

# Public Leadership in Citizen-led Wind Energy Development

A triple case study into provincial strategies for developing wind energy in the Netherlands.

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# Abstract

Whilst civic participation is becoming an increasingly established aspect of the Dutch planning agenda, putting this into practice remains challenging. This can especially be witnessed for Dutch on-shore wind energy as this sector has been dominated by a centralized techno-corporatist approach. With the rapid increase of local energy initiatives (LEIs) over the last decade, provincial governments in the Netherlands are ever more pressured to include these initiatives in RE planning and development. How this is done is the main topic of interest in this triple case study, with as main question: How do provincial governments in the Netherlands take the lead in implementing an adaptive governance approach considering citizen-led wind energy development? Public leadership in this context was studied using the framework of Meijerink and Stiller (2013) for leadership in climate change adaptation and the framework of Sotarauta (2010) for place leadership. Combining these, a framework for public leadership in citizen-led RE development, or accommodative leadership, was created. Through researching the provinces of Gelderland, Flevoland and North-Holland the framework for accommodative leadership was tested and refined. Semi-structured interviews, combined with a policy analysis have shown that all provinces adopt a different leadership style: facilitative decentralization in Gelderland, deliberative innovation in Flevoland and authoritative reluctance in North-Holland. In conclusion it can be stated that although there is no roadmap to good accommodative leadership as it occurs in many forms, the created framework still contributes to an increased understanding of the possible actions taken to improve the current-day practices.

Key words: accommodative leadership, governance, local energy initiative (LEI), wind energy.

# Acknowledgements

Throughout my thesis I have spoken to many people, however, I would like to express my gratitude to those without whom I would not have been able to conduct this research.

First of all, I would like to express my gratitude to my supervisor Ina Horlings, who has helped me grasping the complex subject of leadership theory. Through brainstorming together and her positive attitude, I was always inspired to continue writing.

Secondly, without the willingness of the respondents, I would not have been able to do this research, and I am very grateful that they were willing to extensively explain to me their visions and thoughts.

Nicolien van Aalderen 29<sup>th</sup> of June 2018, Groningen

# Outline

Abstract	3
Acknowledgements	4
Outline	5
Overview of figures and tables	7
List of figures	7
List of tables	8
List of Abbreviations	9
1. Introduction	10
1.1 Societal relevance	10
1.2 Scientific relevance	11
1.3 Research questions	11
2. Theoretical Framework	12
2.1 The Contribution of Citizen Initiatives	12
2.1.1 Civic participation	12
2.1.2 Local Energy Initiatives	13
2.1.3 Changing role of governments	14
2.2 Public Leadership in Renewable Energy Development	14
2.2.1 Governments and leadership	14
2.2.2 Public Leadership in dealing with climate change	17
2.2.3 Place leadership	19
2.2.4 Public leadership and LEIs	21
2.2.5 Accommodative leadership	24
2.3 The Dutch Context	24
2.3.1 Current policy, governance structure and stakeholders	24
3. Methodology	27
3.1 Research design	27
3.1.1 Research approach	27
3.2 Used data collection methods	27
3.2.1 Research strategy	28
3.2.2 Literature study	29
3.2.3 Qualitative research	29
3.2.4 Data collection framework and techniques	30
3.3 Specification of research units	30
3.3.1 Feasibility	31
3.3.2 Case selection	31
3.3.3 Specification of initiatives	33
3.3.4 Timeframe	34
3.4 Data analysis	34
3.4.1 Policy Analysis	34
3.4.2 Interviews	36
3.4.2 Data analysis framework	36
3.4.3 Transparency and ethics	37
4. Findings	38
4.1 Case 1: Gelderland	38
4.1.1 Policy analysis	39
4.1.2 Qualitative interviews	41
4.1.3 Preliminary analysis	44
4.2 Case 2: Flevoland	46
4.2.1 Policy analysis	46
4.2.2 Qualitative interviews	50
4.2.3 Preliminary analysis	53
4.3 Case 3: North-Holland	55

4.3.1 Policy analysis	55
4.3.2 Qualitative Interviews	58
4.3.3 Preliminary analysis	60
5. Interpretation	63
5.1 Leadership performed in the cases	63
5.1.1 Gelderland: facilitative decentralization	63
5.1.2 Flevoland: deliberative innovation	65
5.1.3 North-Holland: authoritative reluctance	66
5.2 Overview: comparing different strategies	67
5.2.1 Notes on the different strategies practiced	69
6. Discussion & Reflection	71
6.1 Theoretical discussion and reflection	71
6.1.1 Theoretical discussion	71
6.1.2 Theoretical reflection	72
6.2 Methodological reflection	75
7. Conclusion	77
8. References	81

# Overview of figures and tables

List of figures

Figure 1 - Conceptual Model for public leadership	16
Figure 2 - Visualization of the various leaderships functions as described by Meijerink & Stiller (2013).	Figure
created by author.	18
Figure 3 - Visualization of public place leadership tasks as described by Sotarauta (2010), figure creaters	ated by
author.	20
Figure 4 - Visualization of accommodative leadership functions with corresponding tasks, figure creaters	ated by
author.	23
Figure 5 - Conceptual model: developments demanding for public leadership, plus public place leadership, plus public placership, plus plus plus plus plus plus plus plus	dership
framework, figure created by author.	24
Figure 6 - Research strategy	29
Figure 7 - The provinces of North-Holland, Flevoland and Gelderland, as located in the Netherlands.	32
Figure 8 - Number of wind turbines per province (CBS, 2018).	33
Figure 9 - Wind park Nijmegen-Betuwe (picture: windparknijmegenbetuwe.nl)	38
Figure 10 - Windvisionmap of the province Gelderland. In red the chosen locations and marked with a	purple
star "promising locations" (Provincie Gelderland, 2015).	39
Figure 11 - Picture of currently present turbines in Zeewolde (picture: blikopzeewolde.nl)	46
Figure 12 - Designated areas for wind energy development in Flevoland visualized in different colour	s (blue,
orange, red and green), with in grey the lines in which the turbines can be located (Provincie Fle	voland,
2016 p. 16).	48
Figure 13 - Artist impression of current wind energy ambitions of NDSM Energie (picture	e: eco-
park.amsterdam)	55
Figure 14 - Areas in the province North-Holland that have been selected for wind-energy developm	ent are
visualised in the blue boxes (Provincie Noord-Holland, 2017, p. 55).	57
Figure 15 - Overview of leadership functions and tasks enacted in Gelderland	64
Figure 16 - Overview of leadership functions and tasks enacted in Flevoland	65
Figure 17 - Overview of leadership functions and tasks enacted in North-Holland	67
Figure 18 - Overview of the characteristics of the process and content of the strategies performed	by the
provinces, as well as their main leadership function and task.	69
Figure 19 - Revised framework for accommodative leadership. In grey the added combinations.	72
Figure 20 - Case specific recommendations based on the accommodative leadership framework.	80

# List of tables

Table 1 - Adapted from Meijerink & Stiller, 2013, p. 252.	18
Table 2 - Expressions of public place-based leadership based on Sotarauta, 2010.	21
Table 3 - Framework for place-based public leadership in climate change adaptation.	23
Table 4 - Division of total on-shore wind energy megawatt (MW) capacity per Dutch province, as well	as the
developed capacity in 2015 (Netherlands Enterprise Agency (RVO), n.da).	25
Table 5 - Framework of data collection techniques	30
Table 6 - LEIs per province (Schwencke, 2017).	33
Table 7 - Colour codes used for policy analysis.	35
Table 8 - Documents analysed in policy analysis.	36
Table 9 - Overview of respondents, their role, the date of interviewing and interview method.	36
Table 10 - Framework operationalization leadership functions and tasks.	37
Table 11 - Division of codes over topics.	38
Table 12 - Overview of data collection outcomes, Case: Gelderland.	45
Table 13 - Overview of data collection outcomes, Case: Flevoland.	55
Table 14 - Overview of data collection outcomes, Case: North-Holland	62

# List of Abbreviations

CLT	Complexity Leadership Theory
EIA	Environmental Impact Assessment
LEI	Local Energy Initiative
MRA	Metropool Regio Amsterdam / Metropolitan Region Amsterdam
MW	Mega Watts
RE	Renewable Energies
RVO	Rijksdienst voor Ondernemend Nederland / Netherlands Enterprise Agency

# **1.** Introduction

### 1.1 Societal relevance

Over the last decades, the realization that an energy transition is unavoidable is increasingly embraced by scholars, as well as nation states and society (Breukers & Wolsink, 2007; De Boer & Zuidema, 2013; Meadowcroft, 2009). Renewable energies (RE) are considered abundant and their potential is highly promising. Yet, their implementation is challenging as they are highly spatial dependent. The spatial impact of RE development is large as due to limited storage possibilities, the RE technologies need to be much closer to the consumer than was the case with non-renewable energy sources. As a consequence, RE development is very present in the everyday landscape (De Boer & Zuidema, 2013).

Despite this spatial impact, the production of energy is often still framed as an isolated theme by governments (De Boer & Zuidema, 2013). In the Netherlands, European energy ambitions are integrated into the national policy, striving to increase the share of renewable energy to 14% by 2020 (Rijksoverheid, n.d.-b). However, as De Boer and Zuidema (2013) note, whilst energy ambitions are expressed, RE developments are commonly approached as separate, technical projects, and synergies with socio-economic contexts and physical landscapes are often missing. This is also recognized for the on-shore wind energy sector, which is considered a vital aspect of the Dutch RE mix (Rijksoverheid, n.d.-b). Wind energy development has been dominated by a techno-corporatist approach, with a strong focus on centralized decision-making and expert knowledge (Breukers & Wolsink, 2007).

Nonetheless, despite this technocratic tradition, a tendency of change can be identified, as a new player is entering the RE development sector: local energy initiatives (LEIs). In the Netherlands they have been increasing in number for many years, with a rise of 60 new cooperatives between 2016 - 2017 to 392 (Schwencke, 2017). This rise can be partly considered as a counter reaction to a decade long process of liberalization, scaling up and privatization in the Dutch energy sector, resulting in large energy companies being the main players at this market. Citizen initiatives have reported the need for a more 'human measure' and a say in the way the energy is produced, for which RE development provides a suitable modus (Kooij et al., 2018). Moreover, these initiatives have been identified to contribute to community building and local identification processes by many scholars (Bauwens, Gotchev & Holstenkamp, 2016; van Dam, Salverda & During, 2014).

In the Netherlands, the public body responsible for the spatial implementation of large RE technologies such as wind turbines, are the Dutch provinces. They have the licensing capacity to allow private developers to initiate projects (Rijksoverheid, n.d.-b). Having this capacity, this public body thus has a large influence on the quantity of turbines developed, but also on the parties involved in their development and the way this involvement is structured. Despite the common national framework, each province has the freedom to implement own plans and strategies. As a result, the practice of developing wind energy differs widely per province (Oteman, Wiering, & Helderman, 2014). Whilst in 2007, Breukers and Wolsink reported no structural incorporation of stakeholders in wind energy development (Breukers & Wolsink, 2007), the growing number of LEIs, including also wind energy cooperatives, indicates that these initiatives gain more importance. In this study the relationship between the provinces and these LEI is the main topic of interest. Comparing three different provinces, this study aims to gain further understanding of the leadership practiced by the different provinces to enable LEIs to develop wind turbines.

## 1.2 Scientific relevance

Leadership is described as the building of bridges between formal planning regimes and informal initiatives, hereby moving beyond traditional boundaries (Sotarauta, Horlings, & Liddle, 2012). Leadership in the context of on-shore wind energy thus extends beyond the formal leadership that the provinces obtain by law and covers a wider scope of practices. Besides adaptivity in the content, process and practice of policy, as is advised by Meijerink and Stiller (2013) for leadership in climate change adaptation; also provinces have to make a shift to include other parties in their governance practices and allow for participation of LEIs (Frantzeskaki, ; Avelino, F.; Loorbach, 2013; Oteman et al., 2014; van Dam et al., 2014).

Yet, despite the large body of literature available on leadership, literature on leadership in dealing with climate change in an adaptive way is lacking, or considers it only briefly (Meijerink & Stiller, 2013). Moreover, also when related to (place) leadership on a local or regional scale a knowledge gap exists (Sotarauta, Horlings, & Liddle, 2012). Therefore, the objective of this study is to gain further insight into the functioning of public leadership related to the development of renewable energy by citizen initiatives. By advancing the understanding of the leadership practiced in these provinces, the knowledge on public leadership in citizen-led RE development can be expanded and future practices improved.

## 1.3 Research questions

The primary research question to be answered is:

How do provincial governments in the Netherlands take the lead in implementing an adaptive governance approach considering citizen-led wind energy development?

Sub-questions contributing to answering the latter are:

- 1. What is public place leadership in the context of citizen-led wind energy development?
- 2. How do provincial governments formally enable citizen-led wind energy development?
- 3. How do provincial governments practice and perceive their own role and leadership tasks?
- 4. How should provincial governments take the lead in citizen-led wind energy development according to those involved in the development process?

# 2. Theoretical Framework

The inclusion of citizens in planning has a long history in the Netherlands and has been linked to various concepts. In this chapter the development of this civic participation will be briefly discussed, just as the type of initiatives. Hereafter the changing role of public bodies is elaborated. The chapter concludes by researching possible types of leadership taken and proposing a framework for public leadership in citizen-led RE development.

### 2.1 The Contribution of Citizen Initiatives

#### 2.1.1 Civic participation

Civic participation has been on the Dutch planning agenda since the 1960s, including attempts to include citizens in spatial development processes, and advocating co-operation between public, private and civic stakeholders. Various methods for participation have been tried and participatory concepts have been promoted (Boonstra & Boelens, 2011). Over the last 30 years, one concept has gained an important position within this discussion: active citizenship.

The active citizenship approach is opting to increase the active participation of citizens and to share the responsibility for the spatial environment between the government and civic communities (Boonstra & Boelens, 2011). In Western Europe, active citizenship has become central in neoliberal policy making. The concept has often been linked to decreasing the citizen dependence on the social services of the welfare states. Through volunteering, citizens are expected to perform tasks previously performed by the state (Verhoeven & Tonkens, 2013). The call for active citizenship in Dutch policy documents, is often accompanied by a call for citizen initiatives. Whereas the initiatives promoted through the active citizenship discourse were initially concentrating on social services of the welfare state, increasingly socio-ecological and spatial aspects are included (Dam, Duineveld, & During, 2015). This increased demand for active citizenship has also been accompanied by an increased number of citizen initiatives in the Netherlands and has sparked the debate on the position of citizens in relation to the government (Dam et al., 2015).

Moreover, from a community perspective active citizenship is recognized to increase social coherence and empower citizens, as well as increasing the connectivity between social networks and public welfare. In addition, it is seen to increase a sense of belonging of participants (Boonstra & Boelens, 2011).

In sum, active citizenship seems to offer a new tool for governments to include citizens, as well as for citizens to be heard. Nonetheless, how to structure this appears challenging and governments have not yet found adequate ways to deal with this (van Dam et al., 2014). Several collaborative methods are offered by multiple scholars. Nonetheless, a reoccurring problem is that they are designed from a governmental perspective, while one could argue that citizen initiatives are not suitable to a government-led participation scheme, as these initiatives have organized themselves in an independent way, which does not always suit the

governmental frameworks (Boonstra & Boelens, 2011). Before looking into this newly evolving relation between citizens and the government, first citizen initiatives will be discussed briefly.

#### 2.1.2 Local Energy Initiatives

As discussed before, citizen participation has become more embedded in planning over the last 50 years and more recently is increasingly accompanied by the emergence of citizen initiatives. While citizen participation is traditionally initiated by the government to involve citizens, citizen initiatives arise without governmental influx, as individuals or groups of individuals go into action (van Dam et al., 2014). Citizen initiatives are thus self-governing: they are managing their own environment relatively independent from governments, on own initiative<sup>1</sup>.

There are various terms used for local-scale citizen initiatives, including grass-root, community and bottomup initiatives. As the focus of this thesis is on initiatives related to wind energy production, the concept for citizen initiatives used is that of local energy initiatives (LEIs). LEIs can be defined following the definition given by Oteman, Wiering and Helderman (2014, p. 2) for community initiatives for renewable energy, as "decentralized, non-governmental initiatives of local communities and citizens to promote the production and consumption of renewable energy". LEIs, in comparison to less place-based grass-root initiatives, are recognized to spur innovation (Hielscher, Seyfang, & Smith, 2011). Reasons for this are their ability to change contexts; the multi-faceted approaches they use, combining a multitude of activities; their focus on citizen engagement; and their ability to strengthen citizens in their capacity to change societal structures together (Hielscher et al., 2011). An aspect differentiating LEI from other energy related grass-root initiatives, is the ability to participate financially in a project. Through this tool, different people with various backgrounds and motivations can come together in one initiative. This financial participation is also often linked to local acceptance of RE structures (Hoppe, Graf, Warbroek, Lammers, & Lepping, 2015). In literature multiple motives are mentioned for the establishment of these LEIs, ranging from political (dissatisfaction with current government) to ecological (climate change mitigation), social (community feeling and liveability) and economic (financial) motives. While ecological motives are generally prevailing, they often occur in a mix and are closely linked to other categories (Hoppe et al., 2015).

According to Smith (2012, referred to by Hoppe et al., 2015) LEIs have a variety of important roles in relation to the energy transition. They raise community awareness; organize protests; provide counter-expertise to established parties; and induce green consumption. However, these LEIs also face many challenges. Hoppe et al. (2015) mention four difficulties discussed frequently in literature: they are often build on volunteers,

<sup>&</sup>lt;sup>1</sup> The notion of self-governance must not be mixed up with self-organization, referring to the spontaneous genesis of urban structures out of the unplanned interactions between initiatives on a lower level of scale. Citizen initiatives can be part of self-organization processes, but they do not have to be (Rauws, 2016).

lacking skilled-workers; they do not have an established infrastructure of assistance; often they fail to grow due to a lack of funding and institutional support; and they face the risk of alienating from their community if they professionalize and grow too much.

#### 2.1.3 Changing role of governments

Various scholars recognize LEIs to be key actors in the transition to a low carbon economy (Bauwens et al., 2016; Hoppe et al., 2015). The smart and effective empowerment of LEIs is seen as a main challenge for policy makers and advocates of sustainable development (Hoppe et al., 2015). However, Oteman et al. (2014) recognize a misbalance in power between these initiatives, the government (having the decision-making power and political legitimacy) and the market (beholding resources, technology and knowledge) in Western-European countries. To allow LEI to be successful, cooperation between these parties is therefore crucial (Oteman et al., 2014). This cooperation implies a new role for the government, steering the interactions between these LEIs and the market in an effective way (Frantzeskaki, Avelino & Loorbach, 2013; Oteman et al., 2014). Nonetheless, this is challenging as governments have to make a shift from governing to governance, implying a decline in their monopoly on enforcing power (van Dam et al., 2014). This shift is often characterized as reducing the necessity of the national government as midpoint of society (Salamon, 2000) and fits to the concept of active citizenship, introduced previously. By promoting increased responsibility for private and civic actors, the government changes their own role, shifting towards a facilitating, rather than producing function.

However, this new role of the government is not a new phenomenon and can be recognized in various sectors. Amongst scholars in governance research, an increasing degree of consensus is arising that both top-down steering and a liberal free-market approach are being outmoded as effective management mechanism to generate sustainable societal solutions on their own, while simultaneously they cannot easily be dismissed (Loorbach, 2010). A new balance must be found between the state, the market and society, to allow effective informal network processes that provide alternative ideas and agendas, fuelling regular policy-making processes with new agendas, ambitions, problem definitions and solutions (Loorbach, 2010).

#### 2.2 Public Leadership in Renewable Energy Development

#### 2.2.1 Governments and leadership

As discussed in the previous paragraph, the emergence of LEIs has forced governments to take a less authorial role and share responsibilities with other non-public parties. However, not only the emergence of LEIs triggers this, also the increasing need for climate change mitigation and adaptation has intensified the demand for coordination between different levels actors and settings (Biesbroek, Swart, & van der Knaap, 2009; Meijerink & Stiller, 2013). Climate change is nowadays recognized to form a considerable threat to modern societies and all over the world various measures are taken to limit, mitigate or adapt to climate change and its effects. In the 2015 Paris Agreement, the Dutch government, amongst many others, agreed to limit global warming to a maximum of 2°C. Several aspects are considered essential in reaching this goal, of which the development of renewable energies (RE) forms a central one (Rijksoverheid, n.d.-b).

