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Managing the relationship between wind power company and municipality

A study analyzing relationship characteristics and factors affecting the perceived effectiveness of the relationship when developing a big wind power facility

Master of Science Thesis

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DANIEL DAHLÉN JOHAN NIHLMARK

Abstract

Due to wind power promoting and stimulating strategies Sweden has gone from having a modest growth of wind power to a more rapid one in recent years. However, wind power growth in Sweden is still characterized by slowness when realizing existing wind power projects which hampers an even faster expansion. One reason for this has been ascribed the role of the municipality in regards to wind power establishments. The municipality is, mainly due to its planning monopoly and Veto power, an influential actor when developing a big wind power facility. Moreover, every municipality is unique in terms of municipal resources, wind power related experience and organizational structure. Consequently, it should be important for a wind power company to find a suitable strategy when interacting with a municipality.

The main purpose of this report has been to examine how a wind power company can improve its effectiveness in the relationship with a municipality when developing a big wind power facility. To accomplish this objective, the relationship has been analyzed and factors affecting the effectiveness of the relationship have been identified through semi-structured interviews with both a wind power company and municipalities.

Even though municipalities are objective entities the study has found a well-developed relationship to contribute positively to relationship effectiveness. Thus, a wind power company needs to strive for a relationship oriented approach when interacting with a municipality. Furthermore, wind power companies are recommended to do a thorough research of the municipality in question before initiating contact. The research should cover an analysis of the Municipal Comprehensive Plan, previous experience of wind power developments and identifying key figures affecting wind power decisions within the municipality. An early contact with the municipality is recommended along with setting up a face-to-face meeting where potential obstacles and possibilities can be discussed. Finally, the wind power company is recommended to maintain a continuous interaction with the municipality throughout the planning and permission phase to further increase relationship effectiveness.

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1. Introduction

The introductory chapter gives a description of the development of wind power in Sweden with a focus on big wind power facilities. Moreover, the background emphasizes the importance of governmental wind power stimulations and gives a broad description of the prerequisites and conditions for planning and permitting issues at a municipal level. Furthermore, issues identified in the background are problematized in the problem identification chapter and thereafter the purpose of the study is presented. The main purpose of the study is to improve effectiveness in the relationship between wind power company and municipality when developing a big wind power facility. The last part of the introduction chapter deals with necessary delimitations of the study.

1.1 Background

Sustainable energy, in particular wind power, is currently a hot subject in Sweden. In 2011 Sweden had the highest development pace of wind power, experienced so far, with an increase of 765 MW distributed over 380 wind power stations[1].

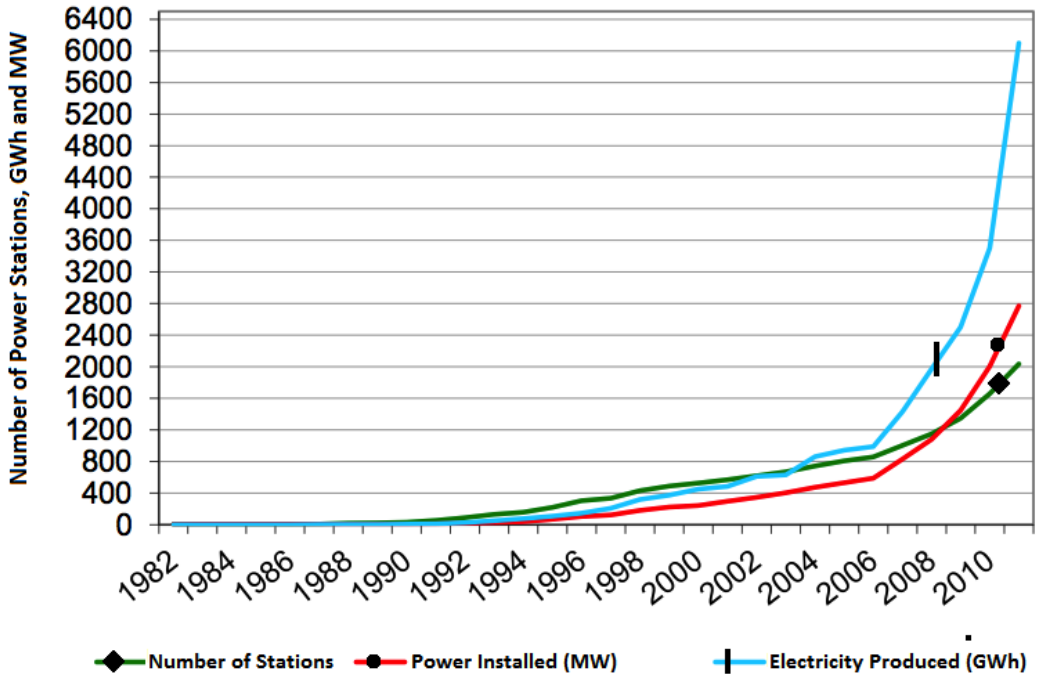

Figure 1 Wind Power development in Sweden during the years 1982-2011

[1] http://energimyndigheten.se/sv/Press/Pressmeddelanden/Kraftig-utbyggnad-av-vindkraft-under-2011/, Accessed 2012-06-11

In the end of 2011 Sweden had a production of electricity stemming from wind power at 6100 GWh, see Figure 1, which denotes a growth by nearly 74 percent compared to previous year. In total this represent 4.2% of net produced electricity in Sweden 2011[2]. At the moment wind power can be found in 154 of Sweden's 290 municipalities, where Gotland and Strömsund are the leading municipalities in terms of installed wind power. In order to meet the 2020 EU renewable energy target, where Sweden has a goal to achieve 49% energy from renewable sources, the Swedish government decided in 2009 to have 30 TWh of wind power to be installed until year 2020. This in turn gives a hint of how much wind power that needs to be installed and planned for in local municipalities.

1.1.1 Wind power stimulations

Because of these goals the Swedish government has come up with a number of different arrangements and strategies in order to improve sustainable energy growth. One part of this has been to let the Swedish Energy Agency ("Energimyndigheten") be responsible for developing tools and resources so as to help private land owners, wind power developers and municipalities in becoming more informed and educated when it comes to issues involving wind power. For this reason the Swedish Energy Agency has launched various websites such as vindval.se, vindforsk.se and natverketforvindbruk.se, as well as enabling wind power courses for County Administrative Boards ("länsstyrelse") and municipalities. Apart from collecting and spreading knowledge about wind power, The Swedish Energy Agency also promotes an increased development through supporting research in the area and by simplifying planning and-permission processes contained in the establishment procedure of wind power farms. To accomplish these tasks require cooperation between all involved actors concerning wind power projecting such as other authorities, County Administrative Boards, municipalities and wind power organizations. Furthermore the Swedish Energy Agency is supposed to have a general opinion to be pro wind power and enforcement comes all the way from the government.

[2] http://energimyndigheten.se/PageFiles/110/Vindkraftsstatistik-2011.pdf, Accessed 2012-05-24

In 2003 Sweden introduced a certificate system for the electricity market. It is a market based support system for renewable electricity production. The objective of the system is to increase production of renewable electricity with 25 TWh until 2020 compared to the level of 2002[3]. The goal of this system is to create an external synthetic demand of renewable energy in order to increase development of renewable energy sources. This green certificate system has been a key reason behind Sweden's extensive growth of wind power since 2006 (Pettersson et al., 2010).

The government has furthermore appointed four wind power coordinators. These coordinators are supposed to facilitate better communication between actors involved in wind power development. Their focus is primarily on large scale wind farms. Grants have also been issued by the Swedish Board of Housing ("Boverket") and given to municipalities in order to develop local wind power plans ("vindbruksplan").

In 2004 Sweden reserved 423 national areas, representing almost 10.000 square kilometers, for wind power development. These areas, defined by the Swedish Energy Agency, are considered to be especially suitable for electricity production using wind as source. They are based on a mathematical model in combination with a number of other criteria, which implies that a lot of other areas outside these may be suitable as well.[4]

1.1.2 Wind power planning and permission

In Sweden wind power establishments are essentially divided into six different classes of permission primarily based on the landing stage and size of the wind power facility. Two of these classes involve wind power establishments in conjunction with water: in water areas within Sweden's territorial border and out in the open sea in the economical zone of Sweden. The remaining classes embrace onshore wind power projects. These classes are referred to as Small Plants, Farm Plants, Medium-sized Facilities and Big Facilities. The general trend

[3] http://energimyndigheten.se/en/International/Instruments/The-electricity-certificate-system/, Accessed 2012-05-24

[4] http://energimyndigheten.se/sv/Om-oss/Var-verksamhet/Framjande-av-vindkraft1/Riksintresse-vindbruk-/, Accessed 2012-08-07

in Sweden is that larger wind farms are being built and capacities of wind turbines are growing (Khan, 2003). Thus most of today's wind developers are focusing their attention on Big Facilities. In more detail they are defined as two or more wind power stations with a total height of above 150 meters or a group station of seven or more plants with a total height of over 120 meters. This type of onshore establishment is essentially governed by two general laws: Planning and Building Act (PBA, "plan- och bygglagen") and the Environmental Code ("miljöbalken") (ibid). The Environmental Code handles management of natural resources and regulates how to assess the environmental and health impacts of wind power establishments[5]. According to the PBA, municipalities control the local physical planning and have the mandate to determine how much wind power that can be established on their ground[6]. Furthermore, the PBA deals with how to balance conflicting interests of land exploration e.g. wind power versus forestry.

A wind power company that intends to set up a Big Facility has to hand in an application for the Environmental Code permit ("miljöbalkstillstånd") to the County Administrative Board that has to be in accordance with these laws. The submission of this application is however obliged to be preceded by a consultation as well as the development of an Environmental Impact Assessment (EIA, "miljökonsekvensbeskrivning"). The consultation stage involves the wind developer to meet with all concerned parties of the planned project; e.g. County Administrative Board, municipality, organizations, local population; which will end up in a written consultation review that summarizes the most critical aspects of the establishment. The results from the consultation then decide on what the wind power company needs to focus on when forming the EIA. With these two documents together with other relevant and adequate data; e.g. technical descriptions, information of potential sources of waste and how this could be managed, suggestions on how the activities are to be supervised and

[5] SFS, 1998
[6] SFS, 1987, p.10

controlled; the application is ready for submission. The wind power company then has to await the decision from the County Administrative Board.[7]

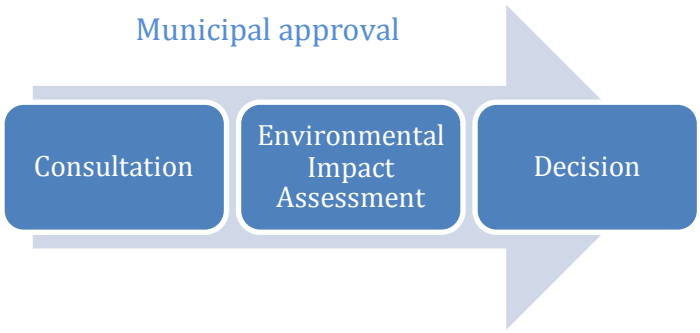

Figure 2 The general permit process of a Big Facility

The general permit process of a Big Facility is summarized and illustrated in Figure 2.

Since the first of August 2009 the County Administrative Board is however obliged to have an approval from the municipality before permitting the wind power company to initiate the establishment, often referred to as the veto right of the municipality[8]. This municipal veto can only be overruled by the Swedish government which however is extremely rare (Söderholm et al., 2007). The introduction of the veto had the intention of speeding up the permit processes within the municipality. There are no explicit restrictions attached to this veto except the general requirements of objectivity concerning municipal operations. It is however important that a municipality which has a negative attitude towards the establishment of wind power clearly states this as early as possible in the planning process. If they do not do this, the wind power company risks spending money on an unnecessary reviewing process. In a permit process of a Big Facility there is also a number of authorities that become involved depending on different circumstances of the project. Some of them, like the Swedish Armed Forces ("Försvarsmakten"), even constitute consultive bodies to the County Administrative Board and municipality. A list with the most central authorities

[7] http://www.vindlov.se/sv/Steg-for-steg/Stora-anlaggningar/Provningsprocessen/, Accessed 2012-08-25
[8] http://www.vindlov.se/sv/Steg-for-steg/Stora-anlaggningar/Provningsprocessen/Kommunens-tillstyrkan/, Accessed 2012-08-04

that can affect the planning- and permit procedure of a Big Facility is found in Table 4 in Appendix 3.

The average turnaround time from the consultation stage to decision being made at the County Administrative Board is for the moment more than a year[9]. Then there is also the possibility for concerned actors to appeal, which firstly can be done to the Land and Environmental Court ("mark- och miljödomstol") and finally at the Land and Environmental Court of Appeal ("mark- och miljööverdomstol")[10]. If the decision is appealed an added time of between half of year to a year per instance is currently to be expected[11]. Thus, it is not uncommon for a wind power company to wait several years before being allowed to begin deployment.

1.1.3 Roles and responsibilities of the municipality

Sweden has a system consisting of three democratic levels. It is divided into 290 municipalities and 20 county councils ("landsting"). For a graphical representation see Figure 3[12]. Elections to municipal assembly, county council and national parliament ("Riksdag") are held every four years.

