

# **The importance of wind power community policies in Denmark and the Netherlands**

*“Can Danish community policies help the development of wind energy in the Netherlands?”*

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Master Thesis

European Spatial and Environmental Planning

February, 2017

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Keywords: wind power, community policies, local acceptance, policy transfer

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# 1.0 Summary

The focus of this thesis will be on the role of community policies within the planning and siting of wind farms in Denmark and the Netherlands. Denmark has several policies to involve the local community and has a high share of wind power in the total electricity consumption. The Netherlands on the other hand pays little attention to policies that involve the local community and has a low share of wind power in the total electricity consumption. During this research, it is argued that the use of community policies during wind energy planning, contributes significantly to the success of wind farm deployment. Through analysing the current Dutch and Danish wind energy policies, institutional setting and historical development of wind power (desk-study) and engaging into empirical research with the planning of an offshore wind farm building zone in the Netherlands, “Aanvulling gebied Hollandse kust” through a survey (case-study), the answer to the main question is researched in two ways. Moreover, a part of the analysis will focus on policy transfer to see if and in what way successful Danish community policies can be transferred to the Netherlands.

Thus, this research is focused on the effectiveness of community policies on the reduction of local opposition and indicates if and how successful community policies can be transferred from one country to another.

## 2.0 Introduction to the research

The Netherlands has high ambitions when it comes to renewable energy generation and wind power is an important tool to reach the 2020 goals set by the Dutch government and initiated by European agreements. However, from the start of Dutch wind power development in the 1980's little progress has been made, especially in comparison with other European countries like Spain, Germany and Denmark. In 2016 Spain's wind power provided 19.2 percent of the total electricity demand (Spanish Electricity System 2017), for Germany the share was about 10,6 percent at the beginning of 2015 (Yearbook Wind energy 2015). And although Denmark's wind power capacity is minor compared to Germany, the share of wind power on the total electricity consumption in 2015 was a staggering 42 percent (Energinet.dk 2016). For the Netherlands in 2015, wind power generated just 6 percent of the total electricity consumption (CBS 2016).

Many reasons contribute to the lack of progress in Dutch wind energy implementation such as changing policy priorities, frequent changes in the subsidy schemes and regulations around wind energy, limited learning capabilities of policy makers, and a general neglect of the articulation processes with other stakeholders such as businesses and the local population. This in combination with the Dutch legal procedures and institutional setting, which gave stakeholders many opportunities to protest and therefore delay wind energy development, made the actual building of windmills a difficult task in the Netherlands (Verbong, Geels and Raven 2008).

This lack in progress in the Netherlands stands in contrast to the development of wind power in Denmark. Denmark is considered to be one of the, if not, the most successful country in wind energy development. If one believes that the principles of best practice can be transferred from one country to another, one should take a look at the development of wind power in Denmark. Danish wind power policies also changed every couple of years, but the rate to which policies changed were a lot smaller compared to the Dutch policies, creating a safer and more reliable investment climate. However, the most outstanding difference between Dutch and Danish implementation strategies is the Danish habit to involve citizens into spatial planning policies making. Where the Dutch instead use market-

orientated centralized planning strategies (Oteman, Wiering and Helderman 2014), the Danish model involves communities using a more decentralized local planning strategy to wind power development with the idea of decreasing local resistance towards planning issues. These community policies that encourage public participation along the policy making and implementation of wind power was a key factor in Danish successful wind power development.

Thus, the focus of this research is on the influence of community policies on the deployment of wind energy in both the Netherlands and Denmark. Moreover, this research tries to uncover under what circumstances Danish successful community wind power policies can be transferred to Netherlands and if these policies will be welcomed by local stakeholders in the Netherlands.

The two-folded research objective therefore is:

*“To uncover the link between wind power development and the use of community policies and to see if and how these policies can be transferred from Denmark to the Netherlands.”*

## 2.1 Research problem statement

Land-use planning challenges present an important barrier to the development of wind energy in many countries. When making decisions on new wind power projects, authorities must balance the views and needs of the local public and stakeholders keeping in mind the national targets and ambitions of renewable energy development. And although high levels of support for renewables in general are common throughout Europe, on the local level, support is often reduced when specific projects are proposed. This research tries to uncover the importance of the involvement of the local community in the planning of wind power projects in order to reduce local opposition. The argument is made that the more local communities are involved, the less local opposition there will be. Eventually, a better understanding about the success factors on the local level of wind energy spatial planning can help the Netherlands in realizing their 2020 renewable energy targets. Moreover, since Denmark has a remarkable successful history around the involvement of the local community with wind power projects, lessons can be learned for the Dutch case. Hence,

research around the topics of public participation and policy transfer and the historical development of wind energy in both countries can help the Netherlands in dealing with local resistance when it comes to the actual physical planning of wind energy.

## 2.2 Research aim and questions

The aim is to analyse the use of community policies in the development of wind power and to understand how it can reduce resistance among the local population that is confronted with the siting of a wind farm. Furthermore, since Denmark has been making use of public participation in the planning of wind power for a long time and the Netherlands has not, it is important to understand and explain under which conditions policy transfer of community policies can take place or, since a 'one-size-fits-all' measure to wind power policy transfer is unrealistic, more specifically, under which conditions can successful Danish community policies of wind power development be transferred to the Netherlands. Also, this research argues that the success of Danish wind power development is partly due to the involvement of local communities and decentralized policies. The goal is to find drivers for the development of wind power in the Netherlands and the focus will be on theories related to policy transfer and public participation. Basically, this thesis will research the use of community policies in two ways. First by means of a literature study, where the application of community policies in Denmark and the Netherlands nowadays and historically will be analysed and secondly, by means of an empirical study, where the use of community policies in the development of the wind farm building zone "Aanvulling gebied Hollandse kust" will be tested through a survey on their effectiveness to reduce opposition and the extent to which community policies which were not used are desired by the local community of Zandvoort to help with local planning issues. All in all, this may lead to a conclusion on the applicability of Danish wind power community policies in the Netherlands. The main question is:

***"Can Danish community policies help the development of wind energy in the Netherlands?"***

The following sub-questions will help answer the main question and a brief elaboration on why this sub-question helps to answer the main question can be found below each sub-question.

1. *“How are the concepts of local opposition and social acceptance around wind power development analysed in the scientific literature?”*

The first sub-question helps to describe the research that has been done around the concept of ‘NIMBY’, social acceptance and local opposition and helps to formulate the hypothesis: *the more community policies are used in the development of wind energy the less resistance on the local level will occur*. Hence, in this chapter the importance of local involvement, public participation and community policies in wind power development is stressed. Eventually a conceptual framework about how to analyse community policies and what community policies are, will be presented at the end of this chapter. The next sub-question is:

2. *“What factors must be taken into account when transferring policy from one country to another and how is policy transfer analysed in the scientific literature?”*

The answer to this sub-question comprises an analysis of the theories around policy transfers and gives us an analytical framework to see if and how community policies from Denmark can be transferred to the Netherlands. Next;

3. *“Which Dutch and Danish policies and institutional factors drove wind power development throughout history and what was the role of community policies in it?”*

When trying to find out why Denmark has such a remarkable high output of wind power generation it is important to understand how the wind power market developed. This will prove to be of importance in the analysis because the policy history of both countries has shaped beliefs and (the lack of) trust in wind power development by several stakeholders, including communities. Furthermore, when understanding the (policy) context in which wind power developed, it will also help to answer the question to what extent wind power



policies can be transferred. Furthermore, this sub-question helps to determine how community policies were used in order to see how effective community policies can be in reducing local opposition. The next sub-question is:

4. *“Which policies stimulate wind power in Denmark and the Netherlands nowadays and which specific measures or policies make sure local opposition is reduced?”*

This question will be answered in the same chapter as sub-question three and here the actual policies, strategies, institutional and cultural setting and differences between Denmark and the Netherlands nowadays will be described and analysed. More specifically, this part of the research concentrates how both countries deal with local resistance and in what way public participation is encouraged. Thus, the application of community policies by both Denmark and the Netherlands is analysed here. Then, the following question is:

5. *“Could the local opposition in Zandvoort have been reduced when Danish community policies were applied to the development of the offshore wind farm building zone “Aanvulling gebied Hollandse kust”?”*

Here the case study is presented. The case study is about a proposal from the Dutch national government to assign a wind farm building zone of the coast of Zandvoort (“Aanvulling gebied Hollandse kust”) where the final decision about the actual building will take place in February 2017. Through a survey the extent to which community policies were used during the planning phase, and if these policies were effective in involving the local community, will be examined. Furthermore, the hypothesis of sub-question one will be tested meaning that if policy transfers of certain Danish community policies were to be possible, would it make a difference in the perceptions of the Dutch local community of Zandvoort when these policies would be applied here. Thus, this sub-question aims to explore the desirability and effectiveness of (Danish) community policies for local citizens in the Netherlands, or in this case for the locals of Zandvoort, before moving on to whether successful Danish community policies can be transferred to the Netherlands. Hence, the possibility of transferring Danish community policies will be analysed here and finally an attempt will be made to answer the main question.

The relevant theoretical frameworks, which are useful for this research, are related to policy transfer theory and the existing research on public perception and participation of wind energy. Devine-Wright (2005) has highlighted that lots of empirical research has been done on the perceptions of wind farms although this research has been carried out in a rather a-theoretical and fragmented manner. Loring (2007) however has developed a set of indicators for community policies, which will prove to be of significant importance in the context of this study. The review of the scientific literature related to local opposition and the factors, which are identified as the cause of local opposition, will help this research in determining what exactly community policies are and which of these policies or style of planning is applied in Denmark and the Netherlands.

Since “Aanvulling gebied Hollandse kust” is a possible offshore wind power-building zone, the topic of offshore wind energy development and their implications for local acceptance will be discussed also. While less is known about the forming of local opposition or support of offshore wind farms in comparison to onshore wind energy, a growing body of research has identified factors that are quite similar, despite suggestions by other scholars that offshore wind farms deal with much less opposition than onshore wind farms (Jay 2010, Ladenburg 2010, Still 2001).

The next step is to determine which literature and theoretical framework can be used to see if and how successful Danish community policies can be transferred to the Netherlands. The sharing of experiences, exchange of best practices and transfer of policies are well known in the scientific literature. Many scholars have analysed the concept of policy transfer and therefore lots of literature can be found. Mossberger and Wolman (2003) give clear criteria for the assessment of potential policies to be transferred and Dolowitz and Marsh (2000) have formed a policy transfer framework, which has been used by many scholars. To Dolowitz and Marsh (2000, p1) policy transfer is *‘concerned with the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system.’* Within this framework several aspects of policy transfer are addressed such as; why transfer takes place, who is involved in policy transfer, what exactly is being transferred and from where, to which

degree transfer can take place and important for this research, what constraints are there on policy transfer. Hence, their framework on policy transfer is rather comprehensive and therefore very helpful in answering the main question of this research: *“Can Danish community policies help the development of wind energy in the Netherlands?”*

### 2.3 Scientific and societal relevance

Nowadays our energy supply is largely dependent on fossil fuels, which are becoming scarcer. This means an increase of prices, costs and a burden for societal and economic progress. Moreover, the impact of our energy-use on the environment is becoming a bigger problem. In addition, geopolitics plays a role. Geopolitics influences the ability of countries to import energy from other nations. Although the Netherlands has its own gas reserves, it is still largely dependent from countries outside Europe for their oil supply. Hence, increasing the renewable energy production, in this case wind energy, through learning from successful Danish policies, does not only reduce the environmental burden Dutch society has on the climate it also makes the Netherlands less dependent from other countries for its energy supply. Moreover, in understanding how local opposition can be reduced in the Netherlands and which community policies can be useful, the land-use planning challenges of the actual building of wind farms can be better dealt with. Thus, analysing if successful wind energy community policies from Denmark can be transferred to the Netherlands can be useful for society in several ways.

Also, the scientific relevance of this research comes to meaning in several ways. First of, analysing the way both countries deal with the implementation of wind farms and the involvement of local community helps to get a better understanding about the way local communities can participate and consequently show a higher degree of acceptance. Furthermore, when putting the policy transfer framework of Dolowitz and Marsh (2000) to use, the applicability of the framework can be tested to what extent it is useful for the transfer of wind energy policies. Furthermore, Loring (2007) has developed a set of indicators, which test to what extent community policies are used and compares these indicators between three countries (Wales, England and Denmark). Several indicators will be used and/or slightly modified and help to build the theoretical framework of this thesis. The

indicators test to what extent community policies have been used and how effective they were during the development and planning of an offshore wind farm building zone in the Netherlands. Moreover, these indicators help to analyse the historical and current wind power market in both the Netherlands and Denmark and its use of community policies, testing once again the effectiveness of a part of Loring's (2007) analytical framework.

In sum, to answer the main question we first have to find out what local acceptance implies and how successful policies can be transferred from one country to another. Logically, the first two chapters will conduct the theoretical views related to local acceptance of wind energy and policy transfer. At the end of both chapters, the theory or parts of certain theories that will be used for the analysis of the case-study "Aanvulling gebied Hollandse kust" are chosen and modified for its use here. Then, a methodological chapter will focus on aspects such as the research design, validity and reliability, research strategy and operationalization of the survey. Next, a short literature review about the history of wind energy development of both Denmark and the Netherlands will be described. In this chapter the current situation on wind power development and the role of communities and community policies in Denmark and the Netherlands will also be analysed. Here the answer to the main question will be given based on a literature and policy analysis of the use and development of community policies in Denmark and the Netherlands. Following on this, the case study "Aanvulling gebied Hollandse kust" will be outlined in the next chapter and the findings of the survey will be discussed. Also, the findings will be linked to the theoretical concepts discussed in the first two chapters. Here the answer to the main question based on the self-conducted empirical research will be given. Finally, the conclusion will point to the importance of the institutional setting and the use of community policies in creating local acceptance and the difficulties related to policy transfer.

### 3.0 Local Acceptance

From the niche market wind energy operated in during the 1970's, 1980's and 1990's, investors attempted to up-scale to a mass market during the 2000's. Until the 2000's wind power could not compete with grey energy, although under certain conditions wind energy was able to reach the stage of being economically viable (Wolsink 2000). However, governmental support through financial schemes was and is often still necessary for wind power to compete with grey energy. The political commitment and use of support schemes of pioneering renewable energy countries like Denmark and Germany allowed economies of scale to emerge for the wind industry. At the eve of the 2000's, wind energy development and its future seemed promising. The public opinion was very positive, investors were ready to invest and the European countries and their policy makers created an encouraging regulatory framework environment. Overall, it was a favourable techno-political period for the wind industry (Reiche and Bechberger 2004).

The surprise was big when in this wonderful scenario many wind power investors and governmental institutions encountered a lot of local opposition to wind power implementation. Thus, while the attempt was made to spread wind farms throughout Europe, a potentially powerful barrier to the realisation of renewable energy targets emerged: social acceptance, or in this case, the lack of social acceptance (Wüstenhagen, Wolsink & Bürer 2007).

Hence, in this chapter the following research question will be addressed:

*“How are the concepts of local opposition and social acceptance around wind power development analysed in the scientific literature?”*

This first sub-question describes the research that has been done around the concepts of local opposition, social acceptance, community policies, NIMBY and public- & local participation. The local community and their views on wind power development within their neighbourhood will be addressed and furthermore, this sub-question helps to formulate the

hypothesis that the more the local population is involved in the development of wind energy the less resistance on the local level will occur. Finally, at the end the most important parts of the theories related to community involvement will be formed into a framework that will help answer the main question and to see whether (Danish) community policies can improve Dutch wind power implementation.

Thus, in this chapter the importance of local involvement is stressed and community policies are defined which will serve as an outline for the analysis of the Dutch case-study “Aanvulling gebied Hollandse kust”, the design of the survey and the analysis on the use of Danish and Dutch community policies nowadays and previously.

### 3.1 Social acceptance and public support

Wolsink (2013, p 3) describes social acceptance as the degree to which a phenomenon (e.g. wind power implementation) is taken by relevant social actors, based on the degree how the phenomenon is (dis)liked by these actors. Or, in other words, social acceptance of wind power implementation concerns many decisions by an abundance of actors throughout the whole chain of wind energy consumption, distribution and production and about the economic and socio-political context in which the chain has been developed (Wolsink 2000).

Discussions related to social acceptance in the field of energy generation are not new, for instance with the siting of nuclear power plants or implementation of hydropower dams. Nonetheless, during the 1980's the issue of social acceptance being part of the implementation process for wind power was almost totally neglected. The general opinion of authorities, developers, private investors and energy companies was that implementation of renewable energy technologies would not be a problem because surveys of public support, for wind power in particular, showed high support. The idea was that if general public support for wind power is high, implementation would encounter little problems (Wüstenhagen, Wolsink & Bürer 2007).

On the other hand, the first research that tried to further analyse the conditions that determine effective support for and effective implementation of wind power showed that

neither support from the public or support from crucial stakeholders should be taken for granted (Carlman 1982). Carlman (1982) suggested that social acceptance consisted of more than the study of public opinion and she herself studied the acceptance of wind power among decision makers (Carlman 1984). Soon, other studies analysed the problematic issues of wind power implementation focusing on reluctance of policy makers, the scale of the installations, the ownership construction, the lack of support among key stakeholders and the significance of landscape issues in the attitude towards wind energy implementation (Bosley and Bosley 1988, Thayer 1988, Wolsink 1987). Nonetheless, because of high levels of general public support showed by other surveys, politicians and decision makers largely ignored the issue of social acceptance on a local scale.

However, the problem with the surveys that showed a high level of public support was that they were not designed to establish the background and structure of attitudes towards wind energy on a local scale. The surveys were designed to indicate the popularity of wind power as a source of energy compared to other energy sources and in comparison to other electricity sources, wind power was popular (Wolsink 2000). Thus, social acceptance is more than just general public support for wind energy compared to other energy sources.

### 3.2 NIMBY

As said, next to showing general support for wind energy, these early surveys on wind power support uncovered some perceived disadvantages of wind power development such as spoiled scenery, noise disturbance or pollution and unreliability of wind as an energy source (Simon 1996). After assessing the relative significance of these arguments against wind power, the perception people have on the aesthetic value of wind turbines proved to affect the attitude of people the most. Thus, the decision of people to oppose or support a wind power project heavily depends on the visual quality of the site (Wolsink 2000). This means that although people are in favour of wind power, they may become opponents when the visual quality of the site within their neighbourhood is negatively influenced. This looks like a typical case of NIMBY, and for a long time, NIMBY has played a big role in the planning of wind power and many failed attempts for the siting of wind farms were ascribed to the so-called NIMBY attitudes of the local population.

Basically, NIMBY is the resident's motivation to protect their own domain. And more formally, NIMBY refers to the oppositional tactics and protectionists attitude used by communities who face an unwelcome development in their neighbourhood. These unwelcome developments include a wide range of land-use proposals such as low incoming housing, nuclear facilities, airport extensions, hazardous waste facilities and landfill sites (Dear 1992). Residents of communities associated with NIMBY usually acknowledge the necessity of these harmful facilities, just not near their homes, hence the term 'not in my backyard'.

In Dutch political documents, the Minister of Housing, Physical Planning and Environment first introduced the term NIMBY-syndrome in 1984 in a parliamentary discussion about the siting of a radioactive waste site. Back then the siting of this radioactive waste site proved so difficult and the opposition of local communities so influential that the term was introduced within Dutch politics and land use development (Wolsink 1994). Following on this, the Dutch government tried to reduce the overall influence of local opposition to such waste facilities plants but also to the planning of railway lines or asylum seekers centres. The change of legislation was made because it was believed that the opposition of such developments only disregarded the common good. Eventually, Dutch legislation of spatial planning was adjusted through a bill that was introduced in 1994 referred to as the NIMBY bill. The bill was adopted and changed the legislation on physical planning reducing public influences on facility siting and speeding up land use planning procedures. It gave provincial and national governments a way to force municipalities to change their local zoning scheme, enabling higher-level authorities to overrule local decisions.

Theoretically speaking, the concept of NIMBY represents a game situation or a social dilemma (Wolsink 2000). For psychologists (social dilemma theory) and economists (game theory) these concepts are important when analysing the provision of public goods. They explain why in society some public goods are not provided, despite all people in that society want that public good to be produced. The eventual outcome is obviously not optimal since each individual's utility maximises his or her decisions. Instead of working together for the greater good, in this process the individual's personal costs and benefits are calculated and



acted upon. In consequence, this stimulates free rider behaviour, meaning that people do get or take the important public good but are not personally hindered by it (Olsen 1965). Hence, the NIMBY concept implicates that the opposition or NIMBY adherents are driven by self-interests and/or free-rider behaviour.

However, in the case of wind power opposition, the motives and interests of opposition are often not clearly distinguished and the perceptions of risks tend to be disregarded. According to Wolsink (2000), the concept of NIMBY as an explanatory concept on wind power opposition is often misused or wrongly interpreted. Wolsink (2000) analysed data collected around three major wind farms in the Netherlands with the goal to find people who combined resistance calculated through personal costs and benefits and a positive general attitude against wind power. Remarkably, he hardly found people who combined these personal motives. Instead, Wolsink (2000) argues that the wind power deployment's success depends largely on the institutional arrangements within the policy domain of energy and physical planning.

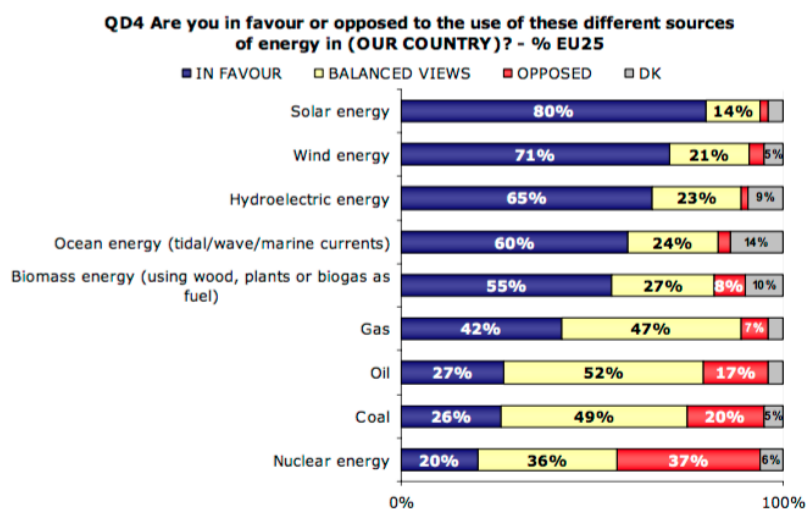
Other studies have also rejected the validity of NIMBYism as an explanatory social science theory suggesting a negative relation between local and general perception (Simon 1996, Petrova 2016). In fact, Simon (1996) identified a positive relationship in terms of support; those in favour nationally also are so locally. Hence, it is clear to say that social acceptance encompasses more than just the public perception on which energy source is prevailed above others.

Unfortunately, problems during decision-making processes on the siting of wind farms are often still typically explained as NIMBY or communication problems. Yet, the gap between a positive attitude towards wind power and attitudes towards wind farms are fundamentally different. And this gap brings about misunderstandings about the nature of support for renewables. When planners take for granted that support for wind farms can be created by information campaigns stressing the environmental benefits and opposition is often formed by the NIMBY attitude, implementation rates for wind farms will be affected (Wolsink 2007).

### 3.3 Local perceptions

Nonetheless, the social controversy wind farms stir up during siting; if or if not caused by NIMBY motives, form a threat to the development of renewable energy and the accomplishing of the 2020 goals throughout Europe. This controversy reflects the necessity and importance of understanding and researching processes of social acceptance and public perception on a local scale. Still, at the general level, wind power has high public support but at the local level, resistance is strong. The Eurobarometer, a survey carried out throughout Europe twice yearly, showed in 2007 the overall strong positive opinion of European citizens towards renewable energy; 71 percent of the EU population was in favour to the use of wind power as an energy source (see figure 1). Moreover, the Eurobarometer (2014) found that nine in ten Europeans are backing an increase in renewable energy targets to expand the amount of renewables by 2030. Nonetheless, developments are lacking behind, especially in the Netherlands.

Figure 1: Eurobarometer survey



Source: Eurobarometer (2007)

As said before, research aimed at revealing possible reasons for local opposition to wind farms has shown that visual impacts and noise are the most often reported problems (Wolsink 2000, Simon 1996). Problems related to visual impact refer to the perception of people on an array of wind turbines in a specific landscape, and noise problems refer to the noise turbine blades make when rotating, although with offshore wind farms noise will not

be a problem. Other described opposing views are the perceived unreliability of wind energy as a power source, the high costs wind power brings about in comparison to conventional energy sources, the impact wind farms will have on marine and/or birds and wildlife, and also the mistrust of the motives from development organizations (Devine-Wright 2005).

Furthermore, in relation to the size of wind farms, there are stable results saying that large-scale developments are more negatively perceived than smaller wind farms. Lee, Wren & Hickman (1989) already pointed out in 1989 that the bigger the wind farm the weaker public support and Danish research showed that clusters of two to eight wind turbines dealt with much lesser opposition than single turbines or larger wind farms and these findings were consistent across age and gender in this large representative sample (Daugarrd 1997). And Wolsink (1989) found that in the Netherlands wind farms received less support in comparison to stand-alone wind turbines.

Remarkably, these findings stand in contrast with the general opinion and choices in governmental wind energy policy making. Often, policymaking tends to favour large-scale developments, in terms of larger numbers and larger turbines in comparison to small scale development (Elliot 1997, Divine Wright 2005). The choice for large-scale development in many European countries shows how policy makers have absorbed renewable energy development within the common approach of centralized large scale electricity supply infrastructure development. This large-scale approach was created for the exploitation of nuclear energy and energy from fossil fuels focussing on economic and technical efficiencies, instead of choosing for a community- or people centred approach.

Additionally, on the topic of visual impact, some studies have indicated the support for turbines that merge with the landscape and have neutral colours (Devine Wright 2005). And secondly, although coastal, farmland and upland landscapes are often perceived more beautiful than urban and industrial landscapes, levels of support for wind farm development were identical across the different types of landscapes, meaning that there is no real preference for wind farms in any particular landscape (Sustainable Energy Ireland 2003, Devine-Wright 2005).