As mentioned before LEIs are considered of high importance in the development of RE. However, also governmental actors and public policies are recognized as being essential in dealing with climate change, which is characterized by uncertainty and unpredictability (Meijerink & Stiller, 2013). Beside technical and environmental uncertainties, also societal uncertainty exist to this regard. Social-ecological systems are defined by complexity, spontaneity, variety and non-linearity. Therefore, it is suggested that successful public leadership in climate change adaptation would create room for, or stimulate experimenting and diversity, which can enhance the adaptive capacity of governments (Meijerink & Stiller, 2013)<sup>2</sup>. Governments not only influence the occurrence of conditions in which leadership can emerge (Beer & Clower, 2014), but also themselves can fulfil a leading role.

The definition of leadership is disputed, and the concept is often related to 'great persons'. However, leadership can range beyond leading individuals (Beer & Clower, 2014) and encompass a much broader movement towards realizing useful change (Meijerink & Stiller, 2013). Multiple types of leaderships are identified by a variety of scholars, including place leadership, complexity leadership theory, sustainability leadership and leadership for climate change adaptation (Beer & Clower, 2014; Meijerink & Stiller, 2013; Sotarauta, Horlings, & Liddle, 2012).

In addition to this, it must be emphasized that as development is no static event, but rather a longterm process, also leadership must be considered to be developing over time. It can be seen as a journey, choosing directions in the stream of development (Sotarauta & Mustikkamäki, 2012). This indicates a relation more complex than leaders and led. While the leaders maybe lead in some instances, they be follower in others and vice versa. Although this thesis focusses on public leadership, in which the roles are rather clear, still a relay exists. The degree of leadership, and the allowance of alternative parties to practice leadership besides the formal leader, differs also in this context. Therefore the leadership relay, as was described by Sotarauta and Mustikkamäki (2012) is also relevant for this study. They describe leadership as a "relay process in time embedded in wider evolutionary processes" (Sotarauta & Mustikkamäki, 2012, p. 194).

As the main governance challenges discussed in this thesis are related to the emergence of LEIs on a local scale and the connected ability of governments to deal with to climate change, the focus will be on public

<sup>&</sup>lt;sup>2</sup> Although leadership is recognized being an important factor influencing a governments adaptive capacity, it must be emphasized that leadership is just one of the factors, as for instance Gupta et al. (2010) distinguished six dimensions of climate change adaptation, including resources, variety, fair governance, learning capacity, room for autonomous change and leadership.

place leadership and Meijerink and Stiller's (2013) framework for leadership related to climate change adaptation. The latter is conducted out of an assessment of four types of leadership including leadership in the policy process; leadership for connectivity; sustainability leadership theory and complexity leadership theory (Meijerink & Stiller, 2013). In this thesis the leadership tasks related to place leadership will be linked to this framework. Place leadership forms a useful addition to this as it relates the concept of leadership to specific places or regions. This is crucial as also the process of governance itself cannot be considered separate from its political, social or environmental surroundings (Loorbach, 2010).

Moreover, place leadership contributes to the implementation of good leadership at a local level (Beer & Clower, 2014). Good execution may also allow regions to change to a new path to create more sustainable and balanced regional development (Horlings, 2015), herein sharing an ambition with leadership focused on increasing climate change adaptivity as described by Meijerink and Stiller (2013). Lastly, as LEIs are both based in an aim for the development of RE and the development from a community perspective, a framework combining these two notions seems suitable for assessing how to successfully lead development including LEIs.

The societal developments described in the previous sections can thus be seen to demand for public leadership. As RE development by LEIs can be characterized as both place-based, as well as striving to deal with climate change, a combination between two leadership approaches dealing with these issues will be made (see conceptual model for public leadership in figure 1). In the following sections, first these two types of leadership will be discussed and hereafter a framework for assessing a combination of the latter will be proposed.

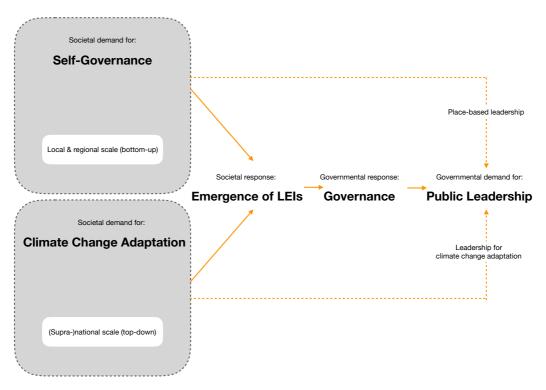


Figure 1 - Conceptual Model for public leadership

#### 2.2.2 Public Leadership in dealing with climate change

Leadership is considered crucial in a regional government's efforts to deal with changes in their direct environment, caused by for instance climate change. By practicing strategic leadership active adaptation to changing conditions can occur (Sotarauta & Mustikkamäki, 2012). Meijerink & Stiller (2013) have adapted the framework of Complexity Leadership Theory (CLT) to make it more suitable to climate change adaptation. Although, the development of renewable energy technologies can be considered an act of climate change mitigation from a technical perspective, as it limits the emission of carbon-dioxide, and hereby aims to minimize or even counter the rise in global temperatures, it can also be considered in line with climate change adaptation. Fossil fuels are limited, and alternative means of energy production need to be adopted. Especially in the Netherlands, where decade long natural gas mining is running low due to exhaustion of the reserves and coinciding earthquakes in the northern provinces, the pressure to adopt alternative means of energy production is increasing (Kooij et al., 2018). Besides this, from a more organizational perspective, the development of renewable energies and the new forms of governance, can be considered climate change adaptation. No radical new organizational forms are developed, but existing structures are adapted to increase inclusiveness and to enhance the adaptive capacity of governments (Meijerink & Stiller, 2013). In the following section, the framework presented by Meijerink & Stiller (2013) will be discussed and connected to place leadership.

Complexity Leadership Theory, which forms the basis of Meijerink and Stiller's (2013) framework, was developed in response to the focus of leadership theories on the presence of a leader. The intellectual movement aimed to examine the fundamental dynamics of the concept as being a process. Herein the focus is on the relation between various agents and actors (Beer & Clower, 2014). Complex adaptive systems (CAS) are the units of analysis (Meijerink & Stiller, 2013). Within CLT there are three types of leadership identified: administrative, adaptive and enabling. Administrative leaders are those fulfilling formal management roles. While administrative leadership relates to persons, Meijerink and Stiller (2013) relate adaptive and enabling leadership mainly to processes. Nonetheless, as they do describe tasks for both, aspects of these functions can also be seen as executed by public leaders, and thus will be regarded as such in this thesis. Adaptive leadership is the complex dynamic arising out of the conflicts and struggles between groups (Beer & Clower, 2014). This function is considered crucial for developing new and innovative ideas and is linked to the ability to allow for experimenting with new adaptation options (Meijerink & Stiller, 2013). Enabling leadership creates the conditions allowing for the latter (Beer & Clower, 2014) and can be carried out by positional leaders. This function can be executed through for instance the fostering of interactions, the creation of a sense of urgency and by allowing for differentiation of set norms and standards. Also non-positional leaders can fulfil these functions, as they e.g. stimulate interactions within a network (Meijerink & Stiller, 2013).

Meijerink & Stiller (2013) have adapted the notion of administrative leadership, to politicaladministrative leadership to fit it more into the political context in which policy is made. The locus of this function, which refers to who fulfils the leadership, is positional leaders, such as elected politicians, and encompasses decision-making on, and communication of, visions. Moreover, they have added two additional functions to the spectrum: dissemination and connective function. The dissemination function entails all activities that intent to disseminate innovative ideas and approaches, developed through the adaptive function of the network. Policy entrepreneurs and champions are playing a crucial role in connecting networks to enable the distribution of ideas. The final connective function includes all leadership activities related to realizing connections between different scales within a network. This includes different governmental scales, but also the connections with other policy sectors and actors (Meijerink & Stiller, 2013) (figure 2).

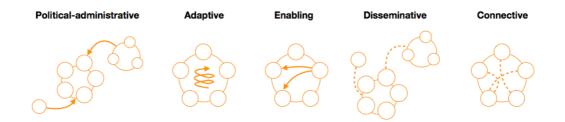


Figure 2 - Visualization of the various leaderships functions as described by Meijerink & Stiller (2013). Figure created by author.

The framework developed by Meijerink and Stiller (2013) to assess leadership functions (table 1) has as prime aim to contribute to the adaptive capacity of inter-organizational networks. Governance efforts by governments can be regards being such networks. In the Dutch case, the interactions between national, regional and local governments, private parties and LEIs considering the development of on-shore wind energy could be regarded such a network.

Leadership function	Locus of leadership	Leadership tasks
Political- administrative	Positional leaders: elected politicians and/or public managers. Decide on, communicate, and monitor the realization shared vision on climate adaptation, generate and a necessary resources for climate change adaptation.	
Adaptive	Complex adaptive system (CAS)	Allow for and stimulate a variety of adaptation strategies and options.
Enabling	Positional leaders; key individual persons (sponsors boundary spanners, policy entrepreneurs, champions)	Create a sense of urgency, e.g. by setting deadlines; insert adaptive tension; foster interaction
Dissemination	Positional leaders; key individual persons (sponsors boundary spanners, policy entrepreneurs, champions)	Insert newly developed ideas (within the CAS) into the network of positional leaders; get accepted newly developed ideas
Connective	Positional leaders; key individual persons (sponsors boundary spanners, policy entrepreneurs, champions)	Promote problems and mobilize actors to search for solutions; bring people together/agree on a collaborative strategy; stimulate multiple action options/working together/building trust and legitimacy; forge agreement/move to action/implement strategies

Table 1 - Adapted from Meijerink & Stiller, 2013, p. 252.

#### 2.2.3 Place leadership

The intellectual and societal interest in place leadership is closely linked to the general idea of place-based development. Place-based development theories, recognize that a territorial system in evidence today, is the result of sunk costs, path dependencies and institutional development. The interactions between institutions and the geography of a place are considered crucial for its development and it is stressed that the implications of a certain context must be considered at the start of policy design processes. By using the local knowledge and sense of community of a region, the social capital and unused potentials of a place can be deployed effectively. Moreover, a place-based development vision aims to consider the variety of possible growth patterns, rather than focussing on a universal one (Barca, Mccann, & Rodríguez-Pose, 2012).

When the concept of leadership is connected to regions or places and their development, it becomes complex and reaches beyond the notion of hierarchical leadership (Beer & Clower, 2014). There are multiple scholars describing the concept of place leadership, however some common features are reappearing in many of these. Leadership at a local scale is deemed to improve (economic) outcomes, while using collaborative, rather than hierarchical methods to connect institutions, individuals and firms. Moreover, leadership has a long-term dimension (Beer & Clower, 2014).

Factors mentioned fostering effective place leadership are: the sharing of power; flexibility and leadership should be rooted in entrepreneurialism (Stimson, Stough, & Salazar, 2009). Place leadership is recognized by George & Reed (2015) as one of the procedural drivers for sustainable development. Place leadership in this context entails the pooling of local resources and the mobilization of a community. The local leader functions as a catalyst in engaging the community and its resources in the development of a region (George & Reed, 2015).

Beer & Clower (2014) recognize that leadership of places is distinctive from leadership found in private, governmental and non-profit organizations, as it emerges in communities. Due to the increasing complexity of the policy environment, in which localities are continuously altered by diverse stakeholders, local leaders face high demands as roles have blurred and new governance processes are introduced (Beer & Clower, 2014). Nonetheless, this thesis will argue that although place leadership often does originate in communities, also positional leaders, such as government representatives, can be local leaders. However, as Beer & Clower (2014) recognize as well, it is crucial to acknowledge that even though formal leadership roles are assigned, they might not be taken up.

Sotarauta (2010, p. 390) seems to acknowledge the role of public place leadership as he describes these positional leaders, or regional development officers, as *shepherds*. He states, "[p]olicy networks are not self-organising entities but groups of people that need their shepherds". Sotarauta (2010) does not apply the term place leadership himself but states to focus on leadership in regional economic development, including networks present in this context and the regional development officers enacting this leadership.

Nonetheless, his research is framed within the body of literature on place leadership frequently (Ayres, 2014; Beer et al., 2018). His contribution is valued for place leadership as he documents ways in which professional staff, such as also are the positional leaders at the Dutch provinces, can enact leadership in bringing strategic plans into effect and enhance communication between stakeholders (Beer et al., 2018). As this suits the focus of this research, the key activities of Sotarauta's (2010) regional development officers are listed below (figure 3). Moreover, since his framework fits within the wider spectrum of place leadership, it will also be referred to as such.



Figure 3 - Visualization of public place leadership tasks as described by Sotarauta (2010), figure created by author.

First, a challenge for these regional development officers is to span boundaries, beyond the communities that authorizes them, to spheres where their actions and words might have influences. To practice leadership, a positional leader should be able to influence the actions of other organizations (Sotarauta, 2010).

Second, they should mobilize individuals with different backgrounds and recruit people with various skills and modes of operating. Leaders that are able to enrol others in networks and commit them when strategic decisions are made are particularly important. Potential participants need to be convinced to invest resources into the network and to discuss competing interests (Sotarauta, 2010). This function can be linked to the catalyst function as was deemed important by George and Reed (2015).

Another important aspect of place leadership lays in the leaders' capacity to create strategic awareness of an issue and draw attention to specific questions to be asked. This can be done through for example seminars or information sharing. Even though strategic awareness is created through a timely process, nonetheless it can contribute to flexible and fast decision-making (Sotarauta, 2010).

As a crucial prerequisite for collective action Sotarauta (2010) stresses the importance of framing done by the positional leader, as he states "perhaps the highest form of power lies in the way in which actual discussions are created and in which problems and challenges are defined and framed" (Sotarauta, 2010, p. 396). To foster collective action, framing should be focussed on creating a shared understanding and vocabulary to deal with issues at hand. A positional leader can frame the policy network context through the introduction of new ideas, hereby aspiring to find common goals between individual goals. Through this framing shapes the emerging development strategies and needs and the collective efforts (Sotarauta, 2010).

A further function of a positional leader is to create coordination between fragmented groups of actors. It must be emphasized that this is often a balancing act, as creating a common vision between stakeholders with very different interest can be very challenging. Coordination can be exercised through

three options. First, new structures and institutions can be created. Part of this option entails the demolishing of 'frozen shapes', by altering static administrative structures. This call for administrative and coordinative flexibility, links to the factors for successful place leadership of Stimson et al. (2009), mentioned before. Secondly, positional leaders can coordinate through the creation of trust, solidarity and interdependency between organizations and individuals. This can be done through emphasizing the mutual benefit of network connectivity, integration and transparency. Finally, leaders can foster coordination through the production of shared knowledge. This leads to social integration of actors and fosters the network functioning as a source of information and working efficiently (Sotarauta, 2010).

A last aspect of positional leadership deemed important by Sotarauta (2010), is the creation of shared visions and development plans. When made too vague or broad, strategies risk too loose their guiding effect, while when made explicit and actors commit to it, a strategy can contribute to the bridging between visions and the creation of a common vision. Moreover, it can be used as a tool to make sense of an ongoing open discourse (Sotarauta, 2010).

Locus of leadership	Leadership task	Practical tasks
Positional leader, regional	Span boundaries	Influence the actions of other organizations, also outside of the leaders' authorial network.
development officer	Mobilization of individuals & recruitment of skills	The mobilization of individuals with various backgrounds. Using locally available skills.
	Create strategic awareness	Create a focus on specific topics of interest through the strategic sharing of information.
	Framing of the development	Creating a shared understanding and vocabulary on the issue at hand.
	Coordination	<ul> <li>Creation of new, flexible structures, to overcome "frozen shapes".</li> <li>Creation of trust, solidarity and interdependence through integration, connectivity and transparency.</li> <li>Creation of shared knowledge.</li> </ul>
	Creation of shared visions	Creation of focussed, whilst inclusive, vision documents that contribute to a common vision.

Table 2 - Expressions of public place leadership based on Sotarauta, 2010.

#### 2.2.4 Public leadership and LEIs

While leadership is discussed in many contexts, the functioning of public leadership in relation to newly arising forms of citizenship, such as LEIs, did not yet gain much attention. This thesis therefore focusses on the tasks within the five leadership functions, to identify the efficacy of place leadership in RE development, whilst enabling citizen-led development. In the following sections, a framework for the assessment of public place leadership in RE development will be proposed and, after the interviews are conducted with positional leaders of the Dutch regional government, the framework will be tested for its effectiveness in assessing public place leadership.

The place leadership tasks of Sotarauta (2010) can be uncovered within the various leadership roles identified by Meijerink & Stiller (2013).

The political administrative role, focusses on the decision-making on, and creation of, a shared vision and strategy, as well as the mobilization of necessary resources and the monitoring of progress (Meijerink & Stiller, 2013). One can clearly recognize the following place leadership tasks of Sotarauta (2010) within this function: creation of shared vision; mobilization and recruitment and strategic awareness. Moreover, also framing can be seen as a task within the political-administrative function, as the political-administrative leader makes decisions on the creation of a shared vision and hereby stirs its development into a certain trajectory, which can be considered a way of framing the issue.

The adaptive function is not executed by individual leaders but emerges out of the complex adaptive system that the policy network embodies. Adaptability entails a balance between learning and allowing for a wide range of ideas, and quick action. In balancing this, the political-administrative function is very important (Meijerink & Stiller, 2013). Eventhough Meijerink and Stiller (2013) assign no activities to this function, still a function of Satorauta (2010) seems to be fitting: the allowance and stimulation of a variety of adaptation strategies and options.

The enabling function, focussing on the enabling of experimenting with new and innovative ideas and the creation of a sense of urgency, encompasses creation of strategic awareness, framing and coordination. Through strategic awareness and framing a sense of urgency can be communicated. Moreover, through the creation of new institutional structures, the positional leader can allow for experimenting with new innovative ideas.

The dissemination of innovative local ideas can be done through effective coordination and boundary spanning by the positional leaders. Though integration, solidarity and transparency between actors, as well as the creation of new institutional structures, "frozen shapes" can be dismantled and a new common vision can be created. Moreover, as a boundary spanner, the positional leader can broaden the vision of established network participants and create a more diversified network and vision.

Finally, the connective function entails a wide range of possible leadership tasks. Through strategic awareness certain issues can be promoted and mobilization and recruitment can be adopted in the search for solutions. By bringing people together and having them agree on a collaborative strategy, a common vision can be created. The coordinative tasks can be performed to stimulate multiple action options and interdependencies, but also to create agreement through focussing on connectivity between actors.

Combining these functions and tasks, a new framework arises, potentially suitable for the assessment of public place leadership in climate change adaptation and mitigation, whilst valuing bottom-up movement by LEIs. This new type of public leadership will be referred to as accommodative leadership and is summarized in table 3 and figure 4.

Leadership function	Locus of leadership	Leadership tasks	Practical tasks
Political- administrative	Positional leaders	Creation of a shared vision, mobilization and recruitment, coordination, strategic awareness and framing.	<ul> <li>Decide on, communicate, and monitor the realization of a shared vision on regional development in climate change adaptation (including strategic awareness and framing of the issue);</li> <li>Generate and allocate necessary resources for climate change adaptation;</li> <li>Inclusion of all stakeholder in development of public energy vision;</li> <li>Creation of shared understanding and vocabulary.</li> </ul>
Adaptive	Complex adaptive system (CAS), positional leaders	Coordination, mobilization and recruitment	<ul> <li>Allow for and stimulate a variety of adaptation strategies and options.</li> </ul>
Enabling	Positional leaders	Strategic awareness and coordination.	<ul> <li>Create a sense of urgency, e.g. by setting deadlines; insert adaptive tension; foster interaction</li> <li>Set frame for innovations: e.g. allow for differentiation of standards.</li> </ul>
Dissemination	Positional leaders	Common vision, coordination, spanning of boundaries.	<ul> <li>Redesigning and altering existing institutions to overcome "frozen shapes": institutional renewal</li> <li>Insert newly developed ideas (within the CAS) into the network of positional leaders;</li> <li>Get accepted newly developed ideas;</li> </ul>
Connective	Positional leaders	Creation of shared vision, mobilization and recruitment, spanning of boundaries and coordination.	<ul> <li>Promote problems and mobilize actors to search for solutions;</li> <li>Bring people together/agree on a collaborative strategy;</li> <li>Stimulate multiple action options/working together/building trust and legitimacy;</li> <li>Forge agreement/move to action/implement strategies;</li> <li>Management of connections between different scales within a network</li> </ul>

Table 3 - Framework for accommodative leadership

Task: Function:	Strategic awareness !	Framing	Coordination	Common vision	Mobilization & recruitment	Span boundaries
Political- administrative	Deciding of focal point of regional strategy	Strategic framing of regional issues	Building of trust and legitimacy within the network	Regional strategy development	Mobilize, generate and allocate resources, knowledge and individuals	X
Adaptive	x	x	Institutional flexibility to allow for innovation	x	Gather resources for innovation	x
Enabling	Create a sense of urgency: deadlines	x	Allow for differentiation of set norms and standards; Foster interactions in the network	x	x	x
Disseminative	x	x	Institutional renewal	Get newly developed ideas accepted	x	Insert newly developed ideas in network of positional leaders
Connective	x	x	Management of connections with network: trust, integration and transparency	Collaborative strategy development	Stimulate multiple action options, mobilizing actors to search for solutions	Connect different networks

Figure 4 - Visualization of accommodative leadership functions with corresponding tasks, figure created by author.