[9] http://www.vindlov.se/sv/Steg-for-steg/Stora-anlaggningar/Provningsprocessen/Miljobalkstillstand/, Accessed 2012-08-25
[10] http://www.domstol.se/Funktioner/English/The-Swedish-courts/District-court/Land-and-Environment-Courts/, Accessed 2012-08-25
[11] http://www.vindlov.se/sv/Steg-for-steg/Stora-anlaggningar/Provningsprocessen/Miljobalkstillstand/, Accessed 2012-08-25
[12] http://english.skl.se/municipalities_county_councils_and_regions/swedens_democratic_system, Accessed 2012-08-15

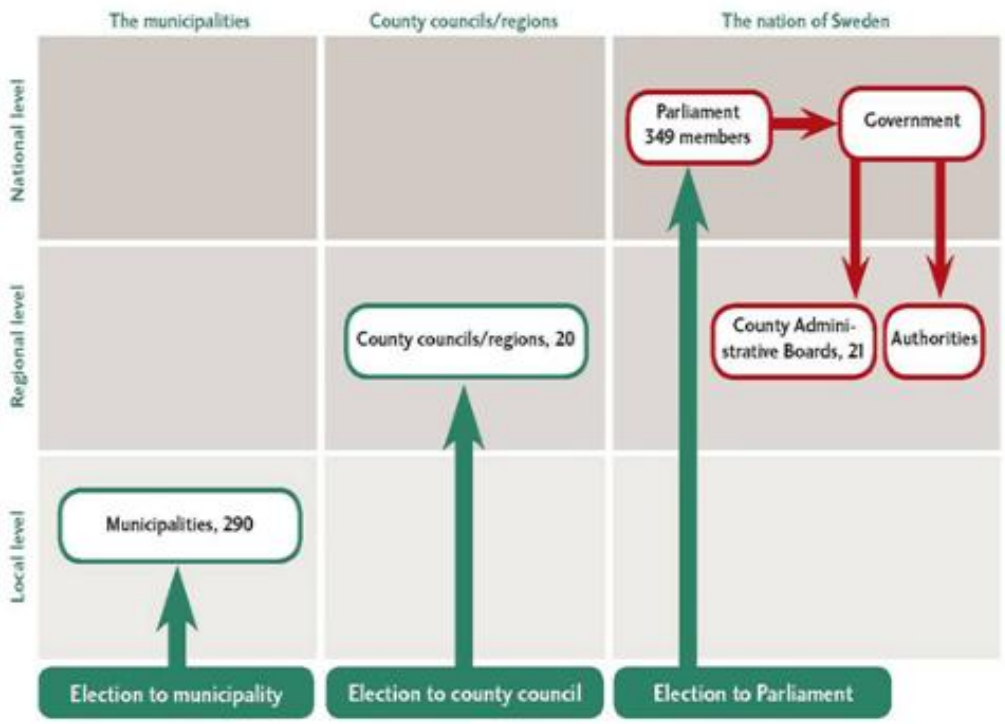

Figure 3 Democratic system of Sweden

There is no hierarchical relation between these since they have different responsibilities and have their own self governing local authorities[13]. In general county councils are responsible for health related issues while municipalities have a much broader range of responsibilities. The municipalities in Sweden are responsible for a larger proportion of public services than in most other countries and the activities are largely dependent of demographic factors such as age and health status.

In Sweden the municipalities are free to organize and allocate responsibilities between the municipal board and committees in their own way. Furthermore, communities consist of two different bodies. One is political and voted on during the election and the other one constitutes of officials. The leading committee of the political part is known as the municipal council ("kommunfullmäktige") and has the power to decide upon regulations concerning the municipality and the distribution of working responsibilities amongst the different committees and

[13] Ibid.

boards[14]. Furthermore, the municipal council is entitled to establish policies ranging from waste treatment to wind power development.

Sweden is known to have a municipal planning monopoly which has a long historical tradition, dating back at least 100 years. Over time it has also been gradually strengthened, not the least with the implementation of the so-called Planning and Building Act in 1987 (Pettersson et al., 2010). The municipality has through the PBA and its municipal comprehensive plan (MCP, "översiktsplan") two strong planning tools for localization of wind power. In each community there is a municipal council which adopts regulations and allocates working responsibilities among town boards and committees. Thus, it differs greatly amongst municipalities who have the responsibility of wind power development in their particular municipality. In general however, the building committee has the responsibility of handling building permits for wind power establishments when needed as well as whether a detailed development plan (DDP, "detaljplan") is called for or not. The MCP is a valuable tool when projects are being reviewed but the DDP on the other hand is said to be legally binding. Swedish municipalities are also confronted with the Law on municipal energy planning which states that every municipality must have an energy plan for its entire energy system (Söderholm et al., 2007). The plan should be in accordance to national energy objectives and the municipal energy policy. Furthermore the European Commission stresses the need to make national systems for enabling investments in renewable energy more efficient (Pettersson et al., 2010). This can be accomplished through faster permitting processes and enhanced policy stability.

1.2 Problem Identification

Despite all the stimulating and promoting measures that have been implemented in Sweden in recent years some argue that the growth of wind power could have been even more extensive. Most analysts agree that the relative low rate of wind power expansion has been a result of political uncertainties regarding state policies and also laws and regulations surrounding the planning and permitting

[14] http://www.vindlov.se/sv/Ansvar--roller/Kommuner/, Accessed 2012-08-15

procedures of wind power establishments (Söderholm et al., 2007). The system of the planning monopoly together with the Planning and Building Act was initially created to facilitate increased efficiency and flexibility for municipal land use planning[15]. This strong position however has been said to hamper wind power implementation mainly due to system uncertainties. This system is said to lack confidence for broad wind power implementation, making interpretations a key factor and ignoring national and regional energy objectives (ibid). A recent study revealed that the public benefits of wind power was de-emphasized at the local level, resulting in municipalities not promoting wind power in accordance with national planning responsibilities (Bergek, 2010).

Establishing wind power projects in general requires certain capabilities and specific wind power related knowledge at the municipalities. This includes handling permits and following central regulations. Sweden's 290 municipalities have different prerequisites in terms of economic growth, unemployment rates and local natural resources. Together with different political agendas and local energy policies this may develop strong incentives separated from those deriving from national energy policies (Khan, 2003). Furthermore they handle a broad range of issues varying from providing child care to making sure there are working water and sewage systems, providing good conditions for wind power establishments is only one part of their duties.

In Sweden the municipalities have veto power when it comes to giving sanction to wind power projects. This means they can, either by saying no or not responding at all, stop future projects in their municipality. This scenario demands a lot of the people working in the municipalities in terms of knowledge and time, but also makes it harder for wind power developing companies to know whether the municipality has the right prerequisites for handling the development of big wind power establishments. Furthermore, there is a rather ambiguous legal situation surrounding the municipal veto. A municipality has three choices when handling a wind power development. Firstly, it can approve the project and the establishment is allowed to continue according to plan.

[15] Vindlov.se, Accessed 2012-08-10

Secondly, it can choose to say no. This decision is final, and the wind power developer cannot appeal this decision and thus has to abandon the project. Additionally, in this alternative the municipality does not have to motivate this decision in any way. The last choice is to say nothing at all. This alternative leaves the company with a huge uncertainty concerning whether it will be approved later on or whether it is to be turned down. This is in contrast to the situation in which the wind power company deals with the County Administrative Board. In this relationship the decisions are clearly motivated and can be appealed at a court of law.

While the electricity market in general is trending towards a more internationalized scope, the permitting procedures and regulations are still considered to be largely influenced by legal cultures and national legislation (Pettersson et al., 2010). The reason for Sweden to lack national regulation in this matter is partly because of the Planning and Building Act enforcing local municipalities. This act empowers the role of municipalities in contrast to many other countries where central government policies and regulations are better communicated and implemented all the way down to the municipalities. In Denmark for example, it is much harder for municipalities to override national guidelines and energy goals (ibid). The national interests' areas for wind power stated by the Swedish government are surrounded by a special legal situation. In Sweden it is up to the County Administrative Board to make sure the areas of interest is implemented in the overview planning on local level. However, in the end it is up to the municipalities to choose if they want to take the County Administrative Board's advice or not (Söderholm et al., 2007). This results in wind power companies not being able to rely on these areas when planning for a wind farm even though they are explicitly stated for this purpose.

Another issue which creates uncertainty in Sweden is the Benefit Sharing Mechanisms (BSMs). Sweden has, in contrast to many other countries such as Norway and Denmark, not laws to regulate these BSMs. BSMs are means to assign benefits to the part of society that is affected by a wind power establishment, and thus improve social acceptance (Koebel, 2011). Other

countries have solved this issue by for example implementing laws on regulatory taxes. In Sweden however, these BSMs are implemented on a more voluntary basis. This lack of regulation creates an uncertainty which is unwanted by both municipalities and wind developers (ibid).

Another important municipal issue concerns how the local industry is affected when wind power is introduced in the community. A wind power establishment can provide opportunities for local employment and economic growth in the municipality. This however calls for a good communication and collaboration between wind power developer and municipality. The municipality needs to know what resources exist in order for the wind power company to be able to utilize it (Wettin, 2011).

The political system in Sweden adds another central dimension in the relationship between wind power company and municipality. Even though the Swedish government is pro wind power, the wills in municipalities can differ substantially. In general where the municipalities are politically pro wind the planning requirements have often been more efficient, meaning simple and flexible (Khan, 2003). On the other hand where the will is against, or non-existing, a number of difficult matters occur. The Planning and Building Act does not directly comprise an obstacle to wind establishments, rather the opposite. But as the legislation leaves much room for discretion this can be used as a force to hamper wind power development for those municipalities not wanting it (Ek, 2005). Another element of uncertainty involves the four years of office length for politicians. During one period the will can be in favor of establishments, but an election can turn the will around and thus create an obstacle for the wind power company (Söderholm et al., 2007). The new politicians can decide not to approve the project late in the development phase and the company has no other option but to suspend or cancel the project. A final political issue that can be troubling for the wind developer when interacting with the municipality concerns local resistance of the wind power establishment. Even though studies show that the public opinion in general favor wind power expansion it is not uncommon that municipalities face local opposition. Some argue that this is explained by the

NIMBY- hypothesis (Not In My BackYard), while some find this explanation too simplistic and instead ascribe the local resistance to poorly planning and communication from both wind developers and political actors (Ek, 2005). Whatever the reason is it affects the relationship between municipality and wind power company. Even though a municipality is positively inclined toward a wind power deployment in the beginning a sudden local resistance can turn their willingness around. The municipality is elected by the local population and is thus dependent on their votes, especially near a re-election period.

In summary, a wind power company has many obstacles to overcome before it can begin construction of a wind farm. Some of these hindrances the wind power company is aware of and accepts, like the environmental approval process at the County Administrative Board. Most of the complications and uncertainties of a wind power development however occur at the local level, where the wind power company is depending on the municipality to give sanction to their wind power project. Thus, it makes sense to further study the interaction between wind power developer and municipality during the planning and permission stage. After analyzing and mapping this relationship it is interesting to investigate what governs effectiveness in a relationship like this, and what a wind power company can do in order to improve it further. By managing and affecting the relationship in a proper and effective manner the wind power company might decrease the mentioned uncertainties, and thus, increase their success rate concerning the municipal approval.

1.3 Purpose and research questions

The main purpose of this study is to investigate how a wind power company can make the relationship between them and the municipality more effective, that is, result in a desirable outcome for the wind power company. In order to achieve this there is initially a need to clarify what constitutes this type of relationship and which factors that affect its effectiveness. Furthermore, the study aims to explore how the effectiveness can be improved by the wind power companies.

With the purpose of addressing the main question- **How can a wind power company improve effectiveness in the relationship with the municipality?**- the following more specific research questions need to be answered:

1. *How does the relationship look like? For example, what elements of interaction does it consist of?*
2. *What does it mean that a relationship is effective?*
3. *What are the relevant factors affecting the effectiveness of this relationship?*
4. *What can be done to improve the effectiveness of the relationship?*
5. *Are there any factors affecting relationship effectiveness which the two focal actors cannot govern?*

By answering these questions, this report will provide wind power companies, as well as municipalities, with a better understanding of the relationship and how it is affected. This can help the parties to manage the relationship in a more effective way. The development of a fruitful relationship will help both wind power companies and municipalities to reach their goals with regard to wind power expansion and also to create a better coherence to national energy objectives.

1.4 Delimitations

The study focuses on onshore commercial projects that are defined as Big Facilities[16] for two reasons. Firstly, wind power companies tend to be more interested in larger scale projects and secondly the Big Facilities category undergoes a specific handling process when it comes to permits and regulations from a municipality point of view. The thesis only covers the interaction taking place between municipality and wind power company in a development phase, a definition visualized in Figure 4.

Figure 4 Process map at Nordisk Vindkraft for the development of wind power farms

This limits the report in only covering the interaction between municipality and wind power company starting when the company has selected a suitable ground for its wind farm and reaches out to the municipality for relevant permits and consultation to where the municipality has given its approval for the project.