Overall, the placement of wind turbines into a landscape has predominantly been described as a development that has a negative impact on the landscape despite the fact that there is little evidence that wind turbines are always perceived as ugly. Many examples of positive perceptions of the visual character of wind turbine do exist. A respondent in Devine-Wright's (2003) study commented on the wind turbines as being beautiful sculptures and between 51 and 63 percent of the respondents who could see a wind farm from their houses choose 'interesting' as the word to describe the presence of wind turbines.

Even more complex about the local perceptions of wind farms is the suggestion that the visual impact is also formed by judgements of rational, symbolic and instrumental aspects of a specific wind farm. Thayer and Hansen (1988) argued that the visual impact evaluation of a person is based upon a combination of judgements and perceptions; the form (size, colour, shape) of the turbines, the perceived intrusiveness of the turbine in that specific landscape or context and the degree to which wind turbines symbolize 'higher' positive or negative concepts. And with concepts they mean the degree to which wind turbines are related to bigger environmental concerns such as energy problems and climate change and the urge or feeling to address such problems. Hence, the visual impact is determined by the relative significance of each of these judgements, both physical and symbolic.

Another concept of wind farm perceptions described above are the way wind farms fit into the historic values of the region, for example a small-scale hydroelectric power installation in an English National Park was highly positively perceived by the locals because the installations were associated by the locals with the historic water mills located in the park (Devine-Wright 2003). Such judgments of the visual impact show how different technologies can be perceived as suitable for different areas by promoting a sense of continuity with the past. In turn, communication strategies can link wind turbines to windmills to increase positive perceptions of suitability in a location, which had or still has windmills. Hence, these place identification processes are important to keep in mind when researching local perceptions.

Other studies on local perceptions have used a longitudinal design, trying to determine whether perceptions become more negative or positive over time. Generally speaking, these

studies indicate that perceptions become more positive over time (Wolsink 2000). In turn, these studies suggest that increased exposure over time leads to increased acceptance or the more familiar people are with wind power the more supporting they will become for wind farms. And Devine-Wright (2003) stresses the importance of social networks (opinion of friends, family and significant others) in shaping public and local perceptions of wind farms.

A final subject related to local perceptions, which has often been investigated, is the 'proximity hypothesis', those who live closest to a wind farm will experience the most negative perceptions of it. Results on this specific subject have been both successful and unsuccessful. Some studies found no link between distance and negative perceptions, some studies accepted the 'proximity hypothesis' and even others had to reverse the hypothesis; those who live closest to the wind farm have more positive perceptions of it (Devine-Wright 2005).

All in all, local perceptions are formed and influenced by many factors that are related to wind power development. Furthermore, it can be safe to say that social acceptance also encompasses the local perceptions on wind farms together with public perceptions on wind energy. Moreover, understanding local perceptions and knowing how to influence them probably is a stronger factor in creating higher wind energy implementation rates since positive local perceptions mean less siting issues. Therefore, the focus of this thesis will turn to how to influence the local perceptions in a positive way, or better yet, how to bypass these negative perceptions, offer something different in return, and consequently reduce resistance. Although first, local perceptions of offshore development are discussed and compared to onshore development. This is of importance since our case study is about an offshore wind farm and differences in perception between on- and offshore development must be clear before moving on.

### 3.4 Offshore development

In an attempt to avoid local resistance, some energy planners have moved their focus towards the planning of offshore wind farms. Ladenburg (2010) for instance, suggest how visual impact or the impact on wildlife and noise have made it increasingly difficult to develop onshore and argues that offshore wind power development is a beneficial alternative to reduce or even eliminate the negative perceptions related to onshore wind farms. And Jay (2010) insinuates that offshore wind turbines avoid broad public resistance, large delays and planning issues associated with onshore development of wind farms. Also Soderholm, Ek & Petterson (2007) argue for offshore development because it has fewer risks related to public opposition. Tong (1998) even stated that developing offshore is developing without public opposition.

To Haggett (2011) however, it seems like there is a misconception about the reduction of local resistance when planning wind farms offshore. She has compared planning issues in both offshore and onshore development and concludes that public perceptions on on- and offshore wind energy do not differ that much. Haggett (2011) extracts five key reasons for opposition or support of wind power development from the research of onshore development and explains that of each form of opposition it is just as applicable for offshore local resistance.

First and foremost, the loss of the aesthetic value of the landscape. Likewise to onshore development, turbines can clearly be seen even several miles offshore and for many locals this view is perceived as something negative or less positive than a view without wind turbines. Secondly, the opposition of onshore development may have its roots in the historical, political and social context of any particular site and the emotional value people have to that place. However, Devine-Wright & Howes's (2010) research shows that locals of coastal towns see the sea and its coast as part of the town and can be very sensitive in case of changes to that 'part' of the town. Third, conflict around renewable energy can embody the detachment between the global and the local. Issues of global warming may be far from everyday life, the impacts on the local level are not. However, as can be seen from the first two key reasons, there is clearly an impact on the local scale when building wind farms

offshore. Furthermore, the detachment between local and global issues also implies that urging people to accept wind power development within their neighbourhood solely because wind energy helps reduce climate change has little success.

Haggett's (2011) fourth key reason for opposition is the role of ownership and the relationships the developer has with the local people. This issue is likely to be even more applicable to offshore development instead of onshore. The European offshore wind farms are almost entirely developed by big energy companies since the initial investment costs of building and planning offshore is a lot higher. Consequently, trust issues and local acceptance are affected more often in comparison with onshore development since locals themselves or the local government more often does onshore development. Many surveys on offshore development show that mistrust and general doubt about the motivations of the developer are part of the resistant arguments by locals (Ellis, Barry & Robinson 2007, Haggett 2008). Finally, the decision-making processes, planning and participation issues and the chances to express opinions are very important in the formation of local opposition or support for offshore development. Following the trust issues locals have towards the commercial developers of offshore wind farms, it seems just as important to involve local citizens into the planning process. As these concerns about a lack of meaningful involvement are not dealt with, it can lead to opposition.

Thus, moving onshore development to offshore development does not solve siting issues. Negative perceptions will not dissolve when moving wind farms from land to sea and even people who support onshore wind power development, do not necessarily support offshore development (Haggett 2011). Attachments and values to places, also at sea, have complex roots and even if people do not see offshore wind farms on a daily base, visual intrusion issues are still important (Ladenburg & Dubgaard 2007). Moreover, Haggett (2011) suggest that too effectively address these issues, the involvement of people can be very helpful. The same suggestion is made by Still (2001), who argues that locals have a key role and should be involved in decision making.

To recognise the potential for conflict, also in offshore development, means to understand the reasons of conflict and one can solve conflict by engaging with local citizens and creating mutual benefits of the development. Many authors point to the importance of institutional

arrangements (Wolsink 2000) and the involvement of the community (Haggett 2010). It seems like negative perceptions related to wind energy development such as the change of scenery, the mistrust locals have in developers or maybe even a general mistrust in wind energy as a power source can best be influenced by engaging and communicating with the local community. Thus, community involvement (facilitated by governmental institutions) can be very helpful in reducing local resistance.

Hence, the focus now turns towards specific community policies, which are either targeted at involving the local community or reducing the forming of resistance by locals.

### 3.5 Community policies

The varied nature of the results in the research on local perceptions described above indicates the possible importance of community policies; where community policies have been applied, less negative perceptions of those living close will appear. Wind farm research that concentrates on public participation to enhance local acceptance has emerged not long ago in comparison to visual impact, technical or economic efficiency policy studies and reflects the increasing awareness among policymakers that the process of wind power development is an important factor of acceptability and the shaping of local and public perceptions.

In order to make a certain distinction between all the theories related to local perceptions and acceptance, community policies, which will be central in the context of this study, are defined as follows: *community policies are policies, either formed by the (local) government or by the wind power developer, which are targeted at involving the local community and through this increasing the level of acceptance or reducing the forming of resistance by locals when a wind farm is planned within a certain neighbourhood.* The degree to which involvement can take place or reduction of resistance is targeted within spatial planning varies and will be discussed in the following sections. Moreover, various forms of public participation theory, participatory planning theory, stakeholder involvement and community involvement will be discussed.



First of, the actual physical planning of wind farms deals with many difficulties and one difficulty is that it affects a multitude of stakeholders, meaning that the deployment of wind energy needs approval of several stakeholders. Building a wind farm soon becomes a local political process, affecting the community in different ways. For all actors who are involved in that local process, the question of acceptability is at stake (Wüstenhagen, Wolsink & Bürer 2007). The involved actors are not only the local civil society and local residents, but also other (higher) tiers of government, large energy companies and investors from other countries. Hence, the social characteristics of wind energy deployment become crucial and certain questions influence the degree of social acceptance; is the initiator someone from the community? Has the local community significant influence? Are there options to participate in the project? Who decides about what?

Also Jobert, Laborgne & Mimler (2007) address factors that can be important for the deployment of wind energy on the local level. Next to the regulations and economic incentives of national policy, territorial and local factors such as features of the local economy, local actors, and the actual planning process on-site can be decisive for the success of the deployment.

To resolve issues related to the significance of the landscape quality and the scale of the wind power projects, local factors should be recognised and dealt with in a collaborative approach (Wüstenhagen, Wolsink & Bürer 2007). The advantage of using a collaborative approach is the strengthening of perceived justice and building of trust relationships (Gross 2007). While trust is a vital element in all siting issues, the perceived fairness depends heavily on how risks related to these siting issues are defined and how information about these risks is communicated and produced. Especially when the wind power projects are designed and built by community outsiders (Owens 2004). Hence, taking on a collaborative approach automatically means involving the local community.

Wolsink (2000) also believes that improving deployment of wind energy and creating better implementation rates can best be achieved by building up institutional capital that is able to use collaborative planning solutions. In addition, institutional capital comprehends three

dimensions: the capacity for mobilisation, knowledge resources and relational resources, which are all three supported by a collaborative approach that can improve sustainable spatial planning (Healey 1998).

Thus, according to Wolsink (2000), Healey (1998) and Wüstenhagen, Wolsink & Bürer (2007) the siting and building of wind farms and the degree to which local acceptance will take place is heavily influenced by the governance form or institutional arrangements of the country or region. A key element lies in the quality of the local policy cultures. While some are well informed, connected, integrated and can act to enhance local conditions and mobilise, others miss the connections to resources of knowledge and power, are fragmented and lack the capacity to mobilise and organise. Furthermore, Toke (2005) found a correlation between landscape protection groups, local authority planning decisions and the opinion of local officers, concluding that the decision of the planning authority was significantly influenced by the attitude of the local population, indicating how attention to the local politics might reduce local opposition to wind farms. Thus, local authorities play a vital role in facilitating a collaborative approach and increasing the public participation of the local community.

Regarding public participation theory, various forms of public participation can be characterized as community policies. And to Soerensen, Hansen, Hammarlund & Larsen (2001) public participation in offshore wind power development can basically be divided into three major forms:

- First, through information about the ongoing development (information)
- Secondly, through direct involvement in the decision making process (public planning participation)
- And third, by way of financial involvement in the project (financial participation)

Participation through information is the most common approach where passively informing locals and carrying out little requirements on consultation is done. Out of the three options, it is the most often used approach although information participation does not out rule the other two forms of participation. Krohn & Damborg (1999) show that 85 percent of Dutch respondents to a survey desired to be informed of developments for future wind farm and

60 percent also thought the local authority is responsible for this information instead of the media. Thus, information participation is the most logical and easiest first step for authorities and wind power developers to carry out.

According to Soerensen et al (2001) the second form of participation, direct influence on the decision making, is almost never offered. This is due to many perceived disadvantages such as the inefficiency of public planning participation, the impossibility to please all and the risk of expanding the conflict. On the other hand, if dialogue channels are kept open and looked after, possible threats can be lightened before bigger protests are formed. A sense of control through a well-established dialogue with the concerned locals can be created and the dialogue will not be largely controlled by misinformation in the media, creating a trustful relationship.

Moreover, a survey from Germany showed a certain willingness on the part of the public to participate in wind farm development processes; 49 percent were willing to attend public meetings (Erp 1997). And Devine-Wright (2003) shows that the majority of Europeans are willing to participate in decision making, although the same majority believes their opinions during decision making participation are not going to be taken seriously, illustrating the implications and shortcomings the centralized context or structure of energy planning processes have in general.

Studies on financial involvement have been carried out numerous in Denmark, where local co-operatives are the most common used form of wind power development in comparison with other countries. Although, this type of development not only relates to financial involvement, but to communities being the actual developers. Another form of financial involvement is the financial participation described by Soerensen et al (2001). This type of financial participation means that locals can buy a share of the wind farm out of environmental concerns or because of financial incentives since owning a share means benefitting from the possible profits. The likely impact on local perceptions by share ownership constructions was suggested by Krohn & Damborg (1999) who revealed that in the Sydthy region 58 percent of the households owned shares in a co-operative and those who did were significantly more positive towards wind power than people without shares

and were more willing to accept other turbines in their area. Overall, Danish studies suggest that financial participation through shareholding have a positive effect on wind power development (Loring 2007). In addition, Agterbosch, Glasbergen & Vermeulen (2007) argue for another type of local financial involvement for wind energy development. They think that creating a municipal interest in wind power will decrease resistance on the local level, meaning that if wind energy developers financially compensate municipalities, local political support can be gained and financial compensation can be used to build or strengthen municipal facilities or recreational facilities, which in turn can change the perceptions of the local community.

In contrast to the high levels of financial participation in Denmark, a survey on financial participation in Ireland showed that only 16 percent of the respondents were interested in investing. On the other hand, 93 percent of the respondents were unaware of the possibility to invest in wind farms (Sustainable Energy Ireland 2003). In turn, this suggests that the local community focused approach of Denmark in comparison to Ireland creates both interest and awareness. Furthermore, a study from Wales indicated that over 80 percent of the respondents believed that profits should be shared with locals and energy from the wind farms used within the area (Devine-Wright 2004).

Where Soerensen et al (2001) gives three relatively basic forms of public participation, Loring (2007) goes a step further and gives six variables, which determine the degree of community involvement. The indicators for the level of community involvement were developed from the theoretical concepts related to public participation in decision-making, specifically land-use planning. It is believed that public participation in decision-making reduces conflicts, facilitates justification in decision-making, is preferable and needed as an essential attribute of democracy and ensures higher quality decisions (Fiorino 1990). The basic premise sketched here by Loring (2007) is that a higher level of public participation would result in less local resistance. Loring (2007) has investigated this premise in England, Wales and Denmark and she has come to the conclusion that high levels of participation are conducive for high levels of local acceptance although it is not a necessity for projects to involve community policies and consequently obtain high levels of acceptance (see figure 2).

Figure 2: Relationship between public acceptance and public participation

		Public Acceptance of Project during Planning Phase			
		High	Medium	Low	Very Low
Level of public participation in planning	High	5			
	Medium	3	1		
	Low	2		1	4
	Very Low		1		1

Source: Loring (2007)

Nonetheless, the findings support participatory planning theory, or in this case, the use of community policies, arguing that if people are informed and/or involved early in the development of projects, they feel less threatened and await benefitting from the project, and consequently are more likely to positively react to the project.

The first indicator of community involvement is the degree to which participants or locals are representative of the views of the total range of affected people. In other words, in what way are steps taken to include all standpoints of individuals who are related to the project. For example, if attempts were made to encourage individuals to participate or other individuals than the ones legally required to be consulted, the degree of community involvement has a high level. Secondly, the level of community involvement will rise when barriers to involve local communities have been minimized. For instance, public meetings should be widely advertised, located centrally and scheduled at times when people are off work. Third, the final plan of the project has truly been influenced by community members and not only by planners and developers. This also will raise the level of community involvement, true collaboration between a large representative group of the community, planners and developers. Fourth, the level of community involvement will rise when members of the community will be able participate financially. And land rental paid to landowners suggest little community participation but shareholding and project revenues

either individual or collectively through community funds for schools or parks indicates high community involvement. Fifth, when the project was initiated by the community the level of involvement is higher than when the project is initiated by an outside developer. The more locals involved, the higher the degree of community involvement. And finally, the level of community involvement will rise when the involvement of the community will continue after construction. Although wind turbines, aside from maintenance, need little attention after construction there are some ways of involving the community after construction. Community members may be involved in the maintenance, or a visitor centre is set up to educate children or even draw tourists. For a total overview of Loring's (2007) indicators see figure 3.

Figure 3: Different degrees of community participation

Community participation						
	The participants are representative of the views of the full range of potentially affected people	Barriers to participation have minimized	Community members impact decisions about the project	Community members have financial ownership in the project	Local initiation of the project	Community will have continued involvement in the project
High	Extensive measures were taken to include all view points in the decision-making process	Extensive measures were taken to reduce barriers to participation	Decision regarding the project made by a large group of local community members in collaboration with planners and, if relevant, the developer	Individuals other than the landowner receive all revenue OR all revenue goes to a community fund	Community group initiated and submitted application	Community group will continue to be involved with the project through receipt of revenues (or decision-making responsibility regarding the use of revenues) and decision-making responsibilities regarding the management of the project
Medium	Reasonable measures were taken to include all possible view points, including some beyond those legally required by the planning process	Reasonable measures were taken to reduce barriers, including some beyond those legally required by the planning process	Decision regarding the project made between the planners, the developer (or landowner), and a small group of interested local individuals	Landowners receive revenue from turbines	Landowner(s) initiated and submitted application alone or had a significant role in the application submitted by the developer	Community group will continue to be involved with the project through significant or high-profile local activities that are directly connected to the project, such as a visitor centre
Low	Minimal measures were taken to include all possible view points	No special measures were taken to reduce barriers other than those legally required by the planning process	Decision regarding the project made largely by developer and the planners. Local comments such as those made in letters or during 'open days' were considered	No community financial ownership in community other than land rental and small community funds	Landowner and developer initiated and submitted application together, or the landowner asked developer to consider that site	Minimal continued community involvement through low-profile activities related to the project, such as funding of computers for local schools
Very low	Some view points of potentially affected people were obviously not represented in the course of the planning process	Obviously barriers existed in planning process. For example, some affected people may not have been invited to meetings or meetings were intimidating for some individuals	Decision regarding the project are made by the developers and the planners only with no regard for public comments	No community financial ownership in community other than land rental	Developer initiated and submitted application with no involvement from landowner	No continued community involvement other than the owner or developer

Source: Loring (2007)

To answer our sub-question;

*“How are the concepts of local opposition and social acceptance around wind power development analysed in the scientific literature?”*

The degree to which social acceptance of wind power is strengthened and local opposition is reduced depends on the perception people have on wind power development. While the perception people have on the aesthetic value of wind turbines proved to affect the attitude of people the most, the institutional setting of wind power deployment and its success on the other hand, depends largely on the institutional arrangements within the policy domain of energy and physical planning. Many authors point to the importance of institutional arrangements (Wolsink 2000) and the involvement of the community (Haggett 2010). It seems like negative perceptions related to wind energy development such as the change of scenery, the mistrust locals have in developers or maybe even a general mistrust in wind energy as a power source can best be influenced by engaging and communicating with the local community. Thus, community involvement, facilitated by governmental institutions, can be very helpful in reducing local resistance.

All in all, we can now say that community policies are very helpful in reducing resistance by the local community and involving the community in some form will strengthen the perceived justice for the ones who are effected by the building of a windmill. This theoretical outline forms the base for the hypothesis:

*“The more community policies are used in the development of wind energy, the less resistance on the local level will occur”*

The hypothesis will be tested on the case study in Zandvoort and during the review of which community policies are used where, when and in what way during the analysis of the historical development of wind power in both the Netherlands and Denmark and the present situation on this matter. But first, before moving on to the next chapter of policy transfer, the next section will describe which variables will be used in the context of this

study for further determining what community policies are, when are they used and which indicators can help identify these variables of community policies.

### 3.6 Indicators of community policies

The previous section has shown that the use of community policies can be very helpful in the deployment of wind power and reducing the difficulties related to the physical planning of wind farms on the local level. Next to the importance of technical conditions, national regulation and economic incentives for investors, community policies, which can be seen as the social characteristics of physical planning, not only reduce conflict and facilitates justification in decision-making, they most importantly increase acceptability and influence local perceptions positively.

Loring (2007) and Soerensen et al (2001) have shown that the degree to which involvement can take place or how resistance is reduced can take place in various ways. Both authors are very helpful and will form the base of the indicators that will be used to test to what extent community policies are used in the Netherlands and in Denmark and how helpful they can be to enhance the acceptability of the Dutch wind farm building zone “Aanvulling gebied Hollandse kust” for the community of Zandvoort. Not all indicators of both authors will be used. For instance, the fifth variable of Loring (2007) ‘the wind power project was initiated by local members of the community’ will not be used. The case study here is about the development of a wind farm by the national government of the Netherlands and as can be seen in the previous part of this study, large offshore wind farms are not initiated by local communities in the Netherlands and hardly in Denmark since starting costs are high. Therefore, this cannot be an indicator of the use of community policies in the case study, despite the fact that some locals might want to initiate offshore wind farms and that it can increase acceptability. Agterbosch, Glasbergen & Vermeulen’s (2007) argument of compensating municipalities to gain political support and local community support on the other hand, will be used as an indicator of financial involvement.

The indicators are subdivided into three types of community policies. The first category is *information distribution* and refers to the ways and types of information distribution before



and during the actual planning of a wind farm by governmental institutions. The second type of community policy is *participation*. This refers to if and how locals are involved during the planning and decision-making phase, the extent to which their involvement has true influence, and also to ways of participation after the construction of a wind farm. The last category is *financial benefits*. This type of community policy refers to ways on how local communities can invest in wind energy and/or can share in the possible profits of wind energy generated in their neighbourhood, or how locals are compensated by the introduction of a wind farm in their neighbourhood. Moreover, the distinction is made between individual financial benefits, through buying shares, and communal financial benefits, where a part of the profit from the nearby generated wind power energy will be given to the municipality in order to enhance social services for instance.

Hence, the eight following indicators will be used to determine to what extent these three types of community policies are used and how effective they are in increasing acceptance or how desirable they are in case they are not used:

- 1: The sharing of information by the national government about the project during the actual planning phase but before the final decision on the building permits (information distribution).
- 2: The sharing of information by the local government about the project during the actual planning phase but before the final decision on the building permits (information distribution).
- 3: Minimization of obstacles to increase participation possibilities (participation).
- 4: Involvement of locals in the planning process and the degree to which all viewpoints are included (participation).
- 5: The degree to which community members actually can impact or have the feeling that their suggestions are being taken seriously (participation).
- 6: The possibility to have continued involvement after construction of the wind farm (participation).
- 7: The possibility for community members to buy shares of the wind power project (individual financial benefits).
- 8: The possibility for municipalities to have access to funds in order to enhance local scenery, facilities and/or recreational values (community financial benefits)

Hence, within this study we make use of three categories or variables of community policies; information sharing, participation and financial benefits. See also figure 4.

Figure 4: Conceptual model for community involvement

<i>Information distribution</i>	<i>Participation</i>	<i>Financial benefits</i>
<i>Indicator 1,2</i>	<i>Indicator 3, 4, 5 &amp; 6</i>	<i>Indicator 7 &amp; 8</i>

Source: author's own

In sum, community policies are policies, formed either by the (local) government or by the wind power developer, which are targeted at involving the local community and through this increasing the level of acceptance or reducing the forming of resistance by locals when a wind farm is planned within a certain neighbourhood. The different ways community policies are identified and used are; information distribution, participation into the planning process and through financial participation. While the indicators will mainly be used for the operationalization of the survey on the case study of Zandvoort, the three categories will also serve as a benchmark when comparing the Netherlands and Denmark on their development of wind energy and their use of community policies nowadays and previously.

Next, the chapter of policy transfer will be presented. In order to know to what extent successful community policies from Denmark can be transferred to the Netherlands, it is important to know how policy transfer can take place and what must be taken into account when transferring a community policy from one country to another.

## 4.0 Policy transfer

Next to the literature around local acceptance and public participation, this study will focus on concepts of policy transfer. The idea is to see whether successful Danish policies related to local acceptance of wind energy can be transferred to the Netherlands in order to increase deployment rates of wind energy and decrease local resistance. If and if so, in what way and under which conditions can these policies be transferred are questions where policy transfer theory can be helpful in answering. In doing so, the next sub-question will be answered:

*“What factors must be taken into account when transferring policy from one country to another and how is policy transfer analysed in the scientific literature?”*

Policy transfer and the extent to which policies are mobile are related to many different terms from various disciplines. Policy transfer is related to policy convergence (Bennett 1991, Stone 2004), policy learning (Bennett & Howlett 1992), policy diffusion (McCann 2011, Dente & Coletti (2011) and lesson-drawing (James & Lodge 2003, Rose 1993). Consequently, policy transfer concepts can be diverse and even contradictory. To give a view examples; to some policy diffusion is a type of policy transfer and to others; policy transfer is a type of policy diffusion (Marsh & Sharman 2009). Furthermore, policy diffusion and policy transfer are again to others types of lesson-drawing (Stone 2004). And Dolowitz (2004) sees policy transfer and policy learning as different mechanisms. As can be seen, the controversy around, the connections between and overlap of different concepts of policy transfer in the literature are somehow confusing and it is therefore important to recognize the differences and clearly define how the concepts will be used here.

As said in the introduction, to Dolowitz and Marsh (2000, p1) policy transfer is *‘concerned with the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system.’*

More recently, Dolowitz (2009 p9) gives a more specific definition of policy transfer; *‘the processes by which agents become aware of information relating to the policy domain of one political system and subsequently transfer this into another policymaking system – where it is used or stored for potential use.’*

Here the definition is concerned with the system of politics, being the context where policies are transferred and the role of agents within this context. It emphasizes the importance of implementation by actors in a new context. Despite the important role of agents, the policy transfer definition of Dolowitz and Marsh (2000) will serve as the benchmark here because it is the most encompassing one, related to their policy transfer framework and pointing to the importance of administrative arrangements and institutions.

Dolowitz and Marsh (2000) ask themselves a series of question in order to better understand the setting of policy transfer; why do transfer takes place, who is involved in policy transfer, what exactly is being transferred and from where, to which degree transfer can take place and important for this research, what constraints are there on policy transfer? These questions are shown in the conceptual framework illustrated in figure 5.