#### 2.2.5 Accommodative leadership

Through combining the conceptual model presented in figure 1 with the framework proposed in paragraph 2.2.4, a final conceptual model can be created (figure 5). This figure illustrates how the different developments relate and how they lead up to the model presented in figure 4. By combining leadership approaches, key terms characterizing accommodative leadership seem to be: adaptivity, to allow a wide range of options in planning and practice and increase adaptive capacity (Meijerink & Stiller, 2013); governance, to allowing other parties besides the formal responsible government body to share responsibility over the planning process (Meijerink & Stiller, 2013; Sotarauta, 2010); and participation, to allow LEIs, but also other inhabitants of a specific region to contribute the implementation of planning (Sotarauta, 2010) and to develop projects themselves. Also, as the framework of Sotarauta (2010) originates in regional development, also the focus of the accommodative leadership framework is sub-national.

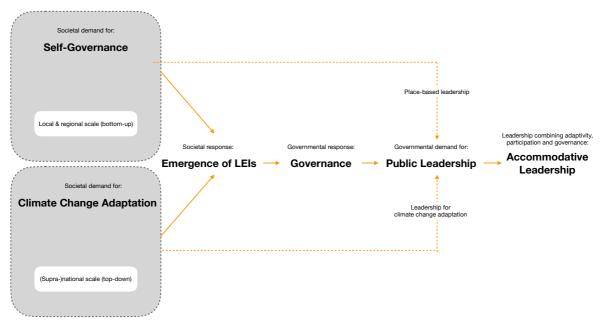


Figure 5 - Conceptual model: developments demanding for public leadership, plus public place leadership framework, figure created by author.

## 2.3 The Dutch Context

Before elaborating on the methods for applying the accommodative leadership framework to Dutch cases, the Dutch context is briefly discussed in the following paragraphs.

2.3.1 Current policy, governance structure and stakeholders

#### National government

As was mentioned before, on-shore wind energy is considered a core aspect of the Dutch energy mix, vital in reaching the energy targets. The spatial planning of large wind parks (over 100 MW) is the responsibility of

the national government, while the spatial diffusion of smaller projects is the responsibility of the provinces. The newly formed cabinet (October 2017) has emphasized the importance of local energy production in their plans for the coming 4 years (Schwencke, 2017). A national target for 6000 MW on-shore wind energy capacity in 2020, was set by the national government in 2014 and a distribution of this target was made between the provinces based on a negotiation between the provinces themselves (table 4) (Netherlands Enterprise Agency (RVO), n.d.-a)<sup>3</sup>.

Province	Target 2020 (MW)	Developed capacity 31-12-2015 (MW)
Flevoland	1390.5	963
Groningen	855.5	442
Zuid-Holland	735.5	332
Noord-Holland	685.5	358
Zeeland	570.5	351
Friesland	530.5	168
Noord-Brabant	470.5	170
Drenthe	285.6	22
Gelderland	230.5	59
Limburg	95.5	18
Overijssel	85.5	43
Utrecht	65.5	25
Total	6001	2951

Table 4 - Division of total on-shore wind energy megawatt (MW) capacity per Dutch province, as well as the developed capacity in 2015 (Netherlands Enterprise Agency (RVO), n.d.-a).

In realizing on-shore wind energy, the following national laws and regulations apply. First, the 'wet ruimtelijke ordening' (law on spatial planning) applies. As wind turbines have a spatial impact, they have to be fitted into local zoning or land-use plans. Secondly, the 'wet milieubeheer' (law on environmental management) applies, including general rules on environmental protection. In some cases, a permitting duty exists for wind energy (this permit will be part of the general environmental permit). Thirdly, a 'milieueffectrapportage' (environmental impact assessment, EIA) is obligated for wind parks over 15 MW. Besides, for smaller wind parks (3 turbines or more) the qualified authority can still demand an EIA. Fourthly, the 'woningwet' (housing law) states all newly build turbines need a permit to be not located too close to housing areas (this permit will be part of the general environmental permit). Fifthly, through the 'natuurwetgeving' (nature legislation), specific natural areas and species are protected from any wind energy development. Finally, there is some other related legislation, related to e.g. water management and air traffic prohibiting wind energy development in certain location (Netherlands Enterprise Agency (RVO), n.d.-b). In practice, an initiative needs to obtain an environmental permit, as well as commonly an EIA.

<sup>&</sup>lt;sup>3</sup> It must be noted that small wind turbines (under 25 meters) are the spatial responsibility of the municipality according to the electricity law (Netherlands Enterprise Agency (RVO), n.d.-b).

#### The provinces

The 'College van Gedeputeerde Staten' (college of provincial executives) governs the province and is elected every four years by the members of the provincial council. The college constitutes of 3 to 7 members, also known as the 'gedeputeerde' (deputy). Each deputy has a task area, wind energy is commonly grouped under the task 'energy(-transition)' (Rijksoverheid, n.d.-a). Nonetheless, these deputies are supported by various civil servants, amongst which also a 'coordinator wind energy'.

In reaching the given targets, the provinces behold the licensing capacity, allowing for private developers to initiate projects (Rijksoverheid, n.d.-b). What the spatial requirements for obtaining a license are however, differs widely per province (Oteman et al., 2014). Besides these differences in requirements, also the involved actors in policy-making, the type of interactions and the degree of civil participation differ substantially. The 'Structuurvisie Wind op Land', created by each province, is the main policy document providing an implementation framework in this context (Netherlands Enterprise Agency (RVO), 2016).

#### Wind energy cooperatives

Participation in privately developed wind energy projects is becoming increasingly common in the Netherlands. Over 80% of all recently developed wind parks offer citizens to participate financially. Moreover, some municipalities and provinces even demand this (Schwencke, 2017). It must be emphasized that this type of financial participation in privately developed projects is not what LEIs are about. In this thesis LEIs are considered that apply a cooperative model. Cooperatives include besides financial participation also ownership and influence on decision-making. Cooperatives are democratically organized, with equal voting rights for all members of the cooperative. The ownership of these models can range between a cooperative ownership, whilst founding a private company by the cooperative; and a shareholder model, issuing shares through a cooperative (Schwencke, 2017)<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Besides these forms, there are also forms to be found including financial participation in wind energy development, without ownership (Schwencke, 2017). However, in this research, these models will not be taken into account.

# 3. Methodology

## 3.1 Research design

In the following sections, the research approach and design chosen in this study will be elaborated on and data-collection methods will be made explicit.

### 3.1.1 Research approach

This research is focussed on the execution of public leadership in the context of renewable energy development by LEIs. As the body of literature on this specific topic is limited, this study will have an exploring character, using a theoretical background founded in leadership theories on climate change adaptation and place leadership. In the previous chapter, a framework for assessing accommodative leadership was proposed. Because this thesis focusses on leadership in relation to LEIs, the framework presented in figure 4 will be tested against this background to identify those leadership functions deemed important in supporting the possibility of wind energy development by LEIs. The focus will be both on those roles performed in practice and those perceived important, as although formal leadership roles might be assigned, they are not always taken up adequately (Beer & Clower, 2014).

This study will be a triple case study, focussing on three provinces in the Netherlands. The research approach is chosen as the Dutch provinces are subject to the national law and regulations, while simultaneously being free to develop their own spatial strategy within this framework (Oteman et al., 2014). Moreover, the regional scale of the provincial government, in combination with the spatial authority of this governmental layer, suits the created framework for accommodative leadership as it focusses on sub-national governments. Nonetheless, as the different Dutch provinces differ widely in their history with wind energy and also their wind energy potential and size, it is chosen to not take a comparative or policy transfer approach, but rather a case study approach. Moreover, the aim of this research is to test the developed framework and its validity for provinces, rather than comparing the provinces and their strategies. Yet, by choosing relatively comparable cases, still some general comparisons can be made. These allow for a further understanding of the unique character of each province.

### 3.2 Used data collection methods

The focus of this research will be on both the planning system and the governance style of the Dutch provinces. In their commentary Gordon and Yukl (2004) advise researchers on leadership to go beyond a survey method, Making a greater use of qualitative methods, such as in-depth qualitative research, allows

for the detailed questioning of certain constructs at hand. In addition, they advise to combine multiple methods if possible (Gordon & Yukl, 2004). Therefore, this study applies a combination of qualitative interviews and policy analysis. By choosing a qualitative approach, this study places itself within a decade long tradition of qualitative leadership research, within which qualitative interviewing (a.o. semi-structured interviews) have been the main data collection method (Bryman, 2004).

In determining the most appropriate qualitative method for this study, several considerations have been made. First, the aim is to collect in-depth and complete responses, for which both interviews, as well as focus groups provide an appropriate method. These methods also seem suitable, to review the information collected through the policy analysis (Harrell & Bradley, 2009). Yet, as the aim of this research is to create an understanding of the importance of certain functions and tasks of the leadership applied, a focus group seems less appropriate, as this method is less suitable to determine emphasis on specific aspects. This can happen as the group members might not share the same emphasis, or because the group dynamic implies a misleading one. These difficulties are not experienced using interviews (Harrell & Bradley, 2009).

Moreover, as different respondents might be dependent of each other for future wind energy development projects, the issues discussed might be sensitive. The potential sensitivity of an issue can also discourage the use of focus groups as a method (Harrell & Bradley, 2009).

In the following paragraphs first, the applied research strategy is set out, after which the types of research are discussed in more detail, as well as their application in answering the research questions and the collection techniques applied.

#### 3.2.1 Research strategy

Figure 6 depicts the research strategy applied in this thesis. The accommodative leadership framework that has been developed will be used as a base in studying three cases. Using this framework, the data collected through qualitative interviews and policy analysis will be analysed and conclusions will be drawn in the last chapter (see figure 6). In this final chapter, also the usefulness of the framework will be evaluated.

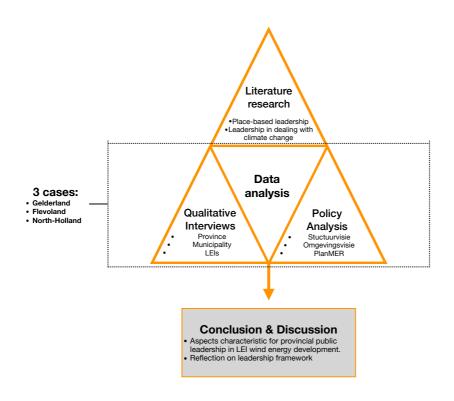


Figure 6 - Research strategy

#### 3.2.2 Literature study

The literature study performed in chapter 2, provides a basis for the further research in this thesis. As a basis for this study literature on *governance*, *LEIs* and *leadership* was employed. The literature used in this chapter was, excluding some grey sources used to describe the context, obtained from scientific journals and books.

#### 3.2.3 Qualitative research

Qualitative research is recognized as providing insights, explanations and theories of social behaviour. Moreover, it provides policy makers with a theory of social action, which is grounded in experiences and the worldview of those likely to be affected by the policy decisions (Ritchie & Spencer, 2002).

Since this study focusses on the evaluation of current leadership practices and the ambitions and demands in this field, mainly evaluative and strategic questions will be addressed. These are focussing on the appraisal of the effectiveness of what exists (evaluative) and on the identification of new theories, policies, plans and actions (strategic) (Ritchie & Spencer, 2002). Diagnostic and contextual questions, having a stronger focus on the form, nature and causes of what exists (Ritchie & Spencer, 2002), will be disregarded.

Qualitative research allows insights in both the planning structure and governance style of the different provinces. The planning system is identified as the medium for action, the administrative framework (Reimer & Blotevogel, 2012), whilst governance style refers to its implementation. By evaluating these, a comprehensive understanding of both the content and process of planning effort is developed. The planning

structure will be researched through a policy analysis, while the governance style is studied through semistructured interviews.

The policy analysis will focus on the requirements the selected provinces have set to wind energy development. The national requirements for wind energy development have been discussed briefly in paragraph 2.3 and will be let out of further consideration. The data for the policy analysis will be collected from the official provincial websites.

The semi-structured interviews will focus on the perceived and expected public leadership by the provincial governments. The units for analysis are further specified in paragraph 3.3.

Question	How?	When	Source	Method of retrieval	Document ation method	Method of analysis
What is public spatial leadership in the context of citizen-led wind energy development?	Insights from existing literature (scientific sources)	First version mid- February, revised version end of February.	Literature on citizen participation (self- governance), governance, climate change adaptation, leadership & place leadership.	Literature study, Critical reading	Writing theoretical framework	Literature study
How do provincial governments formally enable citizen-led wind energy development?	Reading policy documents: coalition agreements, wind energy visions	March & April	Provincial websites: official policy documents	Collecting data from website of provinces.	Text, various overview figures or tables	Content analysis, using coding
How do provincial governments practice and perceive their own role and leadership tasks?	Interview with provincial government officials responsible for on-shore wind energy	Collection: April, May & June, Analysis: May & June	Interviews	Semi- structures interviews	Transcripts	Content analysis of transcript, using coding
How should provincial governments take the lead in citizen-led wind energy development according to those involved in the development process?	Interviews with members of LEIs within specific provinces, as well as with executives at the municipalities	Collection: April, May & June, Analysis: May & June	Interviews	Semi- structured interviews	Transcripts	Content analysis of transcript, using coding

3.2.4 Data collection framework and techniques

Table 5 - Framework of data collection techniques

### 3.3 Specification of research units

To provide both an insight and outside perspective, a combination of research units is chosen. A policy analysis alone can create an overly positive image; therefore, this method is combined with semi-structured interviews. However, as interviews with the policy executives themselves can still draw a one-sided image when combined with the policy analysis, also an 'outsiders' perspective will be adopted. By interviewing both executives and those experiencing the policy, this research aims to combine the insight and outsight view to provide a comprehensive image of the practiced leadership.

#### 3.3.1 Feasibility

To allow for in-depth analysis of the planning structure, as well as governance style, whilst evaluating their differences, it was chosen to limit this research to three cases. Due to the scope of the master thesis, a larger sample would possibly compromise the quality of the individual cases. Moreover, as this research has an explorative character the small sample allows for refining the framework for accommodative leadership, before doing a more thorough analysis.

#### 3.3.2 Case selection

A first criterium used for the selection of provinces as units of analysis was the existence of wind energy development by LEIs. Except for Drenthe, Utrecht and North-Brabant, all provinces have cooperatively developed wind energy (Netherlands Enterprise Agency (RVO), 2016). It might be that these three provinces have active citizen initiatives aiming for the development of wind turbines in the near future, but as there was no development up to now, these will not be taken into account.

After this it was chosen to apply a diverse cases approach to the case selection. A diverse case selection is likely to enhance the representatives of the cases selected and allows more generalization than only choosing typical cases (Seawright & Gerring, 2008). Based on the selection criteria of the presence of active LEIs, the provinces of Gelderland, Flevoland and Noord-Holland have been selected. These three provinces form a profile of the Netherlands, as they are located adjacent from west to east (figure 7). And in addition, they also form a profile of forms of LEI wind energy development. These cases can be considered diverse as in Gelderland several small LEIs have developed wind since 2011; in Flevoland one LEI is developing a very large wind park currently (since 2011); and in North-Holland a LEI has applied but was not permitted to develop wind energy and in general no wind energy was developed by LEIs since 2011 in this province.



Figure 7 - The provinces of North-Holland, Flevoland and Gelderland, as located in the Netherlands.

Yet, these cases not only differ in the occurrence of development of wind energy by LEIs. As is illustrated in figure 8, the wind energy development in the different provinces has taken a very different phase. Whilst Gelderland in 2016 only had 39 turbines, the provinces of North-Holland and Flevoland had 306 and 648 turbines installed (CBS, 2018). However, not only the development took a different phase, also the type of ownership. While the first LEIs arose in the late 80s in North-Holland, the first LEIs in Gelderland and Flevoland were only established after 2010 (table 6) (Schwencke, 2017). Despite the focus of this study on the current leadership practiced in each of these provinces, these numbers are important. As leadership is a relay in time (Sotarauta & Mustikkamäki, 2012), the history of (LEI) wind energy development is an important factor to consider, especially when explaining the differences in leadership between these provinces.

A last aspect to note is the unique history of Flevoland, and its corresponding relationship to development. Flevoland is reclaimed out of the former Zuiderzee, an inland going sea-arm. The province of Flevoland was finished in the late 60s and consist almost exclusively of 'polderlandscape'.

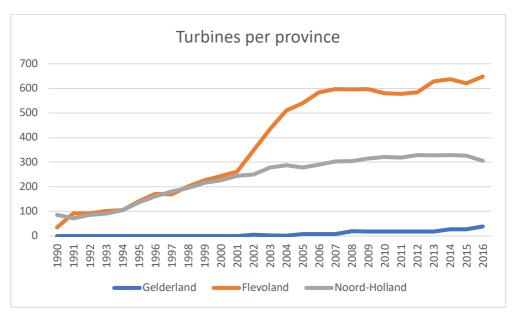


Figure 8 - Number of wind turbines per province (CBS, 2018).

Province:	Number of LEIs with a wind energy focus:	First LEI established in:
Gelderland	15	2013
Flevoland	5	2015
Noord-Holland	29	1986

Table 6 - LEIs per province (Schwencke, 2017).

#### 3.3.3 Specification of initiatives

Within the provinces discussed in the previous section, LEIs are selected. A selection was made for those that have either already developed a wind turbine, or who at least have applied for a permit. As applying for a permit already is accompanied by costs, this can be considered a determinant for their perseverance. Through interviewing the LEIs, their perception on public leadership can be analysed.

#### Windpark Nijmegen-Betuwe

The wind park Nijmegen-Betuwe, located in the municipality of Nijmegen in Gelderland has successfully developed a wind park of 4 turbines. The initiative is a cooperative, founded in the city of Nijmegen in 2013 during a neighbourhood event and can be considered to be a real bottom-up movement. From the start, they have been supported by the municipality and they have teamed up with a foundation and commercial developer to ensure support, feasibility and professionality. The focus of the initiative is on speeding up the energy transition (Interview, LEI: case Gelderland). The park was finalized in 2016 and was co-invested in by over 1000 citizens. The initiative of the wind park originates from the cooperative itself, who has collaborated with both the Gelderse Milieufederatie (GFM, Environmental Federation Gelderland, own translation) and local commercial developer Izzy-projects. The cooperative is currently owning the whole wind park (Windpark Nijmegen-Betuwe, n.d.).

#### Windpark Zeewolde

For the province of Flevoland, the initiative 'Windpark Zeewolde' was selected. This initiative is a collaboration between inhabitants, farmers, and wind turbine owners and is located in the municipality of Zeewolde. In the rural area of the municipality approximately 220 farmers live, of which 90% own a wind turbine. These turbines provide the farmers with additional income. However, they are reaching their lifespan (which is around 20 years). Therefore, the initiatives aim to replace the 220 older turbines in the area with 91 new ones. The old turbine owners receive the possibility to, in exchange for the remediation of their old turbine(s), get a share in the new wind park. Hereby the landscape can be re-organized, whilst maintaining the extra local income the turbines generated. Moreover, also inhabitants and companies of the region are able to invest in the new turbines (Ontwikkelingsvereniging Zeewolde, n.d.).