[16] http://www.vindlov.se/Steg-for-steg/Stora-anlaggningar/Definition-av-klassen/, Accessed 2012-05-23

2. Theoretical Framework

To be able to fulfill the purpose of the study a theoretical framework is presented. First, the framework covers the so-called Industrial Network Approach with the ARA-model since this tool is considered applicable when describing and analyzing the relationship between wind power company and municipality. Second, strategic alliances are defined and discussed. Third, to sum up the theoretical framework elements governing effectiveness in these alliances are introduced.

2.1. The Network Approach

The basic idea of the industrial network approach is that individual companies are considered to be dependent on companies within their business network (Ford et al., 2008; Hammarkvist et al., 2003; Håkansson and Gadde, 1994; Håkansson and Snehota, 1995). The network approach has been developed within the field of marketing where the focus has been on analyzing industrial (business-to-business) markets. According to this approach, in contrast to the marketing-mix approach, the network model is not hierarchically organized or dominated by a single actor but consist of a network of actors with different power structures depending on which position they have in the network (Andersson, 2000).

During the last two decades the role of business relationship in literature has gained importance (Håkansson and Snehota, 1995). It is now established that there are common features when describing a business relationship. These can be classified as structural features and process features. A business relationship, particularly the buyer-seller relationship, is characterized by four structural features; continuity, complexity, symmetry and informality. These elements describe the relationship in terms of meaningfulness for the companies, relationship length and level of formalization (ibid). The other group of features represents a process oriented view which is characterized by four different elements; adaptations, cooperation and conflict, social interaction and routinization. These features illustrate the interaction process dimensions which takes place in the relationship. For example, business relationships are generally

dependent on mutual adaptations in order to develop and be sustainable. This process view also emphasizes the existence of personal bonds and trust when forming a business relationship (Håkansson and Snehota, 1995).

The focus of the industrial network approach is put on collaboration within networks of business relationships rather than competition since collaboration implies more efficient use of the resources and activities within the network (Andersson, 2000). The network approach is characterized by long-sightedness and how the relationships in themselves are important (Håkansson and Snehota, 1995). The roles, success and development of the actors can be explained by their ability to develop relationships with other actors (ibid). The network approach is unique as it looks upon networks in terms of linked connections. If a change occurs in one connection an effect, negative or positive, occurs in another one (Håkansson and Gadde, 1994). There are a number of different tools and methods used to illustrate and gain more understanding of the network approach. This can be done, for example, by applying the ARA-model.

2.1.1 The ARA model

To be able to analyze the business relationship in more detail the relationship can be described in the two dimensions of substance and function (Håkansson and Snehota, 1995). The dimension of substance concerns what the relationship effects on the two parties. In a relationship, three different layers of substance can be found; actor bonds, activity links and resource ties (the ARA model) (Ford et al., 2008). When a relationship develops different actors become connected and bonds are established. These bonds effect how the actors experience, evaluate and treat one another. Actor bonds are interpersonal links which arise between individuals through an interaction process. Here, the emphasis is on the individual rather than the company or municipal entity. The bonds are based upon how actors see, feel, know and trust each other. The creation of actor bonds can lead to appreciation and mutual commitment. (ibid)

Secondly, a relationship can connect different resources which are needed and controlled by both actors. Resource ties can be defined as different resource

elements that connect two cooperating organizations (ibid). These tied elements can be material, technological, commercial, knowledge resources and other intangibles. Resource ties are an outcome of how the relationship has evolved and the ties are in themselves a resource for the companies (Håkansson and Snehota, 1995). A relationship can also tie these resources together and can therefore be said to be made up of different levels of resource ties.

Thirdly, the last layer is the activity layer. Every relationship consists of activities which more or less connect different internal activities of the actors. An activity link can be defined as a technical, administrative, commercial or other activity which can be adapted in different ways to those of another company as a relationship evolves (ibid). Activity links results in synchronized and matched activities. When two or more actors engage in a relationship their combined activities become linked because of the development of the relationship (ibid). Thus, these three layers of substance add up to the relationship in terms of what values are involved and what the result of the relationship can be (Gadde and Håkansson, 2001). The concept is visualized below in Figure 5 (Håkansson and Snehota, 1995).

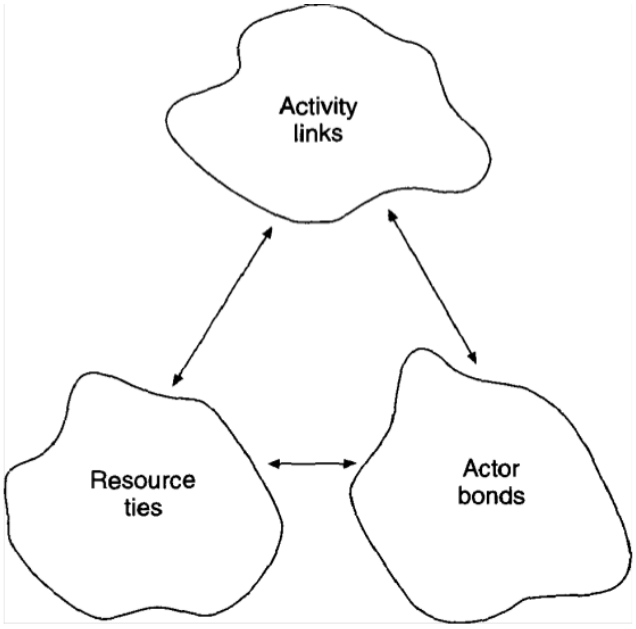

Figure 5 The three layers of substance in a business relationship

The second dimension deals with what effects a relationship has for different parties, which is denoted as the functions of the relationship. A relationship between two different actors is characterized by different functions as it affects

and is affected by different parties and other relationships. Three different functions can be identified. First, a relationship has effects on the dyad, i.e. the union of the two main actors. A relationship involves an interaction process and something is being produced. Here activity links, resource ties and actor bonds are created. Second, a relationship affects the individual actor on what it can do internally and in other relationships. Finally the relationship has effects on the overall network structure in which it operates (Håkansson and Snehota, 1995). The focus in this report will be on analyzing the effects on the dyad. The reason for this is because of the main purpose of the report, which is analyzing how a wind power company can improve its effectiveness in the relationship with the municipality. Thus, the information gathered in the data collection will be skewed towards how the relationship affects the union of the actors. How the relationship affects the individual actor or how it affects surrounding actors will therefore be less emphasized.

Even though the ARA-model is mainly used to analyze industrial networks and companies it is considered to be suitable and appropriate to use when looking at the relationship between wind power company and municipality. The overall characteristics in the relationship between the two actors are very similar those in industrial networks. Through empirical data the layers of actor bonds, resource ties and activity links can be directly connected and verified as existent, and therefore applicable, when analyzing the relationship.

2.2 Strategic Alliance

A relationship is a complex phenomenon which is difficult to define in general terms. The literature uses a wide range of different notions when describing organizations working together. Depending on the level of cooperation and interaction they can be referred to as collaborations, partnerships, public-private partnerships, tactical alliances and strategic alliances (Polonsky et al., 2011). Every relationship is the outcome of an interaction process where connections are developed between organizations to produce mutual goals and commitments (Håkansson and Snehota, 1995). Organizations have different set of skills and resources, but some are however unable to fulfill market demands all by

themselves. To overcome this obstacle, organizations can establish non-competitive relationships with other organizations and these types of relationships are referred to as strategic alliances (Ramaseshan and Loo, 1998). A strategic alliance is defined as a cooperative relationship where partners bring specific and complementary competence and resources to achieve mutual objectives and goals (Polonsky et al., 2011). There are many types of strategic alliances consisting of manufacturers and distributors, buyers and sellers. Common examples of strategies alliances include development partnerships, licensing agreements and different type of franchising relationships (Young et al., 1996).

2.3 Relationship Effectiveness of a Strategic Alliance

When examining the success of a strategic alliance the term alliance performance is often used. There are however many definitions of performance in the literature and all these have their pros and cons. It is therefore important to choose an appropriate alliance performance measure based on which business environment the relationship exists in (Ramaseshan and Loo, 1998). The classic view of relationship performance is based on the concept of a buyer-seller relationship. Here relationship performance is divided along non-financial and financial dimensions. This view was initially widely supported but called for refinements regarding how to define and conceptualize the financial and non-financial dimensions in theory (O'Toole and Donaldson, 2002). Over the years it has however been suggested that alliance performance should be measured in terms of all partners' subjective values of their alliances instead of using objective assessments of performance, such as profitability and longevity (Ramaseshan and Loo, 1998). One established subjective measure of alliance performance to relationships' dyads derives from organization theory and is referred to as perceived effectiveness of an alliance (ibid). In general the term perceived effectiveness of an alliance can be defined as the extent to which the exchanging partners are committed to the relationship and find it value adding and worthwhile (Young et al., 1996). Perceived effectiveness in alliances can be affected by such things as power imbalances, functional and dysfunctional conflict, history between the companies, organizational compatibility and the

length of the relationship (Polonsky et al., 2011). There are many models describing perceived effectiveness in an alliance. The models are composed of a number of factors or elements considered to affect the perceived effectiveness of an alliance. In general the models have several factors that are similar. Some might be entitled differently whilst some are added or excluded due to the specific nature of the relationship being analyzed. An example of a conceptual model describing factors governing perceived effectiveness of an alliance is found in Figure 6 (Ramaseshan and Loo, 1998).

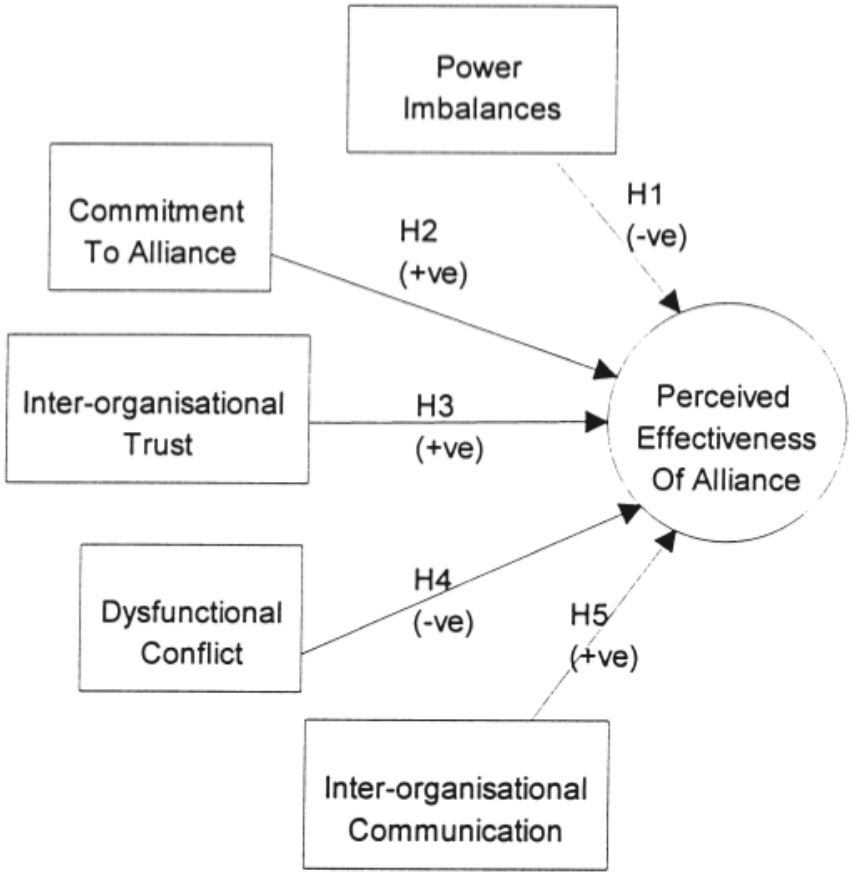

Figure 6 Conceptual model of perceived effectiveness of alliance

In this conceptual framework perceived effectiveness of an alliance is affected by five distinct factors; Power imbalances, Commitment to alliance, Inter-organizational trust, Dysfunctional conflict and Inter-organizational communication.

Power imbalance is considered to be a central alliance issue and is normally included in models that analyze effectiveness of an alliance (Polonsky et al., 2011). It occurs when one side of the alliance is more powerful than the other

and can more or less force the submissive side to change their behavior pattern (ibid). This imbalance of power can be identified through analyzing resource dependencies between partners of the alliance. Partners experiencing unequal resource distributions are likely to face power imbalances (Ramaseshan and Loo, 1998). Balances concerning both resources and power are thus considered to affect a partner's perceived effectiveness of their alliance. Power imbalances can however also be found in the management of an alliance. This usually occurs when one partner has superior power in relation to the other partner. A superior actor will always try to take advantage of its more powerful position and the weaker side therefore usually adopts a more defensive strategy in the alliance (ibid). The existence of power imbalances are considered to have a negative effect on the perceived effectiveness of the alliance (ibid). However, the more relationship oriented an alliance becomes the less probable it is that the superior partner uses its' more powerful position (Young et al., 1996). Hence to minimize the negative effects of power imbalances the alliance should strive to be as relationship oriented as possible.