Figure 5: Policy transfer framework

A Policy Transfer Framework

Why Transfer? Continuum			Who Is Involved in Transfer?	What Is Transferred?	From Where			Degrees of Transfer	Constraints on Transfer	How To Demonstrate Policy Transfer	How Transfer leads to Policy Failure
Want To.....	Have To				Past	Within-a Nation	Cross- National				
Voluntary	Mixtures	Coercive									
Lesson Drawing (Perfect Rationality)	Lesson Drawing (Bounded Rationality)	Direct Imposition	Elected Officials	Policies  (Goals) (content) (instruments)	Internal	State Governments	International Organizations	Copying	Policy Complexity (Newspaper) (Magazine) (TV) (Radio)	Media	Uniformed Transfer
	International Pressures		Bureaucrats Civil Servants	Programs	Global	City Governments	Regional State Local Governments	Emulation	Past Policies	Reports	Incomplete Transfer
	(Image) (Consensus) (Perceptions) Externalities									(Commissioned) (uncommissioned)	
	Conditionality	Pressure Groups Political Parties	Institutions			Local Authorities		Mixtures	Structural Institutional Feasibility	Conferences	Inappropriate Transfer
	(Loans) (Conditions Attached to Business Activity)		Ideologies					Inspiration	(Ideology) (cultural proximity) (technology) (economic) (bureaucratic)	Meetings/ Visits	
	Obligations	Policy Entrepreneurs/ Experts	Attitudes/ Cultural Values						Language	Statements (written) (verbal)	
			Consultants Think Tanks Transnational Corporations Supranational Institutions	Negative Lessons			Past Relations				

Source: Dolowitz and Marsh (2000)

The model helps to think more systematically about the processes involved in policy transfer. However, other authors suggest that the research and literature around policy transfer have become ambiguous and can be seen as a case of over-theorization. Policy transfer tend to suggest the import of 'off the shelf' policies, while the processes around policy transfer are much more organic (Peck & Theodore 2001). Thus, concerns about the usefulness of these concept, and the way these terms and concepts differ from each other must be taken into account.

In order for policy transfer to successfully take place a number of circumstances and agents are required. To Stone (1999) policy transfer includes knowledge about institutions, administrative arrangements and the connected policies. Agents have to transfer the knowledge while policy-making bodies receive or send and implement the information. And policies or knowledge must be utilized from another place, not only received.

Furthermore, policy transfer is socially and institutionally constructed, it includes actors and institutions who favour certain channels and power relations where models, ideas, innovations and technology of policies are shared. Moreover, policy transfer includes lesson learning, innovation generation, policy adoption, expansion and adaptation, policy practice and research practice (Bissell, Lee & Freeman 2011). And, policy transfer has many stages such as, searching policies, collecting information, evaluate information, conceptualization of policy implementation and finally the implementation or adaptation of a certain policy.

In an attempt to transfer policy, it is important to know what is being transferred. Policy can mean a procedure, norm, principle, strategy, a tool, plan, programme or administrative arrangement. Dolowitz & Marsh (2000) further include policy content, ideologies, instruments, lessons and ideas or attitudes.

When determining if a certain policy can be transferred, policy makers almost every time prepare two arguments; one in favour and one against the transfer of the policy. Arguments in favour of transfers often point to the success of the policy at another location and in doing so they try to get an issue or policy on the political agenda. The argument against the transfer are connected to the uniqueness of the policy setting where it was developed to

stress the high risks of the transfer and the likeliness of the policy's failure in the other setting (Stone 1999). Mossberger & Wolman (2003) offer criteria for the assessment of potential policies to be transferred:

- Similarity of problems and goals
- The policy performance
- The difference in setting

It is easier to avoid policy failure through analysing the similarity of the problems, which were addressed by the proposed policy in the past and by analysing if the adopter has the same goal as the policy was developed for. The performance of the policy in the past must also be taken into consideration since it gives an idea under which circumstances it was successful or unsuccessful. The degree to which the setting is different is harder to judge. The setting includes namely, other policies, public opinion, social, political and economic institutions, the political culture and available resources. Moreover, judging the differences in the setting can be helpful in tailoring the policy to the new setting.

#### 4.1 The agents of transfer

A lot of attention is focused towards the role of agents and the many different types of agents. Dolowitz and Marsh (1996) identify six types of actors: political parties, elected officials, pressure groups, policy entrepreneurs or experts, civil servants and supra-national institutions. In their analysis from 2000 they added NGOs, think tanks, consultants and transnational corporations. Stone (1999) distinguished organizations, networks and individuals. Although Stone (1999) also acknowledged the importance of the media, research institutes, think tanks and individual academic entrepreneurs, voluntary organisations and pressure agencies in sharing information and influencing in turn the 'official' agents of transfer. Individuals are the most important actors to transfer, or more specifically individuals from governmental agencies (Stone 1999), while others point to the importance of conferences where interaction takes place (McCann 2011).

Eventually, policy makers are the actors that decide if or if not policy transfer occurs. To Graham, Shipan & Volden (2008) they have two types of goals: policy and political. Political goals are power control, staying legit and trying to get re-elected. Policy goals update former

policies or adopt new ones. Usually the policy makers rely on consultants that in turn usually include 'best practices' from somewhere else in their advice (Dolowitz & Marsh 2000). In the past, policy makers have been admired as rational, intelligent, learning through voluntary forms of policy transfer and making. However, policy makers are framed by not only technologies and information channels but also by their own capacities.

Thus, agents of transfer have different (limited) capacities but also different motivations, which is important to take into account. The capacities and motivations can differ from lesson taking for symbolic reasons or strategic for political support instead of better understanding to enhance their capacity. These differences in political support motivations create two types; tactical learning and policy learning. Logically, tactical learning is more likely to create 'ad hoc' solutions while policy learning creates generally a more coherent transfer of ideas (Stone 1999).

It seems almost a habit, but usually policy change only occurs when certain pressures arise, for example a crisis or other new developments. On the other hand, some agents actively try to proactive promoting or exporting specific policy. And looking abroad, to seek a solution to a similar problem often leads to policy transfer. Furthermore, if problems occur there is a tendency to seek for 'ready-made solutions' from other areas and policy transfer from overall flourishing countries are more likely to occur to almost imitate the success (Rose 1993).

#### **4.2 The process of implementation and policy constraints**

Eventually, when transfer agents select policies, the process of implementation can start. Not surprisingly many issues and obstacles to the implementation of new policies exist. Policy implementation ultimately influences the social setting and in doing so policy implementation is surrounded by hazards, risks and uncertainty. Obstacles such as decision structures, lack of information, costs, ideologies, narrow organizational goals, fear of consequences and competence hamper policy transfers. Partly because of these obstacles, policy transfer is often adapted and therefore the emulated and original policy can be significantly different (Mohr 1969).

Besides, within policy implementation, the way of implementing, the specific tools, procedures and processes at the local level can result in surprisingly different outcomes and Akrich et al (2002) stated that when adopting a policy, adaptation will always take place. The extent to which the specific policy is adapted can even be linked to the level of success. The more policies are customized to the local level the higher the chances of success are (Peck and Theodore 2001). Hence, successful policy adaptation can be the key to successful policy transfer, because of the importance of specific factors of certain locations.

Next in the review are the different scales policy transfer can take place within. Policy transfer can take place either local, regional, national, international and transnational. International transfer policy has been most often analysed although local level policy transfer has been increasingly the centre of attention. Eventually, local authorities are often overlooked, however, they are the senders, receivers and producers of information. In a sense, all policies are local because they are contextually specific, meaning that impact and characters are grounded in their delivery and development (Peck & Theodore 2010).

Then, the difficulties or challenges policy transfer face could be problematic. Some policies are not suitable for direct transfer, who in turn can lead to policy failure and Dolowitz & Marsh (2000) sum up three main arguments for policy transfer without success; incomplete transfer, inappropriate transfer and uninformed transfer. Incomplete policy transfer takes place when only a part of the policy is transferred when other parts, possibly crucial parts, are left behind. When policies are transferred to a totally different context (social, economic or political, they are considered inappropriate. In addition, uninformed policy transfer means that not all relevant information was transferred. Moreover, opportunism and the need for quick fixes can lead to unwanted results, the same goes for incorrectly evaluating evidence or a selected bias. However, the failure of a policy in a certain setting does not mean the policy would be unsuccessful in another setting. Most regularly, the failure of policy lies in the specific characteristics of the political and social setting of the area to which the policy is transferred to and it does not mean that the policy is unsuccessful but the 'match' between the policy and this specific area was. Fundamental flaws however in the design of the policy do occur (Dolowitz 2004).



Following on this, Dolowitz & Marsh (1996) have summarized the constraining factors for successful policy transfer; ideological variance, path dependency, institutional and structural barriers and a shortcoming of resources for implementation (such as bureaucratic, technological, political and economic). However, most important, the complexity of a program or policy affects the transferability of the policy. The more complex a policy is, the more difficult it is to transfer. Other constraining factors for policy transfers are the realisation that policy programs will not be implemented in a 'green field'. Past and current policies in the Netherlands play a role in the successful adding of a new policy, and thus policy commitment from the past constraints transfers. Furthermore, institutional and structural constraints can hamper successful transfer. Can the Minister of Infrastructure and Environment from the Netherlands for instance introduce new policies without interference from other Ministries? The biggest influencing factor for the transfer of policy within policy mobility is path dependency of institutional legacies and imperatives or values, instead of the sometimes voluntary process of rational agents who scan for new policies focusing on practice (McCann 2011). Moreover, policy transfer is dependent upon the transferring political system encompassing the bureaucratic, political resources to implement the policy. The success of transfer will therefore increase when the transferring policy is consistent with the political ideology in the new country.

All in all, in order to determine if Danish community policies can be transferred to the Netherlands certain aspects of the policy transfer literature will be used. First, we will determine what exactly will be transferred. Is it a policy strategy, program, tool, idea or even an ideology? Mossberger's & Wolman's (2003) criteria for the assessment of potential policies that should be transferred and the extent to which Danish community policy can take place and be successful in the Netherlands, will be examined in the last part of this thesis:

- The similarity of problems and goals
- The policy performance
- The difference in setting

Does the Netherlands have the same problems and goals when it comes to wind power development, and exactly how successful were the Danish community policies in increasing

local acceptance? The last and most difficult task will be to determine how different the setting is between Denmark and the Netherlands. Which social, political and economic institutions play a role in the wind power development, what is the difference in political culture between Denmark and the Netherlands, which agents from the Netherlands will or have to be involved in the transfer of policy and what policies are already there that can prevent the community policies to work successfully in the other country?

But first, the next chapter will be about the methodology of this thesis. Here, the research strategy will be presented and issues on sampling will be examined among other relevant topics. Furthermore, the operationalization of the survey will be discussed.

## 5.0 Methodology

The research methodology specifies the way research is carried out and organized. Here questions are addressed such as which decisions were made before the empirical research, which techniques are used to analyse information and understanding the research problem and how was the data collected? As shown in the first two chapters, much literature around the topic of policy transfer and around the concept of social acceptance exists. The literature review on theories related to local acceptance and public participation resulted in the construction of a theoretical framework aimed at answering the question in what way community policies can contribute to reducing resistance with wind power deployment. Or in the case-study, in what way can community policies contribute to a positive attitude on the possible assigning of the offshore wind park building zone “Aanvulling gebied Hollandse kust” by the locals in Zandvoort. Furthermore, the constraints of policy transfer turned out to be of importance to determine under what conditions Danish policies can be transferred to the Netherlands and what constraints there are in policy transfer. Both theories related to policy transfer and the conceptual framework of community policies will help analyse and answer the main question: *“Can Danish community policies help the development of wind energy in the Netherlands?”*

In this chapter, the main focus will be on the operationalization of the theoretical framework of community policies, which will be used for the empirical research. Furthermore, the research approach, the research methods and the validity and reliability will be discussed. In addition, the sample size and sampling errors will be examined and a description of the process of collected data will be given.

### 5.1 Research strategy

This research project is mainly of qualitative nature but also has quantitative elements. It is concerned with an analysis of local opposition, social acceptance and policy transfer and through the use of a questionnaire survey tries to determine if (Danish) community policies would be desirable in Dutch wind power development from the viewpoint of the local community. Furthermore, this research contains a comparative element, analysing the

differences between Dutch and Danish wind power community policies. It also has an element of historical analysis, interpreting and understanding why wind power development of the Netherlands and the use of community policies is so different from Denmark. Thus, the answer to the main question is given in two ways, through empirical research on a case study and through a desk study, comparing the development of wind power and the use of community policies in Denmark and the Netherlands.

The qualitative research is a research strategy emphasising more the meaning of words and perceptions rather than numbers. This also implies an inductive and constructionism approach, embodying a view on social reality. Constructionism is, if social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence. Furthermore, constructionism is the opposite of objectivism; portraying the position that social entities exist in reality external to social actors concerned with their existence. The constructionism and objectivism are more tendencies rather than hard-and-fixed distinctions. The inductive approach, related to constructionism, means that theory is an outcome of research, often related to grounded theory (typically related to qualitative theory). However, the difference between inductive and deductive approach are also not as clear as they are sometimes presented. The deductive approach means that theory guides research. It is based on formulating a hypothesis that must then be subjected to empirical study (typically related to quantitative theory). In addition, also deductive and inductive strategies are possibly better thought of as tendencies rather than as a hard-and-fast distinction (Bryman 2004).

This research, on the one hand, analyses the views of the local community in the Netherlands, which is a more constructionism approach. Their view on social reality will help determine if Danish policies would be helpful in the Netherlands. However, the deductive approach in this research will be visible through an extensive literature analysis in order to clearly define the theory and to see whether it can be used as an analytic framework. It forms the base of the hypothesis that will be tested in the comparative analysis between Denmark and the Netherlands and the case study of Zandvoort. The survey also shows the deductive quantitative element of this study approach, where the conclusion will be based on the data from 181 respondents which is used to explore if the use of community policies

leads to less opposition. Moreover, the first step of deduction is to use a theory, then form a hypothesis, collect the data, analyse the findings and confirm or reject the hypothesis while possibly revise the theory. Roughly, this approach of research will form the baseline of this research.

## 5.2 Research methods

There are several methods that will be used for data collection. First, articles of scholars have formed the first part of the data collection, analysing theories related to policy transfer and community policies. These articles form the base of the research, introducing the problem and providing a history of scholarly work on the subjects. The articles give the purpose and rationale for the study (Wysocki 2007). Thus, a part of the research has been executed through secondary research reviewing literature.

Also, policy documents on Danish and Dutch policies related to wind power development and the reduction of local resistance to wind power development will be used in the analysis to determine the difference in the degree of local involvement between the two countries and from there indicate whether community policies lead to less opposition. Through the analysis of the concept of community policies, three variables are formed into a conceptual framework, which will also form a benchmark to indicate the differences between the two countries in the use of community policies. Next, a case study on the degree of involvement in the planning of the wind farm 'Aanvulling gebied Hollandse kust' will form the core of the self-conducted empirical research, testing the desirability of (Danish) community policies through a questionnaire survey. The survey helps to explore whether successful Danish community policies are useful or desirable from the viewpoint of the local population of Zandvoort. And the analysis afterwards explores the transferability of Danish community policies to the Dutch context. Subsequently, the notion of policy transfer is applied to see whether Danish policies can be transferred to the Netherlands.

As said, the questionnaire survey will be the core of the self-conducted research and the survey will be executed in Zandvoort, the Netherlands where a part of the local population, as well as the municipality of Zandvoort has shown strong opposition towards the building of the offshore wind farm "Aanvulling gebied Hollandse kust", approximately 18,5 kilometres

of the coast of Zandvoort. A survey can be an excellent way to find out about people's behaviour, attitudes and backgrounds. Although several pitfalls must be taken into consideration in order to have a reliable and valid survey. Selecting the right respondents for instance can be problematic and the same goes for the limits of generalization (Bryman 2004). The next section takes a closer look at the reliability and validity issues.

### 5.3 Reliability and validity

The validity is concerned with the accuracy of measurements, meaning that while creating a survey, the validity of the survey determines whether the survey uses the questions that truly measure the issues of importance. Or, in other words, validity is the degree to which the survey measures what it claims to measure (Bryman 2004).

Validity can be divided into content validity, internal validity and external validity. Content validity is related to the ability of the survey to create questions that reflects the issues we are researching. Thus, in this case, content validity reflects the ability of the questions used in the survey to reflect the theoretical framework and its eight indicators constructed in chapter 1. The internal validity refers to whether the questions used in the survey really explain the outcome this research is claiming to explore. Hence, do these survey questions measure the extent to which community policies are used effectively and if Danish community policies are desirable for the local population of Zandvoort and subsequently lead to less local opposition.

Also important to keep in mind is the problems survey designs and its outcome can have. Not always will the opinion people give in a survey be the same as how people will act afterwards. Especially, the outcome of the question related to the desirability of certain (Danish) community policies in the Netherlands, cannot be fully trusted.

Both content validity and internal validity will be further examined while explaining the operationalization of the theoretical framework. Furthermore, while a survey is a good way to explore the transferability and desirability of Danish community policies, it would have been best to make use of triangulation, meaning that several method of data are applied.

Interviewing residents of Zandvoort would have strengthened the validity of the research for instance, however, due to time and cost constraints, the choice was made here to only do a literature study and a questionnaire survey.

Next, external validity, which refers to the extent in which the results of the survey are representative for the entire population of Zandvoort or even other coastal places in the Netherlands or in other countries. The aim of this survey though is to explore the desirability of (Danish) community policies which were not used and the effectiveness of the community policies that were used for the locals of Zandvoort. Simply put, the outcome of this survey and case study cannot be generalized to other coastal towns since it examines the degree of involvement during the planning of a specific wind farm building zone and the way the planners have tried to influence the degree of involvement in this case. The case of Zandvoort was chosen since it provides a suitable context to answer a part of the research question, which afterwards can be used to engage in theoretical analysis. The case does not serve as a typical case of planning of wind farms and the degree of involvement. It gives an in-depth understanding of how locals of Zandvoort can better be involved into planning. What these findings do contribute to is that they can help planning of offshore wind farms in the Netherlands in the future in trying to involve locals, not that the desired way of involvement for the locals in Zandvoort will be the same in every coastal town. The next section, sampling, will further look into the topic of external validity and the extent to which the outcome of this survey is characteristic for the entire population of Zandvoort.

Reliability on the other hand, stresses the consistency or stability of the measurement used in the survey, meaning that whether the used questions will bring out the same type of information each time they are used under the same conditions (Bryman 2004). Or, in other words, reliability refers to the degree to which this study can be replicated. In order to strengthen the reliability of this research, the survey questions are added in the appendix. However, the survey is not only related to finding out the desirability of community policies, it also examines whether the Dutch national government has effectively involved the locals of Zandvoort in the planning phase of the assigning of the offshore wind farm building zone “Aanvulling gebied Hollandse kust”. Thus, replicating and using the survey in another case-study would require the same procedure of the national government on involving locals in

the planning phase in the development of an offshore wind farm. It is therefore hard to totally replicate the study in a different context.

## 5.4 Sampling

Understanding issues related to the sampling of a survey is important to enhance the external validity of the study and to determine how accurate the findings on the degree of the use of community policies in Zandvoort will be. One way of strengthening the external validity is to calculate the sample size.

Before calculating the sample size, a few things about the target population and the sample need to be determined (Bryman 2004). First off, the confidence level needs to be chosen. The confidence level is basically the desired power of the study. It means that with a confidence level of 95% for instance there is a chance of 5 percent in failing to discover an effect in the study that reflects the general opinion in total population which is the subject of the study (false negative) and the higher the confidence level, the higher the sample size. Here a confidence level of 80% is being used. 80% is not a very high level and can be characterized as an explanatory confidence, explaining the general sentiments of the population in Zandvoort. Secondly, the margin of error or confidence interval has to be chosen. This determines how much lower or higher the sample mean can fall. With a 5% significance level for instance, the study accepts a chance of 0.05 to detect an effect in the study that is not present in the total population (false positive). Here the significant level of 5% will be used. This is the most commonly used margin in social science research and gives a reasonable indication of the opinions from the total population in Zandvoort. Finally, the standard deviation has to be determined. This refers to how much variance one can expect in the responses. The choice here is made to use a standard deviation of 0.5, which is also very common in social science research.

Thus, with a confidence level of 80%, a confidence interval of 5% and a standard deviation of 0.5 we can determine the sample size needed in order to make an analysis based on the general sentiments among the population of Zandvoort on the use of community policies in the development of the offshore wind park building zone “Aanvulling gebied Hollandse



kust”. The formula used to determine the sample size is:

$$\text{Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

N is the population size, z refers to the z-score and correlates to the confidence level. With a confidence level of 80% the z-score is 1.28. E is the margin of error 5% but used here as 0.05 and p is the standard deviation 0.5. Zandvoort has 16792 residents in 2016 (CBS 2016). 16792 is also going to be our population size (n) since the survey does not ask the respondents to fill in their age and consequently a selection based on age cannot be formed. Based on these numbers and the sample size formula, the sample size or number of respondents must be 163 in order to make a description about the general sentiments present in Zandvoort. Hence, the description about the general sentiments among the locals in Zandvoort extracted from the survey also refers to the external validity of this study. For instance, expanding the number of respondents, and thereby raising the confidence level, would have created a better understanding of the sentiments of the residents from Zandvoort, opening the option to really stating that the results found in this survey are representative for the entire community of Zandvoort. However, in this study, the issue of representative sampling was much harder to solve and in the next section of process description also the sampling errors will be discussed.

## 5.5 Process description and sampling errors

After constructing the survey, the survey was first tested by four persons with the aim of trying to find out whether the questions seem logical and if they were easy to understand. Their remarks were used and the format slightly adjusted. Then, the aim was to get as many respondents as possible and I decided not to select a perfect random sample of respondents, deliver them the questionnaire survey and await their replies and see how high my response rate will be. I expected the chance of getting many replies to be low and even though creating a perfect randomly chosen sample was feasible, delivering the survey to the representative selection would be very hard to execute. The choice was made to therefore actively promote the survey with the aim of getting as much respondents as possible. Why

the community of Zandvoort was chosen as a research object, was not only because of the plan from the national government to assign an offshore wind farm building zone of the coast of Zandvoort, it was also because I grew up in Zandvoort. Born and raised, I lived there eighteen years and the thought was that because of my connections and options to mobilise Zandvoorters, getting as many respondents as possible would be easier than in Noordwijk for instance where the local community is also faced with the possible building of an offshore wind farm.

However, getting as many respondents as possible turned out to be more difficult than expected. After asking all relatives, friends and acquaintances in Zandvoort I got stuck on approximately 30 respondents. Encouraging them to promote the survey with their friends and family only resulted in around 20 more respondents. I further promoted the survey through Facebook. A community page was made called “Windmolenpark Zandvoort” with information about the plans from the national government, information about my research and the request to fill in the survey to measure the extent and desirable way of involving the people of Zandvoort with offshore wind farm development. Furthermore, the link of the survey was sent out through my personal page, and through personal pages of friends and family who were willing to share my survey. Also, on other community pages where people living in Zandvoort could be members of, such as “Zandvoort”, “Zandvoort aan Zee”, “Zandvoort strand”, “VVV Zandvoort” and “Je mag je Zandvoorter voelen als...”, I promoted the survey and asked administrators of these community pages to do the same. Additionally, I got into contact with the local newspaper “Zandvoortse Courant”, which is distributed throughout Zandvoort, and they decided to write an article about my research and simultaneously asking citizens of Zandvoort to fill in the survey. In the newspaper article a reference was made to the Facebook page “Windmolenpark Zandvoort” and an email address was added where people without Facebook could respond to if they wanted to fill in the survey (aanvullinggebiedhollandsekust@gmail.com). Unfortunately, no mail requests were received but eventually all these actions resulted into a total number of about 70 respondents. I wanted to get at least 163 respondents, so I decided to select three days, print the survey and go to Zandvoort and randomly ask people to fill in the survey. During these days I made sure I stood at different locations throughout Zandvoort at different times. Thus, at late night shopping night for instance I would stand in the South centre for

one hour and the North centre for one hour. During the day I would stand at the entrance of different supermarkets and I also tried not to ask every person to fill in the survey but vary between men and women and relatively young people and relatively old people. Off course these methods are questionable, but it helped a little bit in getting an as much as possible representative sample in this case. After three days the search for respondents ended and the analysis based on 181 surveys continued.

An obvious problem with this chosen approach is that it does not result in a perfect representative sample of the population of Zandvoort, limiting sampling errors. The form of sampling chosen here can rather be characterized as convenience sampling; a way of sampling that is simply best available to the researcher due to time and costs constraints.

## 5.6 Operationalization

This last section will concentrate on the operationalization of the survey. Operationalization is the process of defining the variables into measurable factors, the somewhat fuzzy concept of community policies becomes quantitatively, empirical and measurable. Thus, it is the process where the theoretical framework of chapter 1 will be translated into survey questions. Furthermore, the theoretical framework of community policies exists of three variables and typically a variable can be described as an attribute on which cases can vary (Bryman 2004). These three variables form the base of the indicators that will be used to test to what extent and how effectively community policies were used in Zandvoort and how helpful they can be to enhance the acceptability of the Dutch wind farm building zone “Aanvulling gebied Hollandse kust” for the inhabitants of Zandvoort.

As defined earlier, the somewhat fuzzy concept of community policies are policies, either formed by the (local) government or by the wind power developer, or targeted at involving the local community and through this increasing the level of acceptance or reducing the forming of resistance by locals when wind energy development is planned within a certain neighbourhood. These community policies in turn can be subdivided into three categories, which will also be the research variables: information distribution, participation and financial benefits. Information distribution is the simplest form of a community policy. It is concerned

with the informing of locals on the planning and development of the wind farm. Participation is a community policy where locals are able to have some form of influence in the planning phase and financial benefits occurs when locals or affected communities are able to either financially gain from the wind farm or are financially compensated for the introduction of wind farms in their area.