#### NDSM Energie

As was mentioned before, the province of North-Holland has no LEIs that have completed the whole trajectory of applying for wind energy permits and actually developing these in the last decade. Therefore, the selected LEI differs from the previous two. The LEI NDSM Energie was selected for this province as it did obtain a permit from the municipality in 2014 for the development of a wind turbine. This permit however was overruled and withdrawn by the province, whereafter the initiative has applied for a new permit within the renewed provincial policy, which was denied in 2017 (NDSM Energie, n.d.).

NDSM Energie was founded in 2014 by a number of companies based in the creative cluster of the NDSM wharf in Amsterdam. The former industrial shipping wharf is nowadays a creative hub, housing businesses in a wide range of sizes. The initiative applied for a permit for 6 turbines, which would be funded and cooperatively owned by residents and companies from the city. The initiative represents over 60 businesses of the wharf (NDSM Energie, n.d.).

#### 3.3.4 Timeframe

Wind energy development targets are mainly framed till 2020, therefore the main timeframe in focus in this research is the development to reach 2020 targets.

#### 3.4 Data analysis

#### 3.4.1 Policy Analysis

The policy analysis in this research is focussed upon the formal arrangements provincial governments make to enable citizen-led wind energy development. In table 3 various functions have been discussed, of which several are (partly) formal. Of the political administrative function, the effort to create shared strategies within the province and include all stakeholders in the process is part of these. The inclusion of stakeholders encompasses the inclusion of LEIs as partners, but also the inclusion of other societal stakeholders involved. Moreover, the task of allocating the necessary resources can also be found in the effort to keep the process affordable for LEIs financially, as well as from a temporal perspective. As was mentioned before, LEIs are generally known to poses over smaller budgets than market parties and are known to struggle with long procedure times (Hoppe et al., 2015). Considering the adaptive function, the allowance of a variety of options, through for instance allowing for different types of wind parks or organizational forms, can enable this. The function of the enabling role is found in the deadline setting and fostering of interaction done by the provinces. Moreover, the extent to which rules are rigid and fixed is also an indicator for this function: the allowance to differentiate from set standards. Regarding the dissemination function, again the rigidity of their own institutions is seen to be an indicator, with herein a focus on the role of the province themselves and the institutional renewal they proscribe through for instance the inclusion of societal stakeholders or municipalities. Finally, the connective function can be found in the management of connections between the different stakeholders, but also scales within a network. Based on this, 8 codes have been created that are used in the policy analysis (table 7).

Colour	Code
yellow	Shared strategy
pink	Deadline setting and communication
orange	Perceived provincial role
grey	Connection management
green	Participation of stakeholders in development and execution of regional strategy.
blue	Enabling those with limited resources
purple	Allowing a variety of options
red	Flexible regulations and demands

Table 7 - Color codes used for policy analysis.

While these identified formal functions seem to provide a fairly complete list of indicators, one must not forget that there might also be functions, or tasks outside this range. Therefore, the formal documents of the province will be read thoroughly, to allow for possible expansion of the framework in the reflection.

The documents used for this policy analysis are the provincial visions on wind energy development (*Structuurvisie*/*Windvisie*), as well as the environmental impact assessments (*EIA*) made by each province (or the elucidation of these), and the more general environmental vision. As the province of North-Holland is currently finalizing its new environmental vision, which is not available yet, the provincial spatial regulation is used, to analyse an up-to-date document. The exact documents used are listed below in table 8.

Omgevingsvisie Provincie Gelderland (Provincie Gelderland, 2018).         Toelichting en PlanMER Windvisie Provincie Gelderland (Provincie Gelderland & Royal HaskoningDHV, 2014).         Province of Flevoland       Structuurvisie Provincie Flevoland (Provincie Flevoland, 2016).         Omgevingsvisie Provincie Flevoland (Provincie Flevoland, 2017).         Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)         Province of North-Holland         Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom, Prinsen, & Rienks, 2014).	Province of Gelderland	Windvisie Provincie Gelderland (Provincie Gelderland, 2015).			
HaskoningDHV, 2014).         Province of Flevoland         Structuurvisie Provincie Flevoland (Provincie Flevoland, 2016).         Omgevingsvisie Provincie Flevoland (Provincie Flevoland, 2017).         Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)         Province of North-Holland         Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,		Omgevingsvisie Provincie Gelderland (Provincie Gelderland, 2018).			
Province of Flevoland       Structuurvisie Provincie Flevoland (Provincie Flevoland, 2016).         Omgevingsvisie Provincie Flevoland (Provincie Flevoland, 2017).         Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)         Province of North-Holland       Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,		Toelichting en PlanMER Windvisie Provincie Gelderland (Provincie Gelderland & Royal			
Omgevingsvisie Provincie Flevoland (Provincie Flevoland, 2017).         Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)         Province of North-Holland       Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,		HaskoningDHV, 2014).			
Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)         Province of North-Holland       Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,	Province of Flevoland	Structuurvisie Provincie Flevoland (Provincie Flevoland, 2016).			
Province of North-Holland       Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).         Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).         Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,		Omgevingsvisie Provincie Flevoland (Provincie Flevoland, 2017).			
Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017). Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,		Plan-MER Structuurvisie Windenergie op land (Kok & de Sain, 2013)			
Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,	Province of North-Holland	Structuurvisie Provincie Noord-Holland (Provincie Noord-Holland, 2015).			
		Provinciale Ruimtelijke Verordening 2016 (Provincie Noord-Holland, 2017).			
Prinsen, & Rienks, 2014).		Herstructurering Wind op Land Noord-Holland – PlanMER (Runia, Maronier, Lindeboom,			
		Prinsen, & Rienks, 2014).			

Table 8 - Documents analysed in policy analysis.

#### 3.4.2 Interviews

To make sure a comprehensive understanding of the provinces is warranted, also interviews are used as a method in this research. For each of the provinces the coordinator of wind energy development in the province is interviewed, rather than the deputy him-/herself, as this coordinator arguably is more common with the implementation of the policy. Besides this, also respondents of LEI's in each of the provinces, just as the corresponding municipality are interviewed, to gain also an outsiders perspective on the provincial policies. In table 9, the respondents, the dates of the interviews, and the interview methods are listed.

Province	Position	Respondent	Date	Method	Duration
Gelderland	Province	Respondent for the province Gelderland	11 April 2018	In person	00:41:19 h
	LEI	Respondent LEI 'Nijmegen-Betuwe Wind'	16 April 2018	Phone	00:27:02 h
	Municipality	Respondent municipality Nijmegen	1 June 2018	Phone	00:13:41 h
Flevoland	Province	Respondent for the province Flevoland	23 April 2018	In person	00:42:29 h
	LEI	Respondent LEI 'Windpark Zeewolde'	16 May 2018	Skype	00:25:35 h
	Municipality	Respondent municipality Zeewolde.	24 May 2018	Phone	00:30:16 h
North-	Province	Respondent for the province North-Holland	1 June 2018	In person	01:05:39 h
Holland	LEI	Respondent LEI 'NDSM-Energie'	18 May 2018	Skype	00:50:19 h
	Municipality	Respondent municipality of Amsterdam	24 May 2018	Skype	00:36:17

Table 9 - Overview of respondents, their role, the date of interviewing and interview method.

#### 3.4.2 Data analysis framework

In table 10 the data analysis framework as used in this thesis is depicted. The keywords given in each of the categories show the main codes used for the data collection and analysis, as well as the base for the interview questions. As visible, similar categories are used for the policy analysis and the interviews with the provincial executives, as the data resulting from these will come from a related, if not the same, source. The categories for the interviews with LEIs differ slightly from these, as LEIs are subject, rather than executer of leadership

in this research. To analyze the interviews in a careful manner, it was chosen to use the program AtlasTi. This program allows for structural coding of interview data.

Leadership function	Leadership tasks	Policy analysis	Executed Public Performance, according to provincial administration	Perceived Public Performance, according to LEI and municipality
Political- administrative	Creation of a shared vision, mobilization and recruitment, coordination, strategic awareness and framing.	<ul> <li>Governance strategy of creating a shared strategy</li> <li>Participation by LEIs and society in development and execution of strategy.</li> <li>Perceived role of province</li> </ul>	<ul> <li>Governance strategy of creating a shared strategy</li> <li>Participation by LEIs and society in development and execution of strategy.</li> <li>Perceived role of province</li> </ul>	<ul> <li>Involvement in strategy creation and execution</li> <li>Perceived and desired role province</li> </ul>
Adaptive	Coordination, mobilization and recruitment	<ul> <li>Allowance of variety of options, ranging from physical to organizational variety.</li> </ul>	<ul> <li>Allowance of variety of options, ranging from physical to organizational variety.</li> </ul>	<ul> <li>Allowance of variety of options for development, ranging from physical to organizational variety.</li> </ul>
Enabling	Strategic       - Rigidity of rules:         awareness and       allowance of flexibility         coordination.       - Allow those with little         resources to enter (time funding)       - Deadline setting		<ul> <li>Rigidity of rules: allowance of flexibility</li> <li>Allow those with little resources to enter (time, funding)</li> <li>Deadline setting</li> </ul>	<ul> <li>Rigidity of rules for development.</li> <li>Ability to enter the development process.</li> </ul>
Dissemination	Common vision, coordination, spanning of boundaries.	<ul> <li>Interactions in and outside the network.</li> </ul>	<ul> <li>Interaction in and outside the network.</li> </ul>	<ul> <li>Interaction with province</li> </ul>
Connective	Creation of shared vision, mobilization and recruitment, spanning of boundaries and coordination.	<ul> <li>Management of connections between stakeholders, but also between scales in a network.</li> </ul>	<ul> <li>Management of connections between stakeholders, but also between scales in a network.</li> </ul>	<ul> <li>Connections with other stakeholders</li> </ul>

Table 10 - Framework operationalization leadership functions and tasks.

# 3.4.3 Transparency and ethics

To safeguard transparency of the data collection process and the analysis, a database is created. This database contains all analyzed documents, as well as the transcripts of the interviews. All documents in the database are coded. In addition, it contains also a collection document, with all the quotes that have been coded collected under the code name. The data collected will, if not requested otherwise, solely be used for the purpose of the master thesis and will be deleted after 3 years.

# 4. Findings

In the following paragraphs, the results of the data collection are described systematically. To organize the writing process, the codes have been grouped together using the key components of accommodative leadership as were described in chapter 2.2.5 (see table 11).

While performing the coding of the data, it stood out that the historical and organizational narratives differed substantially per province. Therefore, also these were taken as codes. However, they do not link to a specific topic (as given in table 11) and are therefore discussed throughout.

For each case the policy analysis and interviews are worked out separately. Every case study will end with an initial analysis and cherry picking of the most characteristic aspects of the provincial leadership portrayed in this province.

Colour	Code
Governance	Shared strategy
	Deadline setting and interactions in and outside the network
	Perceived provincial role
	Connection management
Participation	Participation of stakeholders in development and execution of regional strategy.
	Enabling those with limited resources
Adaptation	Allowing a variety of options
	Flexible regulations and demands

Table 11 - Division of codes over topics.

# 4.1 Case 1: Gelderland



Figure 9 - Wind park Nijmegen-Betuwe (picture: windparknijmegenbetuwe.nl)

## 4.1.1 Policy analysis

#### The process

The province of Gelderland has received a target of 230,5 MW for 2020 from the national government. In their Windvisie (Wind vision, comparable to the so-called Structuurvisie of the other provinces) the province has translated this target to local ambitions. In the Windvisie<sup>5</sup> and Omgevingsvisie, the province has worked out their spatial vision for future development and has set conditions for wind energy development, which are elaborated on the in the 'toelichting Plan-MER' (elucidation planning-EIA), which is created for the province as a whole.

#### Governance

The Windvisie, the strategic document of the province, arises from co-creation and has its own decisionmaking processes and participation scheme. In the creation of the Windvisie, the provincial government and municipal governments, together aim to depict concrete development locations for wind energy based on the Plan-MER. Municipalities are assigned to designate concrete locations during so-called 'wind ateliers', in which they consult inhabitants and initiatives. Several locations, deemed 'most preferred' based on these wind ateliers, are further investigated for feasibility and suitability. Based on this, various combinations of projects are considered and the most optimal are included in the so-called 'windvisiekaart' (wind vision-map, figure 10), part of the Windvisie (Provincie Gelderland & Royal HaskoningDHV, 2014).

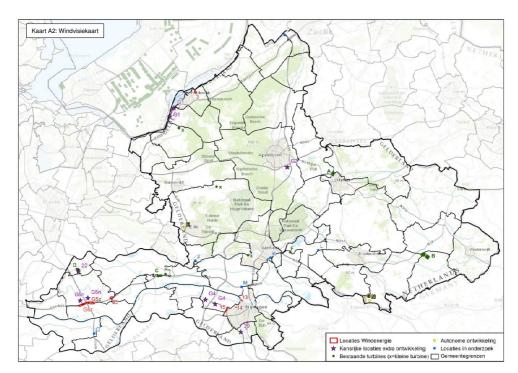


Figure 10 - Windvisionmap of the province Gelderland. In red the chosen locations and marked with a purple star "promising locations" (Provincie Gelderland, 2015).

<sup>&</sup>lt;sup>5</sup> Note that the Dutch word "visie" can be translated into the English word "vision". In the Netherlands visie-documents are common practice in planning to describe future development. In this thesis the Dutch names will be used.

Societal or market initiatives aiming for wind energy development can request an adoption of the local zoning plan and a permit of the municipality. Hereafter the municipality will discuss the location with the province. In the establishment of these initial plans the province has a supporting role with a focus on minimizing bottlenecks. Instruments they can adopt are the deployment of a project leader; planning support; resolving financial barriers (in negotiation with the national government); supporting LEIs; exchange of knowledge and information; support of spatial design and 3D visualization (Provincie Gelderland, 2015; Provincie Gelderland & Royal HaskoningDHV, 2014). However, the provinces main focus seems to be on the connection with the municipality, whilst the municipality liaises with the inhabitants, LEIs and other initiatives.

Often the ambitions of municipalities and regions are more ambitious than those of the province. To realize these, good cooperation is perceived a prerequisite (Provincie Gelderland & Royal HaskoningDHV, 2014). To allow for future additional development by the municipalities, the province has selected several locations as 'long term locations'. These locations work with a different time scale than the current Windvisie, which is decided upon in close collaboration with the municipalities. Moreover, also the province itself has set a long-term ambition: energy neutrality in 2050. The provincial government emphasizes that the 2020 ambitions are an integral aspect of their long-term ambitions (Provincie Gelderland & Royal HaskoningDHV, 2014).

In general, based on the analyzed documents it can be stated that the province allows the municipality to develop their plans relatively autonomous. They offer several modes of support, such as a 'quickscan' or public meetings informing the municipality and its inhabitants on the set targets, but also the process itself. Moreover, the placement of solitaire or small (under 25 meter) turbines, is left to the municipal decision-making (Provincie Gelderland & Royal HaskoningDHV, 2014).

#### Participation

To safeguard support, the option of participation should be available to all actively or passively involved in any wind turbine development project in Gelderland (Provincie Gelderland & Royal HaskoningDHV, 2014). Besides this, a preference is expressed for projects that have large local support. In housing areas, the opposition to wind energy is often severe, as the impact on the landscape is high. Through requiring participation, the province aims to ensure local support. Moreover, wind ateliers are considered important tools in establishing this local support. They provide inhabitants and local politicians with knowledge and make barriers and environmental impacts visible (Provincie Gelderland, 2015).

The province will support initiatives and municipalities actively in creating a participation plan and in their communication with the community. Participation in projects can be organized based on the specific project, however options mentioned are: financial participation through a local investment fund; having a LEI as co-initiator; support of (sustainable) initiatives in the region; compensation of residents through discounts on their electricity; and involvement in spatial planning. In judging wind energy proposals, the province will include participatory efforts (Provincie Gelderland, 2015). However, they do not further specify how this is done.

Moreover, the province of Gelderland does not require high initial investment through regulations on e.g. the number of turbines. The province does prefer the development of minimal three turbines in a project. However, as solitaire turbines also contribute to their ambitions for renewable energy, they do allow the development of those. Hereby allowing initiatives with limited financial resources to develop a turbine. Moreover, as will be discussed in the next section, the provincial government allows for flexibility in project design, with a focus on tailor-made solution and no hard regulations (Provincie Gelderland & Royal HaskoningDHV, 2014).

Nevertheless, the duration and the costs of the process are not visible from the analyzed documents and can thus still form a barrier for LEIs. However, as was previously mentioned, the province has also stated to potentially help alleviate financial barriers for initiatives. Nonetheless, in the analyzed documents it is not further specified how this is done.

#### Adaptation

Based on the analyzed documents, it can be concluded that the province works with relative flexible rules concerning the selection of locations for wind energy development. They have created a route map towards their energy neutral goal of 2050 but seem to allow flexibility in its achievement.

Considering the location of the turbines, the province confirms largely to the national standards given, on distance to houses, train tracks, flight routes, etc. The only addition they make is the protection of designated areas for meadow birds and the historic landscape of the 'Hollandse Waterlinie'. Moreover, wind energy projects can be developed outside of the designated areas given in the Windvisie. Projects outside of the designated areas, with high local support, can be labeled as 'part of the landscape', which allows them to deviate from set standards (Provincie Gelderland & Royal HaskoningDHV, 2014). However, these will not be actively supported by the province. Besides this, also in the development of the wind vision, the province allows some flexibility. In the third phase of the location selection process, the further investigation of specific locations, the province makes use of several criteria, including proximity of houses, safety, ecology, landscape and cultural history and archeology, and a range of scores (--, -, -/o, 0). A low score does not dismiss a location; however, it does impact the desirability of a project.

Moreover, as was mentioned before, there is no minimal number of turbines set for development, although wind parks of minimal 3 turbines are preferred (Provincie Gelderland & Royal HaskoningDHV, 2014).

#### 4.1.2 Qualitative interviews

To assess the working of the policies described in the previous paragraphs, three interviews with respondents of the province Gelderland have been held. One interview with the provincial government (Interview province GL); as well as an interview with an executive at one of the successful LEIs in the province

(Interview LEI GL); and an interview with a representative of the municipality of Nijmegen responsible for wind energy development (Interview municipality GL).

#### Governance

The province of Gelderland not only sees a leading role for themselves, but also considers the municipalities to be crucial players in wind energy development in the province. Already during the development of the Windvisie, the municipalities were involved. "We received the explicit wish of the deputies of the *Provinciale Staten* to find locations with societal support, mainly through the municipal councils". This was done by consulting stakeholders in Windateliers. "From these meetings we acquired enough locations [with municipal support] to reach the provincial target" (Interview province GL).

However, municipalities are not required to internalize the provincial vision documents if they are unwilling. Despite the areas where the province prohibits development, the municipalities are encouraged to develop their own ideas. Nonetheless, in practice it has shown that the provinces and municipalities use the provincial strategy as guiding vision for their own. The municipalities are described by the provincial respondent as being "partners", with whom development cooperatively must be realized. Starting initiatives must try and develop their project with the municipality, without the province leading the process, the province is, nevertheless, always willing to help with the process management (Interview province GL). This process style is also recognizable from the interview with the LEI. Through a neighborhood initiative the LEI was founded, and they were from the start supported by the municipality. The development of the project with the municipality was intensive and in close cooperation (Interview LEI GL). Both the respondents from the municipality and the LEI state that in general, contact with the province "has been little needed over the process time" (Interview LEI GL), or "in my experience the province was no party in this [the wind energy development process]" (interview municipality GL).

However, it must be stated, that this described close bond between the province and municipality was conditionally. When municipalities are unwilling to cooperate with initiatives, while the requested location is deemed suitable for wind energy through the Structuurvisie. The initiative can address the province and overrule the municipality. This already happened more than once in the province and has resulted in protests from residents and conflicts with municipal councils. The respondent of the province states in relation to this that despite his favoring of bottom-up development "at one point the urge to become energy neutral is so big, then we just need to continue. Even if not everyone agrees" (interview province GL).

#### Participation

From the interview with the provincial executive it became clear that participation is at the core of their strategy. Although the development of the strategy only happened in collaboration with the municipalities, the province of Gelderland uses several methods to involve LEIs in wind energy development in the province, as they believe that "that societal support, or at least the societal acceptance, increases when a LEI is involved in the process". LEIs are often found to be consisting of residents and people who know a certain

area "much better than we do". In addition, members of a LEI can communicate with inhabitants much easier than the province can. "Therefore, we highly value their involvement" (Interview province GL).