Commitment in an alliance is one of the oldest and most examined dimensions in organizational theory and results in higher motivation of employees and increased organizational belonging (Ramaseshan and Loo, 1998). In strategic alliances, increased organizational belonging relates positively to a partners commitment to the alliance (ibid). Furthermore, the level of commitment has an impact on the level of effectiveness perceived by the members of the alliance (ibid). One of the most influential factors affecting alliance satisfaction and longevity has been reported to be commitment to alliance and can act to prevent alliance failure (ibid).

When analyzing alliance performance one of the key factors is the degree of trust between partners (Nielsen, 2007). This element has been proven to positively affect cooperation, flexibility, activity coordination and the transferral of knowledge between partners (ibid). Trust reflects the ability to rely on a partner in whom it has confidence in (Ramaseshan and Loo, 1998). Furthermore, trust stems from the idea that the trusting party sees the exchanging party as reliable

with high integrity along with characteristics such as generous, fair, competent and consistent (ibid). The level of trust in an alliance can therefore be said to positively affect the perceived effectiveness of the alliance (ibid).

Another important factor affecting the perceived effectiveness of an alliance is the existence of conflicts. A conflict is defined as the friction which can be experienced between two or more partners and originates from the incongruity of the wanted or actual responses to a situation (Polonsky et al., 2011). Conflict can furthermore be divided into functional or dysfunctional parts. A conflict which cannot be solved is said to be dysfunctional, while a solvable one is functional. The existence of dysfunctional conflicts in an alliance has a negative impact on alliance effectiveness while functional can contribute positively on the perceived effectiveness (Bucklin and Sengupta, 1993; Ramaseshan and Loo, 1998).

The final factor in the framework in Figure 6 is inter-organizational communication which also is known as sharing of important and meaningful data between partners (Ramaseshan and Loo, 1998). Through informational exchanges the companies in an alliance is made aware of their respective roles, responsibilities and developments regarding the effectiveness of the alliance. The greater the inter-organizational communication, the less tendencies there are for misunderstandings (ibid). Additionally, communication can enhance the understanding between partners which can result in increased co-operation (ibid). It is therefore likely that high inter-organizational communication should correspond to increased perceived effectiveness of an alliance between partners.

When considering factors affecting perceived effectiveness of an alliance it is important to look at the context in which the parties operate. For example, when determining international strategic alliance performance factors such as cultural distances and country risk comes into play (Nielsen, 2007). The findings in the empirical data suggest an expansion of factors affecting the perceived effectiveness of the relationship. One of these factors is flexibility and can be seen as the ability to adapt to changing circumstances in a smooth and constructive

manner (Young et al., 1996). A high degree of flexibility is assumed to positively impact the perceived effectiveness of the alliance. Stability is another factor which is regarded useful when analyzing the perceived effectiveness. It can be seen as predictability of expectations, consistency in actions and diminishing of environmental uncertainty (O'Toole and Donaldson, 2002). Increasing stability in a relationship is presumed to correspond to an increased perceived effectiveness in an alliance. However, it is important to be aware that other factors not described in the theoretical framework may occur as a result of the analysis of interviews conducted in this thesis.

The theoretical framework is used describe the relationship in more scientific terms and also to examine and evaluate factors affecting the effectiveness of the relationship. Furthermore, other alternative theories and models could have been applied but were dismissed due to a number of reasons. For example the concept of PPPs (private public partnerships) was considered at an early stage. This is a procurement model where private and public partners come together to achieve a service or facility which is ruled mainly by contracts (Martins et al., 2011). One of the drawbacks with the model is the need of highly contractual and precise arrangements which is very difficult to achieve in the complex nature of establishing a big wind power facility. Furthermore, the municipality is in this case not the permission granting institution which makes the issue even more complex.

3. Methodology

This chapter aims to describe how this study was formed by firstly explaining the process of reaching the research topic. Secondly, research and working methods that were used along the way are presented.

3.1 Research process

The process of converging into the purpose and research questions of this report has not been straight forward. To begin with it involved gaining insight into the relatively young Swedish wind power industry by reading available literature in the field and attending wind power seminars and exhibitions. The next stage was to identify and map Nordisk Vindkraft's problems along the complex procedure of establishing wind power farms. After that a suitable research subject, in terms of usefulness for the company and general feasibility, needed to be defined and addressed. This phase came to be exceptionally time consuming since the research topics had to be changed several times.

The initial purpose was to focus on Benefit Sharing Mechanisms (BSMs) and to study how the company better could manage this aspect of the project. However, it was soon discovered that this objective was far too complex, mainly due to the fact that this is not regulated by any means of legislation. Thus, depending on the case the management of these issues differed substantially. In some cases they were handled by local community unions and in other cases the municipalities, which legally should not even handle these issues, were highly involved. Due to this nature of the subject this approach was abandoned.

It was however evident that the wind power company frequently faced problems dealing with municipalities when developing a wind power farm. The next intended objective was thus to map municipalities' capabilities in regards to wind power establishments. After conducting the first interviews at the wind power company it was however apparent that this research scope should be modified to the present one mainly due to the nature of the municipalities where every municipality is unique and have different prerequisites for wind power establishments. The new approach should also generate more value for both the

wind power company as well as for the municipalities. This should result in the wind power company being able to more effectively deal with municipalities when planning for a big wind power establishment. It is also worth noting that this final scope also was in better accordance with the time frame of the master thesis.

3.2 Research and Working Methods

In order to address the main question of the study, in terms of providing a fulfilling and valuable outcome for Nordisk Vindkraft, it is important to choose appropriate research and working methods. Figure 7 summarizes the working process for this thesis based on the research questions.

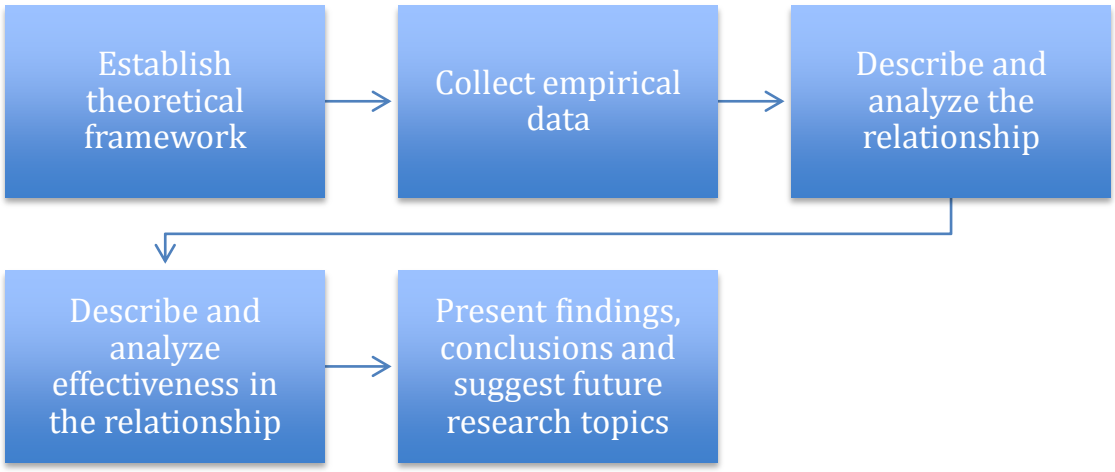

Figure 7 Procedure made visible through a process map

Initially a theoretical framework was established containing suitable literature on the topic and relevant applicable theoretical models. Thereafter, data was gathered through extensive interviews with both the wind power company and five different municipalities. In more detail, when it comes to choice of research methods, the questions for the interviews were prepared in advance based on the findings from studying adequate literature. The relationship was then described based on the theoretical framework. This was also done with the relationship effectiveness but here empirical findings were also incorporated. Finally, the findings and conclusions were presented and future research topics suggested.

Furthermore semi-structured interviews were preferred since they are known to facilitate the respondents to give gradated and detailed answers (Bernard, 1988). The interviews were also recorded and afterwards transcribed with the intention of minimizing errors and maximizing viability and reliability. This empirical data collection process was carried out in Swedish in order to better capture the full picture of the complexity of the topical problems, as well as avoiding dubious information stemming from using a less mastered language. To acquire adequate and relevant information the interviews were targeting suitable people from the development division at the wind power company and people responsible for wind power issues at the municipalities. The interview questions with Nordisk Vindkraft can be found translated in Appendix 1 and the translated questions for the municipalities are stated in Appendix 2. A list of the people interviewed can also be found in these appendices. The interviews in the study were conducted between May and October in 2012.

When it comes to choosing suitable municipalities for interviewing one critical prerequisite is that they have experience of dealing with big facility-projects. An initial strategy to ensure this precondition was to screen municipalities based on amount of installed wind power. The municipalities with the most installed wind power were considered to be most likely to have experience of interacting with wind power companies concerning establishments of big facilities. Table 1 shows the 20 municipalities that had the most installed wind power in Sweden in the years 2010 and 2011.

Municipality	Installed wind power (MW)		Number of wind power stations	
	2010	2011	2010	2011
Gotland	114,2	181,4	155	177
Strömsund	98,2	121,4	51	62
Malmö	112,4	114,4	49	50
Åsele	77,8	89,4	40	46
Dorotea	36	68	18	34
Laholm	44,9	66,4	55	63
Eslöv	61,3	62	48	47
Mjölby	34,6	61,9	39	60
Piteå	42,3	60,3	19	28
Falkenberg	53,3	59,3	45	48
Borgholm	41,1	57,1	31	39
Vara	38,7	56,4	32	43
Mellerud	42,7	55,9	33	41
Malå	4	52,6	2	27
Dals-Ed	0	48,3	0	21
Nordmaling	0,7	46,7	1	21
Tanum	46,5	45,6	38	37
Falköping	39,5	43,5	36	41
Krokom	44,2	42,7	22	21
Mönsterås	0,9	41,4	1	20

Table 1 The 20 municipalities that have the most installed wind power and wind power stations in year 2010 and 2011

Looking at this table alone was not enough however since it was not stated in detail how the installed amount wind power was distributed in terms of size and location of the facilities. For example, the municipality of Malmö which is number three in the list had most of their installed capacity offshore and was therefore not experienced when it came to big onshore facilities. Furthermore municipalities like Vara and Mellerud are also found in the list, but their installed power were constituted by the smaller classes of wind power facilities. Thus, these municipalities were not considered when conducting the interviews. The choice of which municipalities to interview were then based not only their installed power but other prerequisites. It was important the municipality had dealt with and had experience of establishing big wind power facilities. It was also considered favorable if the municipality was in the vicinity of Gothenburg since the interview then could be conducted in face to face manner. Making sure the municipality had experience of handling big facilities was done through an initial telephone call. Five municipalities were interviewed in this study and three of these can be found in Table 1 as a result of this methodology. The intention from the beginning was to conduct several more interviews with municipalities. However, both getting hold of a suitable person at the municipality as well as getting this person to assign time for an interview was

more problematic than first expected. It is worth noting that the difficulties might have had implications on the selection of interviewees from the municipalities. Furthermore, it is possible that the interviewees in the study are more positive towards wind power and more competent than the average person working with wind power related questions at the municipalities. Moreover, during the summer months of June, July and August many employees at the municipalities were on vacation which made the empirical gathering even more difficult and time consuming.

After forming an appropriate theoretical framework, empirical data was collected. Many theoretical tools were brought forward but only a few of them were considered applicable if the purpose of the report was to be achieved. This selection process was done with the literature and models concerning both the relationship description and factors governing the relationship effectiveness. The theoretical framework applied is generally used in a business to business context. The relationship in this report however is between a wind power company and a municipality representing a non-business entity. The empirical data however identified many similarities between these types of relationships and the theoretical framework was therefore considered applicable.

The focus when analyzing the relationship between wind power company and municipality was to describe the characteristics of it. The ARA model along with empirical findings was used to facilitate this description. Furthermore, factors affecting perceived effectiveness of the relationship were analyzed based on the theoretical framework. However, empirical data suggested integrating additional effectiveness factors which could not be found in the literature. Finally conclusions based on the overall findings of this study were presented along with recommendations of future research topics.

4. Relationship Analysis

This chapter analyzes what governs effectiveness in the relationship between a wind power company and municipality. To facilitate this, an analysis of how the relationship looks like is first presented. The focus when illustrating this relationship is on describing involved actors, linked activities and tied resources. After this part, general factors along with factors deriving from empirical findings that affect relationship effectiveness are identified and described.

4.1. Relationship Description

The ARA-model, presented in section 2.1.1., is used to facilitate a description of the relationship between municipality and wind power company. This involves focusing on how the interaction affects the dyad and describing activity links, resource ties and actor bonds. These are identified based on empirical data stemming from the conducted interviews. Part of these findings will also be useful when analyzing the effectiveness in the relationship. To gain a better understanding of the relationship the analysis initially calls for a general description of the interaction taking place between wind power company and municipality.