The three variables are divided into the following eight following indicators from chapter 1:

- 1: The sharing of information by the national government about the project during the actual planning phase but before the final decision on the building permits (information sharing).
- 2: The sharing of information by the local government about the project during the actual planning phase but before the final decision on the building permits (information sharing).
- 3: Minimization of obstacles to increase participation possibilities (participation).
- 4: Involvement of locals in the planning process and the degree to which all viewpoints are included (participation).
- 5: The degree to which community members actually can impact or have the feeling that their suggestions are being taken seriously (participation).
- 6: The possibility to have continued involvement after construction of the wind farm (participation).
- 7: The possibility for community members to buy shares of the wind power project (individual financial benefits).
- 8: The possibility for municipalities to have access to funds in order to enhance local scenery, facilities and/or recreational values (community financial benefits)

Figure 6: Conceptual model for community involvement

<i>Information distribution</i>	<i>Participation</i>	<i>Financial benefits</i>
<i>Indicator 1,2</i>	<i>Indicator 3, 4, 5 &amp; 6</i>	<i>Indicator 7 &amp; 8</i>

Source: author's own

Now these eight indicators will be translated into several survey questions and the possible answers of these survey questions determine whether the community policy was used effectively or not effectively and had any influence, or when the community policy was not used at all, as is the case with indicator 6, 7 and 8, the survey questions will examine to whether the use of this type of community policy is desirable and will lead to less opposition, as suggested by the definition of community policies. Every answer has been numbered alphabetically in order to assign them to a certain category.

In sum; each answer will suggest either that a certain community policy has helped or have effectively been used during the planning or not or, if the community policy was desirable or that respondents were not interested in this type of community policy. The table at the end of this chapter shows which answers will be categorized where.

#### 5.6.1 Information distribution

The first variable, information distribution is divided into indicator 1 and 2. Indicator 1 tries to determine whether the information distribution by the national government has been done effectively and the second indicator tries to determine whether the information distribution by the local government (municipality) has been done effectively. Why only these two levels of government will be analysed will be explained in the chapter where the case-study Zandvoort is portrayed.

The first indicator (1) will be operationalized into the following survey question:

Q5 What did you think of the information provision from the national authorities in relationship to the possible construction of the wind farm “Aanvulling gebied Hollandse kust”?

- ☐ The provision of information by the national government was good (a)
- ☐ The provision of information by the national government was sufficient (b)
- ☐ The provision of information by the national government was bad (c)
- ☐ The provision of information by the national government was not important to me (d)
- ☐ I have not seen any information distributed by the national government (e)

When the first two options are chosen, it will suggest that the first indicator of the community policy information distribution has been done effectively, the third and last option will suggest that the first indicator of information distribution has not been done effectively. The fourth option will suggest that to this respondent the use of this type of community policy is not desirable and/or not important in the case of wind farm planning in Zandvoort.

The next question is a follow-up question related to the first indicator of community policies and tries to determine how big the influence of the information distribution was on the locals of Zandvoort and if it influenced their opinion in any way. If the last option from Q5 is chosen, this question is not offered in the survey.

Q6 Did the information from the national authorities affected your opinion with respect to the possible construction of the wind farm?

- ☐ No (f)
- ☐ Yes, my opinion is more positive towards the possible construction of the wind farm (g)
- ☐ Yes, my opinion is more negative towards the possible construction of the wind farm (h)
- ☐ Yes, in another way: (open answer) (i)

Obviously, the first option suggests that the information distribution by the national government did not have an affect on the respondent. The second option suggests that the information distribution had a positive influence, the third suggests that it had a negative influence and the last option can go both ways, depending on the open answer.

The second indicator (2) will be operationalized into the following survey question:

Q7 What did you think of the information provision from the municipality Zandvoort in relationship to the possible construction of the wind farm “Aanvulling gebied Hollandse kust”?

- ☐ The provision of information by the municipality was good (j)
- ☐ The provision of information by the municipality was sufficient (k)
- ☐ The provision of information by the municipality was bad (l)
- ☐ The provision of information by the municipality was not important to me (m)
- ☐ I have not seen any information distributed by the municipality (n)

Likewise to Q5, when the first two options are chosen, it will suggest that the first indicator of the community policy information distribution has been done effectively, the third and last option will suggest that the first indicator of information distribution has not been done effectively. The fourth option will suggest that to that respondents the use of this type of community policy is not desirable and/or not important in the case of wind farm planning in Zandvoort.

Also likewise to Q5, the next question is a follow-up question of Q7 related to the first indicator of community policies and tries to determine how big the influence of the information distribution by the municipality was on the locals of Zandvoort and if it influenced their opinion in any way. If the last option from Q7 is chosen, this question is not

offered in the survey.

Q8 Did the information from the municipality affected your opinion with respect to the possible construction of the wind farm?

- ☐ No (o)
- ☐ Yes, my opinion is more positive towards the possible construction of the wind farm (p)
- ☐ Yes, my opinion is more negative towards the possible construction of the wind farm (q)
- ☐ Yes, in another way: (open answer) (r)

The first option suggests that the information distribution by the national government did not have an effect on the respondent. The second option suggests that the information distribution had an influence, the third suggests that it had a negative influence and the last option can go both ways, depending on the open answer.

### 5.6.2 Participation

The next survey questions are connected to the variable participation. Participation is divided into four indicators. The way participation could have taken place and how this is translated to the survey questions is derived from the way the actual planning has taken place for the wind farm “Aanvulling gebied Hollandse kust” in Zandvoort. More information on the possible ways of participation in Zandvoort will be given in the case-study chapter. The first indicator (3), minimization of obstacles to increase participation possibilities, is translated into the following survey question:

Q9 Did you attend one of the three information sessions in Egmond (August 30), Noordwijk (5 September) and The Hague (September 6) on the draft structure plan “(second phase) Aanvulling gebied Hollandse kust”?



- ☐ No, I wasn't aware of the meetings (s)
- ☐ No, it was too far away (t)
- ☐ No, I was occupied (u)
- ☐ No, I wasn't interested (v)
- ☐ Yes (w)

The first three options suggest that obstacles to maximize participation have not been avoided effectively. The fourth option suggests that this respondent was not interested in participation in this way and the last option suggests that obstacles were minimized and indicator 3 has worked effectively. Another question related to indicator three (3) is:

Q11 Did you look into the draft structure plan "(second phase) Aanvulling gebied Hollandse kust" at the town hall or on the Internet between August 19 and September 29, 2016?

- ☐ No, I did not know this was a possibility (x)
- ☐ No, I was not interested (y)
- ☐ No, other reason: (open answer) (z)
- ☐ Yes (aa)

The first and third option suggests that obstacles to maximize participation have not been avoided effectively. The second option suggests that this respondent was not interested in participation in this way. And the last option suggests that obstacles were minimized and indicator three (3) has worked effectively, meaning that obstacles to avoid participation have been minimized and that this type of community policy has been used effectively during the planning of the wind farm.

Indicator four (4), involvement of locals in the planning process and the degree to which all viewpoints are included, has been translated into the following survey questions:

Q10 Did you express your opinion on one of the three information meetings?

- ☐ No, I did not express my opinion (bb)
- ☐ Yes, I did express my opinion (cc)

Obviously, this question has not been asked to someone who has not attended the meeting (Q9). The first option suggests that this local has not been involved in the planning process and included their viewpoint, and the second option suggests the contrary. The next question also relates to indicator four (4):

Q12 Have you given your written opinion between August 19 and September 29, 2016 on the "(second phase) Aanvulling gebied Hollandse kust".

- ☐ No, I was not aware that I could give my opinion in this way (dd)
- ☐ No, I was not interested in giving my opinion (ee)
- ☐ No, I did not think my opinion would matter (ff)
- ☐ No, other reason: (open answer) (gg)
- ☐ Yes, I did express my opinion (hh)

Also this question will not be asked to someone who has not viewed the Ontwerp-Rijksstructuurvisie Windenergie op Zee Aanvulling gebied Hollandse Kust (2016) (Draft Structure Plan) at internet or at the town hall. The first, third and fourth option suggest that this local has not been involved in the planning process and included their viewpoint, and the second option suggests the contrary. The last option suggest that this respondent has been involved in the planning process and included his or her viewpoint and the second option suggests that this respondent was not interested in this type of involvement.

Next, indicator five (5), the degree to which community members actually can impact or have the feeling that their suggestions are being taken seriously, is translated into the following survey question:

Q13 Do you have the feeling that your opinion (given or not) on "Aanvulling gebied Hollandse kust" will affect the final decision on the possible construction of the wind farm?

- ☐ Yes (ii)
- ☐ No (jj)

Obviously, option one suggests that community members have the feeling that their suggestions are being taken seriously (effectively) and option two suggests the contrary (not effectively).

Then, indicator six (6), the possibility to have continued involvement after construction of the wind farm, has been translated into the following survey question:

Q14 Would you like that after the possible construction of the wind farm “Aanvulling gebied Hollandse kust” residents of Zandvoort are being involved in some way to the wind farm.

- ☐ Yes, by means of an information and education centre for children and adults about wind energy (kk)
- ☐ Yes, through the hiring of entrepreneurs from Zandvoort in the maintenance of the wind farm (ll)
- ☐ Yes, both (mm)
- ☐ Yes, in another way (nn)
- ☐ No (oo)

Option one to four suggests that locals like the possibility to have continued involvement after the construction of the wind farm and that the use of this type of community policy is desirable for the residents of Zandvoort. The last option suggests the contrary.

### 5.6.3 Financial benefits

The variable of financial benefits has two indicators, which point to the different types of financial participation. Indicator seven (7), the possibility for community members to buy shares of the wind power project (individual financial benefits), is specifically targeted at involving individuals and decreasing resistance through offering ownership. The indicator is translated into the following survey question:

Q15 Would the possibility of buying shares and share in the profits of the wind farm “Aanvulling gebied Hollandse kust” influence your opinion about the possible construction of the wind farm?

- ☐ Yes, I would like to buy shares (pp)
- ☐ Yes, I would like to buy share if I knew more about the options, risks, costs and profits (qq)
- ☐ No, I’m not interested in buying shares (rr)

Option one and two would suggests that locals are interested in this type of community policy and option three suggests that locals are not interested in this type of community policy.

The last indicator (8), the possibility for municipalities to have access to funds in order to enhance local scenery, facilities and/or recreational values (community financial benefits), also tries to measure the desirability of the variable financial participation in Zandvoort and it examines if resistance is reduced when this type of community policy is used and thus whether this type of financial benefit can work effectively in reducing resistance. The indicator is translated as follows:

Q16 Would it influence your opinion when a part of the revenue from the wind power to be granted to the municipality of Zandvoort for the support of social services for example?

- ☐ Yes, this would have a positive influence on my opinion (ss)
- ☐ No, this would not make a difference on my opinion (tt)

Option one would suggests that the citizens of Zandvoort are more positive towards the possible building of a wind farm off the coast when a part of the revenues is shared and invested into the community. Option two would suggest the contrary.

Figure 6 gives an overview of the possible answers and categories of where those answers belong. It shows which answer refers to the use and effect of each type of community policy and indicator. This overview helps with analysing which policies had what kind of effect and if community policies that were not used would be desirable or not.

#### 5.6.4 General Information

Furthermore, the survey starts with four questions that are not necessarily related to the use of community policies but can be interesting and important to the analysis. Firstly, the question is asked whether the respondent lives in Zandvoort. If the respondent does not live in Zandvoort the survey ends. Logically, only citizens of Zandvoort can participate in the research because this research tries to uncover the relationship between the involvement of the local community of Zandvoort and the creating of acceptance.

Next the question is asked whether the respondent is a proponent or opponent of the possible building of the wind farm building zone “Aanvulling gebied Hollandse Kust”. This is asked to see how proponents and opponents respond to the use of community policies in Zandvoort. And most importantly, are opponents of the wind farm building zone “Aanvulling gebied Hollandse kust” sensitive to the use of community policies and would the use of community policies influence their opinion on the possible building of the wind farm off the coast of Zandvoort?

Then the question is asked whether the respondent is a proponent or opponent of the development of wind power in general. This knowledge could also be interesting in several ways. For instance, are proponents of the wind farm building zone “Aanvulling gebied Hollandse kust” also proponents of wind power in general? And are proponents of wind power development in general also negative towards the use of community policies.

The last question of the first section of the survey asks whether the respondent is working in the tourist sector of Zandvoort. The reason why this question is added is more broadly explained in the chapter about the case Zandvoort, but is related to the negative attitude of the municipality of Zandvoort towards the building of the wind farm building zone “Aanvulling gebied Hollandse kust” and their fear of declining tourist visits when the wind farm is going to be build.

In the chapter ‘the case of Zandvoort; description and empirical results’ the outcome of the survey questions will be discussed and analysed, and an indication can be given whether

these community policies could have helped the national government in increasing local acceptance in Zandvoort. Moreover, the bivariate analyses that will be executed will be between the variables obtained in the general information section and the information obtained by the questions aimed at the use of community policies. The relationship between two variables of general information and community policies will be described, without stating that one outcome of a certain variables will lead to the outcome of another.

Finally, the distinction between the type of answers that can be given is displayed below and each answer related to each indicator of community policy can be categorized in whether the community policy has had or can have a positive or negative effect, whether there are no interests in this type of community policy and whether the community policy has been used at all. Where the answers between parentheses belong depends on the type of open answer given.

Figure 7: Use and desirability of community policies

<i>Use and desirability of community policies</i>	<b>Indicators</b>	<b>Use of community policy</b>	<b>No interest in use of community policy</b>	<b>Positive effect of use community policy</b>	<b>No or negative effect of use of community policy</b>
<b>Information distribution</b>	1	V	D	A-B-G (I)	C-E-F-H (I)
	2	V	M	J-K-P (R)	L-N-O-Q (R)
<b>Participation</b>	3	V	V-Y	W-AA	S-T-U-X-Z
	4	V	EE	HH-CC	BB-DD-FF-GG
	5	V		JJ	II
	6	X		KK-LL-MM-NN	OO
<b>Financial benefits</b>	7	X	RR	PP-QQ	
	8	X		SS	TT

Source: author's own

Hence, the next chapter is the start of the analysis and the comparison between Denmark and the Netherlands in the use of community policies. It starts however with looking at how both the development of wind power in both countries has evolved so differently and

indicates why both countries have such large differences in their percentages of wind power generation.

## 6.0 Dutch and Danish developments

As said before, wind power implementation in the Netherlands has been slow in comparison to other European countries despite ambitious national targets. At the end of 2015, Netherlands's total capacity was 3376 MW (CBS 2016). In 2015, Spain's total wind power capacity was 23025 MW, Denmark 5063 MW and Germany is the absolute number one in Europe with a total capacity 44946 MW of wind power (The European Wind Energy Association 2016).

The choice is deliberately made here to compare Denmark and the Netherlands and not for instance the Netherlands and Spain. Obviously it is interesting to see the development of wind power in Denmark because of its success, especially in comparison to the Netherlands where development has been slow and uncertain. What is more, Denmark and the Netherlands are remarkable similar which makes it easier for potentially transferring policy. Hofstede (1994, 2010) for instance, analyses cultural differences within organisations and between nations. He argues that national cultures have a big influence on the way organisations and societies are organized. If countries are similar on a cultural level, they tend to be so on an organisational level as well. Following on this, Hofstede (1995, 2010) has found that Denmark and the Netherlands are two modern Western societies where people when 'acting' do so in a generally informal and pragmatic way. Moreover, Esping-Andersen (1990) outlines three main types of welfare states, where developed capitalist nations are clustered. She compared different types of welfare states in Western Europe and other advanced capitalist economies. She thereby comes to the conclusion that both Denmark and the Netherlands (together with Sweden and Norway) belong to the same cluster where universalism and individualism are central values.

These similar characteristics of Danish and Dutch society are likely to be seen in both societies and its institutional and organisational structure. Thus, if both societies and cultural institutional characteristics are similar the comparison is more viable and policy transfer is more likely to be successful. This part of the analysis will be continued later, when examining



the transfer of Danish community policies in the Netherlands. This chapter will focus on the institutional setting of both countries, how the wind power market developed within this setting and in what way both countries deal with local resistance of wind power siting. By doing this, at the end of this chapter, an answer to the main question can be given based on a desk study of scientific literature and policy documents.

Hence, in this chapter the following research sub-questions will be answered:

*“Which Dutch and Danish policies and institutional factors drove wind power development throughout history and what was the role of community policies in it?”*

and,

*“Which policies stimulate wind power in Denmark and the Netherlands nowadays and which specific measures or policies make sure local opposition is reduced?”*

The first sub-question will be answered first, analysing and comparing the history of Dutch and Danish wind power policies, institutions and developments. Then the focus will turn towards the current wind power setting of both countries, answering the second sub-question. At the end of this chapter, an answer will be given to the main question; “Can Danish community policies help the development of wind energy in the Netherlands?”, based on this part of the study.

## 6.1 History

According to Verbong, Geels and Raven (2008) the Dutch renewable energy policy is full of costly failures, changing policy priorities and visions and limited learning capabilities. Expectations were too high, implementation was too slow, and the technical problems were bigger than anticipated. The slow implementation was the consequence of limited learning capabilities and a neglect of the articulation processes with other stakeholders such as businesses, municipalities, consumers and communities. Commercial feasibility and prospects were disregarded and societal embedding, attention towards social acceptance and involvement of stakeholders was neglected. This in combination with the Dutch legal

procedures and institutional setting, which give stakeholders many opportunities to protest and therefore delay wind energy farms, made the actual building of windmills a difficult task. Instead, the government focused on the use and significance of R & D and the importance of a technology push while other important aspects of renewable energy implementation were overlooked.

The consequence of frequent changes in the subsidy schemes and regulations was a feeling of policy unreliability and instability among investors. Approximately every few years policy shifts took place. The support programme *Toepassing Windenergie in Nederland* (TWIN) (Support Programme for Wind Energy in the Netherlands) for instance, was introduced for the years 1991-1995. In this period wind power capacity in the Netherlands grew significantly. Installed capacity rose from 50 MW in 1990 to 250 MW in 1995 with a growth of 90 MW in 1995, being the most successful year ever back then. However, not so much the used policies at the time contributed to the successful growth of wind power but the upcoming switch of policies can explain the successful growth in 1995. The following two years, TWIN and other direct subsidies ended. 1996 showed only a growth of 52 MW of wind power and in 1997 the situation eroded further. Thus, in 1995 wind energy producers benefitted from the old subsidy schemes and in consequence pushed development during that last year (Verbong et al 2001).

Another example is the introduction in 2003 of the 'Milieukwaliteit Electriciteit Productie' (MEP) (Environmental Quality Electricity Generation). It consisted of an ecotax exemption and a fixed feed-in tariff for renewable electricity producers. The MEP was set for ten years but already after two years the Minister of economic affairs announced a major downscaling because of the popularity of the policy. Many renewable energy generation start-ups and projects wanted to use the MEP. The number of wind park proposals was much higher than expected and policy support for all these projects through the MEP would imply a major increase of the budget. Thus, new offshore wind and large-scale biomass projects were excluded from the scheme. In the end, just two offshore wind parks received financial support through the MEP policy. One year later, in 2006, the MEP-scheme stopped for all new applications. The official argument of the government was that the EU target from the European renewable electricity Directive 2001/77/EC (European Parliament and Council

2001) of 9 percent renewable electricity in 2010 would be met through existing projects and that continuing the MEP would be too expensive.

As can be seen, policy makers did not provide security and guarantees on the long-term and deserted innovations when these were faced with setbacks. This hampered private investment and created uncertainties especially when protection measures were cut off too soon and market pressures were introduced too rapidly when innovations had not yet matured (Verbong, Geels and Raven 2008).

Thus, the Dutch economic-policy support mechanisms were unstable, which led to unsatisfactory development of the manufacturing technology industry and shattered the trust and confidence of commercial investors. Constant phasing-in and phasing-out of financial support systems and an over-focus on R&D and economic performances within the policy packages has led to a neglect of institutional, administrative and social aspects of renewable and wind energy market expansion. From the beginning the choice was made that development of wind power should have a centralized large-scale application with the energy utilities as key actors. Involvement of communities or the use of community policies was just almost totally absent.

While in Denmark, commitment to renewable energy was much stronger historically and relationships with (small) private parties and communities were close. Furthermore, the political will to stimulate wind power was always strong and of great importance. The importance of political will is strengthened by the fact that the Rasmussen administration between 2002 and 2009 showed less support for wind power and in turn wind power growth declined significantly. After 2009 and the re-introduction of direct subsidies, the premium tariff, wind power grew rapidly again.

Many policies and measures were taken and upheld in order to stimulate wind power in Denmark. Quality certificates for windmills created a reliable production process and quality insurance. Investments were stimulated through subsidies and tax deductions over a longer period. And investment security was further strengthened by the purchase obligation for

utilities to buy renewable energy and the introduction of the feed in tariff (Meyer 2004).

What is most important here, Denmark always had relatively little local resistance to the development of wind farms and the low population density in comparison to the Netherlands cannot only explain this. Denmark had several re-powering programmes throughout the years that prevent siting difficulties. Moreover, already in 1979 when the first investment subsidies were introduced, only individuals or groups of individuals could call on the subsidy if they live within 3 km of the given project. Thus, host communities and the project makers were one and the same. Through this special stipulation also known as residency criteria or distance regulation laws, NIMBY effects were minor, local acceptance was high and community opposition was low.

Also part of creating local acceptance was the governmental obligation for municipalities to estimate the potential for windmill building sites at the beginning of the 1990's. Not only would efficient wind sites be spotted, the community knew long before possible building plans what could come. Finally, Danish windmills had to be standardized already at an early stage in order to reduce local resistance. Standard types of windmills had to be used; they had to rotate clockwise and use anti-reflective paint that would minimize disturbance.

You could argue that the (financial) participation of communities in the development and ownership of wind energy was a critical factor in the historical success of renewable energy growth in Denmark. This form of economic governance and the combination of state intervention and local mobilization has been important in utilizing the historical traditions of cooperative organizations and collective learning to develop conditions for public participation, discussion and decentralized economic democracy in the energy sector. The cooperative relations within the renewable energy sector could also be characterized as part of Danish culture within (civil) society. The extent to which people are involved in different forms of associations shapes overlapping and complex relations of identity formation. Moreover, Denmark has a long tradition in cooperative companies. The agricultural sector already had cooperatives at the beginning of the ninetieth century and in the second half of

the ninetieth century cooperatives were one of the widest spread forms of commercial activities (Bauwens, Gotchev & Holstenkamp 2016).

Thus, while the Netherlands neglected the role of the communities within wind power planning, Denmark made extensively use of community policies throughout history and consequently had little siting issues in comparison to the Netherlands.

## 6.2 Currently

Before July 2010, Directive 2009/28/EC on renewable energy by the European Union required Member States (MS) to submit National Renewable Energy Action Plans (NREAP). The Netherlands submitted this plan in 2009 and again the targets were ambitious. The legally binding 2020 target was that the share of renewable electricity should be 37 percent (6000 MW from wind energy) and the share of renewable energy 14 percent (National renewable Action Plan Netherlands 2009). The Directive also requires MS to submit progress reports every two years and the EU may propose corrective actions if the progress falls short (European Commission 2015).

The follow-up of the MEP and the main instrument to reach the targets of the NREAP was the 'Stimulation Renewable Energy Production' (SDE), introduced in 2008. In 2011, the SDE was followed-up by the SDE+. A difference between the SDE and the SDE+ is that governmental institutions and private investors are excluded from participation in the SDE+. To this day, the SDE+ is the main instrument to reach the EU 2020 targets.

The SDE+ programme can be characterized as an operation-subsidy or feed-in premium regulation, which means that producers of renewable energy receive a variable subsidy for the generation of renewable energy and not for the installation of renewable energy production machines. For wind energy, the SDE subsidy compensates the difference between the costs of producing grey energy and the production costs of wind energy for a period of fifteen years. The price difference, and thus the compensation which is given to certain renewable energy producers, between grey and wind energy is calculated on a yearly

basis. Producers of renewable energy with the lowest production costs per MWh can apply first on the limited budget of the SDE+ and have the best chance of receiving subsidy. In doing so, the SDE+ stimulates the most cost-effective production of renewable energy and tries to avoid windfall profits (RVO 2017). However, the SDE+ does not take away all the market risks for renewable energy producers. It works with a basic minimum rate for grey energy prices calculated in advance of the coming year. If the market price of energy falls below the basic rate, the gap is not covered, leaving investors with substantial costs and risks.

Biofuel production is considered to have benefitted significantly from the SDE(+). For wind energy on the other hand, the SDE and SDE+ have not been very successful yet. Many SDE(+) subsidized wind power projects were never realized because of the failure to get building permits (Van der Elst & Bosch 2012). Between 2008 and 2011 only 80 million of subsidy was given on a total budget of 9 billion euro to wind energy producers. The problem is that wind power investors can only apply for subsidy from the SDE+ when they already have the building permit, but getting the building permit is very difficult because of local resistance. Moreover, because the subsidy of the SDE+ is given to the most cost effective renewable energy producers, offshore windmills producers have difficulty gaining access to the funds, since initial production costs of offshore windmills are relatively high.

Thus, despite the fact that wind power is a major tool to reach the 2020 targets, support from the main tool of the 2020 targets, the SDE+, has not yet been very successful in stimulating wind energy. The numbers show the stagnating growth of wind power. From 2010 to the beginning of 2016 wind power increased by 1139 MW (CBS.nl) and this is far from sufficient to meet the anticipated growth from the 2020 targets. However, in 2013 a new Energy Agreement for Sustainable Growth (SER 2013) was set-up between the government and energy market parties. An important part of the Energy Agreement (SER 2013) is the roadmap 'wind energy at sea'. This roadmap indicated five zones where offshore wind power could or should be developed. For the first time, plans were unfolded to build wind farms in sight of the coast of Zandvoort (offshore building zone "Hollandse kust"). Wind farm "Luchterduinen" has already been built now in this zone and can be seen from the coast of Zandvoort. However, the assigning of these zones was again a change in

policy. In 2009 nine permits were giving to wind power investors to build relatively small offshore wind farms, these permits where withdraw in order to build closer to shore, on a larger scale and reduce costs.