However, both the provincial, as the municipal government recognize that especially the start of the development process has proven to be challenging for LEIs, as the process is complex, and it requires large initial investments (Interview municipality; province GL). While LEI 'Windpark Nijmegen-Betuwe' was still supported by the municipality with a loan, as of January 2018 the province provides this (Interview province; municipality GL). In general, the province recognizes that wind energy development is ambitious for LEIs, as it includes a lot of complex financial mechanisms. They can consult other initiatives to gain knowledge on this process. And in the province of Gelderland this knowledge sharing is also promoted by the Association for Energy Cooperatives Gelderland (VECG), which is subsidized by the province. Overall, the respondent of the province identifies a lack of knowledge on how spatial processes elapse, as well as the financing of the process, as the largest barrier for LEIs wind energy development in Gelderland (Interview province GL).

From the interview with the LEI it became apparent that they handled these difficulties by teaming up with a more professional partner. LEI 'Nijmegen-Betuwe' was initiated by residents in close cooperation with foundation 'Wiek-II'. The foundation mainly supported the initiative in the technical project preparation. As soon as the cooperative had gathered sufficient members, 'Wiek-II' has transferred their ownership of the windfarm to the cooperative. "The foundation did the technical, content part, and the cooperative more the citizen participation and communication part" (Interview LEI GL).

#### Adaptation

The province of Gelderland has in comparison to other provinces relatively few restrictions on wind energy development, and they also recognize this themselves. They allow for bottom-up wind energy development to be located where residents and another stakeholders desire. They argue that "if locations might look undesirable upfront, but are very wanted by local parties, are we then the ones blocking this development?" (Interview province GL).

This is also recognized by the LEI as the respondent values the framework set by the province. Moreover, the respondent of the LEI also emphasizes the importance of the 'Gelderse Energieakkoord' (Energy Agreement Gelderland). This agreement, signed by dozens of municipalities, companies, foundations and the province themselves, aims to shape the elaboration of climate goals in the province. The respondent notes that "one must of course warn that it does not become an agreement in name only, but it helps tremendously in defining our common mission" (Interview LEI GL).

The retreating attitude of the province is also valued by the municipal respondent as she emphasizes the regional ambitions within the Arnhem-Nijmegen region (two of the larger cities in the province). "The municipalities are responsible for making their energy production more sustainable and the province only has a role if municipalities don't do it themselves. So, we create no work for them [the province]" (Interview municipality GL).

#### 4.1.3 Preliminary analysis

Based on the collected data on the province of Gelderland, one can conclude that the province takes a rather flexible position in wind energy development. In terms of the content of their policy they allow a wide variety of options for placement. Their spatial policy is focusing on zones excluded from placement, potentially allowing development in all other areas. Also, they have adopted a scope going beyond 2020, allowing for more long-term planning of development.

Considering the process of wind energy, one can make a differentiation between the process of strategy creation and strategy execution. The creation of the strategy was strongly provincial let, whilst based on consultation of the municipalities. Municipalities willing to develop wind energy were given the possibility to designate areas on the provincial windmap. Hereby the municipalities have an important role in Gelderland, and if possible, they are also leading in strategy execution. This indicates a very decentralized and place-based strategy of the province: the willingness of the municipality and residents is highly valued and if possible even given the lead in the development process. However, as reaching the wind energy targets is the final goal within the province, these conditions can also be overturned. If an initiative is blocked by the municipality, they can reach out to the province for support. The current provincial policy allows them to go to the *Raad van State* (Council of State<sup>6</sup>) and apply for a permit despite the municipal resentment. Whilst the policy documents of the province only discuss municipalities with higher ambitions than the provincial ones, it became clear during the interview with the province is aiming for and the relatively low target they received, there might not be sufficient municipalities willing to develop wind energy.

Looking at the perspective of the municipality and the LEI, the large role given to the municipality is apparent. Both the LEI and municipality had only sparse contact with the province and mainly dealt with the municipality itself. They do, however, get supported by the province indirectly through the association of LEIs within Gelderland.

In general, the narrative of participation and bottom-up development is very strong in both the policy documents analyzed as well as apparent from the interviews with the province and the municipality. Both the province, as well as the LEI, emphasized wind energy as being crucial for the energy transition, and also the energy transition was a commonly re-occurring narrative in the interviews. It must be noted however, that this is the first generation of wind energy in the province. The phase of policy development possibly influences the role and strategy of the province.

To coin the accommodative leadership practiced by this province, the decentralized approach they take seems crucial, just as their facilitation attitude towards the municipality and LEI. Therefore, Gelderland's leadership strategy can be named *facilitative decentralization*.

<sup>&</sup>lt;sup>6</sup> Highest juridical court in the Netherlands

In table 12 the leadership functions are discussed based on the different sources of the data.

Leadership function	Administrative Public Efforts: policy documents	Executed Public Efforts: interview province	Experienced Public Efforts: interviews LEI & municipality	
Political- administrative	Shared strategy creation is done whilst focussing on the municipal level, this is also the level involved in the strategy execution. Nonetheless, creation of the strategy is mainly done by the province. The province is mainly framework setting and enabling. Participation is the core of the strategy and projects with large local support, are allowed to deviate from provincial demands. Also, LEIs are preferred over other similar initiatives.	Societal support is seen as a crucial point in the provincial strategy, this is realised through close cooperation with the municipal councils. However, if needed, the province can overrule the municipality to enable development.	Individual LEIs are not included in the strategy creation or execution of the province. However, the association of LEIs in the province is. Also, the framework setting role of the province is appreciated by the LEIs. The municipality sees the province more as framework setting than as partner. They are the main party executing the strategy (if they are willing, if not, the province takes over).	
Adaptive			The LEIs appreciate the allowance of variety. The municipality does not recognize the province to be either supporting or hindering: they just set the framework.	
Enabling       Although the province has a set of development criteria, they allow for differentiation in terms of location, positioning, number of turbines. They also allow for projects to take another timeframe than the provincial frame for 2020. No regulations seem to be in place that require large resources. The province seems flexible in their regulations, which potentially allows LEIs to e.g. build solitaire		Through a conditional loan to LEIs for the initial stages of the development process, the provincial government aims to relieve the financial barrier for LEIs. Also, through the subsidizing of the LEI association in Gelderland, they promote the sharing of knowledge between initiatives.	Through a cooperation with foundation Wiek-II, LEI Nijmegen-Betuwe allowed themselves to be relieved of barriers they would experience without them, whilst enabling citizen participation in wind energy. Municipality also enable and encourage LEIs through supporting the process and helping with initial funding.	
Dissemination	The province mainly focusses upon their connection with the municipalities. Other parties are not discussed. No references are made to a differentiation form previous strategy.	The province endorses the 'Gelders Energieakkoort' and cooperates with the LEI association in Gelderland. This is the first-generation turbines in Gelderland therefore no reflection on old policies is done.	The goal of the LEI is to promote the citizen-led energy transition. They do this through teaming up with commercial developers and being a membe of the LEI association in Gelderland. The connections made with the LEIs in the province of Gelderland are mainly done through the LEI association and only in limited way direct with LEIs. As was said, their contact was mainly with the municipality. Also, the municipality only has little contact with the province.	
Connective	The province seems to uphold a relationship in varying intensity with the municipalities, depending on their demands. The relations with market or civil parties are mainly managed by the municipalities.	The province prefers the municipal council handling the initiatives. However, if requested they are willing to support municipalities using their expertise in planning processes. Also, the goal of developing wind energy is preferred over the relationships with the municipalities: if needed the province can overrule them.		

Table 12 - Overview of data collection outcomes, Case: Gelderland.

# 4.2 Case 2: Flevoland



Figure 11 - Picture of currently present turbines in Zeewolde (picture: blikopzeewolde.nl)

## 4.2.1 Policy analysis

# The process

The province of Flevoland has received a target of 1350 MW from the national government, to be developed in large wind energy projects over 100 MW each. Therefore, all projects in Flevoland are part of national coordination projects and are therefore under the final spatial responsibility of the national government. Nonetheless, the province still has a crucial role in the development of the strategy and its implementation (Provincie Flevoland, 2016). The specific areas in Flevoland are designated in the nationally created Plan-MER Structuurvisie Wind op Land (from now on Plan-MER) (Kok & de Sain, 2013). To structure the development of these project the province has created the Structuurvisie, also called the 'Regional Plan', to guide the development of these wind projects. The Structuurvisie is focusing on the Flevopolder, leaving the Noordoostpolder out of consideration as the turbines in the Flevopolder need remediation. The Structuurvisie itself was created whilst including multiple stakeholders in the process, including the potential initiators of projects and inhabitants of the areas (Provincie Flevoland, 2016). Besides the Structuurvisie, another document elaborates on the spatial policy of the province: the Omgevingsvisie. In this document, development of the provinces functioning is discussed, and spatial implications are elaborated on (Provincie Flevoland, 2017).

#### Governance

Over the last 20 years wind energy policy in the province of Flevoland has gone through major transformations. Despite their popularity, especially amongst farmers, the province proclaimed a construction stop on wind turbine development in the province in 2005. Development by individual farmers had led to a "proliferation" of wind turbines, deteriorating the landscape (Province of Flevoland, 2016, p.5, own translation). Therefore, the province has introduced their "Scale-up and Clean-up" strategy in 2006, which allowed alleviation of the construction stop if the proposed development included deconstruction of

old turbines and if the new ones would be larger than the existing ones, generation more electricity. Using this strategy, over 600 older turbines in Flevoland can be replaced, doubling the energy production, whilst bisecting the number of turbines. Besides this, the new turbines allow for a reconsideration of the placement of the turbines in the landscape (Kok & de Sain, 2013; Provincie Flevoland, 2016).

By coupling the development and deconstruction of turbines the province thus aims to re-structure the visual landscape, whilst offering the turbine owners a reasonable alternative to their individual turbine (Provincie Flevoland, 2016).

As the 'Scale-up and Clean-up' strategy has a large spatial impact and required cooperation of various different stakeholders and societal actors, the development of the Structuurvisie was organized as follows. First, four regions have been designated for wind energy development (see figure 12). The economic feasibility of combining the remediation and development of turbines was considered a determining factor in creating these regions, as well as the scenic consistency in the specific region (Provincie Flevoland, 2016). After this the old turbine owners and residents have been encouraged to form wind associations. This happened and these associations were the first ones consulted on the plans in the strategy (Provincie Flevoland, 2016). As these groups "are strongly rooted in society and the rural landscape", they are seen as crucial in creating societal support (Province of Flevoland, 2016, p. 12). These groups became LEIs and expressed the willingness to become initiator of the region projects, sometimes in cooperation with other (commercial) parties. Hereafter open evenings were organized for inhabitants of the involved municipalities. This was done when the opportunities and barriers were estimated. Finally, also interest groups rooted in e.g. agriculture, environmental protection, etc. were consulted. This process resulted in the Structuurvisie, designating four large areas for wind area development. The initiator of a wind park, the wind associations, create a project plan that enjoys public support, while the authorities work to create the necessary policy and jurisdictional conditions (Provincie Flevoland, 2016).

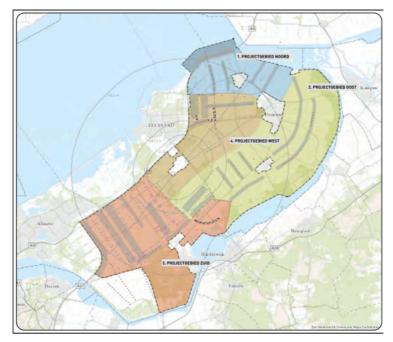


Figure 12 - Designated areas for wind energy development in Flevoland visualized in different colours (blue, orange, red and green), with in grey the lines in which the turbines can be located (Provincie Flevoland, 2016 p. 16).

Important stakeholders in the development of wind energy projects in the province of Flevoland are besides the provincial government themselves, the national government, the municipal governments and initiators of wind projects (Provincie Flevoland, 2016).

The national government plays an important role in this province as the projects in each of the designated areas will consist of wind parks over 100 MW. The spatial planning of projects this size are the responsibility of the national government (Kok & de Sain, 2013). However, whilst the national government has a final say in the spatial planning and the Structuurvisie is a regional elaboration of the given national targets, the spatial plan for the region aims to go beyond the horizon of 2020 and create a long-term plan, hereby also developing their own visions (Provincie Flevoland, 2016). The municipalities were involved in the development of the Structuurvisie. However, their exact role is not further specified in the analyzed documents. Lastly, the wind associations are of high importance as in each designated area only one initiator is allowed to start a project, which in practice seems to be the associations (Provincie Flevoland, 2016).

With the Structuurvisie the province of Flevoland aims to combine several ambitions: improving the landscape, generating renewable energy and creating a strong economy in the province. The latter is mainly expected to result from the revenues remaining within the area due to the local ownership and participation schemes (Provincie Flevoland, 2016).

#### Participation

As was mentioned before the wind associations have been involved in the development of the Structuurvisie. Their input was valued most in designating the placement zones due to their area-based and technical knowledge. Moreover, the province argues that due to this knowledge and the fact that they will share the investment risks, their involvement in the development of the Structuurvisie is "obvious" (Province of Flevoland, 2016, p. 15). The creation of economic perspective for the initiators was set as a precondition for development. If necessary, the remediation of old turbines can wait if it hinders the development of new turbines. If the economic necessity can be proofed the old turbines can extend their running up to 5 years after development of the new ones (Provincie Flevoland, 2016).

With the restructuring of the wind energy policy in the province, also ideas on participation have been restructured. The individually owned wind turbines in the province provide an additional income for their owners. The province aims to allow the continuation of this, while also offering others the option to participate in the financial revenues and also bear the risk of the investments. Besides this they aim to improve the benefits for the province as a whole. As was mentioned, this is realized through re-organization of the turbines in the landscapes. Yet, in addition, also an area-fund is installed. Each initiative donates approximately 1050 euro per MW per year, too be invested in improving the quality of the surroundings of the wind turbines (Provincie Flevoland, 2016).

Lastly, the province alleviated the financial risk for the initiators, by providing a financial analysis upfront. This analysis supplied additional information on the economic perspective to the initiators (Provincie Flevoland, 2016).

#### Adaptation

The rules set by the provincial government can be considered rather strict, both in terms of remediation, placement and participation. However, it must be noted that the strategy at the base of this was drafted whist including many stakeholders.

The development target for the individually depicted development areas is linked to the remediation of all old turbines in this area (for areas see figure 12). In case the old turbine owners are unwilling to cooperate in the remediation of the turbines, despite a reasonable offer, the province can start a juridical procedure at the *Raad van State*. As the ownership of an old turbines does not guarantee the right on renewal, the province can even enforce remediation (Provincie Flevoland, 2016). In the policy documents, this is not further specified.

The province, in cooperation with the other parties discussed before, has designated several plan areas within each of the four regions created. To allow the initiator with sufficient possibilities for development, in some locations a deviation of the standards is allowed, for instance by allowing crossing, rather than only parallel placing of turbines in relation to dominant landscape lines, such as waterbodies. However, in general areas are selected in which turbines can be positioned in long lines of minimal 7 turbines with a regular interval, to allow for visual continuity. These placement zones are generally 500 meters wide (1000 meter if more flexibility is desirable). The turbines need to be constructed in straight lines within these zones (Provincie Flevoland, 2016). The continuity of provincial policy for all scales and selected regions is considered to contribute to the transparency of the policy and to provide clarity to initiators. The initiators are asked to draw down a 'scale-up and clean-up' plan, improving the environmental organization within this framework. They are free to design it too their own preferences within the framework of the placing regions and plan areas (Provincie Flevoland, 2016).

#### 4.2.2 Qualitative interviews

To gain more insight into the case of the province Flevoland, also here three additional interviews have been conducted besides the policy analysis. Again, a representative of the province has been interviewed (Interview province FL); as well as an executive of the currently developing LEI in the province 'Windpark Zeewolde' (Interview LEI FL); and a respondent of the municipality of Zeewolde (Interview municipality FL).

#### Governance

As was already found based on the policy analysis there is a strong emphasis on shared strategy creation in Flevoland. Throughout the strategy development and implementation, regular meetings have been set up between the province and the LEI (Interview LEI FL). The main points on which these initiatives joined the discussion where participation of citizens and farmers; compensation of those living in the proximity of a turbine; and remediation of the old turbines. In these strategy negotiations, also the ministry and municipality have been commonly present (Interview LEI FL). The municipality is responsible for exact placement and contact with the inhabitants, as well as for the area fund that has been constructed to improve the area surrounding the turbines (Interview province & municipality FL).

The province sees itself mainly as checking the framework given by the strategy is followed up. The respondent describes herself as a "guardian" and "mediator", safeguarding that clear agreements are made considering remediation and participation and making sure that no old turbines are left in the landscape. This role was also recognized by the LEI as the respondent describes the province as framework setting, allowing the initiatives to fill in the exact plan. The municipal respondent states that in his opinion, the province is successful in performing her role due to the fact that "the knowledge was there, due to the rich history in wind energy (...) as well as the good cooperation between parties" (Interview municipality FL).

However, the respondent of the LEI does see a difficulty in the performance in this role, as there is no continuation in executives of this role. "the development trajectory takes long, approximately 10 years (...). Both the executive and administrative officials change regularly. New people can have different opinions or take time to get settled in", which is considered a barrier for successful development (Interview LEI). As was stated before, the projects in Flevoland are developed under the supervision of the national government. Yet, the strategy creation and detailed planning still is coordinated and leaded by the province (Interview province FL). The respondent also states that sometimes they can also benefit from this connection. Especially concerning the development of plans for the airport in the province, the direct connection with the state speeds up the process (Interview province FL). However, the municipality also points out a difficulty of these national programs, as the national government assigns Flevoland with high ambitions in turns of wind energy, housing and Lelystad airport, without stating which is valued most. This creates "challenges" as he states: "Sometimes they seemed to think, this has to be constructed here (...) and you figure it out. With these large projects, this has led to discussion. (...) Eventually it is always solved, but it's not easy" (Interview municipality FL).

In relation to the governance processes going on in Flevoland, the respondent of the province adds that the regional scale of Flevoland is very suitable for these kinds of negotiations. "For instance, the province of North-Holland has 48 municipalities (..) I think the regional scale is very suitable for this target, it makes the target manageable and allows us to be specific" (Interview province)<sup>7</sup>.

The current strategy goes beyond 2020, as they have planned an additional 300-400 MW in the province. However, hereafter most of the space is used according to the respondent: "when you look at the map you see that we have used the space very intensively, but also very balanced. Hereafter we have to focus on the next generation turbines, but this will only be in 25 years" (Interview province).

### Participation

Participation is crucial in Flevoland's strategy, as they have encouraged wind associations to be initiators of the new projects. This was successful, and all development areas are currently led by a wind association (or a coalition of associations). However, this way of organizing the development also can be recognized to be a barrier according to the respondents of both the province, municipality and LEI. "People who were part of a small cooperative of 8 turbines, or who owned one turbine themselves, now have to become part of a park of over 90 turbines with a business case of over 500 million. This upscaling is one of the biggest challenges for initiators (...). Getting everyone onboard" (Interview province FL).

By creating the Structuurvisie and designating areas for wind energy development and remediation, as well as by showing strong political commitment, the respondent of the province beliefs to have supported these wind associations in their development process: "They only have to fill it in" (Interview province FL).

Moreover, it could even be said that the province favours these bottom-up initiatives. Currently a court case is running to determine if it was legitimate of the province to limit the number of initiators per area to one, without organizing an open bidding. The province states here that if this would have been the case and "you

<sup>&</sup>lt;sup>7</sup> The province of Flevoland has only 6 municipalities.

create a bottom-up policy, but a Chinese investor comes and is able to develop cheaper, than we had to grand the development to this party. You can wonder whether this would have contributed to an appropriate spatial use..." (Interview province FL).

Both respondents of the province and the LEI belief that part of the successful strategy of Flevoland derives from this bottom-up basis and the fact that so many participated. Reason given for this by the LEI are, first, that "farmers are used to invest and earn money through wind energy", and secondly, that "there are almost no citizens living in this rural area. (...) The citizens do not join in on the park. We have always strived to give all who had a turbine, a possibility to take part in the new park. However, the province demanded 2,5% of participation by citizens (...) so they can invest 10 million in the park" (Interview LEI FL). This comment indicates that the members of the wind association see themselves distinct of the other citizens. They are inhabitants of the rural area and entrepreneurs already familiar with wind energy.