4.1.1. Interaction Process between Municipality and Wind Power Company

To identify and describe the interaction process between a municipality and a wind power company it can be useful to look at a general process of a wind power development. An illustration of such a process is found in Figure 8 (Wizelius, 2012).

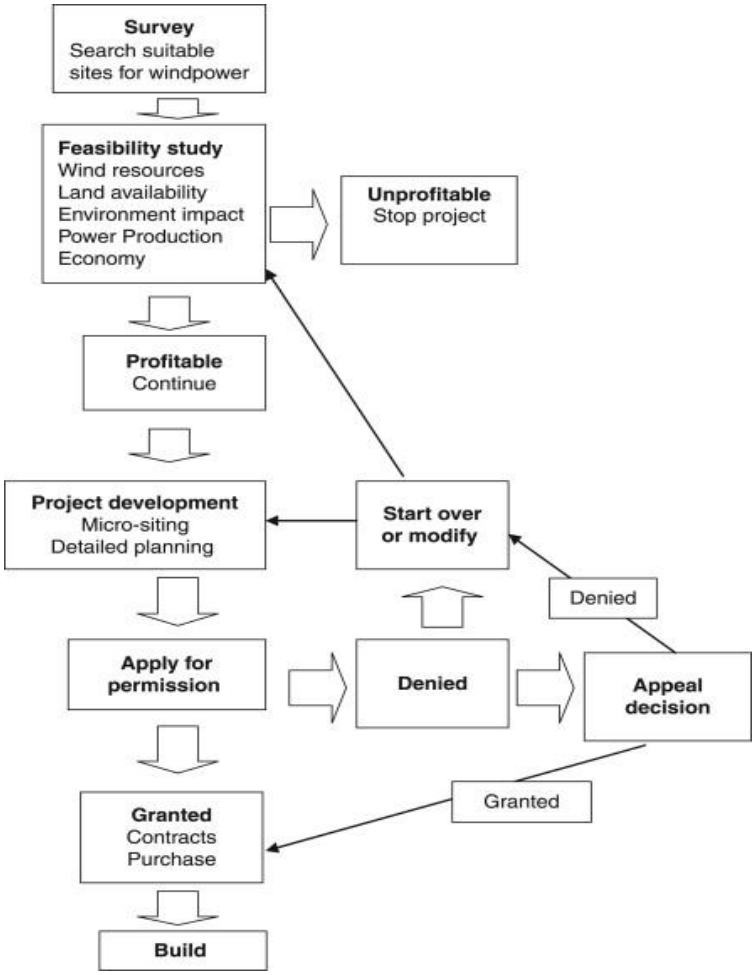

Figure 8 Description of a general process establishing a wind power facility in the planning and permission phase

The general process map in Figure 8 calls for a more detailed description adapted to suit an establishment of a big wind power facility. Firstly the wind power company needs to find a suitable location for wind power, especially in terms of favorable wind conditions. Then the company must perform some kind of feasibility study where environmental impact, land availability and economy are analyzed. If the project is considered profitable it continues or otherwise it is abandoned. The next stage is to further develop the project by micro-siting and more detailed planning. This phase also includes compulsory consultations with concerned parties like the public, the municipality, the County Administrative Board and other central authorities and organizations. After that the application for permission is finalized and sent to the County Administrative Board. In turn they send it to the concerned consultive bodies; where the municipality is one of them. This application is then either approved or denied. If approved the wind

power company can initiate the building phase. If the application is denied by the County Administrative Board the wind power company either has the choice of modifying the project or appealing. However, if the project is denied based on the municipal veto the company has to abandon the project.

During this development process the interaction between municipality and wind power company can differ substantially depending on which municipality and wind power company the relationship is between. In more detail the interaction differs in terms of interaction occasions and communication forms. Some companies insist on having face to face meetings on a regular basis while other prefers contact via e-mail or telephone. Other companies prefer a more restrained profile. In general the interaction process can vary from the extreme case where the company only has contact with the municipality at the compulsory consultation and then only sends the application for permission to the County Administrative Board; to the other side of the spectrum where the company takes an early contact with the municipality and has continuous communication with the municipality all along the planning-and permission phase of the project[17]. Thus the project varies between being more or less transactional to being a long-term two-way interaction process.

Municipalities consist of a civil servants' part and a political part but are unique in terms of resources, interests and organizational structure. This affects the prerequisites for how the wind power company can interact with the municipality. For a wind power company it is critical to address the political will regarding wind power in a municipality (Khan, 2003) [18]. If the municipality has an articulated negative attitude towards wind power the wind power company faces seriously increased risk levels[19]. In such cases companies seldom continues with the development process of a wind power facility[20]. However, even though the municipality is pro wind power the interaction between it and the wind power company can still differ considerably. Figure 9 gives an overview of the

[17] Interview with Maria Söderlund
[18] Interview with Marie Löwkrantz
[19] Interview with Lars Thomsson
[20] Interview with Karl-Johan Svanvik

possible interaction occasions between municipality and wind power company at the planning and permission phase. This figure is based on the empirical data stemming from the interviews and exemplifies a general process. However, the internal arrangement of the process elements can in some cases differ.

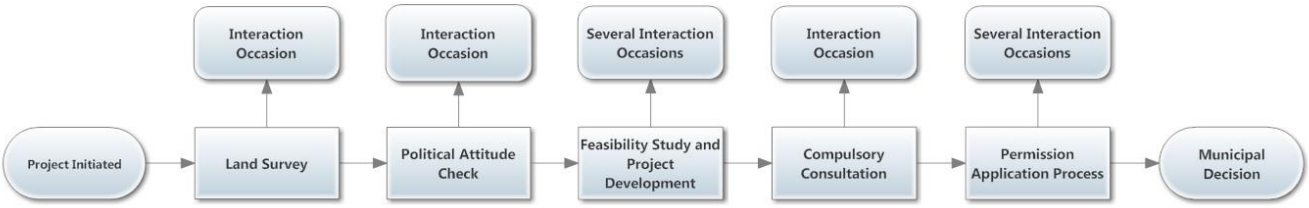

Figure 9 Process map of possible interaction occasions between municipality and wind power company

During the planning and permission phase interaction between municipality and wind power company can take place on a number of different occasions. In general a project leader from the wind power company initiates the contact with the municipality[21]. Depending on the size of the wind power company there can also be other persons initiating the contact like CEOs and people responsible for environmental issues at the company[22]. As have been said earlier the wind power companies commence the contact with the municipality at different phases of the development process. Some do it early, before even conferring with the mark owner, while some have their first communication in conjunction to the compulsory consultation[23]. It is however not only the contacting moments that differ but also the companies' intentions for initiating the contact. Many of the early contact initiators do it with the purpose of identifying the political attitude towards wind power in the municipality as well as exploring potential development sites and possible obstacles for the establishment[24]. To obtain such information some wind power companies book a meeting with adequate people from the municipality which can be represented by both the civil servant side

[21] Interview with Maria Fransson
[22] Interview with Karl-Axel Jansson
[23] Interview with Erna Pezic
[24] Interview with Maria Söderlund

and the political side[25]. Usually contact is initiated with the civil servants side and most likely someone working on the Town Building Office ("Stadsbyggnadskontor") at the municipality[26]. It is however important to emphasize that every municipality is unique and has its own composition of roles and functions. For example when a wind power company contacts the municipality of Varberg in an early stage, it is offered a meeting with a group of civil servants to discuss a planned project. This group consists of people representing the Town Building Office, the Environmental Department ("Miljöförvaltning") and a municipality ecologist[27]. In the municipality of Falköping another approach to early planning is assumed. When the wind power company contacts them it is generally informed of the prerequisites for establishing a wind farm directly by the Town Building Office of Falköping[28].

The compulsory consultation taking place in the project development phase can also be preceded by discussions between wind power company and municipality concerning other issues. Sometimes the company explores the opportunities to utilize local labor and competence. This is often discussed with the municipal business developer ("näringslivsutvecklare")[29]. At other times wind power companies contact the municipality to address locally related issues such as bird habitats and restriction areas from the Swedish Armed Forces ("försvarsmakten")[30]. There are even companies striving to uphold a continuous communication with a municipality in order to gain better understanding of how projects develop regarding permits and other investigations[31].

Another interaction between wind power company and municipality takes place at the compulsory consultation. Here municipality, County Administrative Board and people from the vicinity of the wind power establishment are gathered to discuss topics such as localization, extent and predicted environmental impact of

[25] Interview with Maria Fransson
[26] Interview with Karl-Johan Svanvik
[27] Interview with Maria Söderlund
[28] Interview with Erna Pezic
[29] Interview with Karl-Johan Svanvik
[30] Interview with Maria Fransson
[31] Ibid.

the wind farm[32]. After the consultation the wind power company establishes an environmental impact assessment which is to be included in the permission application[33]. During this finalization some companies have a dialogue with the municipality if questions arise[34].

In conclusion, the interaction process between wind power company and municipality can vary substantially especially in terms of number of interaction occations. How the process looks like is highly dependent on the prerequisites and characteristics of the wind power company and municipalty. To further describe the relationship activity links, resource ties and actor bonds will be examined and analyzed.

4.1.2 Activity Links, Resource Ties and Actor Bonds

The basic philosophy of the ARA-model is that resources are refined through activities done by actors through resource exploitation (Håkansson and Gadde, 1994). In an inter-organizational relationship this means that actor bonds, activity links and resource ties are created and interconnected. Furthermore, through the resource ties one actor adapts its operations and routines to the other actor's internal resource base (Håkansson and Snehota, 1995). The common goal for both the wind power company and the municipality is to exploit and refine the wind as a natural resource as effectively as possible. In order to achieve this goal other resources from both actors need to be used.

The municipality provides the prerequisites for the wind power company to exploit the wind in a sustainable manner. The most important tool the municipality has in this context is the Municipal Comprehensive Plan (MCP). This document aims to guide the use of land within the municipality, where areas regarded as suitable for wind utilization can be emphasized. This part of the MCP can be said to belong to the municipality's internal resource base when it comes to developing wind power projects. Furthermore, the wind power company adapts its operations when planning for the establishment of a big wind power

[32] www.vindlov.se, Accessed 2012-11-02
[33] Ibid.
[34] Interview with Marie Löwkrantz

facility. Thus, the MCP can be regarded as a resource which is tied between municipality and wind power company. However, the quality and design of this planning tool can vary substantially between different municipalities[35]. There are examples of MCPs which do not contain any appointed areas for wind developments and where the possibilities of establishments are very limited. On the other side of the spectrum there are municipalities which have a lot of areas appointed and also allows for other areas to be reviewed. These differences originate from the fact that all municipalities are unique in terms of wind and land conditions, but foremost the framing of these MCPs are subject to political decisions[36]. In the municipality Varberg for example, the wind power areas that are appointed in the MCP are prioritized for wind power development. If an area outside the appointed wind sites in the MCP is to be considered for wind power establishment a political decision must be taken. In general, such areas are not to be approved[37]. When considering establishments on such sites the wind power company in general does not further investigate the areas due to an occurrence of increasing uncertainty and risk levels associated with these types of projects[38].

The municipality Gotland is characterized by having favorable wind conditions as well as a relatively long history of wind power developments. Here the MCP in regards to wind development is considered being well elaborated and thus it should be difficult to find areas outside the appointed ones that are suitable for wind power[39]. Gotland has seven different types of wind establishment areas appointed ranging from the national areas of wind power development as type 1 to type 7 where wind power development today is not possible[40]. A similar strategy is adopted within the municipality Falköping. Falköping has four area types when it comes to wind power development. They range from being highly prioritized for wind development to very restricted types but still open for

[35] Interview with Roland Lord
[36] Interview with Lars Thomsson
[37] Interview with Maria Söderlund
[38] Interview with Karl-Johan Svanvik
[39] Interview with Lars Thomsson
[40] http://www.gotland.se/imcms/ByggGotland, Accessed 2012-11-05

reviewing[41]. The municipality Laholm has adopted a different view on wind power development areas. Areas outside the appointed ones in the MCP are not to be reviewed. Laholm strives to notice the wind power companies early in the development process but if they still continue with the project it is to be denied through the municipal veto[42]. The last and final example of MCPs comes from the municipality Motala. Here they appoint specific stop areas for wind power development and all acreage outside these stop areas are open for reviewing[43].

The municipal resource of the MCP can obviously be designed in many different ways concerning wind power establishments. Regardless of the layout of the MCP it can still be suggested a municipal resource which is tied with a wind power company when establishing a big wind power facility. A MCP which has strictly appointed areas for wind power establishments need to be well elaborated. This involves specific understanding about local natural values, ancient remains, infrastructure and such (Wettin, 2011). This is resource demanding in terms of wind power related knowledge and can incur substantial costs at the municipality. With a more flexible and open approach regarding possible sites for wind power developments the municipality can transfer the activities of investigating possible sites for wind power establishments to the wind power company. In such cases the internal activities earlier performed by the municipality are instead performed by the wind power company. An example of this is when a landscape analysis can be done by a wind power companies and the outcome is beneficial to both the municipality and the wind power company[44] [45]. This can be especially favorable when municipalities have little or no experience concerning wind power establishments while the wind power company is experienced in these matters. As a result an activity link between the both actors occurs. The activity links are known to have a rationalizing effect, which implies they can either improve an outcome or reduce a cost related to the activities (Håkansson and Snehota, 1995). Thus, the municipality allocating these

[41] Interview with Erna Pezic
[42] Interview with Karl-Axel Jansson
[43] Interview with Alisa Basic
[44] Interview with Maria Söderlund
[45] Interview with Lars Thomsson

types of activities to the wind power company can achieve decreased costs and more efficient land utilization.