Within the new plans, “Luchterduinen” is just the start of the development. Offshore development is the major tool for the national government to increase its renewable energy production and to reach the objectives set in the Energy Agreement (SER, 2013) and the 2020 targets (14 percent): 4450 MW by 2023. The “Gemini” offshore wind farms, which are under construction now, and three existing wind farms along the coast of North and South Holland (“Hollandse kust”) will generate approximately 1000 MW when all are finished. This means that another 3450 MW should be installed before 2023. The national government has set itself a leading director’s role for the execution of the roadmap this time, in order to make sure the targets are met and has chosen to achieve these objectives by using a new issuance system. Even a new law has been installed; the Wet Windenergie op zee (2015) (Offshore Wind Energy Bill), to ensure the director’s role of the government. It has entered into force, given the state the option of issuing zones, sites, subsidies and permits for the development of offshore wind farms. A wind farm site decision set up by the national government stipulates under what conditions and where a wind farm may be build and a permit is only granted after a wind farm zone decision is made. When a permit has been given through the issuance system, the permit holder is the only one who is able to build at the site location. The national government tries to be as cost-efficient as possible when issuing zones, sites and permits. The issuing of permits on sites where a developer can build a wind farm is also linked to the granting of subsidies (SDE+) and based on tenders, where the lowest price tender is the main criterion. This cost-efficient attitude of the national government also implies that only large wind farms can be build offshore with a capacity of minimal 350MW, instead of several small zones (Noordzeeloket 2017).

When speaking of the national government and energy topics in the Netherlands nowadays, one is often referring to the Ministry of Economic Affairs. The national Ministry of Economic affairs is the dominant governmental actor in the Dutch energy sector. The Ministry works together with the provinces, the Environmental Assessment Agency (PBL), the facilitating state-based agency Agentschap NL and the Social and Economic Council (SER). The

dominance of the national government and the SER creates a strong centralized economic approach to renewable energy planning, focussed on large business partners instead of communities. Even though policy making is centralized, municipalities and provinces can choose some form of their own plans and strategies such as trying to achieve a climate neutral city (Nijmegen) or in contrast objecting and prohibiting projects (building stop for wind turbines in Noord Holland province).

The market parties or large business partners have a large role in the arrangement and they are strongly orientated on fossil fuel consumption (Shell, Gasunie, Nuon, Essent and Exxon for instance). And companies from the transport and agriculture sector also lobby for fossil fuels since they are subsidized for their fossil fuels use. Furthermore, over 50 types of governmental interventions (such as tax reduction) in favour of fossil fuels can be found in the Netherlands. The lobby for renewable energy production is a lot smaller. In fact, most large market parties that do produce renewable energy often also have interests in fossil fuels. In comparison to Denmark, there is no large industry of wind turbine builders and the few renewable energy NGOs in the form of umbrella organizations for local initiatives have little financial means and political influence (Oteman, Wiering and Helderman 2014).

After 2010, energy policy was again allocated to the Ministry of Economic Affairs instead of energy policies being part of an interdepartmental cooperation between different Ministries. Consequently, new policies became more economic oriented and subsidies are only given to projects that are economically viable. Wind speeds calculations on suitable sites are more important than scenery preferences of locals for instance.

Recently, as can be seen in the roadmap offshore wind energy, the choice by the national government was made in favour of large scale on- and offshore wind farms to reach the 2020 targets, planned on a centralized economic efficiency manner. However, the actual planning is partly left to the provinces, who are expected (not obliged) to install a minimum target of wind power capacity and have a certain amount of freedom in their approach on how to reach these targets. Offshore wind farm planning is however left to the national government.



Oteman, Wiering and Helderma (2014) characterize the renewable energy sector in the Netherlands as a business oriented and vested interest policy arrangement. Sustainability and climate change can hardly be found in the policy discourse and current policies are economic efficient and risk averse. Unfortunately, the role of communities has mostly been limited to negative influences on wind power development through protesting on siting and development. Although on the other end, community initiatives are developing rapidly, despite the unfavourable institutional (little subsidies and governmental support) and economic (strong competition of large market players) field they act in.

However, in the Netherlands, community initiatives in the form of wind power cooperatives, where the turbines are owned and exploited by a group of locals, do exist. Following the pro-environmental and anti-nuclear movement in the 1980s & 1990s, 25 cooperatives emerged and a small number of cooperatives have emerged the last two decades. Most of these cooperatives just economically exploit the wind turbines, but some provide information about other renewable practices such as home insulation. These cooperatives focus on selling their electricity to large market parties such as Eneco and GreenChoice, although net metering<sup>1</sup> is just recently allowed for small installations, meaning these cooperatives can also cover their own energy costs (Oteman, Wiering and Helderma 2014).

However, most new community initiatives emerging within cities nowadays focus on other forms of renewable energy generation (solar panels for instance) since starting costs are lower and planning rules are less complicated in comparison to wind turbine deployment. And even these other renewable energy projects rely on local fundraising for their starting capital since municipalities only sometimes offer financial contribution. Oteman, Wiering and Helderma (2014) refer to these new community initiatives as 'local renewable energy companies (LDEB) and most often these initiatives are environmentally but also economically motivated.

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<sup>1</sup> Net metering is a way for producers to use the energy they generate for themselves.

Despite the deficiency of active communities initiating the planning and building of wind turbines, there are forms of planning where participation is offered and compensation is given. Hence, community policies are not absent in the Netherlands.

Only recently (2014) the “Nederlandse Wind Energie Associatie” (Dutch Wind Energy Association, DWEA) in cooperation with some Dutch NGOs (Greenpeace, Milieudefensie, ODE decentraal) have developed a code of behaviour on involvement and participation for wind energy on land. The code implies that developers initiate to involve the neighbourhood in an early stage of development. For every new project, stakeholders (citizens, municipality) are invited to start a dialogue and sketch a plan in what participation can take place. Moreover, the code is not fixed; every project and participation plan can be different on each location. The code can basically be divided into initiating participation by communication (information distribution) and financial participation (financial benefits).

Wind power developers are expected at least to offer participation by communication through; meetings with locals, initiating of a sounding board, indicate when locals are involved, to show to which extent projects can be adjusted, give communication means for complaints and to appoint a contact for locals to go to (Bosch en Van Rijn 2016). And financial participation can take place when developers set up a local fund, offer between € 0,40 and € 0,50 for each produced MWh compensating the local community for introduction of windmills in their community. Moreover, involving local businesses to work on the project is stimulated, cuts on electricity bills can be given, making a local residents scheme or offering financial benefits by buying shares or turbines to the maximum of 25 percent of the project. (Gedragscode windenergie op land 2016).

Furthermore, the code of behaviour is also directed towards environmental organisations. When projects are initiated they are expected to help developers and actively try to increase local acceptance by give out information or point to the necessity and benefits of wind power. Local governmental organisations are not officially part of the code of behaviour although it is stated within the code that they should participate with the set-up of a participation plan, hand out general information, explain why this location has been offered, explain local planning procedures and speak out their own renewable energy ambitions.

Thus, the recommendations of the code of behaviour for wind power on land truly are community policies, trying to increase local acceptance. Next to the community policies described above, there are ways for locals to get financial compensation when for instance the value of houses drops after the building of wind turbines in the neighbourhood. This can be achieved by addressing municipalities on their planning blight schemes (*planschade*). However, in practice, planning blights of municipalities for wind power development are hardly ever given to locals, and if they are given to locals, it is often just a fraction of the costs suffered by locals. Municipalities defend themselves well to such claims because of fears for high compensation claims instead of helping its citizens. These municipalities can defend themselves well based on a verdict by the Council of State in 2012; 'depreciation of houses through normal societal developments, are at the costs of the applicant and not the municipal'. Obviously, the building of wind turbines here is characterised as a normal societal development by the Council of State.

The code of behaviour has been evaluated not long ago (Bosch & Van Rijn 2016) and although applying the code of behaviour is not obliged for wind power developers on land to use, this evaluation has shown that a large majority of the project developers do attempt to apply the code of behaviour when planning new projects. Furthermore, most locals developed a slight enhanced form of acceptance because of the communication and financial participation options and especially financial participation was appreciated. Most often developers give the option to compensate locals by € 0,40 and € 0,50 for each produced MWh. The option to reduce resistance through public ownership, where people can buy shares, is still hardly being used.

What seems to be part of the problem is that compensating or actively involving locals is not officially incorporated into policies in the Netherlands, in this case, it is incorporated into a code of behaviour, drawn up by market parties and NGOs. The national and regional government, where the bulk of the wind energy policies are made, has shown little involvement into participation and communication projects (participation and information distribution). Municipalities in general lack capacity and knowledge to engage in an active 'director role' and financial compensation is often only given to municipality projects (investments in playgrounds for instance) instead of given to the ones who are affected the

most (Bosch & van Rijn 2016). Thus, the use of community policies has just recently been started and despite its limitations, it does show its potential and positive effect it can have on the siting of wind farms and the increase of local acceptance in the Netherlands. Furthermore, while all three ways of community policies are offered, they are offered by the developers and market parties, and often not monitored or initiated by governmental institutions. Basically, the decision on the building of a wind farm has already been made before involvement of the local community can take place. Thus, while information distribution, participation and financial benefits policies are used, their power is limited, especially in offering a true form of participation in planning schemes before the actual building permit is given. As the definition of community policies implies the stimulation of involvement to increase local acceptance can be offered by governmental institutions and developers. Where developers do so now during the building of wind farms on land, the governmental institutions make little use of community policies, and are not involved in making sure community policies are used.

Moreover, while the code of behaviour is only for the development for wind power on land, the major wind capacity growth has to take place offshore. However, for the issuing of zones and sites offshore, the national government does offer participation for stakeholders during the actual planning phase of wind farm building zones. Through Platformparticipatie (platform participation), which is an initiative by the Ministry of Infrastructure and Environment, stakeholders can look into plans before the decision on whether or not to build has been made (information distribution). Moreover, stakeholders get the opportunity to participate in the planning phase and argue why the building should be modified or even cancelled (participation). Thus through this institute, the community policies of information distribution and participation are offered. Both forms of financial benefit policies are not mentioned here and it can be stated that these type of community policies are left to the developers on whether or not to use them. “Windfarm Wieringermeer”, “Kavels Borselle I II”, “Kavels Borselle III, IV V”, “windfarm Krammer”, “windfarm NOB” and “windfarm Zuidlob” were previous projects and actual wind farms or zones where participation has been made possible.

A change in the national Electricity Law of 1998 in 2009 made sure wind farms with a capacity of over 100 MW are subject to the coordination of the national government (National Coordination Arrangements) and consequently these projects make use of the platform participation. What is remarkable though, is that in all these finished projects, no viewpoints of individuals or communities were upheld or during some projects no viewpoints or appeals were even submitted. Consequently, one could argue that the extent to which participation was made possible was little. In the chapter of the case study, the use of platform participation during the appointing of the wind farm zone “Aanvulling gebied Hollandse kust” will be further analysed.

Denmark’s National Renewable Energy Action Plan (2009) from the European Directive 2009/28/EC targets are to have a 30 percent share of energy generated from renewable sources on the total energy consumption. And for electricity the share should be 50 percent generated by renewable energy sources by 2020. The main tool to reach these targets is the Law on the Promotion of Renewable Energy and wind power is the largest contributor to these targets. Since the introduction in 2009 the feed-in tariff has become a premium tariff. Plant operators receive a variable bonus on top of the market price and the sum of the bonus and the market price shall not exceed a certain statutory maximum (although in certain cases law does not define the maximum). Next to the premium tariff, the Act contains four more schemes to promote the development of wind (International Energy Agency 2016):

- Local citizens have the option to purchase wind turbine shares.
- Clarification of payment measures when loss of value to property for locals emerges due to the erection of wind turbines.
- Municipalities can call on a green scheme subsidy to enhance local scenic, recreational values, increase acceptability of wind turbines or undertake activities to promote renewable energy in the municipality.
- And local wind turbine associations have access to a guarantee fund of financial support for preliminary investigations such as siting studies, planning and technical and financial considerations. The requirement to use this guarantee fund is that the turbine’s output cannot be solely for the owners own electricity needs but for electricity generation on a larger scale ([iea.org/policyandmeasures-2](http://iea.org/policyandmeasures-2)).

The Act also requires all municipalities to site possible locations for 150 MW of wind power. Finally, the Act updates the scrapping scheme for old wind turbines. Likewise to the previous replacement scheme, a price supplement can be given when replacing old turbines with new and more efficient turbines. However, these four schemes to promote the development of wind are developed for onshore wind farms, although they apply to most offshore wind farms as well.

The developers of wind turbines higher than 25 metres are compelled to offer at least 20 percent of the ownership to local citizens living within a radius of 4.5 km from the turbine. This also includes offshore wind turbines that are erected without the government tender procedure but through an open door procedure<sup>2</sup>. The wind power developers have to run through the sales requirements at an information meeting which has to be announced in a local newspaper within a reasonable period of notice. After the meeting locals have four weeks to buy shares (Danish Energy Agency 2009). The option of buying shares is obviously making use of a community policy and since the Danish government obliges it, the community policy is used every single time when development of wind farms takes place, in turn increasing local acceptance.

The erector of a wind turbine higher than 25 meters has a duty to pay compensation for loss of value of real property following from the erection of the wind turbine and an appraisal authority determines the size of the loss value. The owner receives full compensation when a loss of more than 1 percent of the value has occurred. This also includes offshore wind turbines that are erected through an open door procedure. However, the owner must notify a claim for compensation to the Danish Energy Agency and the claim must be notified before the wind turbine has erected (Danish Energy Agency 2015). Compensation pay for loss of value can also be characterized as a community policy. It is another form of financial benefits, compensating negative influences erecting from wind turbines for local citizens and

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<sup>2</sup> New offshore wind farms can be established through 2 types of tender procedures; with a government tender, project developers have to bid in an open competition to obtain the project which is part of the official Danish development of renewable energy. With an open door procedure, developers can apply for a license to build at a specific place (Wind turbines in Denmark 2009)

therefore a way to possibly reduce local resistance in the Netherlands. However, it will not be tested in the survey and used as an indicator. Those having real estate closer to a wind turbine than six times the height of the turbine can only use the Danish 'loss of value' community policy. Therefore, a turbine of 100 meter can only receive claim from real estate owners within a range of 600 meters. Since the planned offshore wind farm building zone "Aanvulling gebied Hollandse kust" is between 10 and 12 nautical miles of the coast, paying compensation to everyone within a twelve nautical miles range of a wind turbine would probably make the deployment of wind turbines too expensive.

Obviously, the green scheme is also a community policy. Through improving and developing local scenic and/or recreational options from the revenues of the nearby wind farm the community benefits from the development of wind turbines and can reduce local resistance.

The last scheme in the Act; the guarantee scheme is also a community policy. It is especially aimed at cooperatives of local communities in helping with the costs of preliminary investigations, if energinet.dk thinks the project is financially viable. Unfortunately, in practice this means that community initiatives, especially for offshore wind farms, do not meet the requirement of being financially viable, since initiating starting costs are too high (Oteman, Wiering and Helderman 2014).

Furthermore, in Denmark energy policies are supervised by the Ministry of Energy, Utilities and Climate instead of the Ministry of Economic Affairs in the Netherlands, although the Ministry of Finance is the main partner of the Ministry of Energy, Utility and Climate in supervising renewable energy policies and constrains the renewable energy budget. Supervising by the Ministry is the right word since Denmark is highly decentralized. Municipalities have large independence of policy design and have financial means to execute them. However, these municipal policies have to be embedded in the national framework. Consequently, the Danish national government makes sure community policies are used.

For offshore wind farms the planning is however centralized. The Danish Energy Agency is

the authority responsible for the planning and erection of offshore wind turbines. For project developers, all necessary approvals and licences can be obtained here in order to reduce uncertainties and bureaucratic disorder (Wind Turbines in Denmark 2009).

The strong lobbies that are involved in the renewable energy field focus mainly on the type of business models used instead of lobbying against renewables and for fossil fuels. Large market parties concerned with energy development are Dong energy, Vattenfall (in favour of renewables) and Maersk (in favour of fossil fuels). Other parties which play an important role are the Danish Energy Agency and wind turbine manufactures such as Vestas and Siemens Windpower. They create local employment and thus form a strong motive to invest in wind power (Oteman, Wiering and Helderman 2014).

Within the planning system the provinces hardly play a role anymore although they use to have a leading role in wind power development. This shift in responsibility meant a loss of knowledge and capacity which municipalities still have to rebuild. Partly because of this shift in responsibility and the relatively many changes in policies the last decade (EU liberalization of energy market, new governments trying to inject financial discipline) local initiatives and cooperatives have been reduced dramatically (Oteman, Wiering and Helderman 2014).

However, the Law on the Promotion of Renewable Energy was specially installed to involve local communities again by offering them financial benefits and other forms of involvement. Consequently, wind power capacity has been growing rapidly again. This time with the help of large investors instead of mostly community cooperatives. Within the policy discourse both environmental and economic motivations can be seen. Economic motivations and financial revenue of wind power deployment are more and more being found at the local level and environmental concerns are more dominant at the national level policy discourse.

Thus, although wind power cooperatives within communities have declined, they still are present today and of the onshore wind turbines in 2008, nearly 75 percent was owned by community initiatives. As said before, the subsidy (guarantee scheme) that aims to help local



communities in assessing the potential of new projects for wind turbines has not been used often, showing the decline in new community initiatives. The offshore wind farms are mainly owned by large commercial investors who were able to invest in the upgrading of smaller wind turbines sites and the deployment of bigger wind farms, although communities can be partly owner since locals have the options to buy at least 20 percent of the share if the wind farm is closer than 4.5 kilometres off shore. Because the initial building costs of offshore wind farms are much higher than wind farms onshore commercial companies can make up by building on a much larger scale than they can do on land. This also implies why costs are so high for communities to endeavour in such projects. Community cooperatives now turn towards other renewable solutions such as solar panels and district heating systems.

Nonetheless, the lack of community initiatives in wind power development does not mean a lack of community policies that have been defined in the previous chapter. Denmark makes use of all three types of community policies, and the rapid growth and decline of growth of wind power goes almost simultaneously with the introduction and abandonment of community policies, underpinning the importance of its use.

### 6.3 In sum

The basic premise sketched in the first chapter of community policies and participatory methods is that a higher level of public participation would result in less local resistance. Loring (2007) has investigated this premise in England, Wales and Denmark and she has come to the conclusion that high levels of participation are conducive for high levels of local acceptance although it is not a necessity for projects to involve community policies and consequently obtaining high levels of acceptance (see also figure 2). Yet, it has to be said that Loring (2007) gathered these findings in 2001 and 2002 and limited her cases to projects that developed between one and eight turbines.

Nonetheless, these findings support participatory planning theory, arguing that if people are informed early in the development of projects, they feel less threatened and wait benefitting from the project, and consequently are likely to positively react to the project.

Moreover, all six variables in the form of high levels of public participation have been used during wind power projects in Denmark (Loring 2007). While in the case study specific forms of community policies will be tested on their effectiveness and desirability for the local community of Zandvoort, this chapter has shown the extent to which community policies are being used in both Denmark and the Netherlands in general. To answer the first sub-question of this chapter:

*“Which policies stimulate wind power in Denmark and the Netherlands nowadays and which specific measures or policies make sure local opposition is reduced?”*

The first category of community policies, information distribution is being used in both countries. Information distribution is the most common and easiest form of community policies and it is therefore not surprisingly that in both countries these policies can be seen. However, information distribution about projects seems to be more common for the lower levels of governmental institutions such as municipalities and provinces in Denmark than in the Netherlands. In the Netherlands, municipalities lack the capacity and the support from the national government to actively inform communities on projects and generally show little interest in doing so. Moreover, only recently the code of behaviour for wind power on land outlined certain guidelines on how to effectively inform stakeholders in order to increase acceptance in the Netherlands. In recent years, this form of information distribution has been used in almost every new project, although developers and not municipalities do this (Bosch en van Rijn 2016).

The second form of community policies; participation, shows bigger differences between the two countries. The national government of the Netherlands has only recently been using a true form of participation when it comes to wind power development. Through the institute Platformparticipatie, stakeholders get the opportunity to look into draft structure plans and argue why their standpoint is valid and why the planning should be modified and or cancelled. Public ownership, where communities initiated and logically participate in the planning of wind power, are a rare phenomenon. If they are present, these initiatives are most often totally dependent on themselves and lack support from governmental policies. Moreover, the recently drafted code of behaviour does not stimulate or encourage this form

of community involvement. Denmark, on the other hand is the total opposite, where local communities develop wind power on land most often and wind power is therefore dominated by public ownership constructions. Hence, in many cases local communities participate to the full extent to which participation is possible. For the larger off- and onshore wind farms, participation in its true form is declining. Likewise, to the Netherlands, Denmark has chosen a more cost-effective larger-scale planning form, making use of a government tender.

The third type of community policies, financial benefits, is present in both countries. In the Netherlands, nowadays, wind power developers on land most often offer some kind of financial benefit policy to the local community when initiating new wind farms. The most regularly used policy is a financial compensation based on the amount of generated wind power, but also sometimes the option of buying shares is given or cuts on the electricity bills of community members are proposed in order to increase local acceptance. The evaluation of the code of behaviour for wind power on land development has shown that this form of community policies is very helpful in the degree of acceptance among local stakeholders and in 90 percent of the new projects on land, some form of financial benefit policies is used.

Likewise, Denmark has many forms of financial benefit policies. The Law on the Promotion of Renewable Energy ensures that wind power developers involve communities. Developers are obliged to offer the possibility to buy shares to community members living within a certain range of the development for instance and municipalities can call on a green scheme fund to increase acceptability and or promote renewable energy in the municipality. Moreover, the Law on the Promotion of Renewable Energy also guarantees clarification of payment measures when loss of value to property emerges. In contrary to the Dutch situation, where agreed payment measures before development of the developers or municipalities are absent. For citizens to get compensation for loss of property value is hard to get. As said, blight schemes do exist but are hardly used when it is related to wind power development.

It can be concluded that both countries do offer different forms of all three types of community policies. In Denmark however, community policies are grounded in the law, obliging developers and municipalities to make use of not only information distribution but also participation and financial benefits policies. In the Netherlands, there is no law that ensures the use of community policies, only a code of behaviour to stimulate the use of certain community policies. Developers can offer these policies after the decision to build the wind farm already has been taken. The platform participation in the Netherlands has recently given the option for citizens to participate both for offshore and onshore development. However, viewpoints of citizens are hardly ever used and the plans for wind power development are not changed. It seems that the Dutch commitment to develop wind energy according to the agreed targets in the EU, has to be developed so rapidly, because of the slow development throughout history, that delays and changes of plans do not fit into the 'schedule'. This goes at the costs of community acceptance and in favour of the 'greater good' for society.

Thus, where in the Netherlands the dominance of the national government and the SER creates a strong centralized economic approach to renewable energy planning, focussed on large business partners instead of communities and the use of community policies, in Denmark, the wind power revolution has been based upon planned intervention and public ownership but is neither a grassroots initiative top-down centrally planned state process. Rather, it is a combination of state action, grassroots social mobilization and public ownership arrangements operating at different geographical scales, making use of lots of community policies. And current policies of both countries reflect these tendencies. The Dutch SDE+ is aimed at subsidizing only the most cost-efficient initiatives from businesses and Denmark Law on the Promotion of Renewable Energy has specific measures to compensated or involve local communities.

Based on the historical development of both countries and the current setting analysed and described here, you could say the hypothesis does apply; *"The more community policies are used in the development of wind energy, the less resistance on the local level will occur"*

This automatically gives an answer to the main question; Can Danish community policies help the development of wind energy in the Netherlands? Yes, it can. Community policies in Denmark have contributed to the success of wind power deployment and reduction of siting issues and in the Netherlands the lack of community policies have contributed to its backward position in the development of wind power. The incorporation of community policies in the Netherlands can therefore help the development of wind power.

In the next chapter, the application of (Danish) community policies in the Netherlands will be further examined and again an answer to the main question will be given based on empirical research, actually testing if community policies will lead to less opposition in the development of a wind farm in front of the coast of Zandvoort.

## 7.0 The case of Zandvoort: description and empirical results

Zandvoort is the second largest beach place of the Netherlands and is home to 16792 people (CBS 2016). It is a tourist town and many people go there especially during the summer to enjoy the beach and the sea. Many citizens from Zandvoort are afraid though that the visits from tourist will decrease after 2018. This is the year that the possible construction of wind farms in front of the coast of Zandvoort (10-12 nautical miles away) can become reality. The national government is now busy with the planning and the assigning of the wind farm building zone “Aanvulling gebied Hollandse kust” and simultaneously many members of the community, including the municipality itself, try to stop this development. As can be seen in the previous sections of this thesis, the national government offers several forms of participation during the planning of this zone. The extent to which community policies are used and how effective they can or are, will be tested here. In doing so, the next sub-question is answered;

*“Could the local opposition in Zandvoort have been reduced when Danish community policies were applied to the development of the offshore wind farm building zone “Aanvulling gebied Hollandse kust”?”*

First, the development and possible assigning of the building zone “Aanvulling gebied Hollandse kust” will be analysed and how the community of Zandvoort experience the planning of these zones. Then, the findings of the survey will be presented and analysed while at the end of this chapter a discussion on the transferability will be presented, before moving on to the conclusion.

## 7.1 How did “Aanvulling gebied Hollandse kust” develop?

The possible building of a wind farm that directly would affect the scenery along the beach of Zandvoort the most is based within the zone “Aanvulling gebied Hollandse kust (South)”. “Aanvulling gebied Hollandse kust” is a designated area where several wind farms will be or can possibly be built along the coast of North and South Holland. See figure 10 below.