The initiative for all wind projects in the province comes from the wind associations. They themselves can be cooperating with commercial parties if desired. However, this is not always necessary, as Zeewolde develops completely independent (Interview LEI). The target is to remediate all older turbines within these new projects. Currently a case is at court of an old turbine owner who does not want to participate in the remediation. The province now explores the possibilities to expropriate him from his ground ownership to remove the turbine, as "it is in the public interest to do this." The turbine owner will receive a compensation for his loss but is no longer able to participate in the new turbine. The respondent of the province recognizes this to be a last resort, "we need to be certain that all has been done to come to an agreement. But after 3 mediation rounds, it becomes a matter of principle, which forces us to take action" (Interview province FL).

Also, the LEI does not seem to consider this as a violation of rights: "they have completely blocked themselves out. They should have just joined. We have created a very good business case" (Interview LEI FL). The respondent of the municipality adds to this: "in my opinion it [the expropriation of ownership] might never happen. It is not something you enact overnight. It is a whole process in which also consensus is sought. However, it stays a possibility". Moreover, he adds that this also does not cause disturbance amongst community members: "By far most people participate. You will always cross people who don't" (Interview municipality FL).

#### Adaptation

As was mentioned earlier, the province has created a rather detailed placement plan for the turbines. However, while this is limiting the availability of options and flexibility, it is easing the process for the initiatives. A possible explanation for this strategy found in the interviews is the general positive attitude towards wind energy in the province. Wind energy is a common additional income, as well as that people in the province are used to large scale development projects. "The old land<sup>8</sup>, as we call it here, (...) is less

<sup>&</sup>lt;sup>8</sup> Flevoland is almost entirely made up out of reclaimed land, making the province relatively young compared to the others.

rational and less large scale. They treat space in a different way". "We are pioneers [in wind energy] (...) and we continue this now in the new Scale-Up, Clean-Up strategy" (Interview LEI FL). All these factors seem to contribute to a relative ease in placing turbines in the landscape. The location is important for the province, as they aim to streamline the landscape, but seems of less importance for the initiatives. The main motivation mentioned during the interview has been the economic benefits wind energy delivers the farmers. "We consider wind energy as additional income to our agricultural business. When the potato or milk prices are low, we still have our income" (Interview LEI FL).

#### 4.2.3 Preliminary analysis

The province of Flevoland adopts a very strict policy on wind energy development. Looking at the content of their policy they clearly define specific areas for development as they have designated very specific zones and set a minimum of 7 turbines in a row, as well as a compulsory line set-up. The focus of their strategy is on zones that are suitable for development, which are specified in detail and outside of which no development is possible. Moreover, they have set remediation of all old turbines as a precondition for any development. Also, in the process the province is rather strict, as they only allow one initiator per designated region. They do however, value the development of wind energy by wind associations highly, as all initiators are associations, and this was also arranged so by the province. Besides, both the wind associations, as well as the municipalities were closely involved in the development and execution of the strategy. All parties met regularly throughout the process.

Interesting in Flevoland, is that although these wind associations are considered LEI, they have some distinctive features. They consist almost solely of farmers and landowners and do not consider themselves as "civilians". The focus of these initiatives is on earning additional money through the wind turbines and the respondent of the initiative made clear that the offered participation options, offered to citizens of the village of Zeewolde and city Almere, are only in place as this was a requirement of the province. On the other hand, the initiative is also unique as, except for a very few, all inhabitants of rural Zeewolde are participants in the cooperative.

In general, the narrative used in Flevoland in relation to wind energy is one of profit. As was said, especially the LEI uses this as a main argument. Moreover, the province also uses a narrative of redesigning the landscape. As this will be the second generation of turbines, remediation of older turbines and careful placement of the new ones is of high importance for them. Also, the history of Flevoland seems to influence their opinion, as the respondents refer to the difficulties in the 'old land' and the entrepreneurial attitude and different concept of scale adopted in the province.

The province aims to include all actors in the decision-making process. Therefore, the accommodative leadership practices of Flevoland can be said to reflect characteristics of deliberative governance. The concept of deliberative governance considers policy making as in need of a space where different institutions, groups and citizens can come together and deliberate on current topics (Hendriks, 2009). These spaces can be spontaneous, or more structured as can be recognized to be the case in Flevoland. In deliberative governance, those affected by the decision, are also involved in the decision-making process (Hendriks, 2009). A term that would encompass both the entrepreneurial, innovative character of the provincial leadership, as well as its governance practiced, would thus be *deliberative innovation*.

Leadership function	Administrative Public Efforts: policy documents	Executed Public Efforts: interview province	Experienced Public Efforts: interviews LEI & municipality	
Political- administrative	There is a strong focus on shared strategy creation through involvement of several stakeholders (wind associations, municipalities, societal interest groups and residents). Participation is core of the strategy. Local wind associations are initiators of the projects and in addition all residents are offered financial participation in the projects. The province mainly coordinates the project and to create the jurisdictional framework in which the detailed plans can be mapped out by the initiators.	Creation of a shared strategy is very important in Flevoland. After the dismissal of the first, province-wide, attempt, the current plan was developed, in which Flevoland was cut-up in four development areas. Further detailed planning was done in cooperation with the wind associations and municipalities. The provincial government sees a mediating and guarding role for itself, safeguarding the participation and remediation targets set.	The LEI feels included in the provincial strategy creation. In close cooperation they have decided upon participation, compensation and remediation. The province executed their role properly, however the continues changes in executive officers was a difficulty. Also, the municipality displays a positive attitude towards the role enacted by the province. The high demands of the national government are more considered a challenge. However, in close cooperation with the province solutions are found.	
Adaptive	The province has created rather strict development areas and has linked development to remediation of old turbines. However, these demands have been developed in close cooperation with stakeholders to create support of the strategy.	The allowance of options is limited in Flevoland. However, the detailed planning provided by the province is meant to make the process easier for the wind associations, who are the project initiators.	The variety of options in terms of location is low, but this is not considered to be a difficulty by the LEI. In terms of organization the respondent explained that only due to the pressure of the province citizen participation in the wind park was established.	
Enabling	The rules drawn up by the province on location and organization of turbines are strict and allow only little deviations. It must be emphasized however, that these rules were created in collaboration. The scale of the projects is large, as a minimum of 7 turbines is set. However, smaller initiative can be co-developers in a larger project. While the province does strive for the 2020 target, they have set out their ambitions beyond this date.	By setting a clear framework for the LEIs, the province aims to enable development by them. Moreover, the province provided initiators with an assessment of the financial feasibility. As the province states it, in the current plans, all available space is put to use in the plan of the Structuurvisie. In the coming years this will be finalized.	Whilst the positioning of turbines seems a main interest of the province, the LEI is less interested in the location. The ownership and corresponding additional income provides more of a motivation for the LEI. The LEI is not supported financially by the province or municipality, however, the municipality states to support them in the development process by hiring specialists that also benefit the LEI.	
Dissemination	The province has fostered the collaborative creation of ambitions through collaborative strategy creation including both bottom-up initiatives, the national government and the municipalities. To re-organize the landscape the scale-up, clean-up strategy is developed.	The province beholds close contact with the national government, the municipalities and the LEIs. The LEIs were formed after encouragement by the province. New strategy was accepted by the inhabitants and municipalities.	Especially during the period before the licence application, the LEI met with the province every two weeks. After the granting of the licence this became less. Also, the municipality has had very regular contact with the province, in sometimes daily.	

In table 13, the data collected for Flevoland is summarized per source.

Connective	The province seems to uphold relations with all stakeholders and forms the connection between the national government and the initiators. Through the national responsibility for the projects (projects over 100MW), the province also has a strong interaction with this higher scale.	The direct connection the province has to the national government comes in handy when coordination is needed for e.g. the airport and is also used effectively. The role of the municipality seems marginal. The municipalities are responsible for the environmental fund created with the wind park to improve the environmental guality.	The LEI mainly has been in contact with the municipality of Zeewolde and the province. Initiating the remediation, there was one big coalition of all old turbine owners, but with the new structure vision, this split up into four regions. Within the municipality the LEI and municipal government together aimed at getting everyone aboard.			
Table 13 - Overview of data collection outcomes, Case: Flevoland.						

# 4.3 Case 3: North-Holland



Figure 13 - Artist impression of current wind energy ambitions of NDSM Energie (picture: eco-park.amsterdam)

# 4.3.1 Policy analysis

#### The process

The province of North-Holland has received a 685,5 MW target from the national government. The development in the Wieringenmeerpolder, led by the national government as it concerns a development of over 100 MW, will cover the largest part. The remaining will be developed in other designated areas in the province (approximately 80 MW). The focus of the documents analyzed for North-Holland was almost exclusively on the spatial distribution of the turbines. Collaboration with other parties, such as initiatives or municipalities were not, or very limited, discussed. A lot of considerations are made in relation to hinder caused by turbines: eg. Buffer zones to houses, etc. The PlanMER, has explored the spatial possibilities for wind energy development in the province, which were included in the provincial Strucuurvisie. The Provinciale Ruimtelijke Verordening, again, focusses almost solely on the spatial requirements for wind energy development.

#### Governance

The provincial government in North-Holland identifies a decrease in societal support for on-shore wind energy development. They attribute this decrease to the up-scaling in physical appearance and number of turbines (Provincie Noord-Holland, 2015). In their 'Provinciale Ruimtelijke Verordening' (Provincial spatial regulation, own translation) they list wind turbines under spatial initiatives with negative spatial impacts (Provincie Noord-Holland, 2017).

Responding to this societal trend, the province has adopted a restrictive policy on wind energy development from 2011 onwards. Initially no *new* turbines were to be built in the province. However, with the national government introducing the new wind energy targets in 2014, this policy was adapted to no *additional* turbines. To achieve this, remediation of old turbines is one of the key aspects of the provincial policy (Provincie Noord-Holland, 2015). In addition, the province aims to restructure the ordering of the turbines to diminish the visual scattering of turbines over the landscape (Provincie Noord-Holland, 2015). The province creates the framework for development and designates the suitable areas. This is done mainly by the province itself, based on spatial data, in cooperation with the environmental impact assessment commission. Besides this, the province regards itself having a stimulating and facilitating role. They are connecting stakeholders and organize meetings; as well as providing a calculation model for the remediation of old turbines; testing economic feasibility of projects; and offer a 'windbroker' that connects old turbine owners to developers (Provincie Noord-Holland, 2015).

The project-plan for restructuring is based on three main tracks: spatial, economic and societal (Provincie Noord-Holland, 2015). The 'PlanMER' mainly contributes to informing the spatial track and is focused on comparing alternative strategies for placement. The method is based on the worst-case scenario in relation to the hinder to residents and other stakeholders created by the turbines. Based on these findings, several areas have been depicted suitable for wind energy development (figure 14). One of the main tools for determining the development areas for wind energy in the province is GIS (Runia et al., 2014).

Ultimately this spatial track is to be combined with the economic track, focusing on the value determination of the remediation task, as well as the financial compensation for wind energy development and the participation in new wind energy development, and the societal track focusing on informing and facilitating wind energy initiatives and stakeholders, e.g. information meetings (Runia et al., 2014). However, in the early days of the development of the Structuurvisie (2009 & 2010), also other stakeholders have been heard. So-called 'region-tables' have been organized, bringing together the 10 different regions in the province. Besides two meetings have been organized with societal organizations and the province has visited 25 events throughout the province to get feedback from its residents (Provincie Noord-Holland, 2015).



Figure 14 - Areas in the province North-Holland that have been selected for wind-energy development are visualised in the blue boxes (Provincie Noord-Holland, 2017, p. 55).

### Participation

In creating the Structuurvisie the province has consulted residents, local representatives, directors, businesses and societal and intermediary organizations on their visions on the spatial development of the province, as well as the role of the province. However, what the outcomes of these meetings are is not specified further, nor how often they have been held. Later in the development process, when development areas are designated, the province aims to actively involve residents and other stakeholders in these areas. This is done through making the planning documents available for inspection, as well as organizing interim 'region-tables' and meetings. In addition, the municipalities are actively involved by organizing official and administrative consultations on crucial moments in the planning process, as well as organizing so-called 'area-ateliers', to discuss the placement wind parks when they are proposed in more detail by developers.

Considering the allowance of none established parties to develop wind energy in North-Holland. The province allows those with existing turbines to replace them by turbines of similar height and capacity. Besides this, expansion of height and capacity is only allowed under strict conditions. However, the restructuring of the old turbines is supported by a 'windbank', which is a financially supporting instrument. By giving up their existing windrights in a certain location, old turbine owners can contribute to the development on another location (through the remediation condition set for development). In exchange for giving up their rights, the old owners get financially compensated, or they become shareholder in the new wind park (Runia et al., 2014).

Lastly, as was mentioned before, the province provides a windbroker to allow all developers easy access to knowledge on the old turbines available for remediation and to connect owners and developers (Provincie Noord-Holland, 2015).

#### Adaptation

The province of North-Holland cannot be said to offer a wide variety of options for development of wind turbines. In their Structuurvisie, mainly created by the province themselves, they have designated very specific areas, in the north and south of the province, to be suitable for wind energy. Moreover, in the PlanMER it is elaborated, how the selection of these areas was done largely based on maps and e.g. distances to houses or valuable landscapes. The designated areas can provide in approximately 1,5-2 times the target (which is 165 MW, if the development in the Wieringenmeerpolder and the existing capacity are excluded) (Runia et al., 2014).

In addition, the development requirements within these areas are rather strict. The four regulations with high impact on development and placement of the turbines are: First, for every newly build wind turbine, two older ones need to be remediated. Secondly, wind turbines can only be built in a line of minimal six turbines. Thirdly, wind turbines are to be built on at least 600-meter distance of 'sensible locations', such as residential areas. Which is substantially higher than the till that moment prevailing norm of 300 meters. This was chosen to diminish the impacts on livability to a minimum. And finally, the 685,5 MW target is seen as a maximum for development and shall not be overridden (Provincie Noord-Holland, 2017).

#### 4.3.2 Qualitative Interviews

The qualitative interviews performed for this case have been with an executive respondent of the provincial government (Interview province NH); a respondent working for the municipality of Amsterdam (Interview municipality NH); and the manager of the project bureau of LEI NDSM Energie (Interview LEI NH). In comparison with the other LEIs investigated there is one major difference. NDSM Energie did not receive a permit for the development of their turbines. Therefore, this project is currently on hold. However, as there are no LEIs in North-Holland that have succeeded in going through the whole development process and receiving a permit during this development round, and as NDSM Energie did go through the entire application process, they are still considered to provide valuable insights on the functioning of the province.

#### Governance

During the interviews it became clear that the province of North-Holland adopts a very top-down governing strategy. The strategy has been created mainly by the province alone and was a radical change from previous strategies. Whereas wind energy has been possible in the province and the municipalities fulfilled and important role in its development till 2012, hereafter a mortarium was enacted, with limited and strongly regulated development. Within this new policy the focus has been on the spatial integration of turbines. The respondent of the province explains that although the new strategy had been reviewed and tested, involvement of other parties was kept to a minimum: "as it is such a negative policy, you also may be less likely do that [involvement of other stakeholders in the development of the strategy]" (Interview province NH).

The respondent of the municipality of Amsterdam experienced this radical change of strategies, as the municipality has been working on wind energy development since 2007 and even already permitted a

turbine of the LEI NDSM Energie (Interview municipality NH). However, the new provincial policy of 2012 overruled the permit and annulled it (Interview LEI NH). As of 2012, the municipal respondent states: "We definitely have not been involved in that [*creation of strategy*] (...) we have given many opinions on it, but these has always been put aside" (Interview municipality NH). Also, the LEI was not in any way involved in the creation of the new policy (Interview LEI NH).

The provincial respondent adds, when referring to the very limited role of the municipality in wind energy development: "Of course we did not trust them at all [*the municipalities*], and there also have been court cases (...). We have been very rigorously. Looking back, we sometimes wonder if this was really necessary?". However, "as we constructed our policy in such a negative manner, we felt an extra pressure to reach our target", explains the provincial respondent. She notes that although many municipalities "have much to say about sustainability, as soon as it has to be developed, they do not want it within their borders". Therefore, she states: "Considering what is necessary for 2050, we need politicians to rise above this and look at it from the perspective of the societal challenge we face. Therefore, I believe that our policy is well thought-out and aims to protect things we deem to be important (...). With this attitude (...) we met our target" (Interview province NH). Nonetheless, all respondent for North-Holland recognize that the relatively low target of the province has also contributed to the success in achieving it (Interview province; municipality; LEI NH).

Moreover, the municipality and LEI are less positive about the strict approach enacted by the province. They express their incomprehension of the exclusion of parties that are willing to contribute to the target: "If you have municipalities that are keen to start developing, include them. (...) Spatial planning is important and you should consider it (...), but I would definitely want to explore the possibilities" (Interview municipality NH). The respondent of the LEI agrees to this and adds that by first looking at the initiative that are willing, seems to be a better start in his opinion. "That would be a more logic order than basing your policy on subjective feelings (...)" (Interview LEI NH). The respondent of the LEI added that, in his opinion, the province is lacking a vision for the energy transition (Interview LEI NH).

By taking various juridical steps the two parties have tried to achieve wind energy development in Amsterdam by the LEI, but these have not been successful (Interview municipality; LEI NH).

#### Participation

"Originally also the province of North-Holland planned to have nice bottom-up and area-based processes. However, politically this was rejected, as they did not aspire any onshore wind development (...). There was no political wish for wind energy" (Interview province NH). As a result, participation seems to be of secondary importance for the province, as only little notions are made on it in the policy documents. The provincial respondent however does note that all initiatives need to create a plan on how they aim to involve the inhabitants of their development area. Yet, what the extend is of this involvement is up to them, the province just requires a plan (Interview province NH). The LEI respondent criticizes this approach stating that in his opinion this is merely "window dressing". "They did not create any frame for involvement of inhabitants in placement or outlook of the turbines, or for financial participation" (Interview LEI NH). In relation to this the province states that this is not how they visualize their role, they merely focus on reaching the targets (Interview province NH).

In addition, also the municipality critiques the attitude of the province toward participation: "They have always stated that societal support was an issue, a focal point in granting projects. Yet, when you review the selection criteria used (...) only a spatial consideration has been made. The entire societal support story got lost in the process" (Interview municipality NH).

### Adaptation

The province of North-Holland has created a dense framework of regulations for wind energy development. As was listed before the rules most mentioned are the rule that two old turbines should be remediated for every new one; turbines should be constructed in lines of minimal 6; and need to be situated at a distance of 600 meter of residential areas; and finally, that the target is seen as a maximum for development. According to the municipality these are "actually all just rules designed to stir the number of wind energy developed", as they can be used to dismiss projects that do not meet the targets (Interview municipality NH). This rigid framework is further discussed by the LEI as the respondent states that in his opinion "the province of North-Holland is limiting itself, as they implicitly consider the provincial landscape to be uniform. They act as if the urban area requires a similar approach to the rural area." He adds to this that the current regulations also favor the established order. Referring to the 2-for-1 remediation requirement he states: "The entire policy favors those in a good position already. Parties that already have a turbine can use this to negotiate with other turbine owners" (Interview LEI NH).

Nonetheless, the respondent of the province is clear in her ambitions: "Wind energy development has large spatial impacts, and these hurt. (...) And when it hurts it's good to introduce strong control. And I think it is good to have a role for the provinces" (Interview province NH).

Yet, both the LEI and province foresee a different scale of action in the future: "Looking at the region, with its specific challenges (...) an interesting mix could be found [*of technologies*]. For instance, the regional scale of the Metropole Region Amsterdam (MRA)" (Interview province NH).

#### 4.3.3 Preliminary analysis

Also, for the case of North-Holland a first impression can be drawn up. The province adopts a rigid spatial strategy with a focus on the spatial integration of turbines. Reacting to the growing discontent on the placement of turbines, the province radically redesigned their strategy in 2012. By adopting several strict regulations, they aim to reduce the experienced hinder of the turbines, as well as their actual number to a minimum. The province has clearly designated areas suitable for wind energy, while excluding a large share of the provinces surface from development. Considering the process, the province is less strict. They allow all initiators as long as their rules are obliged. The creation of the strategy, as well as the execution of this happens rather top-down. The province is in charge, and the municipalities only seem to fulfill a marginal role.