Another possible activity link can be the identification of local labor and competence. This task is sometimes performed within the wind power company, but there are cases where this activity has been performed by the local municipality. They should logically have more local knowledge of which companies and competence which exists within the municipality. This activity link can benefit both municipality and wind power company (Wettin, 2011). By sharing and mapping local companies and competence, which can be utilized in e.g. the construction phase, municipalities can stimulate local growth and wind power companies can possibly reduce costs and decrease local resistance[46].

Although municipalities are objective entities interpersonal bonds still arise. Municipalities in this study state the importance of objectivity but still mention trust, professionalism and humbleness as important collaboration factors[47]. Furthermore actor bonds are important in collaboration issues such as learning about solutions and opportunities. An example of how actor bonds can be utilized in the relationship between municipality and wind power company is the localization of wind turbines at a big facility. A planned establishment might have some of its turbines located at a less appropriate location regarding local bird habitats or other local values. This issue can be addressed, and alternative placing of the turbines discussed, at a relative early stage through early communication processes and the development of actor bonds between wind power company and municipality[48].

A growing trend due to the introduction of the municipal veto is the early contact wind power companies initiate with the municipalities[49]. It is firstly important to recognize where the main responsibility and decision making regarding wind power related issues is located; whether it is the civil servants side or the

[46] Interview with Martina Wettin
[47] Interview with Alisa Basic
[48] Interview with Maria Söderlund
[49] Interview with Lars Thomsson

political side which in practice is governing the municipality in these issues. Furthermore, from a wind power company´s point of view this organizational structure can be complex and hard to grasp at first sight. The central decision affecting person might be a municipal architect at the Town Building Office, a local government commissioner ("kommunalråd"), the chairman of the municipal board ("kommunstyrelseordförande") or even a former local government head ("kommundirektör"). Lars Thomsson who is Wind Power Coordinator for the Central Region of Sweden and Local Government Commissioner at the municipality Gotland suggested how this issue could be addressed:

It only requires common human interaction and some basic research followed by solving the puzzle of who the key person is in the municipality.

Thus, in order be more effective when establishing a wind power facility the companies need to identify this individual of interest, start an interaction process and strengthen the actor bonds with this person. Another way to strengthen the actor bonds between the individuals in the municipality and at the wind power company is to strive to uphold a continuous communication process during the planning and permission phase. This can be done by regularly updating each other regarding project status but maybe even more important to unravel possible questions and obstacles[50].

4.2. Relationship Effectiveness

This section of the report aims to identify and analyze what governs effectiveness in the relationship between municipality and wind power company. To accomplish this goal the relationship need to be further classified and described. Furthermore, factors affecting the perceived effectiveness of the relationship described in section 2.3 will be brought forward, analyzed and discussed. The perceived effectiveness can be either positively or negatively affected by these factors. For example, if the perceived effectiveness is positively affected this should lead to the exchanging partners being more committed to the relationship and find it value adding and worthwhile (Young et al., 1996).

[50] Interview with Erna Pezic

The findings will be summarized in a framework and in addition external factors which cannot be governed by the wind power company nor the municipality will be presented.

4.2.1. Strategic Alliance

A strategic alliance can be defined as a cooperative relationship in which the involved companies complement each other with resources and competence to achieve common goals (Polonsky et al., 2011). Both the municipality and the wind power company have the interest of exploiting the wind as a natural resource. The wind power company strives to make use of the wind resource mainly in order to generate company profits. When it comes to the municipality the general goals should be in accordance with the ones of the Swedish government. In order for Sweden to develop a sustainable energy supply the government promotes a strong expansion of wind power and the municipalities are to follow these guidelines in the best possible manner. Furthermore, municipalities are local administrative units which are to handle municipal interests in an objective manner by following current laws and regulations. However, there are still elements of human interaction affecting the relationship. These elements have earlier been discussed in terms of actor bonds developed in the relationship. For example, if a wind power company is to build an establishment in a municipality there may be details not addressed in the municipal comprehensive plan (MCP) such as local bird habitats and other sensitive areas. This information is important to gather early in the interaction phase instead of getting a refusal later in the process costing both valuable time and money[51]. Acquiring knowledge of this kind is sometimes only accessible through an element of human interaction. Additionally, both the wind power company and the municipality have been identified to share and complement each other in terms of resources and competencies. This collaboration has even, in some cases, resulted in the transferral of internal activities in order to more efficiently accomplish common goals. Based on these findings the relationship between municipality and wind power company can be regarded as a strategic alliance.

[51] Interview with Karl-Johan Svanvik

4.2.2. Perceived Effectiveness in Strategic Alliances

There are a number of different models describing relationship performance as explained in section 2.3. Furthermore, relationship performance can be analyzed in terms of financial and non-financial dimensions. In the relationship between wind power company and municipality the financial dimension is non-existent because no such transactions occur between the parties. Thus, it has been important to find a relevant model which focuses on the non-financial dimensions when explaining the relationship performance between wind power company and municipality. An established model describing alliance performance in relationships´ dyads is the perceived effectiveness of an alliance (Ramaseshan and Loo, 1998). To be able to address the main purpose of the study, which is to examine how a wind power company can improve its effectiveness in the relationship with a municipality, a general framework is developed based on both literature and empirical data. This framework will contain relevant factors affecting the perceived effectiveness of the alliance between a wind power company and a municipality. The framework will be based on an existing conceptual model developed by Ramaseshan and Loo (1998). However, the empirical findings suggest an expansion of factors affecting the perceived effectiveness of an alliance due to the specific nature and prerequisites of the focal relationship.

The framework will consist of five factors emanating from the existing conceptual model; Power Imbalances, Commitment to Alliance, Inter-organizational Trust, Dysfunctional Conflict and Inter-organizational Communication. These factors can all be deemed relevant when examining the empirical data. Furthermore, a number of factors stemming from other models and empirical data are also brought forward. These are referred to as; Flexibility, Professionalism and Stability. An illustration of the conceptual framework describing perceived effectiveness in the relationship between wind power company and municipality can be found in Figure 10. The figure illustrates which factors affect the perceived effectiveness between wind power company and municipality. The following sections will explain in more detail how each factor

affects the perceived effectiveness based on the findings from both literature and empirical data.

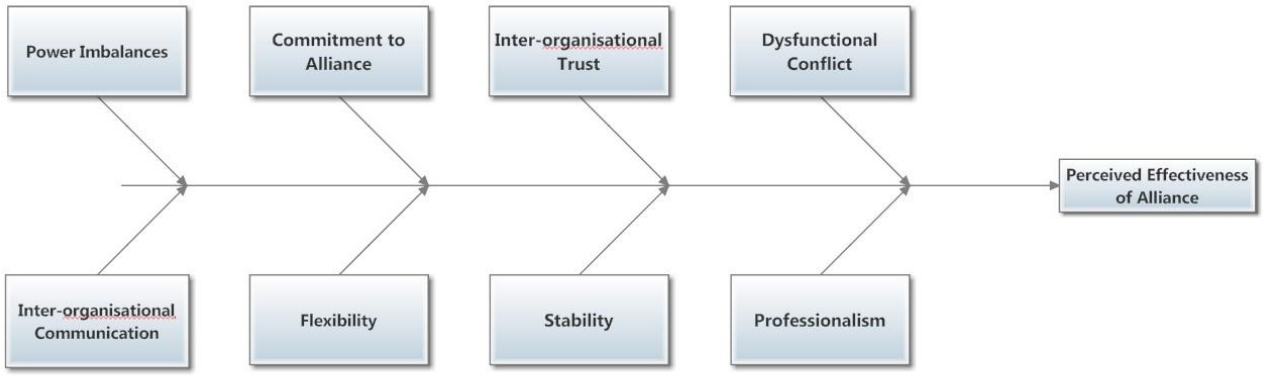

Figure 10 Conceptual Framework of Perceived Effectiveness of the Alliance between a Municipality and a Wind Power Company

4.2.2.1 Power Imbalances

One factor which is relevant when analyzing what governs effectiveness in the alliance between municipality and wind power company is power imbalances. This element occurs to more or less extent in every relationship between these two partners. The more powerful side in this alliance is the municipality due to the Swedish plan monopoly, where the municipality decides upon who has the right to exploit the grounds within their boundaries. Furthermore, the municipality presently has the veto right for approving big wind power facilities which makes them a very important actor for the wind power company[52]. As a result an obvious imbalance concerning both resources and power occur in this alliance. The wind power company is totally dependent on getting the approval from the municipality which leaves them in a more submissive position in the alliance. The municipality, on the other hand, can use its more powerful position to force the wind power company to change its actions if felt necessary. For example, the municipality can "threaten" with its veto power to force the wind power company to relocate their wind turbines to a position which they consider more appropriate[53]. If the wind power company is to proceed with their project

[52] Interview with Mattias Törnkvist
[53] Interview with Erna Pezic

in this case they are obliged to comply with the municipality and thus adopt a more defensive strategy in the alliance.

Power imbalances have also been identified to occur in cases where the wind power company uses the MCP when planning for a wind power farm. Even though the MCP can contain areas which are specifically appointed for wind power establishments the municipality can still reject these areas in a later stage of the project[54]. This is even the case when it comes to the national areas appointed for wind development[55]. Furthermore, the wind power company cannot appeal a municipal decision which is based on the veto power. For example, the municipality is not even compelled to motivate why a project is being rejected[56]. The existence of these power imbalances are considered to affect the perceived effectiveness in the alliance between municipality and wind power company negatively.

Imbalances of power occur in every alliance between municipality and wind power company due to the superior power of the municipality in relation to the wind power company. One strategy the wind power company can adopt to minimize the negative effects of the power imbalances in the alliance are to be as relationship oriented as possible. By developing a close and well-managed relationship with the municipality it might be less probable for them to take advantage of their superior power position.

4.2.2.2 Commitment to Alliance

Another important factor when evaluating the perceived effectiveness in relationships is commitment to the alliance. Almost all the interviewed municipalities and the interviewees from the wind power company stressed the importance of a long term view when looking at the relationship in focus[57] [58] [59] [60].

[54] Interview with Roland Lord
[55] Ibid.
[56] Interview with Karl-Johan Svanvik
[57] Interview with Erna Pezic
[58] Interview with Karl-Johan Svanvik
[59] Interview with Lars Thomsson
[60] Interview with Maria Fransson

The wind power company mentioned the long term view as an important collaboration factor when establishing a wind power facility since the company will be active and working in the municipality for a long time ahead[61]. Representatives from the wind power company also suggested the layout of the MCP and the design of areas assigned for wind power establishments as a scale of judging the municipality´s commitment to the alliance[62] [63]. If a MCP is carefully thought through, positive opinions regarding wind power clearly stated and areas for wind power development prioritized the municipality should be considered highly committed to the alliance. In addition, the municipalities also stated attitude towards and prioritization of wind power as important factors when judging the municipalities' commitment to the alliance[64] [65]. A well elaborated MCP where wind power is prioritized in combination with a long term focus on relationships should minimize alliance failure and contribute to increased perceived effectiveness in the relationship.

4.2.2.3 Inter-organizational Trust

Always when looking at inter-organizational collaborations where human interactions are prevalent trust becomes an important factor to evaluate. Even though the municipality always has to take an objective stance regarding the relationship it is inevitable to disregard the human factor. Trust was mentioned as very important in the relationship by several municipal representatives and one representative even stretched it as far as stating it would be difficult to approve an establishment if the municipality had a total lack of trust in the wind power company[66] [67] [68]. Losing trust often originates from e.g. poor quality in the application documents, especially in the nature value reports, and the feeling of companies being negligent and trying to slip through the permission process

[61] Interview with Maria Fransson
[62] Interview with Karl-Johan Svanvik
[63] Interview with Mattias Törnkvist
[64] Interview with Alisa Basic
[65] Interview with Karl-Axel Jansson
[66] Interview with Erna Pezic
[67] Interview with Karl-Axel Jansson
[68] Interview with Alisa Basic

with minimal effort[69]. Examples from the wind power company regarding trust issues were also brought forward. There had been cases where the person responsible for wind power development at the municipality had given the impression of not being at all interested in wind power related questions and more or less forced to handle these issues[70]. This resulted in a lack of trust in that person/municipality and should be considered to have a negative effect on the perceived effectiveness in the relationship. Even though the municipality is an objective entity inter-organizational trust is an important factor. Wind power companies adapting a more concerned approach towards municipalities and an overall increased competence and knowledge base at both the municipality and the wind power company should lead to increased inter-organizational trust and improved perceived effectiveness of the alliance.