Figure 10: Map (possible) building zones wind farms

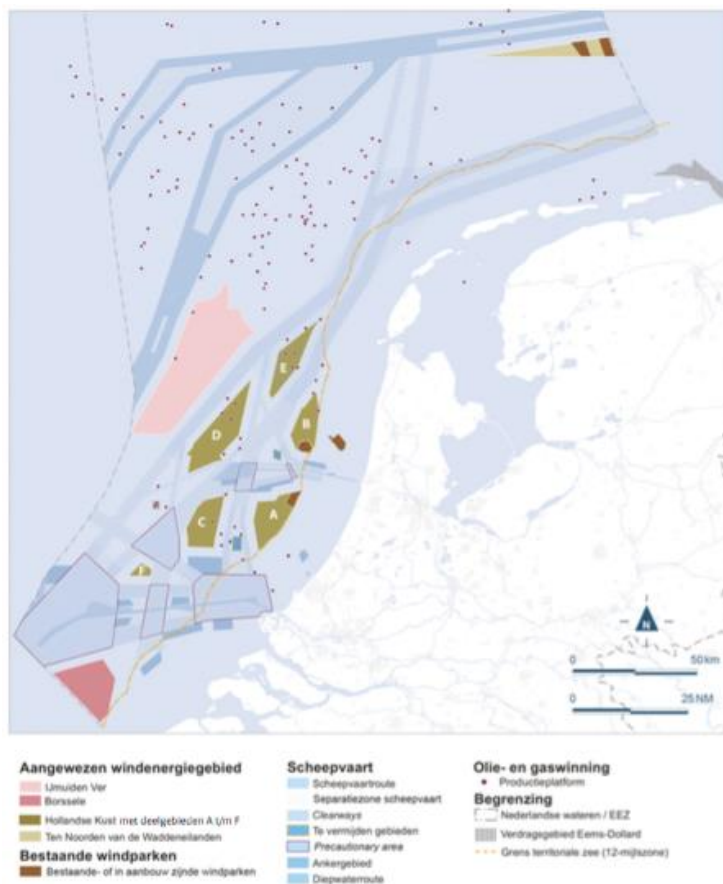


Source: Notitie reikwijdte en detailniveau (2015).

On the map, the pink area is “Aanvulling gebied Hollandse Kust” which is divided into two sections; North and South, according to their geographical location. The green areas next to the pink areas are already designated zones for wind farm sites to be developed and are called “Hollandse kust”. In the north area of “Hollandse kust”, one wind farm has already been build “Prinses Amalia” wind farm (purple zone). East of the designated area “Aanvulling gebied Hollandse Kust (North)”, the wind farm “NoordzeeWind” is already in use. In the southwest area of “Hollandse kust” one wind farm has already been build; “Luchterduinen”, which is also visible from the coast of Zandvoort. “Hollandse kust” also compromises four

other areas west to the green areas shown in figure 11. As the name suggests, “Aanvulling gebied Hollandse Kust” is an additional part of the zone “Hollandse Kust” (aanvulling means additional in Dutch). The zone “Hollandse kust” was designated as an approved possible building site for wind farms on 26 September 2014 in the final setting of the Rijksstructuurvisie Wind Energie op Zee (2014) (National Structure Plan Offshore Wind Energy). The National Structure Plan Offshore Wind Energy also assigned an area north of the Netherlands “Noord van de Waddeneilanden”. And more previously, in the Nationaal Waterplan (2009) (National Waterplan), two large zones were assigned to be building sites for wind power; “IJmuiden Ver” and “Borssele”. See also figure 11.

Figure 11: Map of assigned wind farm building zones



Source: Notitie reikwijdte en detailniveau (2015)

Within these designated zones the national government assigns lots, where actual wind farms can be built by a developer who has won the tender and then has a monopoly within



that area to build and is guaranteed access to subsidies for a fixed period (15 years).

While the development of wind farm “Luchterduinen” within the zone “Hollandse kust” was not received with joy by many members of the community in Zandvoort, the real commotion started with the Notitie Reikwijdte en Detailniveau (2015) (Intention declaration of the Structure Plan “Aanvulling gebied Hollandse kust”). As said, in 2014 six zones called “Hollandse kust” were assigned in the North Sea to be designated areas of wind power development offshore. The goal was to make preparations for the development of a couple of large wind farms, instead of smaller wind farm development, which could be connected to certain standard electricity platforms to connect the wind farms to the electricity network onshore. These offshore grids would have a capacity of 700 MW and on the basis of the Electricity Act of 1998, TenneT is appointed as the offshore grid operator (Notitie reikwijdte en detailniveau 2015).

Again the choice for cost efficiency was leading here and of the six zones appointed in the Rijksstructuurvisie Wind Energie op Zee (2014), the two nearest to the shore were most interesting for development according to the national government because development here would be less expensive than in the other four zones further offshore of “Hollandse kust”, mainly because the sea is deeper and the cables to connect the wind farms to the onshore electricity network have to be longer. The problem however with assigning these two areas as the most interesting and cost-efficient options for wind power development was that both are too small to be connected to several standard 700 MW offshore platforms. Expansion of these zones would be necessary to connect more wind farms to the standard platforms and through the economy of scale principle reduce costs. A feasibility study investigated several areas near shore and out of seven investigated zones, two were appointed to be most cost effective and least disruptive to other functions in that area of the sea (fishery, recreation, military practice zones, oil and gas extractions, sand extraction, nature reserves and shipping). The two new areas were the ones next to the most western zones of “Hollandse kust” and were assigned as “Aanvulling gebied Hollandse kust” as can be seen in figure 10. The other five options which were researched to be possible building sites were much closer to the shore (starting from 3 nautical miles (NM)). These areas however

were not chosen because the estimation was that the possible impact would be too big for the coastal communities. Building wind farms at a distance starting from 3 NM would be cheaper, but the possible impact on tourist behaviour, shipping and fishery for instance would be much bigger than building from 10 NM. Again, on the basis of a cost-benefit analysis, the decision was made to study the feasibility of building from 10 NM offshore and not from 3 NM (Reactiedocument op zienswijzen en adviezen 2016).

## 7.2 How did the local community experience the development of “Aanvulling gebied Hollandse kust”?

Before the areas of “Aanvulling gebied Hollandse kust” can formally be zones for wind power exploitation, the forming of the Structure Plan (2016) “Aanvulling gebied Hollandse kust” has to go through three phases; intention, draft structure plan and structure plan. Phase one, where the intention was communicated to all stakeholders to mark these zones as wind farm building sites started at the beginning of 2015. Between the 24<sup>th</sup> of April and the 4<sup>th</sup> of June, stakeholders were invited to look into Notitie Reikwijdte en Detailniveau (2015) (intention) and give their vision on the plans. Stakeholders were coastal municipalities, provinces, civil society organisations, branch organisations, entrepreneurs and citizens. The Intention Plan (2015) could be seen on the internet, at town halls and during three meetings. In August 2016 the national government replied to the opinions and stands from the stakeholders and simultaneously came with the Draft Structure Plan (2016). In phase one, 528 viewpoints (399 from citizens) were submitted and stakeholders from Zandvoort submitted 63 viewpoints (Reactiedocument op zienswijzen en adviezen 2016). These viewpoints were categorized into seven stands: necessity of wind energy, use of alternative locations, the importance of a free horizon, consequences for the regional economy, leisure and tourism, ‘shipping, fishery and boating’, nature and environment and the coordination by the national government on the process of communication.

Over 200 viewpoints questioned the necessity of wind energy in general, because wind power is too expensive and/or because other sources of more efficient ways of generating renewable energy would probably be available before 2023. The response of the

government on this issue was to point towards the European agreements to generate 14 percent renewable energy by 2020, to reduce global warming and to be less dependent on fossil fuels from unstable regions. Large offshore wind power development is, in this stage, one of the cost-effective ways to reach these 2020 targets. Without subsidising these projects, wind power can never become an economy of scale where costs are reduced because of the large output of wind and where wind power becomes competitive to energy from fossil fuels.

Critique on the coordination by the national government of the process is interesting here since this directly refers to the use of the community policy information distribution. Several viewpoints criticize the way the national government communicated about the policy development in an early stage or better said, the lack of communication. What also is mentioned is critique on the change of plans, where the government first only appointed zones outside the nautical 12-mile border, where visibility of wind turbines would be less clear, now the change is made to build within this border. To some, this directly affects the reliability of the government and the trust in public administration. The government states that all plans were communicated in an early stage, and does not agree to the statement it lacks reliability because of the change of plans. The National Water Plan (2009), where the importance of building wind farms outside the 12-mile border in order to keep a free horizon was emphasized, was adjusted because, according to the national government, this change of plan is of national importance and therefore justified.

Also, viewpoints that are related to shipping, nature and environment interests were refuted by the national government but the main concern and subjects of viewpoints for the communities of coastal towns was the possible economic consequences the building of wind farms within the nautical 12-mile line would have.

Three categories of viewpoint are related to this issue; the importance of a free horizon, use of alternative locations and consequences for the regional economy. Building in the new appointed zone would imply a bigger change of the coastal scenery for Zandvoort. The

assumption is made by the municipality, many residents and entrepreneurs that tourist visits would decrease because most people would not be pleased looking at these wind farms and thus would go to other places to leisure. This would mean a decrease in economic activities and a decline in employment. The coastal municipalities and other stakeholders even engaged in on a joint effort to change the plans and build only in the designated zone “IJmuiden ver”, beyond the view from the coast. This group is called ‘Ver-zet IJmuiden’ and still is active today. Their argument is that building at “IJmuiden ver” would be much better and worth the costs (although they claim the costs of moving all building plans to “IJmuiden ver” is much lower than estimated by the government) then building within sight (verzetwindmolens 2016).

Likewise, more than half of the submitted views were related to the importance of a free horizon. Within the ‘Randstad area’ the coast is the only place with a free horizon, these people enjoy the view and to them it is part of the cultural historical value of the North Sea. Building outside the view of the horizon would be acceptable to the people who submitted these viewpoints. The response of the government was that the development of renewable energy and the building of offshore wind farms is more important than the maintaining of a horizon free view. By grouping the wind farms to certain zones, only giving permits to large offshore parks and consequently keeping the costs of development low, the government accomplishes the maintaining of a free horizon in other parts of the coast. The expanding of the zone “Hollandse kust” with “Aanvulling Hollandse kust” does not imply that more wind turbines can be seen at more locations. Since “Aanvulling Hollandse Kust” lies directly next to “Hollandse kust” it would imply an increase of visibility at that location, not an increase of the visibility of wind farms on the total horizon (Draft Structure Plan 2016).

The response of the national government to the concerns about the consequences for tourism, leisure activities and the regional economy was to look into these economical concerns before publishing the Structure Plan (2016) and outsource additional research (perception research for tourists) on this matter (Motivaction 2016, Decisio 2016). As said, a part of the community of Zandvoort already attempted to present the solution; to solely build in the zone “IJmuiden ver”. The response of the government was again based on the

importance of costs-efficiency. The option of building in “IJmuiden ver” would, despite higher wind speeds at this site, be significantly more expensive than building in “Aanvulling gebied Hollandse kust”.

Simultaneously with the presentation of the Draft Structure Plan (2016) and before the additional research on the economic consequences for coastal towns, the government published research by Motivaction (2016) about the perceptions of tourists (Dutch and German tourist) and their beach visit behaviour when wind farms would be built 10 NM offshore compared to no building of wind farms within sight and building from 12 NM. The research showed that in general, 20 percent of the tourists would not be positive about building wind farms within sight, 20 percent would have a positive attitude about wind farms within sight and 60 percent does not have a (clear) opinion on the matter. Even more important, the research showed that of the Dutch tourists, 20 percent stated that they would not visit the beach of Zandvoort any more when building would take either at 10 or 12 NM offshore (no differences were found in the perceptions and visit behaviour of tourists between the two scenarios) and of the German tourists 33 percent. On the other hand, 2 percent of the Dutch tourist would on purpose visit a beach with wind farms built at 10 or 12 NM and 10 percent of the German tourist would do so. This research would imply an impact on the tourist visits in Zandvoort. However, the outcome of the results was doubted because there could be a significant difference between what people stated in doing so in the survey and what they would actually do when the plans are realized (Motivaction 2016). Motivaction (2016) therefore added another part to the research where tourists were not asked what they would do when the plans were realized, but were shown pictures of the different scenarios and asked how they rated the attractiveness of each picture and if it would affect their visit behaviour. The outcome of this research showed that only 5 percent of the Dutch tourists would visit another beach when the plans are realized and none of the German tourists. Decisio (2016) further investigated the impact on Zandvoort and other coastal communities and made a cost-benefit analysis based on economical values. Their calculations show that the costs of building only outside the 12NM border compared to adding the 10NM border would be between 693 million and 1294 million, depending on if there building would only take place at “IJmuiden Ver” (1294 million) or also outside the 12

NM border (693 million). The costs for the coastal communities however would be between 69 million and 285 million, based on the differences between the two alternatives building zones and on the differences in what one claims to do (285 million costs) and what one probably would do when the plans are realized (69 million) (Decision 2016).

Despite the critical viewpoints of many stakeholders from the coastal communities on the first phase of “Aanvulling gebied Hollandse kust” or maybe because the findings of both perception research outcomes, the Draft Structure Plan (2016) had no real changes in comparison with the first phase of intention. The only thing that did change in relationship to the impact on the view from the coast because of complaints by the community based on the experience of wind farm “Luchterduinen”, is the ambition to adjust the lights at night on the wind turbines (less bright and static instead of flashing on and off) and the use of camouflage colours on the turbines. This change will be adjusted in the ‘omgevingswet’ (Surrounding law) (RVO 2016).

Hence, the Draft Structure plan (2016) was set on the first of July 2016 and between the 19<sup>th</sup> of August and the 26<sup>th</sup> of September, the Draft Structure plan (2016) could be looked into by all stakeholders and viewpoints could be submitted. Before the actual assigning of the zone “Aanvulling gebied Hollandse kust” in a structure plan, the community was again invited to participate.

This is where the empirical research of this study starts. As can be seen in the methodological chapter, the conceptual framework of community policies and the variables, information distribution, participation and financial benefits are linked within the survey to the process of involving the Zandvoort community with the setting of a structure plan and the evaluation of the Draft Structure Plan (2016) “Aanvulling gebied Hollandse kust”. In the following section the outcomes will be presented.

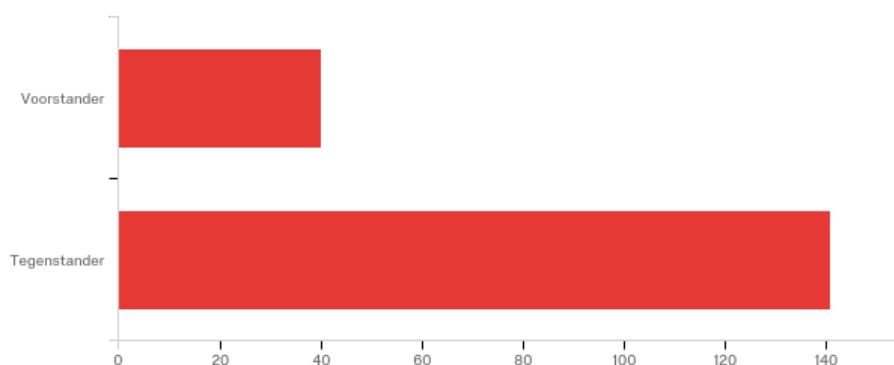
### 7.3 The possible influence of (Danish) community policies on the degree of acceptance of locals from Zandvoort

By means of a survey, the use of community policies in the planning of the wind farm building zone “Aanvulling gebied Hollandse kust” were tested on their effectiveness, when these community policies were used, and desirability, when these community policies were not used, according to members of the local community in Zandvoort. The findings of the survey will be presented here, according to their category; general information, information distribution, participation and financial benefits.

#### 7.3.1 General information

Logically, only the respondents who live in Zandvoort were selected and out of the 181 respondents from Zandvoort, 141 respondents were against the possible building of a wind farm in the zone “Aanvulling gebied Hollandse kust” (South). This reflects the overall tendency in Zandvoort, where several protest groups have emerged and also the municipality protested against the assigning of the wind farm building zone.

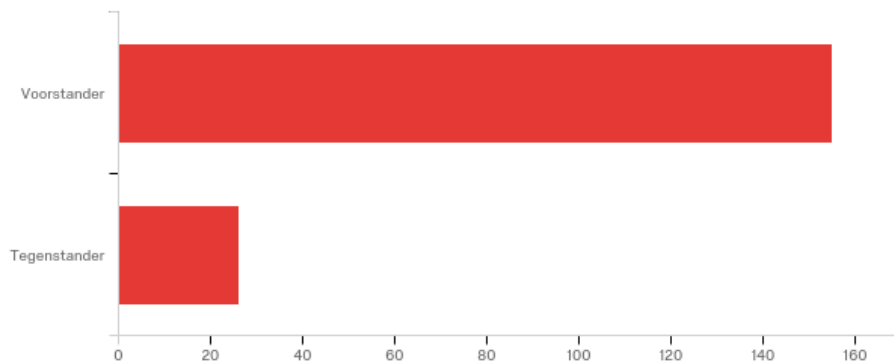
Q2 – Are you a proponent or opponent of the possible building of a wind farm in the zone “Aanvulling gebied Hollandse kust” off the coast of Zandvoort?



#	Answer	%	Count
1	(Proponent) Voorstander	22.10%	40
2	(Opponent) Tegenstander	77.90%	141
	Total	100%	181

When asking the respondents if they are a proponent or opponent of wind energy development in general, the distribution is almost the other way around. 155 proponents and 26 opponents of wind power development in general. This looks at first glance like a classic case of NIMBY, people are in favour of wind power development, just not near their home.

### Q3 – Are you a proponent or opponent of wind power development in general?



#	Answer	%	Count
1	(Proponent) Voorstander	85.64%	155
2	(Opponent) Tegenstander	14.36%	26
	Total	100%	181

What is more, the large majority of the sample (85 percent) does not work in the touristic sector of Zandvoort, suggesting that the majority of the respondents are not motivated out of economic concerns only and that the building of a wind farm in front of the coast of Zandvoort would lead to less tourism.

### Q4 – Do you work in the tourist industry of Zandvoort?

#	Answer	%	Count
1	(yes) Ja	14.36%	26
2	(no) Nee	85.64%	155

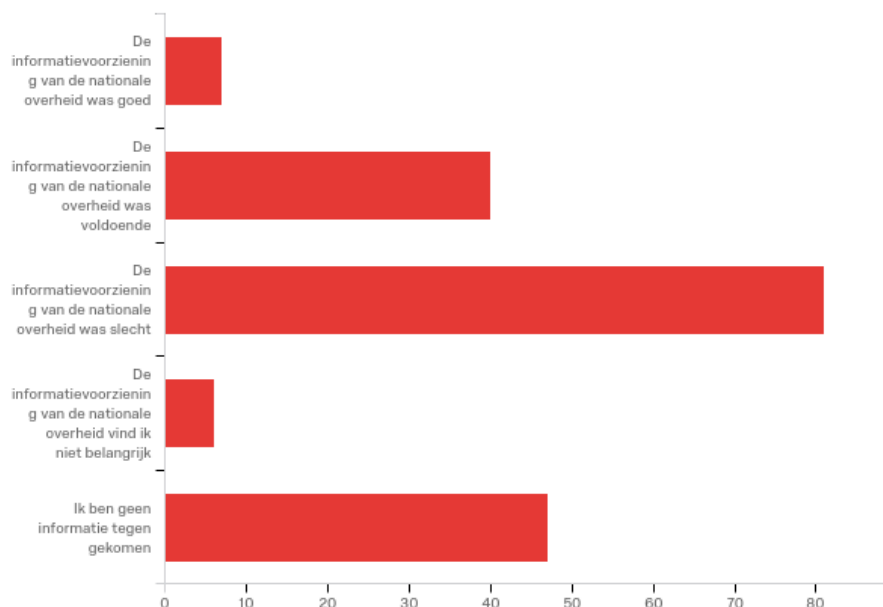


So far the general information section. The next section is about the use of the community policy information distribution. An indication is given how well the information distribution has been carried out or how well the information distribution about the assigning of “Aanvulling gebied Hollandse kust” was received by the local community in Zandvoort.

### 7.3.2 Information distribution

The first survey question was about the way the national government (the initiator of the project) provided information and how this was received by the local population of Zandvoort. What is notable here is that only 7 respondents think the provision of information by the national government was good and no less than 47 respondents did not see any information.

Q5 - What did you think of the information provision from the national authorities in relationship to the possible construction of the wind farm “Aanvulling gebied Hollandse kust”?



#	Answer	%	Count
1	(good) De informatievoorziening van de nationale overheid was goed	3.87%	7
2	(sufficient) De informatievoorziening van de nationale overheid was voldoende	22.10%	40

3	(bad) De informatievoorziening van de nationale overheid was slecht	44.75%	81
4	(not important) De informatievoorziening van de nationale overheid vind ik niet belangrijk	3.31%	6
5	(not seen any information) Ik ben geen informatie tegen gekomen	25.97%	47
	Total	100%	181

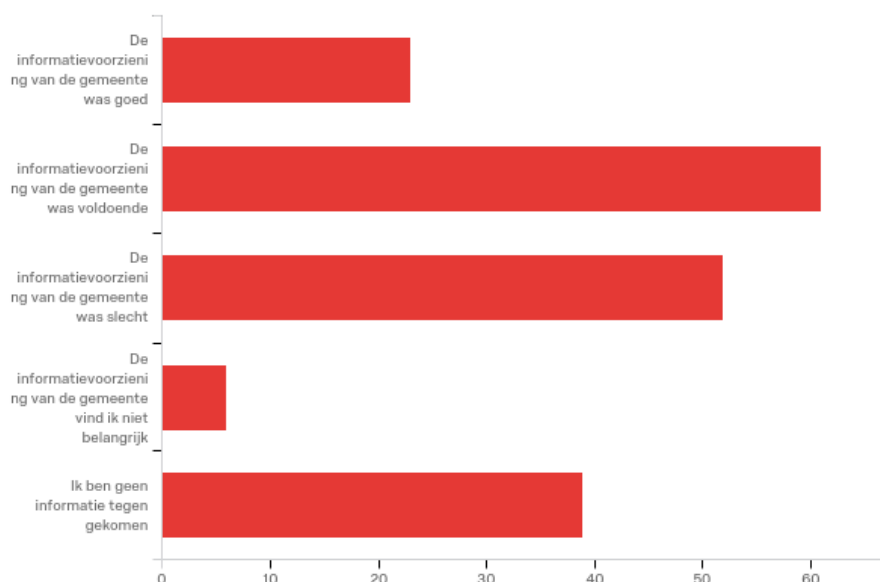
Furthermore, out of the 134 respondents that saw information provided by the government, 97 respondents (72 percent) were not influenced by the information and 29 respondents (22 percent) were even more negative towards the possible building of the wind farm after reading information provided by the government. This can imply that the information distribution by the government was not received well, or did not contribute much to raising the degree of acceptance. You could argue how much information distribution can truly change people's minds in favour of developing wind farms in front of the coast, however the fact more people were negatively influenced by the information than people who think the information distribution by the government was well, would suggest that the information distribution of the national government needs improvement.

**Q7 - Did the information from the national authorities affect your opinion with respect to the possible construction of the wind farm?**

#	Answer	%	Count
1	(no) Nee	72.39%	97
2	(More positive) ja, ik sta positiever tegenover de bouw van het windmolenpark	3.73%	5
3	(more negative) ja, ik sta negatiever tegenover de bouw van het windmolenpark	21.64%	29
4	(Yes, in another way) Ja, op een andere manier:	2.24%	3
	Total	100%	134

Information distribution by the municipality was a little bit better received, although not much. 39 respondents did not see any information, 23 respondents think the information from the municipality was good, but more remarkable, almost 30 percent of the respondents thought the information distribution provided by the government was bad, despite the similar viewpoints of many respondents and the municipality.

Q6 - What did you think of the information provision from the municipality Zandvoort in relationship to the possible construction of the wind farm “Aanvulling gebied Hollandse kust”?



#	Answer	%	Count
1	(good) De informatievoorziening van de gemeente was goed	12.71%	23
2	(sufficient) De informatievoorziening van de gemeente was voldoende	33.70%	61
3	(bad) De informatievoorziening van de gemeente was slecht	28.73%	52
4	(not important) De informatievoorziening van de gemeente vind ik niet belangrijk	3.31%	6
5	(not seen any information) Ik ben geen informatie tegen gekomen	21.55%	39
	Total	100%	181

Also, the information provided by the municipality did not affect the opinion of the majority who received the information (almost 74 percent). Thus, also the information distribution by the municipality was not very effective. Especially since the information distribution by the municipality was targeted at trying to prevent the appointing of the zone “Aanvulling gebied Hollandse kust” as a building zone, a view that is similar to many respondents. However, the information distribution by the municipality was more effective in turning people’s mind (29 respondents are more negative towards the possible building) than the information distribution of the national government.

Q8 - Did the information from the municipality affect your opinion with respect to the possible construction of the wind farm?

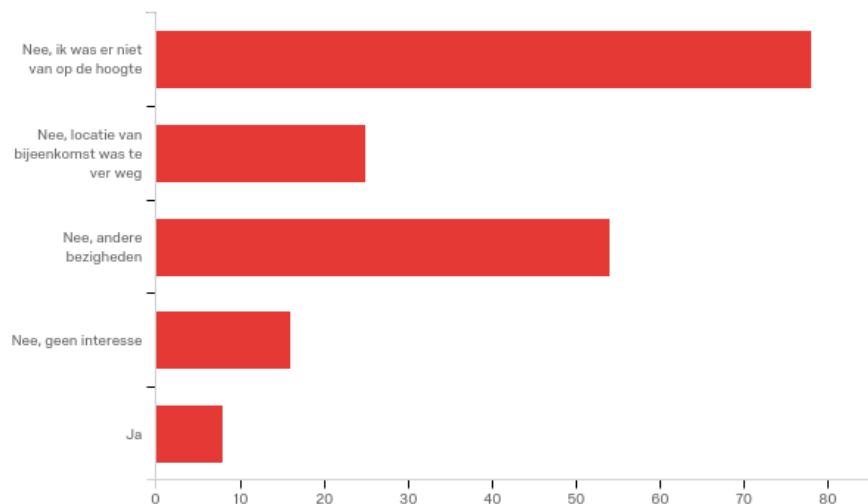
#	Answer	%	Count
1	(no) Nee	73.76%	104
2	(more positive) Ja, ik sta positiever tegenover de bouw van het windmolenpark	4.96%	7
3	(more negative) Ja, ik sta negatiever tegenover de bouw van het windmolenpark	17.73%	25
4	(yes, in another way) Ja, op een andere manier:	3.55%	5
	Total	100%	141

### 7.3.3 Participation

The community of Zandvoort was able to participate in two ways. First, there was the ability to come to three meetings in Egmond, Noordwijk and The Hague. And secondly, the Draft Structure Plan (2016) could be looked into on the internet and in the town hall and in writing a viewpoint could be submitted. Furthermore, one question was targeted at trying to uncover the desirability of participating in another way. Regarding the use of the community policy participation, many remarks can be made as well.