Despite the statements made in the policy documents on stakeholder inclusion, the interviews have shown that this did not happen as much in practice. Whilst the province sets the development frame, they are neutral about how it is actually executed. As long as initiative adhere to the described rules, and the rules are lawful, they do not interfere in the working out of the regulations.

Initiatives such as NDSM Energy, and municipalities like Amsterdam, who have set high ambitions in terms of wind energy development, consider this policy to be restricting and have been in several legal battles over the last years. Interestingly enough, both the municipality and the LEI, as well as the province referred frequently to the narrative of the energy transition and the challenge the Netherlands faces in this. Yet, limiting the spatial impact and corresponding societal opposition to wind energy, seems within their current strategy the focal point.

Just like Flevoland, also North-Holland faces the challenge to remediate old turbines. The spatial pressure caused by old turbines being scattered over the landscape are at the root of its current 2-for-1 remediation strategy and possibly also of its strict spatial policy in general. Finding a term to coin the strategy and type of accommodative leadership practiced in this province one could state that the province is both authoritative, as no collaboration with other parties is searched, and reluctant, as they apply maximum on the development and do not have a pro-active attitude towards wind energy. Therefore, their strategy can be coined as *authoritative reluctance*.

Leadership function	Administrative Public Efforts: policy documents	Executed Public Efforts: interview province	Experienced Public Efforts: interviews LEI & municipality
Political- administrative	The strategy is based on spatial considerations. The participation by LEIs is never mentioned and participation in general is part of the spatial track of the Structuurvisie but is not further elaborated on. The province mainly seems to be framework and requirement setting.	The creation of the strategy was done rather top-down. No LEIs were involved and municipalities only in a minimal way. The province highly values spatial planning of the turbines and therefore created a strict policy.	The LEI was not included in policy making and the municipality feels unheard. The province is in their opinion to rigid and they aspire a more collaborative approach. Also, the LEI critiques their one size-fits-all strategy. Both parties show incomprehension of the provincial rejection of their bottom-up plans.
Adaptive	A limited number of development areas was selected and in additions a large amout of conditions created: A minimum of 6 turbines is applied, as well as 2 for 1 remediation and a 600-meter distance to sensible areas. All this together limits the physical variety of options.	The province states to be framework setting whilst allowing development by any party. As long as parties can adhere to their requirements, development is possible for all parties.	The regulations set by the province are considered to be too strict by the municipality and the LEI, and only designed to be able to turn projects down. There is no flexibility of rules experienced and only spatial requirements matter for the province.

In table 14 the leadership functions are discussed based on the different sources of the data.

Enabling	As they said to take the target as a maximum, they can force all to adhere to the set standards, in order to even qualify for a permit. The number of requirements set for wind energy development is high, which is a potential limitation for initiatives. No support of LEIs is mentioned, and strict deadlines are applied	No flexibility is allowed by the province and as they have set a maximum, they force initiator to adhere. They say to support LEIs, but do not actively act upon this. By setting strict deadlines and creating a sort of tender procedure, the province achieved to reach the target within the given time frame. Beyond this frame, there are possibilities explored, but no new targets set.	The strict regulations are seen by the LEI as to enforce the possibilities for the established parties, whilst hindering new parties. Especially the 2-for-1 rule is mentioned in this context.	
Dissemination	No close connections to other parties are discussed. To safeguard the spatial quality in the province a new strategy is developed differing widely from the previous.	There has been none to very limited interactions with other parties to get the ideas accepted, as the province states that in their opinion this was necessary since they practiced a "negative policy".	The LEI and municipality often have been in contact with the province on their own initiative. However, less in a constructive manner. (The municipality has been in the context of the wind development in the harbour).	
Connective	The connection between old turbine owners and developers seems to be main focus of the province. Moreover, they aim to inform and involve other stake- holders in development projects by providing events to meet each other. What the outcome is, however, is not clear.	There has not been much connections with stakeholders. The province has provided the framework for development which can be filled in by the initiators.	The connection between the municipality and the LEI has been good from the start of their ambitions in 2007. They have regular contact and teamed up in court cases against the province.	

Table 14 - Overview of data collection outcomes, Case: North-Holland

# 5. Interpretation

# 5.1 Leadership performed in the cases

To interpret the analyzed data first a general impression can be created. Even though the focus of this research is not on comparing the different provinces, placing them next to each other can still provide valuable insights on the individual character of, and decisions made in, each of them. Besides this, it shows the variety of strategies resulting from different functions, narratives and phases of policy development, hereby enabling the identification of best practices and lessons learned.

As was discussed in more detail in the preliminary analyses made after each case, each province showcases an own leadership type and an individual approach. Differences can be found in the execution and creation of the strategy, as well as in the process and contents applied. It must be noted that, given their position in the Dutch governmental framework, the province automatically claims a leading role to some extent as they have a formal leadership role. Nonetheless, this study aims to not just asses their leading role in general, but the way they practice accommodative leadership<sup>9</sup>, as was elaborated on in chapter 2.

In the following paragraphs each province will be discussed individually. The leadership practiced will be assessed using the accommodative leadership framework of figure 4 and main functions and tasks will be distinguished. Hereafter an overview will be provided, visualizing the main differences between the provinces.

# 5.1.1 Gelderland: facilitative decentralization

Applying the framework of figure 4 to Gelderland many functions and tasks listed in chapter 2 are found. Assessing its coherence with the framework for accommodative leadership presented in figure 4, the *adaptive* and *enabling* functions seem to be of main importance in the provincial strategy (see figure 15). The province allows initiatives to be very flexible in the placement and the number of turbines, just as they aim to enable LEI wind energy development in various ways. Through participating in the 'Gelderse energieakkoord' (Energy Agreement Gelderland) they create a sense of urgency. Moreover, by supporting LEIs through subsidies, as well as with knowledge, they aim to mobilize resources for innovation. All these measures opt to enable LEI wind energy development. The LEI and municipality have experienced the flexible strategy of the province.

The main tasks practiced by the province are found to be the *mobilization and recruitment* tasks to mobilize actors for development. By allowing relative autonomy to municipalities that are willing to take

<sup>&</sup>lt;sup>9</sup> From now on, when leadership is discussed, a reference is made to accommodative leadership, unless it is explicitly stated differently.

action, the province aims to enable and motivate them to develop renewable energies. The interview with both the LEI and the municipality showed that the interference of the province in the eventual development of turbines was therefore very minimal: they were mainly framework setting. This leadership attitude taken, is reflected in the keywords for their strategy presented in 4.1.3: *facilitative decentralization*.

A combination that was missing in the accommodative leadership framework proposed in figure 4 is the *mobilization and recruitment* task, within the *enabling* function. In Gelderland the mobilization of LEIs was supported by the province through enabling their participation by supporting them financially and with knowledge. Therefore, this combination is added (in grey) in figure 15.

A function that has been found to be of less relevance in the province is was the disseminative function. As Gelderland is developing its first generation of wind turbines, no large institutional innovations are found here. Also, the interactions in- and outside the network of developers and relevant public parties were minimal. Therefore, some function-tasks combinations that have been present in figure 4, are left out for Gelderland, as they were not relevant.

		Strategic awareness	Framing	Coordination	Common vision	Mobilization & recruitment	Span boundaries
Function	Task:		1		<b>``\´</b> <b>\\</b>		
Political- administrat		Participation is the focal point of the regional strategy.	The province frames wind energy as part of the larger energy transition.	Main partner is the municipalities, but also other parties can request support. LEIs are not included in strategy creation.	Municipalities adopt fairly individual strategies. If their ambitions fit in the provincial ones (or are higher), they can develop individually.	The province does not mobilizes initiatives themselves, contact with initiatives ideally goes through the municipalities.	x
Adaptive	• }	x	x	Whilst putting up long term ambitions, the province allows for flexibility on the short term in location and size of the windpark as well as the organization.	x	The province supports organizational innovation through favoring LEI development.	x
Enabling	<b>)</b>	Municipalities are allowed to deviate form deadlines. Sense of urgency through "Gelders Energieakkoord"	x	Norms set are flexible, differentiation is allowed if the project is desired by the community.	x	LEIs are supported through subsidies and knowledge (through the association of LEIs subsidized by the province)	x
Disseminat	tive	x	x	x	x	x	The province aims to introduce their participation strategy, but not all municipalities are willing to cooperate.
Connective	e	x	x	The province allows relative independency of the municipality, demonstrating trust in this body.	The strategy is developed by the province, but executed in close cooperation with municipalities.	A wide variety of development options is allowed.	The province interacts with the association of LEIs and participated in the 'Gelders Energieakkoord'.

Analysis Gelderland

Figure 15 - Overview of leadership functions and tasks enacted in Gelderland

(In orange the main functions and in grey the added functions compared to figure 4, X represents combinations that are

not relevant for this province).

## 5.1.2 Flevoland: deliberative innovation

As was stated before, the leadership practiced by the province of Flevoland can be captured by the term *deliberative innovation*. Assessing their leadership using the framework of figure 4, figure 16 is created. The main function performed seems to be the *disseminative*, as their strategy focusses on institutional renewal and the acceptance of these new strategies by various stakeholders. This province is moving into its second generation of turbines and aims to renew all old turbines through four large projects in close cooperation with the wind associations. Due to this focus on a shared strategy and close connections within the network, a second function important here is the *connective* function.

Regarding important tasks in the province of Flevoland it must be pointed out that the *framing* seems to be done very carefully, also by combining it with the *creation of a common vision*. The objective of remediation is effectively linked to the idea of establishing a durable additional income for the inhabitants of the rural area through wind energy development. The new narrative is very effective and has led to a general acceptance of remediation of all old turbines. Therefore, an additional combination is added to the proposed accommodative leadership framework of figure 4. In figure 16 it is visualized (in grey) how in Flevoland a new combination of functions and tasks is added between the *framing* task and *connective* function. This new function considers the acceptance of a created frame.

	Strategic awareness	Framing	Coordination	Common vision	Mobilization & recruitment	Span boundaries
Task: Function:		1		<b>↓</b> <b>₩</b> <b>₩</b>		
Political- administrative	Focal point of regional strategy is remediation and locally organized development	The province frames the new development mainly as cleaning the landscape and economic possibility.	The LEI and municipalities are treated as equal partners in the development process.	Both in the strategy creation and execution both the municipality and LEI are involved and able to contribute.	Participants in the LEI are entrepreneurs which organized after a call from the province.	x
Adaptive		x	A big regional plan was developed and later adapted to the current plan with smaller development areas.	x	The members of the LEI united supply sufficient resources to fund the new turbines.	x
Enabling	A remediation target is set by the province for 2027. Also those who not join the LEI must be remediated than.	x	The allowance of differentiation of set rules is very limited. However, the rules are made in collaboration	x	x	x
Disseminative	x	x	An innovative and collaborative strategy is developed for the second generation turbines	Through close cooperation with the wind associations the remediation plans were accepted.	x	The province stimulated residents to organize themselves, hereby enabling their strategy of 'Scale-up & Clean- up'.
Connective	x	The frame of the province is accepted by the LEIs: they accept the legal procedures against non- participating turbine owners.	LEIs and municipalities have been included in the process from the start, this has fostered the building of trust.	The strategy creation happend in collaboration with municipalities and inhabitants	Actors were mobilized to search for solutions by encouraging the formation of associations.	Many functions as housing and airport development need to be coordinated

Analysis Flevoland

Figure 16 - Overview of leadership functions and tasks enacted in Flevoland

(In orange the main functions and in grey the added functions compared to figure 4, X represents combinations that are

not relevant for this province).

#### 5.1.3 North-Holland: authoritative reluctance

The province of North-Holland also enters its second, generation of turbines. However, the approach this province adopts is very different from Flevoland. North-Hollands leadership strategy was coined in 4.3.3 as *authoritative reluctance*. This reflects in the main leadership function performed in the province. This is the *political-administrative* function, as they focus on practicing a strict regime in wind energy development (see figure 17). The province has decided on the focal points of the regional strategy by itself, and also did the framing of this. This focal point is set on the cleaning up of the landscape through remediation. They gather the necessary resources for this by enforcing the remediation of two old turbines by the development of every new one. Both the creation of a *common vision*, as well as the *coordinative* leadership task is seemingly lacking in North-Holland, as there was little collaboration with the municipalities and LEIs and they have not been created through collaborative processes. Moreover, also the set rules are uniform for the whole province and no differentiation of norms is allowed. Just for the *disseminative* function a combination was found with these two tasks, as the current restrictive strategy was based on societal critiques and represents institutional renewal.

The main task applied is the creation of *strategic awareness*. In North-Holland, this was applied to communicate the narrative of wind energy as a nuisance. Moreover, the deadline setting done in relation to the new strategy was very successful. By using a tender-like strategy, the province enabled themselves to choose the projects adhering to all rules, as well as meeting the 2020 deadline. Also, a new combination is created with the *adaptive* function, as the strategic awareness led to the initial radical changes in the policy (figure 17).

## Analysis North-Holland

Task: Function:	Strategic awareness !	Framing	Coordination	Common vision	Mobilization & recruitment	Span boundaries
Political- administrative	The strategy is based on potential nuisance and remediation	Wind energy is framed as a nuisance	x	x	Through the creation of a tender-like procedure, the initiators have been mobilized and encouraged to meet deadlines.	x
Adaptive	With a new coalition in the province the policy changed radically, the focus of the province is on the nuisance of turbines and the remediation.	x	x	x	x	x
Enabling	Through the creation of a tender procedure, deadlines have been met.	x	x	x	x	x
Disseminative	x	x	Responding to societal critiques the province has designed this strategy, which is radically different from before.	x	x	Newly developed ideas on remediation are accepted by established positional leaders, but less by new ones such as LEIs.
Connective	x	x	x	x	x	The networks of existing turbine owners is linked to the new developers. But no other links seem to be made.

Figure 17 - Overview of leadership functions and tasks enacted in North-Holland

(In orange the main functions and in grey the added functions compared to figure 4, X represents combinations that are not relevant for this province).

# 5.2 Overview: comparing different strategies

When assessing these cases and positioning them in the developed leadership framework, a clear difference can be observed. Gelderland, as the largest province assessed here, negotiated the lowest development target from the national government. The strategy of this province focusses on the inclusion of stakeholders and prioritizes bottom-up processes. Nonetheless, the target for 2020 has not been met, which indicates that even though they have been receptive for bottom-up initiatives, there have not been sufficient applications to meet the targets. This was also confirmed by the provincial respondent, as the respondent explained how the province sometime overrules the municipality when an initiative is blocked by this layer. Whilst performing the interview the respondent of the province also stated that in his view, sometimes action is thus needed, and there is no time to wait for uniform support. Nonetheless as the province still had a fairly low target, which was not met, one could state that the province has mainly focused on the place-based aspect of wind energy development, whilst postponing their task to meet the development targets. Despite the flexibility allowed by the province, this was apparently not employed by the municipalities and inhabitants. This indicates that the provincial aspiration to develop wind energy, might not be shared with all of its municipalities and inhabitants.

Flevoland on the contrary, shows a stronger regime. With strict policy and placement zones the development of wind energy has been governed. They also applied a strategy focused on participation but added a second core goal: ordering the landscape. As turbines were owned by many individual owners, the province searched for collaboration and created their "Scale-Up, Clean-Up" strategy. However, even though the inclusion of residents was a core principle, the province stayed in control and took the lead in the governance process. From the interviews it became apparent that this was appreciated by the developers and municipality, and they felt included. As a result, the province of Flevoland can be said to enact a combination of place leadership, as well as leadership in dealing with climate change. Nevertheless, in the context of Flevoland two aspects are important to note:

First, the associations of farmers are not comparable to the LEIs found in the other provinces. The scale of the initiatives is very different (over 90 turbines developed by the LEI in Flevoland) and also their background differs. The initiators in Flevoland represent the inhabitants of the rural area. These are merely existing turbine owners. The enabling of wind energy development by these parties is possibly less challenging than with other LEIs, as the initiatives in Flevoland already have knowledge on the process, as well as money to invest in the process. These two factors, knowledge and financing, are exactly the conditions that have been mentioned as challenging for other LEIs during the interviews. The LEIs in Flevoland can therefore be considered to be in a favorable position over new LEIs.

Secondly, the province of Flevoland is newly build in the 1960s, causing the attitude in the province to differ from other provinces. As was mentioned in the interviews, large scale developments are more accepted in the province, because it is a man-made landscape, and also no protest of citizens against wind energy is observed.

The last and final province observed seems to be on the other end of the spectrum between meeting targets and allowing participation. Their focus has been mainly on meeting the set targets, whilst participation was considered of minor importance. Even though their strategy focusses on protecting the inhabitants of the province from nuisance, a repeated critique voiced considered the uniformity of the strategy: No difference was made in the strict regulations between urban and rural landscapes, or between types of initiatives. Nonetheless, despite their rigid approach North-Holland is the only one of the three cases where the wind energy targets have been met. Both Gelderland and Flevoland will meet theirs in the coming few years, but of these three only North-Holland has met the original deadline of 2020. Nevertheless, it is to be expected that for the next round of development Gelderland and Flevoland are one step ahead, as their current strategies have led room to work out projects that adopt a different time scheme. Moreover, it must be noted that the initial negotiations on the targets might also has influenced the success of the provinces, e.g. North-Holland has almost double the land surface of Flevoland, but only half the target.

The findings of the analyses, as well as the main leadership functions are summarized in figure 18.

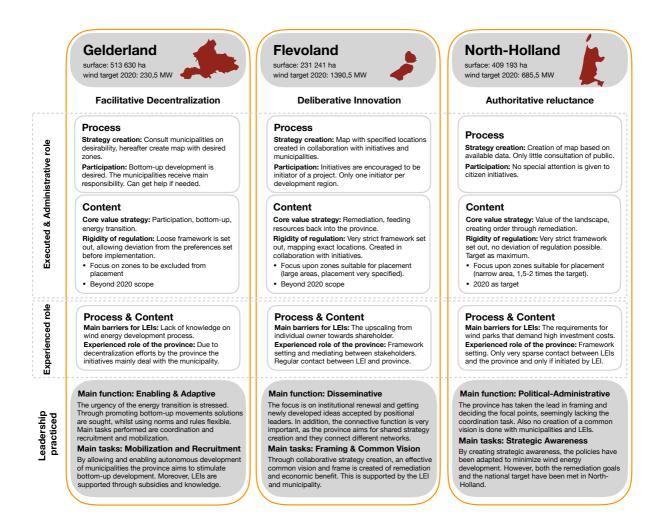


Figure 18 - Overview of the characteristics of the process and content of the strategies performed by the provinces, as well as their main leadership function and task.

# 5.2.1 Notes on the different strategies practiced

Analyzing the similarities and differences between the cases it becomes clear that all of them value their particular landscape characteristics and use these in the development of their strategy. In Flevoland the polder landscape is used as an argument in favor of turbines, while in Gelderland and North-Holland landscape characteristics are generally used as arguments against placement. Yet, the number of locations excluded through this measure are very limited in Gelderland and much larger in North-Holland.

A second interesting analysis that can be made considers the allowance of municipalities and LEIs to collaborate in strategy development. Flevoland did this to the highest extend, as they included both the municipalities and LEIs in their strategy creation; Gelderland only collaborated with the municipalities, only including LEI and other initiators in the actual development; and North-Holland did not include other parties at all in strategy creation, and municipalities only in the execution.

A third aspect to point out is the scale difference of the provinces. Both the provinces of Gelderland and North-Holland have almost double the surface of Flevoland. This smaller scale was mentioned by the provincial respondent Flevoland as being their advantage, as this size makes the province easier manageable. Also, in the other provinces the desire to organize wind energy on a smaller scale than the entire region was expressed. For instance, the MRA region in North-Holland, or the Arnhem-Nijmegen region in Gelderland.

A final difference between the cases is the occurrence of *rijkscoordinatie projecten* (national coordination projects). In Flevoland all projects have this status, in North-Holland one in the northern part of the province and in Gelderland none. As was said by different respondents in Flevoland the fact that the national government took part, sometimes made the coordination easier. However, the province of Flevoland also stated that despite the final spatial responsibility of the national government, the province still took the lead in planning endeavours. As the focus in North-Holland was on a project in Amsterdam without national coordination, this was not further discussed for this province.