4.2.2.4 Dysfunctional Conflict

The existence of conflicts is inevitable in every relationship and thus also in the alliance between municipality and wind power company. However, the existence of unsolvable conflicts referred to as dysfunctional conflicts have only been identified occasionally in the empirical data of this report. The municipality of Varberg once experienced a conflict where the wind power company wanted to develop a wind power farm outside the appointed wind power areas in the MCP[71]. This conflict proved unsolvable, and thereby dysfunctional, as the wind power company wanted no other area for development and the municipality refused an establishment outside the areas appointed in the MCP. Another example of a dysfunctional conflict that can occur is if the municipality demand money from the wind power company for letting them establish their wind power facility in the territory of the municipality[72]. Setting the legislation aside by demanding a bribe naturally leads to a conflict that is not possible to solve.

The existence of dysfunctional conflicts in the relationship between wind power company and municipality is considered to have a huge negative impact on the

[69] Interview with Alisa Basic
[70] Interview with Marie Löwkrantz
[71] Interview with Maria Söderlund
[72] Interview with Roland Lord

perceived effectiveness. Empirical data suggests that a wind power company should carefully do their background research of the municipality before investing too much in a specific wind power project.

4.2.2.5 Inter-organizational Communication

One of the most central factors affecting the perceived effectiveness of the alliance between wind power company and municipality has proved to be inter-organizational communication. The importance of an early contact is emphasized by both municipality and wind power company. There are many advantages with this early approach, one of them is to find out the municipality´s view of the area of interest and if there are any obstacles associated with it[73]. The wind power company also sees the benefits of an early contact. This can be a way to address the political will in the municipality and to address their concerns regarding the area. Furthermore, this allows them to express if there are any major obstacles regarding an establishment[74]. Both partners express the positive implications of an early face to face meeting between the two where early issues, problems and concerns are ventilated[75] [76]. An early contact might also prevent companies getting ahead of themselves in terms of too extensive planning and preparations before having enough information and thus avoiding sunk costs[77] [78]. Furthermore, an early contact can result in considerable benefits for both municipality and wind power company. Through this contact wind power companies can be made aware of what resources exist within the municipality in terms of local labor, companies and competence. Companies in the municipality can also be made aware of what procurement opportunities there are to compete for[79].

[73] Interview with Erna Pezic
[74] Interview with Maria Fransson
[75] Interview with Maria Söderlund
[76] Interview with Maria Fransson
[77] Interview with Erna Pezic
[78] Interview with Alisa Basic
[79] Interview with Lars Thomsson

In addition to the early interaction the empirical data also suggests continuous communication between wind power company and municipality. This can result in the partners immediately being able to respond to and solve problems occurring in the process[80]. This continuous information can also include relevant project updates which can facilitate the foundation of a long term relationship[81] [82]. Furthermore, sharing important and meaningful information is found to result in a better understanding of one another's processes. Wind power companies can sometimes see municipalities as slow and bureaucratic organizations. Reasons for this can vary, but gaining a better understanding of the working processes through communication can help to explain the experienced slowness and what the cause of it is[83].

Overall, high inter-organizational communication through an early contact followed by a continuous dialogue where valuable information is shared between the two partners should therefore lead to an increased perceived effectiveness in the alliance.

4.2.2.6 Flexibility

In addition to the five distinct factors mentioned above stemming from the conceptual framework developed by Ramaseshan and Loo (1998), empirical data suggests adding flexibility as a complementary factor.

A high degree of flexibility in the relationship between municipality and wind power company is found to have a positive impact on the perceived effectiveness in the alliance between the two. Flexibility has been found to be important from the company´s point of view as well as from the municipality´s.

An example of flexibility within municipalities is the organizational structure managing wind power related issues. This structure can vary substantially

[80] Interview with Erna Pezic
[81] Interview with Maria Fransson
[82] Interview with Alisa Basic
[83] Interview with Erna Pezic

between municipalities[84]. In general it is up to the civil servants side to prepare and present relevant data and information regarding a wind power facility to the politicians. It is thereafter up to the politicians to decide upon whether to approve or reject the project. However, in some cases this decision has been delegated and authorized to be taken by the building committee which represents the civil servants side[85]. The reason for this delegation is based on the idea of the building committee having the most experience and wind power related knowledge in these matters. This organizational structure along with this decision model enable wind power matters to be more effectively managed in terms of complexity and lead times[86] [87].

Flexibility is also important in terms of the design and management of the MCP concerning planning for future wind power establishments. Some municipalities adapt a more flexible approach and accept and appreciate when wind power companies look at areas outside the appointed ones in the MCP. However, other municipalities are strictly opposing this flexible strategy and only allow establishments within areas appointed in the MCP. The lack of flexibility in this matter is considered to be an aggravating circumstance for the wind power company[88]. Wind power companies are very positive towards municipalities which adopt a flexible approach in their view of the MCP[89] [90]. Furthermore, a flexible strategy might even have cost reducing implications. Instead of municipalities using their resources by examining suitable grounds for wind power establishments a flexible strategy transfers this cost to the wind power companies[91]. This can also in some cases be beneficial in terms of wind power companies having more experience and being more knowledgeable in these kind of prospecting activities. This should results in the municipalities being more of the supervising and guiding entity rather than the cost bearing part.

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[84] www.vindlov.se, Accessed 2012-11-23
[85] Interview with Erna Pezic
[86] Ibid.
[87] www.vindlov.se, Accessed 2012-11-23
[88] Interview with Karl-Johan Svanvik
[89] Interview with Roland Lord
[90] Interview with Maria Fransson
[91] Interview with Alisa Basic

Municipalities have also been found to appreciate a high degree of flexibility at wind power companies. An example of this is when alternative placing of wind power turbines are discussed. If a planned location of a turbine is considered to interfere with other municipal interests or is deemed unsuitable due to other obstacles this generally calls for discussion of an alternative placing. In this situation companies adopts different stances ranging from a distinct unwillingness of moving turbines to being open minded and accepting a discussion in the matter. The latter more flexible approach is highly appreciated by municipalities should result in a more constructive dialogue[92] [93].

In general, a high degree of flexibility is desirable from both parties point of view. This should result in an increased perceived effectiveness of the alliance between wind power company and municipality.

4.2.2.7 Professionalism

When analyzing the empirical data a factor considered affecting the perceived effectiveness of the alliance outside the theoretical framework emerged. It related to business know-how and workmanship and is to be referred to as professionalism. This factor concerns both municipality and wind power company and a high degree of professionalism should correspond to an increased perceived effectiveness of the alliance between the two.

The existence of a local wind power plan has been identified as an important aspect when evaluating the professionalism of a municipality[94] [95]. Through having a local wind power plan together with a thorough MCP a municipality shows a high degree of professionalism in wind power related matters[96]. This involves municipalities having clearly stated standpoints regarding wind power

[92] Interview with Erna Pezic
[93] Interview with Maria Söderlund
[94] Interview with Mattias Törnkvist
[95] Interview with Karl-Johan Svanvik
[96] Interview with Mattias Törnkvist

in general and a distinct strategy regarding wind power appointed areas[97]. Furthermore, professionalism in municipalities can be determined by previous experience of handling wind power projects[98]. Previous experience facilitates learning of wind power related processes and know-how of the business[99].

An aspect of professionalism in municipalities is related to how the approval is made when handling big wind power facilities. The approval can be done either with or without motivating the reasons for it. A well motivated approval is appreciated by the wind power company and is to be considered a sign of municipal professionalism[100].

An important issue which often is discussed between municipality and wind power company concerns the distribution of resources to community funds ("bygdepeng")[101]. This is an issue which according to the law should be handled only between the wind power company and the local community union ("bygdeförening"). However, some municipalities have engaged in this matter which should be seen as sign of lacking professionalism within municipalities[102].

The factor of professionalism can also be evaluated looking at the wind power company. The most important aspect when assessing professionalism in wind power companies is related to the quality of the application documents[103]. Depending on how distinct, complete and correct these documents are the more professional a wind power company can be considered to be[104]. In more detail an error in the application might result in a prolonged approval process due to the need of new opinion round-ups ("remissrunda")[105]. Furthermore, previous experience of wind power establishments at the wind power companies is also

[97] Interview with Roland Lord
[98] Interview with Mattias Törnkvist
[99] Interview with Karl-Johan Svanvik
[100] Interview with Karl-Johan Svanvik
[101] Ibid.
[102] Interview with Roland Lord
[103] Interview with Erna Pezic
[104] Interview with Karl-Axel Jansson
[105] Interview with Erna Pezic

an important issue relating to professionalism in the alliance. The previous experience can result in wind power companies learning how to improve their application process and gaining better understanding of how municipalities in general are run[106]. Moreover, knowledge regarding the environmental code and the ability to conduct local investigations either internally or through local professionals has been emphasized as signs of professionalism at wind power companies by the municipalities[107] [108] [109].

Previous experience of handling big wind power facilities at both the municipality and wind power company is seen as a key aspect when evaluating the professionalism of in the alliance. It results in an overall insight in the processes involved in establishing wind power facilities. Furthermore, the quality of application documents and the design of municipal MCPs and local wind power plans are the most central aspects governing professionalism in the alliance between wind power companies and municipalities. Enhanced professionalism between the two should result in an increased perceived effectiveness in the alliance.

4.2.2.8 Stability

The final factor used in the framework to describe what affects the perceived effectiveness in the alliance between municipality and wind power company is denoted stability. This factor mainly affects the wind power company and is especially relevant due to the political prerequisites and other uncertainties contained in their relationship with the municipality.

Even though a municipality is positive towards wind power developments within their territory, there can still occur aggravating political uncertainties. If there is a lack of political conformity within the municipality concerning wind power related issues, decisions regarding these matters generally are prolonged and

[106] Interview with Lars Thomsson
[107] Ibid.
[108] Interview with Maria Söderlund
[109] Interview with Karl-Axel Jansson

creates uncertainties for the wind power company[110]. This can also result in MCPs being modified after an election which can be detrimental to wind power projects already invested in[111].

Moreover, in municipalities where there is a large political disagreement concerning the MCPs wind power companies usually don´t approach these types of municipalities[112]. In the municipality of Gotland there is an overwhelming majority of pro wind power politicians; 70 out of 71 district councilors (”kommunfullmäktigledamot”). This stable political majority has minimized the existence of political uncertainty towards the wind power company[113].

Political uncertainties can also occur later in the project. For example, future political elections can result in politicians adopting a more conservative strategy when handling wind power establishments. This local political game might lead to politicians awaiting the outcome of an election before approving a wind power project[114].

A final issue which relates to stability in the relationship between wind power company and municipality is the municipal veto power. The design of the veto has been widely debated and is by some considered to be a hastened compromised solution making the wind power business erratic and uncertain[115]. Others though are very positive towards the veto as it empowers the local governing of land utilization[116]. How it is used can differ between municipalities. The approval can be rejected, confirmed or not responded to at all[117] [118]. This final alternative can result in large uncertainties as wind power companies don´t know whether their project will or will not be approved. Moreover, at this stage

[110] Interview with Karl-Johan Svanvik
[111] Interview with Marie Löwkrantz
[112] Interview with Mattias Törnkvist
[113] Interview with Lars Thomsson
[114] Interview with Roland Lord
[115] Interview with Lars Thomsson
[116] Interview with Alisa Basic
[117] Interview with Lars Thomsson
[118] Interview with Karl-Johan Svanvik

of the project they usually have invested substantial time and money into the project. Additionally, there is no regulation governing at what stage of the project the municipality has to give approval. An example illustrating the problematic nature of the veto was a wind power project in Härjedalen. Here an establishment of 100 wind power turbines were planned for with 25 million SEK already spent on prospecting activities and investigations. Later on in the process the municipality in question threatened to reject the project which could have resulted in large sunk costs. These could have been avoided with a different order of the processes involved[119].

In order to increase the perceived effectiveness in an alliance between municipality and wind power company a high degree of stability in the relationship is desirable. To achieve this, wind power companies must conduct thorough research in terms of the political situation in the municipality. It can also be suggested to check whether the municipality has used their veto power and if so in what way. Minimizing the uncertainties and increasing the predictability of future municipal actions should lead to improved stability in the relationship.

4.2.3 External factors affecting effectiveness in the relationship

The empirical findings also suggest a number of external factors which affect the effectiveness of the relationship between wind power company and municipality. These are factors which cannot be controlled by the two parties but still can play a significant role when evaluating the effectiveness of the relationship.

The external factor most often mentioned in the interviews is the Swedish Armed Forces as a consultive body of wind power developments. They have a large power of influence when it comes to land they require for their activities, partly due to their exceptional position in the Environmental Code. Within the municipalities there can be certain stop areas where wind power is prohibited. Furthermore, planned wind power establishments can be denied late in the

[119] Interview with Lars Thomsson

application process due to the opinion of the Swedish Armed Forces as a consultive body.