More than 43 percent of the respondents did not even know about the three meetings that were held to discuss the possible assigning of “Aanvulling gebied Hollandse kust” as a wind farm building zone. And, only 8 respondents attended the meetings. Out of those 8 respondents, 4 spoke up. Hence, out of the 181 respondents, only 4 truly participated in the discussion and policy making process by means of personal meetings.

Q9 - Did you attend one of the three information sessions in Egmond (August 30), Noordwijk (5 September) and The Hague (September 6) on the draft structure plan "(second phase) Aanvulling gebied Hollandse kust"?



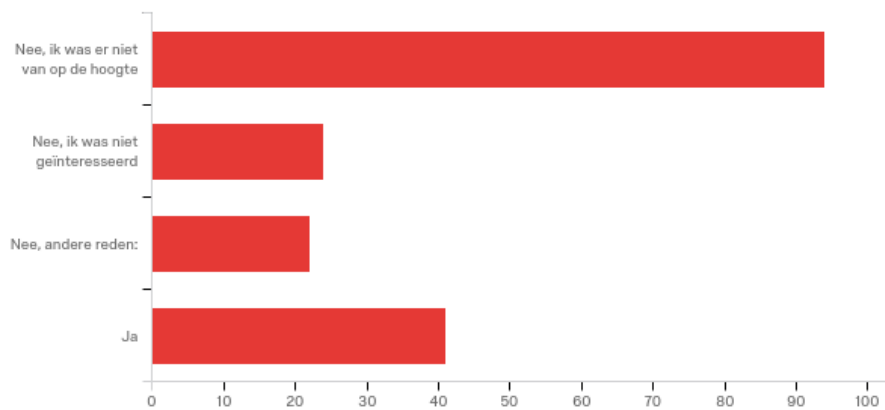
#	Answer	%	Count
1	(wasn't aware) Nee, ik was er niet van op de hoogte	43.09%	78
2	(to far) Nee, locatie van bijeenkomst was te ver weg	13.81%	25
3	(no, other activities) Nee, andere bezigheden	29.83%	54
4	(no interest) Nee, geen interesse	8.84%	16
5	(yes) Ja	4.42%	8
	Total	100%	181

#### Q12 - Did you express your opinion on one of the three information meetings?

#	Answer	%	Count
1	(no) Nee, ik heb mijn mening niet uitgesproken	50.00%	4
2	(yes) Ja, ik heb mijn mening wel uitgesproken	50.00%	4
	Total	100%	8

In addition, the other available option of participating; to look into the Draft Structure Plan (2016) in the town hall or on the internet was unknown to more than 50 percent of the respondents. However, of the 50 percent who knew this information was available, almost 23 percent (41 respondents) did look into the Draft Structure Plan (2016).

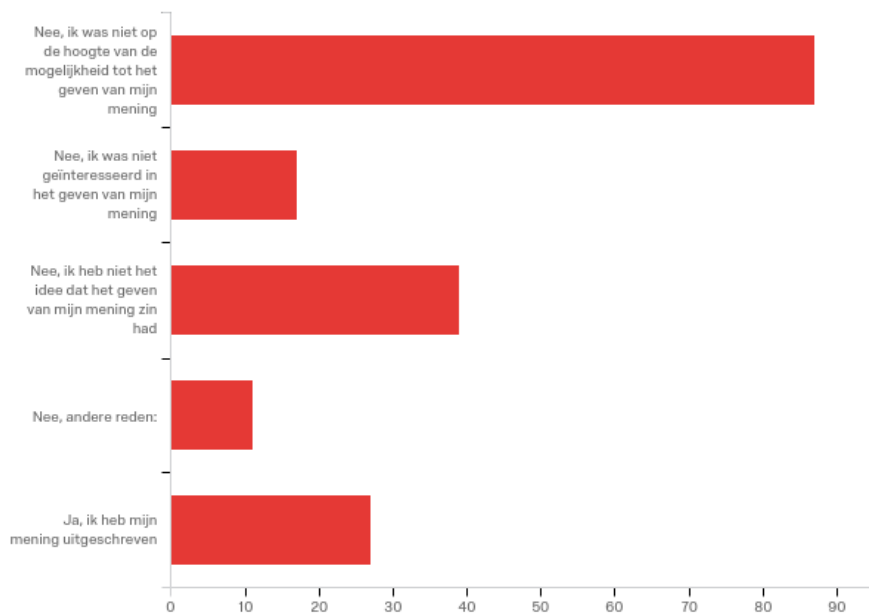
Q11 - Did you look into the Draft Structure plan "(second phase) Aanvulling gebied Hollandse kust" at the town hall or on the Internet between August 19 and September 29, 2016?



#	Answer	%	Count
1	(wasn't aware) Nee, ik was er niet van op de hoogte	51.93%	94
2	(no interest) Nee, ik was niet geïnteresseerd	13.26%	24
3	(no, other reason) Nee, andere reden:	12.15%	22
4	(yes) Ja	22.65%	41
	Total	100%	181

Remarkably, out of those 41 respondents, 27 gave their written viewpoint and thus these people truly participated into the policy making process. Out of the 8 respondents who attended the meetings, only two gave their written viewpoint (they both also spoke up at the meetings), making the total number of people who participated in the policy making process 29 out of 181 (16 percent). This is quite a lot and it shows the importance and interest of the community to speak up and participate.

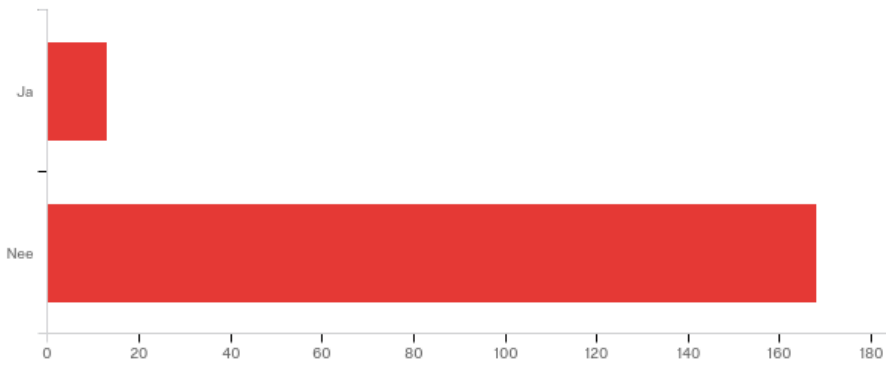
Q13 - Have you given your written opinion between August 19 and September 29, 2016 on the "(second phase) Aanvulling gebied Hollandse kust"?



#	Answer	%	Count
1	(No, wasn't aware) Nee, ik was niet op de hoogte van de mogelijkheid tot het geven van mijn mening	48.07%	87
2	(no interest) Nee, ik was niet geïnteresseerd in het geven van mijn mening	9.39%	17
3	(no use in giving opinion) Nee, ik heb niet het idee dat het geven van mijn mening zin had	21.55%	39
4	(no, other reason) Nee, andere reden:	6.08%	11
5	(yes) Ja, ik heb mijn mening uitgeschreven	14.92%	27
	Total	100%	181

On a more pessimistic note, a large majority of the respondents did not think that if they would give their opinion that it would affect the policy making process in any way (almost 93 percent).

Q14 - Do you have the feeling that your opinion (given or not) on "Aanvulling gebied Hollandse kust" will affect the final decision on the possible construction of the wind farm?

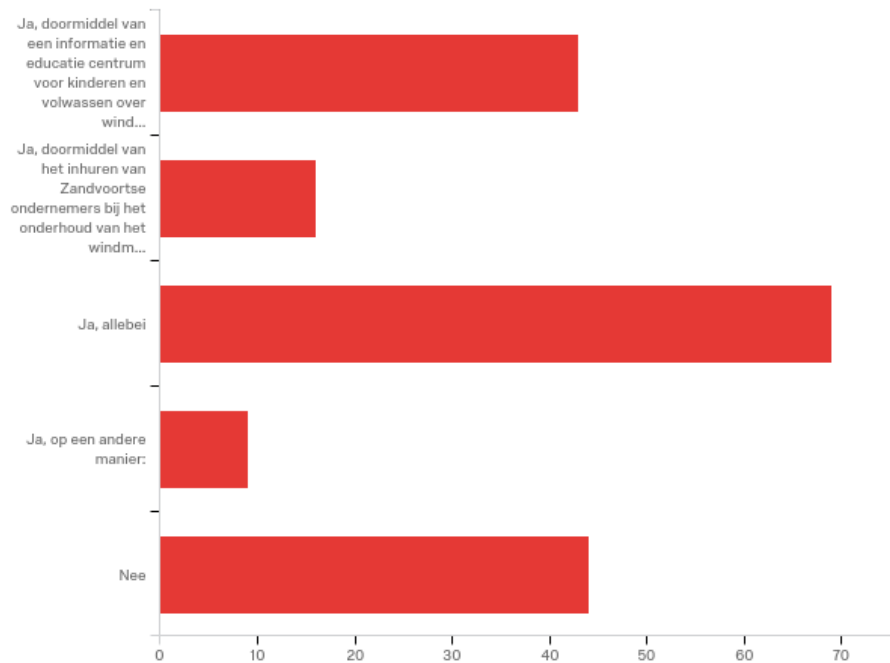


#	Answer	%	Count
1	(yes) Ja	7.18%	13
2	(no) Nee	92.82%	168
	Total	100%	181

The next three survey questions are hypothetical questions, meaning that they measure the desirability of this kind of community policy. The first question gives an indication in what way the community of Zandvoort could be involved after the construction and through this reducing the resistance. Hence, the next survey questions belong to the category participation and the other two are about the possible use of the community policy financial benefits.

Q15 - Would you like that after the possible construction of the wind farm “Aanvulling gebied Hollandse kust” residents of Zandvoort are being involved in some way to the wind farm?





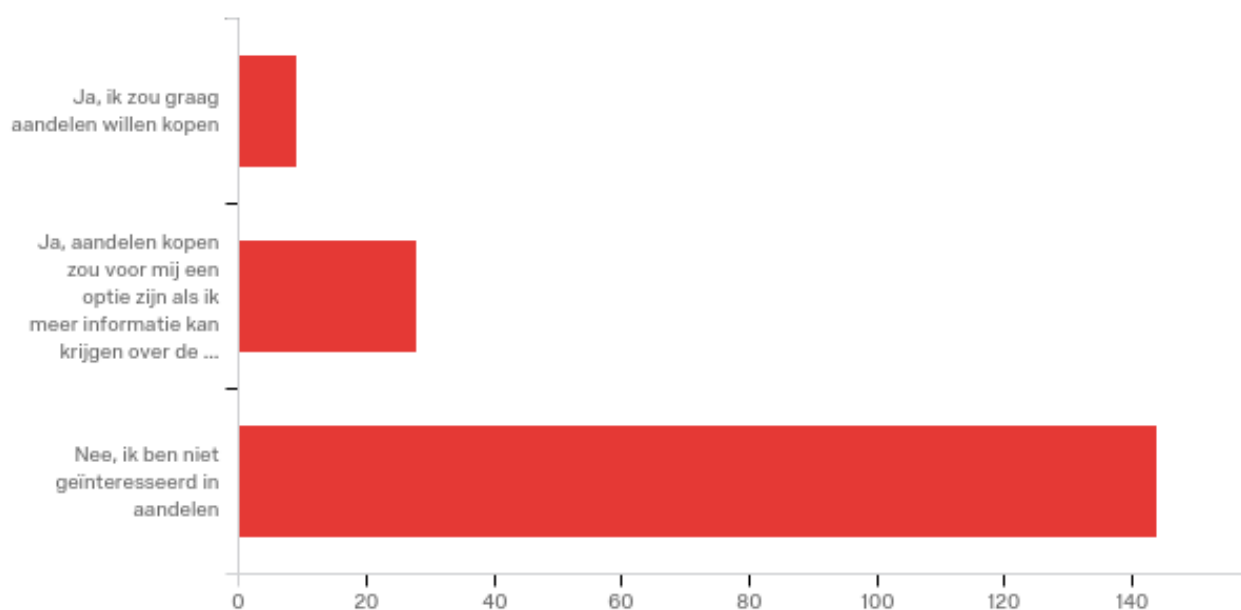
#	Answer	%	Count
1	(education and information) Ja, doormiddel van een informatie en educatie centrum voor kinderen en volwassen over windenergie	23.76%	43
2	(hiring contractors from Zandvoort) Ja, doormiddel van het inhuren van Zandvoortse ondernemers bij het onderhoud van het windmolenpark	8.84%	16
3	(yes, both) Ja, allebei	38.12%	69
4	(yes, in another way) Ja, op een andere manier:	4.97%	9
5	(no) Nee	24.31%	44
	Total	100%	181

What stands out here is that only 25 percent of the respondents were not keen on using this type of participation by the community. The overall majority would like to see that the community of Zandvoort is continued involved after the possible construction of the wind farm. Since no initiatives have been made so far on this area, it could be a chance for the government and developers to reduce resistance and increase acceptance.

### 7.3.4 Financial benefits

When asking the members of the community of Zandvoort if they would like to buy shares, remarkably many people were not interested in buying shares. A possibility could be that the respondents did not fully grasp the concept of buying shares and were afraid of losing money instead of benefitting financially. Nonetheless, 20 percent of the respondents were interested in buying shares and this would influence their opinion on the assigning of the zone “Aanvulling gebied Hollandse kust” as a wind farm building spot.

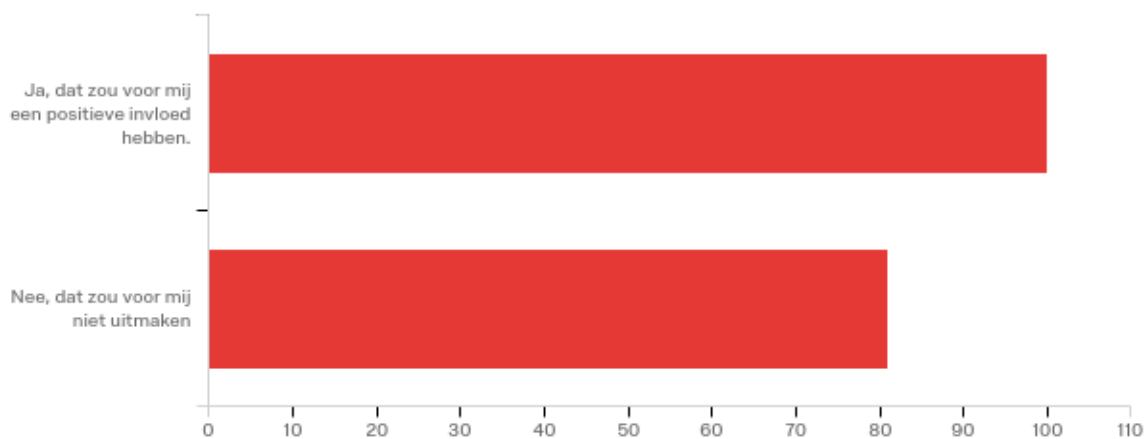
Q16 - Would the possibility of buying shares and share in the profits of the wind farm “Aanvulling gebied Hollandse kust” influence your opinion about the possible construction of the wind farm?



#	Answer	%	Count
1	(yes, would like to buy shares) Ja, ik zou graag aandelen willen kopen	4.97%	9
2	(yes, when knowing more information) Ja, aandelen kopen zou voor mij een optie zijn als ik meer informatie kan krijgen over de eventuele risico's, kosten en winsten	15.47%	28
3	(not interested) Nee, ik ben niet geïnteresseerd in aandelen	79.56%	144
	Total	100%	181

The fact that many people would not change their mind when the option of buying shares was presented is even more remarkable if one looks at the outcome of the last survey question. 55 percent of the respondents answered to show less resistance when a part of the revenue from the generated wind power in front of the coast were to be given to the municipality. Hence, more people were attracted to the option of community financial benefits instead of individual financial benefits.

Q17 - Would it influence your opinion when a part of the revenue from the wind power to be granted to the municipality of Zandvoort for the support of social services for example?



#	Answer	%	Count
1	(yes, positive influence) Ja, dat zou voor mij een positieve invloed hebben.	55.25%	100
2	(no, does not matter) Nee, dat zou voor mij niet uitmaken	44.75%	81
	Total	100%	181

## 7.4 Use and desirability of community policies

If these findings are put into the conceptual framework of 'Use and desirability of community policies' and analysed according to their indicator, it is clear to see that many community policies have not been used effectively. What is more, the overall majority does not state to be not interested in the use of community policies, implying that the use of community policies can make a big difference when used well.

Conceptual model: Use and desirability of community policies

<i>Use and desirability of community policies</i>	<b>Indicators</b>	<b>Use of community policy</b>	<b>No interest in use of community policy</b>	<b>Positive effect of use community policy</b>	<b>No or negative effect of use of community policy</b>
<b>Information distribution</b>	1	V	6 (1,90%)	7-40-5 (0) (16,51%)	81-47-97-29 (3) (81,59%)
	2	V	6 (1,86%)	23-61-7 (0) (28,26%)	52-39-104-25 (5) (69,87%)
<b>Participation</b>	3	V	16-24 (11,04%)	8-41 (13,53%)	78-25-54-94-22 (75,41%)
	4	V	17 (8,99%)	27-4 (16,40%)	4-87-39-11 (74,60%)
	5	V		13 (6,53%)	186 (93,47%)
	6	X		43-16-69-9 (75,69%)	44 (24,31%)
<b>Financial benefits</b>	7	X	144 (79,56%)	9-28 (21,44%)	
	8	X		100 (55,25%)	81 (44,75%)

Source: author's own

With indicator one, referring to the sharing of information by the national government about the project during the actual planning phase but before the final decision on the building permits (information sharing), more than 80 percent of the possible answers indicated that the information distribution by the national government has not been used according to the liking of the respondents. This could be due to the fact that the national government is the initiator of the project and that many respondents were not in favour of the national plans. Nonetheless, the information distribution can be improved for instance by motivating the policy plans better or using more and different types of information channels.

Indicator two; the sharing of information by the local government about the project during the actual planning phase but before the final decision on the building permits (information

sharing), was also not successful in the eyes of the respondents. 70 percent of the possible answers indicate an ineffective use of information distribution.

Indicator three aims to uncover whether the obstacles to participation have been reduced to increase policy making participation for the community. Here, 75 percent of the answers indicated that obstacles were not removed effectively. It is remarkable for instance that no meeting has taken place in Zandvoort for citizens to participate in, only in other coastal places such as Noordwijk, Egmond and The Hague. Moreover, many people did not know about the meetings or the possibility to give a viewpoint at the town hall or on the internet, implying that promotion for participating and thus decreasing resistance can be more effective and widespread.

Indicator four; involvement of locals in the planning process and the degree to which all viewpoints are included (participation), was also not successfully used. 75 percent of the possible answers given hint towards ineffective use of this type of community policy. Of the people who received the necessary information or have attended the meetings, just a small part actually gave their viewpoint. It is difficult to determine why this is the case, but the outcome of the next indicator suggests why so many people have not bothered to truly participate into policy making.

Indicator five; the degree to which community members actually can impact or have the feeling that their suggestions are being taken seriously (participation), shows the worst outcome of all indicators. Close to 94 percent of the respondents do not believe that their opinion would matter or that the initial plans would change. If you look at the differences in the intention plan (2016), the Draft structure Plan (2016) and the actual Structure Plan (2016), which just recently has been published (Rijksstructuurvisie Windenergie op Zee Aanvulling gebied Hollandse Kust 2016), hardly any changes are made. Thus, one could say that participation and influencing policy plans are truly hard and difficult for the average citizen or even municipality to accomplish.

Indicator six, the possibility to have continued involvement after construction of the wind

farm (participation), which was not used in the planning of the zone “Aanvulling gebied Hollandse kust” and consequently was only used here to see whether or not this type of community policy is desirable, shows that the use of this community policy can possibly contribute to the reducing of resistance. 75 percent of the respondents would like to see continued involvement of the community when wind farms will be built in front of the coast of Zandvoort.

The last two indicators of financial benefits; the possibility for community members to buy shares of the wind power project (individual financial benefits) and the possibility for municipalities to have access to funds in order to enhance local scenery, facilities and/or recreational values (community financial benefits) could also contribute to the reducing of resistance. Especially community financial benefits could have made a difference, where revenues of the wind power would go to the support of social services or enhancement of local facilities and scenery. Many respondents claim that the use of this type of policy could change their mind and thus lead to less opposition.

What is also interesting to see is that in the appendix a couple of cross tabs have been added, which show how opponents of the wind farm building zone “Aanvulling gebied Hollandse kust” are sensitive for the use of certain community policies. Appendix one for instance shows that 50 percent of the opponents of “Aanvulling gebied Hollandse kust” could change their opinion when a share of the profit would go to the municipality. And appendix two shows how also how to many proponents of the development “Aanvulling gebied Hollandse kust” the information distribution by the government could be improved. Furthermore, appendix three shows that many opponents of “Aanvulling gebied Hollandse kust” are not opponents in general, indicating the important role of the institutional arrangements and governmental agencies to facilitate participation and taking on a collaborative approach to planning.

All in all, to answer the sub-question: *could the local opposition have been reduced when the Danish community policies were applied to the development of the offshore wind farm*

*building zone “Aanvulling gebied Hollandse kust” in the Netherlands?* The answer is yes. A part of the respondents has shown that resistance could be reduced when certain community policies are applied, likewise as they are being used in Denmark. What is more, few respondents show that they have no interest in the use of community policies, indicating the potential benefits communities and governmental agencies can have when incorporating these policies and using them effectively. However, due to the sample size and the poor representative sample, the potential of the use of community policies and the outcome of the survey only gives an indication on whether the use of community policies is helpful in the increasing of acceptance in Zandvoort.

## 7.5 Discussion on transferability

In this thesis, some of the success factors of Denmark’s wind power development and some of the failures of Dutch wind power implementation have been uncovered. While many aspects contribute to the success and the failures of both countries, the focus of the analysis was on the differences in use of community policies. Clearly, Denmark has made use of many types of community policies, while in the Netherlands the use of all three types of community policies and the involvement of communities in the planning of wind energy has just recently taken place. Moreover, Denmark has a very high percentage of wind power on the total use of electricity in contrary to the Netherlands. In that sense, the hypothesis; *“the more community policies are used in the development of wind energy, the less resistance on the local level will occur”* is true, and you could say the development of wind power in Denmark went a lot faster with less resistance because of the involvement of the communities. In the Netherlands, development went slow, partly because many communities delayed planning and were not keen on wind turbines in their neighbourhood because they did not receive any benefits. Although it is hard to solely judge the success and failure of Denmark’s and the Netherlands’s wind power development based on their use of community policies, you could say that local acceptance will rise when community policies are used. The case-study has also shown that community policies can reduce resistance and contribute to the acceptance of wind power deployment in the community of Zandvoort if they are well put in place and effectively used. Moreover, when they are not used well,

resistance is more likely to grow instead of reduce. Likewise, other (Danish) community policies, which were not used in the planning of wind power in Zandvoort, showed their potential in rising the degree of acceptance. People seemed more positive towards the development in front of the coast when they or the community would benefit financially and are involved after the construction.

Hence, the goal of this thesis was; *“to uncover the link between wind power development and the use of community policies and to see if and how these policies can be transferred from Denmark to the Netherlands.”*

While we have uncovered the link between wind power development and the use of community policies, we still have to see if and how these Danish community policies can be transferred to the Netherlands.

In order to determine if Danish community policies can be transferred to the Netherlands, we have to determine what exactly will be transferred and to judge to what extent policy transfer of community policies can take place. With Mossberger's & Wolman's (2003) criteria for the assessment of potential policies that should be transferred (similarity of problems and goals, policy performance and the difference in setting) together with the constraining factors Dolowitz and Marsh (2000) present, the extent to which Danish community policy can take place and be successful in the Netherlands, can be examined.

In the previous section of this thesis, it has become clear that both Denmark and the Netherlands have the same goals when it comes to wind power development. Although the ambitiousness of the goals is different, both countries try to enhance their domestic renewable energy production in order to reach the 2020 goals. And in both countries, wind energy has to play a significant part in the realisation of these goals. When it comes to having the same problems, the situation is different. The realisation of these goals have proved to be difficult in the Netherlands, where Denmark on the other hand, shows rapid implementation rates of wind power, the Netherlands did not. Part of the problem and the focus of this analysis, is the resistance communities show when they are confronted with wind power development in their neighbourhood in the Netherlands. In contrary, local



resistance is less common in Denmark, because of the use of community policies. Hence, Denmark has already a solution to the Dutch problem related to wind power implementation.

The performance of community policies in Denmark has been highly successful. Many communities were not only informed correctly and in an early stage, participated to the full possibilities and gained financially, they were often also the initiators of wind power implementation. Nowadays, the Law on the Promotion of Renewable Energy is in place to make sure communities are involved or are compensated because of the building of wind turbines within their neighbourhood. Furthermore, you can say the policy performance of community policies has been successful in Denmark. Most community policies are even anchored in the Law on promotion of Renewable Energy, which gives clarity to communities, developers and governmental institutions. Simply put, in order to reduce local resistance, the Netherlands has to develop laws where involvement or compensation of communities is well arranged, likewise to the Danish Law on Promotion of Renewable Energy. This law is clear on what it aims to achieve and how communities should be involved, making the complexity of the transfer not that difficult, you would say.

However, to successfully transfer community policies, it is very much dependent not just on the adoption of a law, but also on recognising the differences in setting between Denmark and the Netherlands. Obstacles such as decision structures, lack of information, costs, ideologies, narrow organizational goals, fear of consequences, institutional and cultural differences and competence of implementation agents hamper policy transfers. Likewise, Dolowitz and Marsh (2000) point to constraining factors for successful policy transfer such as; ideological variance, path dependency, institutional and structural barriers and a shortcoming of resources for implementation (such as bureaucratic, technological, political and economic).

