke afdelingen gefaciliteerd?

- Hoe heeft de City Deal het contact tussen uw gemeente en de nationale overheid beïnvloed?

Improvement:

- Ziet u gebreken met betrekking tot de impact die de City Deal heeft voor uw gemeente?
- Heeft u nog suggesties van mogelijke verbeteringen van de City Deal?

Afronding:

- Zou u zelf nog iets willen toevoegen aan dit interview?

Appendix II: Topic List Interview Platform31

Introductievragen:

- U bent werkzaam binnen Agenda Stad. Voor wie werkt u precies?
- Hoe groot is het aandeel van de City Deal Energieke wijken in u totale werk?
- Wat is destijds de reden voor oprichting van de City Deal Energieke wijken geweest?
- Hoe is de selectie van het aantrekken van partners (partnergemeenten) verlopen?

Functies netwerk:

- Op welke wijze zou u stellen de deelnemende gemeenten aan deze City Deal te ondersteunen? Ook op het gebied van de energietransitie opgave.
- Op welke wijzen delen jullie kennis met de partners?
- Wat voor kennis wordt er zoal door jullie gedeeld? Heeft u voorbeelden?
- Op wat voor andere wijzen bieden jullie de deelnemende partijen handvaten voor de opgaves waar zij met betrekking tot de City Deal mee te maken krijgen? Documenten? Workshops? Etc.
- Zijn er doelstellingen binnen de City Deal? Ook waarvan jullie verwachten dat de partners deze overnemen?
- In hoeverre heeft de City Deal invloed op bevindingen die opgedaan zijn in de City Deal te agenderen bij andere ministeries, overheden of organisaties?
- Levert de City Deal een bijdrage aan het vergaren van financiën voor de partners?

Multi-level Governance:

- Wat is de rol van uw organisatie in deze samenwerking?
- Hoe is het contact met de verschillende lagen van overheden binnen deze samenwerking?
- In hoeverre heeft u het idee dat de City Deal een bijdrage levert aan het contact leggen met andere partners?
- Heeft u ook contact met betrekking tot de City Deal op Europees niveau? Of zijn er nog andere partijen waar u nauw mee in contact staat met betrekking tot deze City Deal?

Ervaringen met partner gemeenten:

- Hoe is uw algemene beeld met betrekking tot de samenwerking met de partnergemeenten?
- Ziet u valkuilen waar gemeenten tegen aanlopen in het bewerkstelligen van resultaten uit de City Deal?
- Zou u mij een beschrijving kunnen geven van hoe implementatie van de City Deal op gemeentelijk niveau plaatsvind?
- In hoeverre denkt u dat deelnamen aan de City Deal impact heeft op de deelnemende gemeenten? En op welke wijze heeft dit dan impact?

Aanbevelingen:

- Heeft u aanbevelingen naar partners, in het specifiek naar partner gemeenten, hoe meer uit de deelname aan de City Deal te halen?
- Ziet u zelf ruimte voor verbetering binnen de City Deal? Kunt u voorbeelden geven?

Afronding:

- Zou u zelf nog iets willen toevoegen aan dit interview?