# 6. Discussion & Reflection

# 6.1 Theoretical discussion and reflection

### 6.1.1 Theoretical discussion

Having used the developed framework (figure 4) as a base for case study analysis and applied it to three different cases, a balance can be made of its applicability in assessing leadership.

As was mentioned in the introduction, this study has not so much focused on the question what good leadership entails, as well focusing on what leadership can entail in the context of citizen-led renewable energy development. Whilst looking into three different cases, representing a different historic development and relationship with wind energy, three different accommodative leadership strategies have been identified, some more effective than others. In Gelderland the focus has been on facilitating bottom-up development through decentralization, whilst in Flevoland a more deliberative governance approach was applied, innovating their strategy to 'clean up' the landscape. Finally, North-Holland has taken a more authoritative strategy, whilst being reluctant to wind energy development in general.

The outcomes of the case studies have shown that the combinations between tasks and functions as were visualized in figure 4 represent a good indication of the leadership functions and tasks to be expected. Moreover, it has also shown that these were not comprehensive. In each of the cases another leadership combination of a function and a task was added to the framework. Yet also not all of the combinations were found in each case. As this indicates that empirical reality is more complex than the theoretical reality, further research is recommended. To fully explore the potential of the accommodative leadership framework, and test all combinations of tasks and functions possible, more case studies ought to be performed. Nonetheless, with the knowledge generated through the case studies performed here, the framework can already be extended. In figure 19 an elaboration of the theoretical framework on accommodative leadership as was discussed in chapter 2 (figure 4) is presented. In gray the new combinations found through these case studies are noted down in general terms.

Task:	Strategic awareness	Framing	Coordination	Common vision	Mobilization & recruitment	Span boundaries
Function:	<b>•†††</b>	1		<b>*††</b> † <b>†</b>	820	
Political- administrative	Deciding of focal point of regional strategy	Strategic framing of regional issues	Building of trust and legitimacy within the network	Regional strategy development	Mobilize, generate and allocate resources, knowledge and individuals	x
Adaptive	Visionary change based on awareness of certain issues	x	Institutional flexibility to allow for innovation	x	Gather resources for innovation	x
Enabling	Create a sense of urgency: deadlines	x	Allow for differentiation of set norms and standards; Foster interactions in the network	x	Supporting niche development; help initiatives to overcome barriers.	x
Disseminative	x	x	Institutional renewal	Get newly developed ideas accepted	x	Insert newly developed ideas in network of positional leaders
Connective	x	Acceptance of applied frame by the network	Management of connections with network: trust, integration and transparency	Collaborative strategy development	Stimulate multiple action options, mobilizing actors to search for solutions	Connect different networks

Figure 19 - Revised framework for accommodative leadership. In grey the added combinations.

Having used the framework and assessed its outcome it can be stated that the more a provincial government is able to proceed in filling in the framework, the more action is taken to realized accommodative leadership. This can be illustrated by looking at the three cases assessed here. Flevoland, who, based on the analysis arguably came closest to successful accommodative leadership, has filled 17 out of 30; Gelderland who also made and active effort, has filled 15 out of 30; and North-Holland, who focused mainly at reaching the target, putting less effort in participation or governance aspects, has 8 out of 30 boxes filled.

By analyzing different cases based on the total number of boxes filled, rather than focusing on some of the functions or tasks that might be or not be more important than others, the influence of local conditions on the leadership approach taken can be buffered. This local difference in leadership can be illustrated by the different focusses the provinces took in their strategy. Flevoland focused on the *framing* task, and getting everyone aboard, whilst Gelderland focused on being *adaptive* and allowing many different options of development. In North-Holland, on the other hand, the *political administrative* function is central. These different core points of their strategies do not per se determine their success, they are rather illustrative of the type of accommodative leadership practiced.

# 6.1.2 Theoretical reflection

### **Beyond ticking boxes**

Reflecting on the framework developed it can thus be stated that it can be useful in assessing the extend of the accommodative leadership taken. Yet, note that the practicing of successful accommodative leadership

reaches beyond the ticking of boxes. The quality of the functions and tasks discussed is of core importance. Therefore, a critical attitude is advised when filling in the accommodative leadership framework: only when performed successful, a box can be ticked. Nonetheless, as still the outcome of this process can be deceiving, a wider interest in a cases history, strategy and implementation practiced is advised to make sure the outcome of the framework used reflects the experienced reality.

In this context it is also important to note that the specific narrative of a certain case provides the reasons and motivation at the base of their strategy. Looking solely at the framework, a wider understanding of the origin and extend of a certain leadership focus is dismissed. For all three cases assessed, the province specific narratives and history provided a useful addition in understanding the leadership practiced. Moreover, especially as leadership adapts over time (Sotarauta & Mustikkamäki, 2012) it can be crucial to realize what has been at the base of a certain leadership tendency. Creating an understanding of the socio-economic, institutional and environmental context can contribute to a more effective use of the framework.

#### The versatility of leadership

Besides understanding its origin, considering leadership as a relay in time also contributes to an understanding of the versatility of leadership (Sotarauta & Mustikkamäki, 2012). This study has focussed on a time-span of approximately 5 years. However, it is likely that during these years the focus (what) and locus (who) of leadership has varied. To safeguard a rather stable outcome, this study chose to base the timeframe on the development of policy documents. As was shown in the analysis, the provinces followed their set out strategies rather strictly and much of the leadership practices was captured in these policy documents. Nonetheless, it can be expected that different phases of development, require different leadership approaches. In this study, no division was made between the different stages of development, but in a future elaboration this potentially would be a useful extension.

#### Normative dimension of the accommodative leadership framework

It must be realized that the developed framework contains a normative dimension. Whilst leadership can have many forms, the framework of figure 19 represents a very specific one. Accommodative leadership is based on the underlying assumptions that a participatory governance approach, allowing for adaptivity is desired. However, the case of North-Holland showed that by applying more authoritative leadership also set targets can be realized (and it arguably even makes it easier). When you, as either a researcher or policymaker, aim to assess the success of a leadership approach taken, it is useful to reflect on the desired leadership processes, before applying this framework. When the aim of a public authority was to either speed up the energy transition, or to include residents in spatial development, this framework is not the most suitable to assess its development. Applying this framework to a regional government to reflect on its practiced leadership includes a normative assumption that it is the combination of leadership to deal with climate change and leadership to include citizens initiatives in development, that is desired. Nonetheless, as was shown through the case studies performed here, the success of applying the combinations present in this framework do not guarantee successful development and meeting of targets. Nonetheless, it can be argued, that with the large spatial impact these developments have, and the involvement of LEIs in RE development, ensuring a link between the two types of leadership can be beneficial on the long run.

#### Transferability

As was mentioned frequently before, the framework developed in this study has been based on the concepts of place leadership and leadership in climate change adaptation as has been elaborated on by Sotarauta (2010) and Meijerink and Stiller (2013). Set out in chapter 2, also the writings of other scholars have been considered for their value to this specific study. Nonetheless, the leadership types researched here refer to theories with an origin in the Global North, or even Western Europe. Its transferability to other geographic regions, especially on different continents, should therefore be researched thoroughly before practiced. Planning systems and institutional context are found to differ widely, even between neighboring countries (Reimer & Blotevogel, 2012). These differences influence both the applicability, as the desirability of the accommodative leadership framework in other countries and continents and its potential for generalization.

#### Vagueness of terms

Moreover, the frameworks at the base of the study, provided by Meijerink and Stiller (2013) and Sotarauta (2010) have been limited in their extent of detail. While working out their theories into the comprehensive framework of figure 4, this has posed a challenge, especially when translating these general descriptions to case specific characteristics. Translating the *disseminative* task to the specific cases for instance, has proven to be a delicate as this term is used in a rather broad manner in the framework: it not only includes the dissemination of new ideas in and outside the network, but also the development of these ideas as such. Elaborating on these functions and tasks in more detail will avoid conceptual misunderstanding.

#### Relevance for the leadership debate

As was elaborated on in chapter two, the energy transition forces provincial governments to combine governance, adaptability and participation to enable the inclusion of LEIs in RE development. As the quantity and the spatial impact of RE technologies will be unprecedented, an understanding of the leadership practices suitable is crucial. This study contributes to the knowledge on leadership in this context and has identified main combinations of functions and tasks that signify accommodative leadership. As is clear from the analysis made, there is no blueprint for success and contextual factors influence the focus of the leadership taken. Nonetheless, the framework developed illustrates how despite the lack of a formula for success, still a ranking can be made, based on total combinations found. Hereby the framework of figure 19 potentially proofs to be useful for planners in analyzing approaches taken and exploring new strategies.

In addition, looking back at the scientific relevance of this study, it can be stated that this exploration provides a start for more in-depth analysis of leadership applied during the energy transition. As was stated before, literature on leadership in climate change adaptation is still lacking (Meijerink & Stiller, 2013). By doing additional case study research, the framework of figure 19 can be expanded and made comprehensive.

Hereby the important first step of Beer and Clower (2014) to define leadership at a local or regional level is taken, as also each individual province was characterized by a certain type of leadership (Gelderland: facilitative decentralization; Flevoland: deliberative innovation; Noord-Holland: authoritative reluctance). These identifications are an important step towards implementing good leadership in a community, as it advances the understanding of this important concept (Beer & Clower, 2014). This is crucial, because a knowledge gap is still experienced in the field of place leadership (Sotarauta et al., 2012).

#### The locus of leadership

In this study the decision was made to focus on leadership practiced by the province. However, it must be emphasized that the entire process requires shared leadership and thus also the LEIs themselves practice a leading role. Whilst also their leadership is of importance, it was outside the scope of this specific research. The cases assessed in this study show that the extent to which these LEIs are accommodated in their desire for leadership in RE development, is determined by the provinces. Despite the formal leadership tasks of the provinces, these cases have showcased that public leadership in the context of citizen-led RE development is more than only facilitative through the formal role of the province, it is accommodative and can have many shapes.

#### 6.2 Methodological reflection

Reflecting on the research performed for this study some considerations are worth sharing. These considerations will be of particular interest to those willing to work with the framework developed or interested in conducting a similar research.

#### **Respondent selection**

The original plan for this research has been to focus upon the respondents of the provinces and the LEIs. After performing the first three interviews it became apparent that also the municipalities have played a crucial role in wind energy development and that they could provide valuable insights. This group of respondents was therefore added to this study. Another group however, that could have been of interest, was the national government. In both Flevoland and North-Holland national coordination projects are performed, as some of the parks will have a capacity of over 100MW. The influence of the national government was in this study only touched upon briefly, but potentially is of big impact for the role of the provinces and the way they take the lead. Potentially, projects in which the national government is involved will proceed quicker or might trigger more resistance at the local community. Based on this study, it is not possible to make any claims with regard to the influence of this party, yet it would have possibly provided valuable insights to include them.

#### Data collection methods applied

In this study, the qualitative data collection method applied was semi-structured interviews. The argumentation for this is provided in 3.2. Despite that this method was very suitable for the current research, additional studies could combine this with focus groups. Especially when the focus shifts from mainly descriptive research of the current practices, towards prescriptive research into what good accommodative leadership could entail, this method can be beneficial. Focus groups are suitable to discuss different opinions amongst different network members (Harrell & Bradley, 2009), and could thus be adopted to discuss different leadership types and their application.

## 7. Conclusion

This study has aimed to lay the base for a further understanding into leadership in renewable energy development, whilst recognizing its spatial and societal impact. In researching this, four questions have been supporting the main research question. In the following sections each of these will be discussed, after which the main research question will be answered.

#### What is public place leadership in the context of citizen-led wind energy development?

The literature on leadership discusses many types of leadership for various different purposes. However, looking at the challenges governments currently face in greening their energy provision, two types are considered relevant for this study. First, leadership in climate change adaptation. When considered in the context of wind energy development, governments are urged to take the lead through societal pressure and (supra-)national agreements. As a result (provincial) governments need to create a shared vision for wind energy development with the parties willing to be initiators in their management area. Moreover, they can create a sense of urgency and allow for a variation of strategies. Lastly, they can insert newly developed ideas into actor networks and promote problems to mobilize actors. All these leadership functions are gathered into the framework for leadership in dealing with climate change as is described by Meijerink and Stiller (2013).

However, this framework does not yet accommodate the need for understanding of place and the impact of renewable energy technologies on the use of space. Therefore, to fully understand the scope of public leadership in wind energy development, also place leadership as described by Sotarauta (2010) has been elaborated on. Within place leadership there is a strong focus on the connections with other stakeholders in the network. Tasks described in the framework of Sotarauta are the strategic framing of the issue and the connection with organizations also outside the leaders' network. In addition, the creation of a strategic awareness of the issue, as well as the creation of shared visions with other stakeholders is valued highly. Lastly, this type of leadership aims to effectively coordinate development, to overcome 'frozen' institutional arrangements, as well as to establish trust amongst stakeholders and use this to mobilize individuals and skills.

In the Netherlands LEIs are increasingly aiming to participate in the development of renewable energy technologies. This participation can include the development process itself, as well as the placement strategy and financial participation. In this thesis these LEIs have been considered as enabling actors in achieving both renewable energy goals, as well as the inclusion and valuing of local contexts. Through combining the two described frameworks, an accommodative leadership framework is developed (figure 4). Using this framework, public leadership in the context of citizen-led wind energy development can be assessed.

Based on empirical analysis this framework was tested and new combinations of functions and tasks have been added (figure 19). The framework can potentially be further expanded if additional research would be performed.

#### How do provincial governments formally enable citizen-led wind energy development?

To assess the formal enabling of wind energy development by the different provinces, this study has focused upon the key strategic documents for wind energy development. The analysis has shown, that these documents provide a rather comprehensive overview of the different provincial strategies. Nonetheless, despite the common national regulatory framework, the differences in strategy between the provinces are striking. As was discussed in chapters 4 and 5, all provinces focus their attention on different tasks and functions, resulting in very different strategies. Whilst Gelderland focusses on bottom-up development, with a large role for the municipalities and a high degree of flexibility; Flevoland and North-Holland keep the control in their own hands. Nonetheless, while in Flevoland LEIs and municipalities play a crucial role, North-Holland takes a more top-down approach. Referring back to the statement of de Boer and Zuidema (2013) noted it the introduction, it can be concluded that North-Holland seems to consider wind energy projects as isolated technical projects, focusing on all kinds of specific technical necessities (e.g. sound nuisance), without searching for synergies with socio-economic and physical landscapes. This is done to a larger extend in the provinces of Flevoland and Gelderland where differentiations were made in types of development zones and the socio-economic and institutional context was crucial in shaping development.

#### How do provincial governments practice and perceive their own role and leadership tasks?

The interviews with provincial executives have provided valuable insights into the motivations behind certain strategy choices. The history of wind in the provinces has proven a crucial factor, as the province of North-Holland and Flevoland are already developing wind energy for decades, making this development round the second generation of turbines. This factor influences the strategy, as both provinces combined the development of new turbines with the remediation of old ones. In addition, it also seems to influence the general attitude, as the previous wind policy is mentioned as the origin of the current restrictive policy in North-Holland.

A second factor that has been influential on the strategy, and consequently on the leadership practiced by the province, has been the main narrative applied in relation to wind energy. All provinces showed to use a different type of storyline for elucidating the strategy.

A last element that is used as an argument in the placement of turbines is the physical landscape. As was discussed before this has been used both as a pro- and contra argument for wind energy.

These factors in combination with the formal strategy applied, are captured by the types of leadership identified in the provinces: *facilitative decentralization* in Gelderland, *deliberative innovation* in Flevoland and *authoritative reluctance* in North-Holland.

# How should provincial governments take the lead in citizen-led wind energy development according to those involved in the development process?

Interesting enough no clear statements were made by the LEIs or municipalities on the desired role of the province. When asked they mainly referred to general terms such as "framework setting", which they

struggled to explain in more detail. Both LEIs and municipalities in Gelderland and Flevoland referred to their own province when stating how leadership should be practiced. As was elaborated on in chapter 4, the LEIs and municipalities in these provinces were content with the leadership practiced. This despite the fact that the contact between these parties and the province was very intensive in Flevoland, and only very limited in Gelderland. In North-Holland on the contrary, the respondents of the LEI and the municipality were less positive about the province. The core aspects mentioned to be changed by respondents in this province were the universal approach towards all areas within the province and the limited inclusion of both municipalities and LEIs in strategy creation and execution. Finally, also the consideration of the 2020-target as a maximum for development was critiqued, as well as the corresponding regulations to achieve this maximum to not be overridden.

Nonetheless, an important aspect mentioned by many respondents was the scale of the strategies applied. Both in North-Holland, as in Gelderland the potential efficiency of a more regional approach was expressed. In Gelderland the municipal respondent referred to the urban Arnhem-Nijmegen region, and in North-Holland the MRA and upper part of North-Holland were pointed out as potentially suitable regions. In Flevoland, the desire to work on a regional scale has already been put in practice as the province itself is a lot smaller and also was divided in 4 development areas.

# *Main Question:* How do provincial governments in the Netherlands take the lead in implementing an adaptive governance approach considering citizen-led wind energy development?

This study has shown that there is not one roadmap to practicing successful accommodative leadership. Many different combinations of leadership functions and tasks are possible. Yet, assessing the cases whilst using the framework developed illustrates that the more combinations of functions and tasks are found within the framework, the more thorough and comprehensive the leadership taken is, and the more a combination is sought between participation, governance and adaptation. The relevance for the scientific debate on leadership is clear as a knowledge gap exists on place leadership in climate change adaptation (discussed in 6.1.2.). The accommodative leadership framework as was discussed in this study provides a detailed tool for the assessment of this type of leadership. Besides scientifically relevant, also the societal relevance of this framework can be proven, as recommendations practicing accommodative leadership can be made.

The cases explored have shown that accommodative leadership entails more than just facilitating development by setting a framework. Both North-Holland, and to a lesser extend Gelderland, took a framework setting role. However, in North-Holland municipalities and LEIs felt excluded from the process, and in Gelderland not enough initiatives applied. To make sure LEI RE development takes place, provinces thus should go beyond this facilitating leadership and take a more pro-active role. By not only providing a regulatory framework, but for instance by also providing other aspects of the accommodative leadership

framework, provinces can ensure this. An example is the provision of a future vision. Flevoland has successfully applied this as they effectively framed wind energy as and economic opportunity. Note that, due to contextual differences, what an effective frame is, most likely differs per province. Yet, this is just one of many aspects of accommodative leadership. The strength of this leadership framework is its different application in different contexts. Therefore, public parties interested in implementing an accommodative leadership approach can assess for themselves, what are the key combinations of functions and task to be made for their specific context, whereafter they can gradually expand to also fulfilling the other combinations. Based on the analysis of the cases, some individualized recommendations can be made for each case, based on what was found to be missing functions and tasks. In figure 20, these recommendations are given.

#### Case specific recommendations based on the accommodative leadership framework

#### Gelderland

Gelderland could improve its accommodative leadership by being more pro-active and adopt the disseminative function more effectively. By allowing the stakeholders within the province to join in on thinking about the strategy used, potentially also more willingness to initiate projects amongst municipalities and LEIs can be created.

#### Flevoland

Flevoland adopts a strong collaborative strategy, however excluding the inhabitants of the urban areas. By focusing on the inclusion of all stakeholders in the development, through the enabling function and the mobilization and recruitment task, their accommodative leadership practiced could become more inclusive.

#### North-Holland

By reviewing places where wind energy is desired by the municipality and community and exploring the potential of these places for wind energy development, bottom-up development could be enabled. Also, this could potentially increase the support of municipalities and LEIs for the provincial strategy. As such, especially the creation of a common vision and coordination task seem focal points for North-Holland in the future.

Figure 20 - Case specific recommendations based on the accommodative leadership framework.

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Accommodating a citizen-led energy transition? Public leadership in citizen-led wind energy development. A triple case study into provincial strategies for developing wind energy in the Netherlands. Date: 29th of June 2018 Nicolien van Aalderen - Master Thesis Environmental and Infrastructure Planning | Double Degree Water & Coastal Management Faculty of Spatial Sciences - Rijksuniversiteit Groningen | Carl von Ossietzky Universität Oldenburg Student number Groningen: S3442756 | Oldenburg: 5088617 Supervisor: L.G. Horlings | Second Supervisor: R.C. Spijkerboer Contact: nicolienvanaalderen@gmail.com