While Hofstede (2010) and Esping-Anderson (1990) have shown that both countries are quite similar when it comes to certain cultural habits and organizational structures, the differences in the setting of wind power development are also quite evident. In the Netherlands, the dominance of the national government and the SER creates a strong

centralized economic approach to renewable energy planning, focussed on large business partners instead of communities. The wind power revolution of Denmark has been based upon planned intervention and public ownership but is neither a grassroots initiative top-down centrally planned state process.

Moreover, municipalities in Denmark have large independence of policy design and have financial means to execute these policies. However, these municipal policies have to be embedded into the national framework. The cooperative relations within the renewable energy sector could also be characterized as part of Danish culture within (civil) society. The extent to which people are involved in different forms of associations, shapes overlapping and complex relations of identity formation.

In the Netherlands, this is quite the opposite. The role of communities has mostly been limited to negative influences on wind power development through protesting on siting and development. A collaborative approach with communities is almost absent and thus the ideological differences on how to effectively deploy wind power are big. The market-orientated policy culture on wind power development within the Netherlands can be seen as an ideology, making the transfer of Danish rules ensuring the involvement of communities embedded in the Dutch context a more difficult task. It requires a shifts in thinking by Dutch policy makers to approach planning of wind power as a collaborative task instead as a top down planning arrangement, where market parties have to find solutions to resistance themselves. The agents of transfer in the Netherlands would most logically be from the Ministry of Economic Affairs, since the bulk of wind power policies in being made here. As can be seen, their focus is on creating cost-efficient policies, not so much on the involvement of communities. Consequently, the incorporating of community policies by these agents will probably prove to be difficult.

Furthermore, the incorporation of the policies is eventually taken place on the local level. Local authorities are often overlooked however, they are the senders, receivers and producers of information. In a sense, all policies are local because they are contextually specific meaning that impact and characters are grounded in their delivery and development (Peck & Theodore 2010). In Denmark, municipalities can call on a green scheme subsidy to

increase acceptability and have been part of renewable energy deployment for decades. Municipalities in the Netherlands on the other hand, were never really took part in renewable energy development planning. And, as can be seen in the case-study, they even hamper development. They are not offered tools by the national government to increase acceptability, instead they increase resistance. Although in Denmark, ownership laws are reduced, community policies are less common and market orientated policies, especially when it comes to the development of offshore wind farms are being used more often now. These ownership laws on the other hand, gave critical momentum to collective and localised forms of ownership that have long-lasting effects. People in Denmark are more used to wind power development in their neighbourhood and have been shown the advantage of development in their neighbourhood.

However, the difference in setting between Denmark and the Netherlands also comes to play in another way. Most community policies in Denmark have been used for the development of small-scale wind power on land. In the Netherlands, wind power is often being developed now on a large scale, especially offshore. Using Danish community policies of small scale on land wind power development, for Dutch large-scale wind power development is somewhat tricky. Although, this study is not solely focused on the transferability of Danish community policies for the reducing of resistance in Zandvoort, and Danish community policies can also help with the improvement of development on land in the Netherlands.

Nonetheless, to some extent the Danish community policies are already used in a different way in the Netherlands. Information distribution, participation and financial benefit policies are all being used in the Netherlands, although they are not developed by the national government but by NGO's and developers themselves, probably to improve implementation rates and to enhance acceptance. They have set-up a code of behaviour for the development of wind power on land in order to create a dialogue with the involved stakeholders. Municipalities and other governmental agencies are mostly absent when it comes to the exploitation of this code. Local governmental organisations are not officially part of the code of behaviour although it is stated within the code that they should

participate with the set-up of a participation plan. In the case of Zandvoort, the total opposite has happened and instead of increasing acceptance, the municipality has joined the resistance, showing that making a code of behaviour does not enforce change of behaviour in every case. And although policy adaptation can lead to higher chances of success, because of the importance of the specific factors on location, the voluntary nature of the use of community policies does not seem to work in this stage when it comes to offshore development in the Netherlands and the acceptance of wind power by the coastal communities.

It almost seems like a 'quick fix' by the Dutch national government to increase public involvement by making use of platform participation in the planning of the wind farm building zone "Aanvulling gebied Hollandse kust", without actually using the suggestions made by community members and making sure the community has the feeling they can actually influence the policy making process.

All in all, the transferring of Danish community policies to the Netherlands is possible although the chance that they would succeed here is dependent on many factors. It is not just a case of incorporating a new law here to ensure community involvement, it would require a shift in ideological cost-efficient thinking to a more collaborative approach of spatial planning. Given the big role of large market business partners in the planning of energy, a switch to more community orientated and for market parties more expensive policies, would not be easy or without resistance.

## 8.0 Conclusion

Like always, at the end of a thesis the conclusion is given. It is the sum where all parts should fall together. In the field of sociology, where I had my first university degree, scholars argue that human behaviour is shaped by social structure and society is seen as more than the sum of individuals. This could imply that the sum of a thesis is worth more than its parts. Let us see if the conclusion here can give such a sum and transcend just the sum of parts.

The aim of this thesis was to analyse the use and importance of community policies in the development of wind energy, to understand how it can help create acceptance among the local population and to see how the Danish experience with the use of such policies can be helpful for the Netherlands, and if so, how they can be transferred from Denmark to the Netherlands. In doing so, the main question was:

*“Can Danish community policies help the development of wind energy in the Netherlands?”*

The answer to the main question was given through first analysing what incorporates community policies. It was argued that community policies could be split up into three variables that define the extent to which community policies are used: information distribution, participation and financial benefits. From here, the extent and way these community policies are used was researched in two ways. In the first part, through a desk study, the use of community policies throughout history and how they are used in both countries nowadays was analysed. Moreover, in this part the overall setting of energy planning in Denmark and the Netherlands was analysed in order to see which other factors have contributed to or prohibited the development of wind power and how they can be influential for the transferring of Danish community policies to the Netherlands.

In the Netherlands, the national government has created a strong centralized economic approach to (wind power) energy planning. Partnerships are made between big business partners in order to steer up implementation of wind power instead of collaborating extensively with local communities in order to increase acceptance and increase implementation. Exemplary for this approach is that the forming of (renewable) energy

policies are mainly done by the Ministry of Economic Affairs. Cost efficiency and minimizing expenses are most important. High wind speeds calculations on suitable sites are more important than preferences of scenery by locals and the building of wind farms out of sight.

Moreover, governmental support and subsidies for community initiatives of wind power development can rarely be seen. The SDE+ for instance, the main tool to reach the 2020 targets set by European agreements, is not accessible for private investors. And, if communities despite the unfavourable institutional setting they act in decide to initiate development, they are faced with strong competition by these big energy market players who are subsidized by the national government.

On the other hand, the use of community policies is not totally absent in the Netherlands. Only recently (2014) the “Nederlandse Wind Energie Associatie” (Dutch Wind Energy Association, DWEA) in cooperation with some Dutch NGOs (Greenpeace, “Milieudefensie”, “ODE decentraal”) have developed a code of behaviour on involvement and participation for wind energy on land. The code implies that developers initiate to involve the neighbourhood in an early stage of development. For every new project, stakeholders (citizens, municipality) are invited to start a dialogue and sketch a plan in what way participation can take place. The use of the code and the extent to which they make use of community policies can be divided into initiating participation by communication (information distribution) and financial participation (financial benefits). An evaluation of this code (Bosch & van Rijn 2015) has shown that communities appreciate the use of these community policies and most locals develop a slightly enhanced form of acceptance when the code has been applied during the development of wind power in their neighbourhood.

However, local governmental organisations and municipalities are not officially part of the code and show little interests in doing so. Although the definition of community policies here implies that community policies are targeted at involving the local community and can either be formed by the (local) government or the wind power developer, it has been shown that the siting and building of wind farms and the degree to which local acceptance will take place is heavily influenced by the governance form or institutional arrangements of the country or region (Wolsink 2000, Healey 2007, Wüstenhagen, Wolsink & Bürer 2007). To resolve issues related to the significance of the landscape quality and the scale of the wind

power projects, local factors should be recognised and dealt with in a collaborative approach. And, the advantage of using a collaborative approach is the strengthening of perceived justice and building of trust relationships (Gross 2007). While trust is a vital element in all siting issues, the perceived fairness depends heavily on how risks related to these siting issues are defined and how information about these risks is communicated and produced. Especially when the wind power projects are designed and built by community outsiders (Owens 2004), as is often the case in the Netherlands. The formal institutional framework in the Netherlands does not acknowledge the importance of social conditions enough. Certain management styles for instance by governmental institutions and informal contacts between these institutions and communities can contribute significantly to local acceptance, along with procedural and distributive justice.

Thus, while information distribution and financial benefits policies are used with the planning of wind farms, their power is limited, especially in offering a true form of participation in planning schemes before the actual building permit is given.

In Denmark on the other hand, the national government also has a strong role, but it is far from centralized. Danish policies go against mainstream European policies regarding the confidence in market solutions and private business ownership in particular (Cumbers 2013). The wind power revolution of Denmark has been based upon planned intervention and public ownership but is neither a grassroots initiative top-down centrally planned state process. Rather, it is a combination of state action, grassroots social mobilization and public ownership arrangements operating at different geographical scales.

Furthermore, within the planning of Danish wind power, the use of community policies is widespread. Even more, localized forms of ownership, where the community itself initiates the use of information distribution, participation and financial benefits policies, are a common form of planning. The Mittlegrunden offshore wind farm for instance, built on the coast of Copenhagen in 2001, providing 40 MW (approximately 3 percent of the capital's electricity needs), is partly owned by the community. Consequently, Mittlegrunden provides local acceptance by facilitating the ownership structure into a 50-50 split. One half was owned by the local utility company, Copenhagen Energy which is owned by the city council and the other half is owned by a cooperative of local citizens. The cooperative was organized

with the aid of the city's council energy department and the support of local residents' groups where individuals were able to buy shares. More than 10.000 residents bought shares (Sorensen, Hansen & Molgaard Larsen 2002).

And the Danish main tool to reach the 2020 targets, the Law on the Promotion of Renewable Energy, is pretty much based on community policies. Founded within this law is the option for communities to purchase shares of a wind farm when it is built within a certain range. Furthermore, if loss of property occurs within these communities, payments measures need to be ready. Also municipalities are funded to promote the use of renewables and invest in the community and thereby increase acceptance.

Likewise, but then again not likewise to the Netherlands, exemplary for the community approach and a more focused attention to energy and climate is the fact that Danish (renewable) energy planning policies are mainly introduced by the Ministry of Energy, Utilities and Climate. Thus, instead of (renewable) energy policy being part of the economic department, in Denmark, energy policies are embedded into an institutional framework where climate issues are centrally highlighted.

Looking at the differences between both countries in the use of community policies and the high implementation rates and community ownership constructions in Denmark, and on the other hand, the many delays and little involvement of communities in the Netherlands, the hypothesis: the more community policies are used in the development of wind energy the less resistance on the local level will occur, can be confirmed.

The case study also showed the potential community policies can have in the development of wind power in the Netherlands. In this part of the study, the answer to the main question was given by means of an empirical case-study, where the use of community policies with the planning of the wind farm building zone "Aanvulling gebied Hollandse kust" was tested through a survey on their effectiveness to reduce resistance and tested on their desirability by locals in Zandvoort when they were not applied to increase acceptance.

During the planning of the wind farm building zone "Aanvulling gebied Hollandse kust", two forms of community policies were offered by the Dutch national government: information distribution and participation. Through the institute platform participation, stakeholders got



the opportunity to look into plans before the decision on whether or not to build has been made (information distribution). Moreover, stakeholders were invited to participate in the planning phase and argue why the building zone should be modified or even cancelled (participation). However, the outcome of the survey showed that the use of both community policies has not been done effectively. In other words, the survey indicates that many members of the community were not satisfied with the way information was distributed by both the national government and the municipality. Moreover, although some took the effort to submit their viewpoint or attend the meetings, no viewpoints were actually used by the national government to change the initial plan. And this is reflected by the feeling many respondents have that their suggestions will not be taken seriously. In addition, the community policies that were not used in the planning of the wind farm building zone “Aanvulling gebied Hollandse kust” such as financial benefit policies and another form of participation, were overall positively received. Especially many respondents stated that their resistance would decrease if a part of the profit by the wind farm generated in front of the coast of Zandvoort would be directed towards the municipality and used for communal facilities for instance. What is more, only a small part of the respondents has shown no interests in the use of community policies, indicating the potential the use of community policies can have on the increasing of local acceptance when they are used effectively.

Thus, to answer the main question, yes, Danish community policies can help the development of wind power in the Netherlands. It obviously can be seen in the outcome of the survey but also the desk-study has shown that Dutch communities are willing to be involved into renewable energy development, or at least that the use of these policies could have made the slow and uncertain process of wind power implementation in the Netherlands a smoother process with less resistance. A general neglect of the articulation processes with other stakeholders such as the local population, in combination with the Dutch legal procedures and institutional setting, which gave stakeholders many opportunities to protest and therefore delay wind energy development, made the actual siting of windmills a difficult task in the Netherlands. Especially in the Netherlands, where the high population density implies that many wind power development projects deal with locals nearby, attention towards the use of community policies can be very helpful in the deployment of wind power. Involving communities will unlikely turn people who are

fundamentally opposed to wind power. Nonetheless, supporters of wind power in general, such as many residents in Zandvoort and respondents of the survey, may accept wind farms off the coast when they truly get the opportunity to participate and influence the design of the plan. This form of planning not only enhances the democratic legitimacy of the outcome and the process, their knowledge can improve the planning process and design of the participation process.

While answering the main question positively, it does not necessarily mean that successful Danish policies from the past and now can be transferred to the Netherlands and simultaneously Dutch wind power implementation rates will go up. The literature review of policy transfer and the discussion on transferability has shown that Denmark and the Netherlands are quite different when it comes to wind power implementation. Where Denmark's government is very supportive towards wind power implementation to make sure the not fully-grown market is able to compete with energy prices from fossil fuels and enables communities to participate, the Netherlands has a long lasting tradition in making use of market solutions to steer up development. Hence, to make sure Danish policies would work in the Netherlands, it is crucial that Dutch governmental agencies that are responsible for the development of support measures for renewables take on a more collaborative approach with communities and change the cost-effective thinking on wind power development, which still is the dominant state of mind. Apart from this, organisational wise, the Dutch national government most certainly has the organisational capacity and finance to do so. It is more a matter of choice. The implication will be that the costs of wind power development will rise on the short term, but if this means that local communities, who are affected the most by these new developments, are more satisfied and pleased with the development, it is maybe worth the effort.

## 8.1 Recommendations

Based on these findings several recommendations will be described here in order to increase local acceptance during wind power planning. First and foremost, the Netherlands has to move the development of wind power policies from the Ministry of Economic Affairs to a new to be established Ministry of Energy and Climate, likewise to Denmark. This can change the cost-effective ideological way of thinking to a more collaborative approach. On the other

hand, this is quite hard to realize and requires a fundamental shift in the way (renewable) energy policies are developed. A subtler move would be to shift the main responsibilities to the Ministry of Infrastructure and Environment, which is already in place and is less composed by economic centralized thinking and probably also to the influence of the large energy market parties.

Another way to improve acceptance is to incorporate the use of community policies into the law, likewise to Denmark. Nowadays, communities and individuals have little support grounded in the law to initiate wind power development themselves, or that they are involved into the planning making system. Making sure communities are better collaborated with and the dominant role of large businesses is reduced, requires communities to be able to use certain support systems.

A subtler change would be to improve the working of the Platformparticipation. Now, this platform does not serve as an effective way of citizens and communities to participate into planning making system. Stakeholders do get the opportunity to submit viewpoints, although these are hardly being used. Platformparticipation now more serves like an information distribution platform. Participation measures have to be improved and viewpoints of stakeholders taken more seriously.

What also could contribute significantly to the increasing of wind power development is to further extent and/or expand the 'code of behaviour' for wind power on land. This code has proven to help with the acceptance of wind power development on land already. For the national government it is quite easy to show its support for the use of this code and to make sure developers are stimulated in using this code. Moreover, developing a code of behaviour for the development of wind power offshore can increase acceptance of communities of coastal towns. This is especially important keeping in mind that offshore development is faced with the same problems of resistance as onshore development and the fact that the Netherlands will expand its offshore wind power capacity even more than onshore.

Finally, the role of municipalities is neglected in the Netherlands. Municipalities can help significantly with the reduction of resistance, while in this stage, as can be seen in the case-study, they sometimes increase resistance. Municipalities should be informed better by the

national government and foremost, get financial means to educate its residents and can get compensation when wind power development within their neighbourhood takes place. The implementation capacity of municipalities is minor and should be strengthened.

Then, further research on this matter could be to use the survey and research the sentiments present in other coastal towns that are confronted by the upcoming offshore wind power development in the Netherlands. Noordwijk for instance, is dealing with the same type of issues and a case study can broaden the findings and add to the understanding of effectively using community policies and the potential they have on increasing acceptance.

## 8.2 Reflection

All in all, the methods used in this thesis to make sure the research objective, to uncover the link between wind power development and the use of community policies and to see if and how these policies can be transferred from Denmark to the Netherlands, has been achieved, are satisfying given the time and scope of this thesis. Although certain aspects could have been researched more extensively. The analysis concerned with policy transfer for instance could have been more deeply analysed. Mossberger & Wolman (2003) and Dolowitz & Marsh (2000) now serve as an analytical benchmark to highlight certain aspects of the difference in the institutional setting between Denmark and the Netherlands. The literature concerned with policy transfer has so much more to offer, and this analysis has only scratched the surface of it. Moreover, it is a pity that the number of respondents within the case study was 181. Now, only an indication about general sentiments present among the total population in Zandvoort can be given. And interviewing some respondents, especially the ones who have submitted a viewpoint, to get a more in-depth understanding about the issues, would have been helpful in giving recommendations to the Dutch government and the way to improve public participation and increase local acceptance.

Furthermore, successfully planning wind farms and developing wind power is influenced by so many factors. Here the focus was on the use of community policies, however other aspects such as the political climate, the growth of the economy, the prices of fossil fuels, the prices of other renewable energy technologies, the liberal EU market and the

development of smart new technologies for instance can all play a big role in successfully deploying wind energy. The true influence of community policies on the implementation of wind energy is therefore very hard to uncover, although making a more comprehensive analysis and adding other influential factors to the development of wind power could have improved the analysis of this thesis.

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# 10.0 Appendix

## Appendix 1

'Aanvulling gebied Hollandse kust' Cross Tabulation(1)

		Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...		Total
		Voorstander	Tegenstander	
Zou het uw mening beïnvloeden als een deel van de opbrengst van de windenergie aan de gemeente Zaa...	Ja, dat zou voor mij een positieve invloed hebben,	29	71	100
	Nee, dat zou voor mij niet uitmaken	11	70	81
Total		40	141	181

Zou het uw mening beïnvloeden als een deel van de opbrengst van de windenergie aan de gemeente Zaa...	Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...	
	Chi Square	6,18
	Degrees of Freedom	1
	p-value	0,01

## Appendix 2

'Aanvulling gebied Hollandse kust' Cross Tabulation(1)

		Wat vond u van de informatievoorziening van de nationale overheid m.b.t. de mogelijke bouw van he...					Total
		De informatievoorziening van de nationale overheid was goed	De informatievoorziening van de nationale overheid was voldoende	De informatievoorziening van de nationale overheid was slecht	De informatievoorziening van de nationale overheid vind ik niet belangrijk	Ik ben geen informatie tegen gekomen	
Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...	Voorstander	4	10	10	3	13	40
	Tegenstander	3	30	71	3	34	141
	Total	7	40	81	6	47	181

		Wat vond u van de informatievoorziening van de nationale overheid m.b.t. de mogelijke bouw van he...
Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...	Chi Square	13,22*
	Degrees of Freedom	4
	p-value	0,01

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.



## Appendix 3

'Aanvulling gebied Hollandse kust' Cross Tabulation(1)

		Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...		Total
		Voorstander	Tegenstander	
Bent u voor of tegenstander van windenergie in het algemeen?	Voorstander	40	115	155
	Tegenstander	0	26	26
	Total	40	141	181

		Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Ho...
Bent u voor of tegenstander van windenergie in het algemeen?	Chi Square	8,61
	Degrees of Freedom	1
	p-value	0,00

## Appendix 4: survey

'Aanvulling gebied Hollandse kust'

Q1 Woont u in Zandvoort?

- ☐ Ja
- ☐ Nee

Als Nee Is Geselecteerd, En vervolgens overslaan naar Einde enquête

Q2 Ben u een voor of tegenstander van de mogelijke bouw van het windmolenpark 'Aanvulling gebied Hollandse kust' voor de kust van Zandvoort?

- ☐ Voorstander
- ☐ Tegenstander

Q3 Bent u voor of tegenstander van windenergie in het algemeen?

- ☐ Voorstander
- ☐ Tegenstander

Q4 Verdient u uw geld in de toeristische sector van Zandvoort?

- ☐ Ja
- ☐ Nee

Q5 Wat vond u van de informatievoorziening van de nationale overheid m.b.t. de mogelijke bouw van het windmolenpark 'Aanvulling gebied Hollandse kust'?

- ☐ De informatievoorziening van de nationale overheid was goed
- ☐ De informatievoorziening van de nationale overheid was voldoende
- ☐ De informatievoorziening van de nationale overheid was slecht
- ☐ De informatievoorziening van de nationale overheid vind ik niet belangrijk
- ☐ Ik ben geen informatie tegen gekomen

Als Ik ben geen informatie tege... Is Geselecteerd, En vervolgens overslaan naar Wat vond u van de informatievoorzieni...

Q7 Heeft de informatievoorziening van de nationale overheid uw mening beïnvloed ten opzichte van de eventuele bouw van het windmolenpark?

- ☐ Nee
- ☐ ja, ik sta positiever tegenover de bouw van het windmolenpark
- ☐ ja, ik sta negatiever tegenover de bouw van het windmolenpark
- ☐ Ja, op een andere manier: \_\_\_\_\_

Q6 Wat vond u van de informatievoorziening van de gemeente Zandvoort m.b.t. de mogelijke bouw van het windmolenpark 'Aanvulling gebied Hollandse kust'?

- ☐ De informatievoorziening van de gemeente was goed
- ☐ De informatievoorziening van de gemeente was voldoende
- ☐ De informatievoorziening van de gemeente was slecht
- ☐ De informatievoorziening van de gemeente vind ik niet belangrijk
- ☐ Ik ben geen informatie tegen gekomen

Als ik ben geen informatie tege... Is Geselecteerd, En vervolgens overslaan naar Einde blok

Q8 Heeft de informatievoorziening van de gemeente Zandvoort uw mening beïnvloed ten opzichte van de eventuele bouw van het windmolenpark?

- ☐ Nee
- ☐ Ja, ik sta positiever tegenover de bouw van het windmolenpark
- ☐ Ja, ik sta negatiever tegenover de bouw van het windmolenpark
- ☐ Ja, op een andere manier: \_\_\_\_\_

Q9 Heeft u één van de drie informatiebijeenkomsten in Egmond (30 augustus), Noordwijk (5 september) of Den Haag (6 september) over de ontwerpprijsstructuurvisie' (tweede fase) 'Aanvulling gebied Hollandse kust' bijgewoond?

- ☐ Nee, ik was er niet van op de hoogte
- ☐ Nee, locatie van bijeenkomst was te ver weg
- ☐ Nee, andere bezigheden
- ☐ Nee, geen interesse
- ☐ Ja

Bij nee, sla volgende vraag over.

Q12 Heeft u uw mening op één van de drie informatiebijeenkomsten uitgesproken?

- ☐ Nee, ik heb mijn mening niet uitgesproken
- ☐ Ja, ik heb mijn mening wel uitgesproken

Q11 Heeft u de ontwerpprijsstructuurvisie' (tweede fase) 'Aanvulling gebied Hollandse kust' ingezien op het gemeentehuis of op internet tussen 19 augustus en 29 september 2016?

- ☐ Nee, ik was er niet van op de hoogte
- ☐ Nee, ik was niet geïnteresseerd
- ☐ Nee, andere reden: \_\_\_\_\_
- ☐ Ja

Q13 Heeft u tussen 19 augustus en 29 september 2016 uw schriftelijke mening gegeven over de tweede fase (ontwerprijsstructuurvisie) van het project 'Aanvulling gebied Hollandse kust'.

- ☐ Nee, ik was niet op de hoogte van de mogelijkheid tot het geven van mijn mening
- ☐ Nee, ik was niet geïnteresseerd in het geven van mijn mening
- ☐ Nee, ik heb niet het idee dat het geven van mijn mening zin had
- ☐ Nee, andere reden: \_\_\_\_\_
- ☐ Ja, ik heb mijn mening uitgeschreven

Q14 Heeft u het idee dat uw mening (al heeft u die niet gegeven) over 'Aanvulling gebied Hollandse kust' invloed zal hebben

op het uiteindelijke besluit over de mogelijke bouw van het windmolenpark?

- ☐ Ja
- ☐ Nee

Q15 Zou u willen dat na de eventuele bouw van het windmolenpark 'Aanvulling gebied Hollandse kust' bewoners van Zandvoort

op een bepaalde manier betrokken blijven bij het windmolenpark.

- ☐ Ja, doormiddel van een informatie en educatie centrum voor kinderen en volwassen over windenergie
- ☐ Ja, doormiddel van het inhuren van Zandvoortse ondernemers bij het onderhoud van het windmolenpark
- ☐ Ja, allebei
- ☐ Ja, op een andere manier: \_\_\_\_\_
- ☐ Nee

Q16 Zou de mogelijkheid tot het kopen van aandelen en dus eventueel meedelen in de winsten van het windmolenpark

'Aanvulling Hollandse kust' uw mening over de mogelijke bouw van het windmolenpark beïnvloeden?

- ☐ Ja, ik zou graag aandelen willen kopen
- ☐ Ja, aandelen kopen zou voor mij een optie zijn als ik meer informatie kan krijgen over de eventuele risico's, kosten en winsten
- ☐ Nee, ik ben niet geïnteresseerd in aandelen

Q17 Zou het uw mening beïnvloeden als een deel van de opbrengst van de windenergie aan de gemeente Zandvoort wordt toegekend voor de ondersteuning van bijvoorbeeld sociale voorzieningen?

- ☐ Ja, dat zou voor mij een positieve invloed hebben.
- ☐ Nee, dat zou voor mij niet uitmaken