The role and exceptional position of the Swedish Armed Forces has been reported to be an aggravating circumstance to both wind power company and municipality[120] [121]. Wind power projects have had a tendency to overrun due to the involvement of the Swedish Armed Forces[122]. Sometimes, there might also be obstacles to wind power establishments which are impossible to address beforehand due the classified documents of the Swedish Armed Forces. There are national defense issues concerning the safety of the state which are classified and have large impact on wind power developments. Furthermore, the Swedish Armed Forces does not have to motivate or give any reasons for rejecting or dismissing a planned establishment which can result in the wind power company and the municipality not knowing what is wrong with the application[123] [124]. Overall, both wind power company and municipality have had experiences where the Swedish Armed Forces has acted as an external factor negatively affecting the effectiveness of the relationship.

The municipal veto power can be considered an external factor as neither municipality nor wind power company can change its legal framework. The use of the veto power with its current design is considered to have positive implications if used in a correct and professional manner. However, the current design leaves much room for discretion and own interpretations within municipalities which can result in reduced effectiveness in the relationship between wind power company and municipality. Thus, a more distinct and regulated design of the veto power would most likely benefit both municipality and wind power company in general[125] [126].

[120] Interview with Maria Fransson
[121] Interview with Lars Thomsson
[122] Ibid.
[123] Interview with Maria Fransson
[124] Interview with Erna Pezic
[125] Interview with Lars Thomsson
[126] Interview with Karl-Johan Svanvik

Another area which lack distinct regulations is the distribution of resources in terms of BSMs and especially the distribution and size of the community fund. This external factor is by some considered the most aggravating circumstance associated with wind power establishments[127]. Some even consider constructive discussions of the community fund with the local community more important than the interaction between wind power company and municipality in some cases[128]. Similar to the case of the municipal veto power the management of BSMs also leaves much room for discretion. Both municipality and wind power company have in the empirical data requested a more distinct and regulated handling of these issues especially in terms of the community fund[129] [130] [131] [132] [133]. Thus, a more regulated legal framework for the BSMs should correspond to increased effectiveness in the relationship between municipality and wind power company.

[127] Interview with Mattias Törnkvist
[128] Interview with Lars Thomsson
[129] Interview with Karl-Axel Jansson
[130] Interview with Karl-Johan Svanvik
[131] Interview with Roland Lord
[132] Interview with Mattias Törnkvist
[133] Interview with Lars Thomsson

5. Conclusions and Recommendations

The main purpose of this study has been to examine how a wind power company can improve its effectiveness in the relationship with a municipality when planning a big wind power facility. To be able to analyze what affects effectiveness and how it can be improved in the relationship, it has been necessary to first describe how the relationship looks like. In this chapter the conclusions from this study are presented. Furthermore, recommendations on how a wind power company can more effectively manage its relationship with a municipality are submitted. Finally, future research subjects will be proposed.

5.1 Conclusions

In this study the characteristics of the relationship between wind power company and municipality has been analyzed by looking at the interaction processes taking place and by applying the ARA-model. The relationship has been found to vary in terms of people involved in the communication, interaction occasions and communication forms. It was thus found that the relationships could vary from being strictly transactional, where contact only takes place at the compulsory consultation, to highly relationship oriented where interaction takes place continuously and frequently throughout the entire project. Furthermore, even though municipalities are supposed to be objective entities the study showed that human interaction was an important dimension of the relationship.

The main finding by applying the ARA-model concerns the importance of establishing actor bonds with a carefully chosen person with great influence in wind power related questions at the municipality. This results in a more rational interaction process where correct prerequisites and possible obstacles are communicated. Moreover, the MCP was identified as a possible resource tie in the relationship. The design and contents of the MCPs differed between municipalities which could be divided into two main types in terms of strategies for defining wind power areas. The first type involves a conservative strategy where the appointed wind power areas of the MCP are the ones that should be considered for development. The other type adapts a more flexible approach

where areas are more open for development and divided into zones with different preconditions for wind power establishments. The former type with appointed areas should require very well elaborated MCPs and a high general knowledge level in wind power related issues at the municipalities in order to be implemented successfully.

There was little evidence of the existence of activity links when analyzing the relationship. However, based on the empirical data two possible activity links were suggested which could have a rationalizing effect due to a better match with the competency of the involved organisations. First, the municipality could transfer the investigating and prospecting activities, usually done by themselves, to the wind power company. The second suggested activity link was letting municipalities, instead of wind power companies, perform an inventory of local labor and competence.

From a wind power company´s point of view, it should be favorable to identify and address municipalities with a flexible approach concerning the MCP. MCPs with wind power priority zones should lead to wind power companies being able to find optimal sites for wind power development regarding wind conditions, infrastructural preconditions and environmental aspects. Simultaneously, this approach should lead to the municipality being more of a supervising and informative party which can give guidance and make the wind power company aware of possible obstacles and restrictions.

In order to suggest how a wind power company could improve its effectiveness with a municipality a conceptual framework was developed. This framework identified eight factors which were found to affect the perceived effectiveness of the relationship between wind power company and municipality; power imbalances, commitment to alliance, inter-organizational trust, dysfunctional conflict, inter-organizational communication, flexibility, professionalism and stability.

Many of the factors in the conceptual framework are found to be interconnected. The municipality as a political and approving party has a major impact on the factors affecting the perceived effectiveness of the alliance. Because of the municipal veto, the municipality has a superior position in relation to the wind power company which gives rise to power imbalances. Moreover, the municipal veto and the political situation in the municipality have a great impact on the stability factor affecting the relationship. A wind power company which wants to improve the effectiveness of the relationship with a municipality needs to minimize power imbalances and increase stability. Increasing stability can be done through thorough background research in terms of political majority and previous use of municipal veto power. Minimizing power imbalances is suggested to be done by being as relationship oriented as possible and thus developing a close and well managed relationship. Creating this kind of relationship requires choosing a suitable inter-organizational communication approach. The study suggests the wind power company to take an early contact with the municipality and thereafter maintaining a continuous dialogue throughout the entire planning and permission stage. Furthermore, both the wind power company and municipality appreciated a long term view of the relationship. The long term view together with a positive municipal attitude towards wind power was found to be the two main elements positively affecting commitment to the alliance.

When analyzing the factors affecting the perceived effectiveness of the relationship between municipality and wind power company the importance of the MCP has been strongly emphasized. As concluded in the relationship analysis, a flexible design of the MCP with wind power zones could lead to benefits for both wind power company and municipality. It was even suggested that designing a MCP with priority zones might have cost reducing implications making the wind power company the cost bearing part. The flexible approach should correspond to a higher level of flexibility in the conceptual framework positively affecting the perceived effectiveness of the relationship. Municipalities are also found to adopt different organizational structures when managing wind power projects. Some municipalities have even delegated the municipal approval

of wind power projects to the civil servants side. This has been considered to relate to a high level of flexibility in the relationship between wind power company and municipality. Furthermore, to increase the level of flexibility the wind power company should be open minded and willing to discuss possible alternative solutions to uprising problems.
There was very little empirical data illustrating possible dysfunctional conflicts between wind power company and municipality. However, such conflicts are considered to negatively affect the perceived effectiveness of the relationship. To avoid dysfunctional conflicts wind power companies could do careful and thorough background research of the municipalities.

The final two factors of the framework, inter-organizational trust and professionalism, were both highlighted as important by all interviewees. Previous experience of managing wind power projects and general competence level were found to be highly interconnected and desired by both parties. Furthermore, previous experience also proved to be a key aspect when evaluating the professionalism factor affecting the perceived effectiveness. Moreover, the quality of application documents and design of the MCP and local wind power plans were other important elements affecting the level of professionalism in the relationship. Competence level and the general knowledge base of both municipality and wind power company were also found to affect the inter-organizational trust in the relationship. Furthermore, wind power companies should adapt a concerned and humble approach when dealing with municipalities. Such an approach together with a general high competence level regarding the application process has been found to lead to an increased inter-organizational trust and thus increasing the perceived effectiveness of the relationship.

The study also identified a number of factors affecting the effectiveness in the relationship between wind power company and municipality which neither one of them could govern. The exceptional role which the Swedish Armed Forces has in the Environmental Code has been found to be an aggravating circumstance for both wind power company and municipality. It would benefit both parties if the

Swedish Armed Forces responded and managed the submission for comment in a faster way. Another identified external factor affecting the effectiveness in the relationship was the design of the municipal veto. Municipalities appreciated the possibility of affecting decisions concerning their land use, but both the wind power company and some municipalities wanted a more distinct and regulated design of the veto power. Finally, Benefit Sharing Mechanisms (BSMs) and especially the community fund was another subject which often was discussed in the relationship. The municipalities in the study highlighted that the BSMs was not for them to decide upon, but it could still affect the effectiveness in the relationship. Moreover, both the municipality and wind power company requested a more regulated and clear layout of the legal framework surrounding the BSMs.

5.2 Recommendations

Based on the findings of this study, recommendations of how a wind power company more effectively could manage the relationship with a municipality is presented. The recommendations concern how the wind power company should communicate with the municipality but also general guidelines of what to investigate and do research about before entering into a relationship with a municipality. General guidelines of how to act in the relationship with the municipality are given. Moreover, favorable municipal characteristics and prerequisites for wind power development are also presented.

The first thing a wind power company needs to do is making a thorough research of the municipality in question. This involves investigating the political situation and the attitude towards wind power. A broad stable political majority in favor of developing wind power projects within the municipality was seen positively affecting the perceived effectiveness of the alliance. The study emphasized the importance of analyzing the MCP and local wind power plan. A flexible and well elaborated MCP, preferably with a local wind power plan, in which wind power development is stated in positive terms was seen as favorable and a good sign to further investigate opportunities in the municipality. A flexible approach with different priority zones regarding wind power should enable wind power

companies to apply for optimal wind power sites in terms of wind conditions and environmental aspects. Furthermore, a flexible approach indirectly tells the wind power company that the municipality is open for an objective permission process since all areas within the municipality can be applied for.

It is critical for a wind power company to realize that every municipality is unique. Therefore, it is important to identify key persons in the municipalities affecting the decisions regarding wind power developments. Furthermore, the organizational structure of the municipality should be identified and analyzed in terms where wind power decisions are taken. The study also suggests that the wind power company does research about previous experience of handling big wind power projects, especially in terms of veto usage. In general, if the municipality has previous experience of handling big wind power projects its competence level and professionalism regarding wind power should make the relationship more effective and easy to manage. When doing a research on a municipality it is also important for the wind power company to realize that a municipality has other interests besides wind power to account for. It is therefore central for the wind power company to be aware of the local prerequisites in terms of conflicting interests of the municipality in question. Performing a thorough research would most likely limit the political uncertainties, reduce the possibilities of sunk costs and improve understanding of municipal prerequisites. The wind power company should adapt its strategies and resources depending on the outcome of the research in order to effectively manage the upcoming relationship.

When communicating with a municipality the study suggested initiating an early contact. It has been proposed for the wind power company to take the contact with the municipality before or in conjunction with contacting the land owner. Moreover, it is recommended to set up a meeting face-to-face where issues regarding the planned wind power establishment can be addressed. Initiating this contact should enable the municipality to be more prepared when answering questions from the general public and noticing the wind power company of possible obstacles to the planned establishment at an early stage and

thus avoiding possible sunk cost. Furthermore, the study stressed the wind power company to approach the municipality with a humble and professional attitude.

When the initial meeting has been held, it is important to strive for continuous communication. Municipalities appreciated when being noticed of the progress of the project and should also as a result of this be more prepared when facing questions from the general public. The preferred means of communication in this latter stage was through e-mail. A suggestion is for the wind power company to incorporate occasions for contacting the municipality in their process schedule or similar. This approach results in continuous communication where updates and other relevant information are shared throughout the project.

5.3 Future research

Managing the relationship between wind power company and municipality is a very complex and versatile process. The study in question used only interviewees from one wind power company. Research on how other wind power companies experience the relationship and their view on relationship effectiveness would be of interest. Similarly, interviews with additional municipalities should provide a broader understanding of the municipal perspective in these matters. Moreover, this study seems to have picked municipalities with positive attitude towards wind power establishments. It would be interesting to examine whether there are municipalities with a negative attitude regarding wind power and their view on how relationship effectiveness can be improved.

Another interesting future research topic is how the general public affects the relationship in question. An analysis of this kind could improve the understanding of processes taking place in the relationship. Research of other actors, like the County Administrative Board, involved in the planning and permission phase and how they affect the relationship effectiveness could also be beneficial. Finally, research on what impact the BSMs have on relationship

effectiveness would be of interest for both wind power company and municipality.

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Appendices

Appendix 1- Interview Questions Nordisk Vindkraft AB

Semi-structured interview

Purpose

The main purpose with this interview is to get a good overview of which factors that affect a municipality's competence, maturity and development level when it comes to wind power projection.

General

1. Which actors are initiated contacts with during the entire life span of a wind power project?
2. Describe the general permit process when it comes to establishing a big facility?
3. What do you see as the major bottle necks concerning the establishment of big facilities?

Interaction with municipalities

4. *How does the communication interchange with municipalities look like?*
   4.1. Which parties/clerks/boards are contacted under the lifetime of a wind power project?
   4.2. How does the role distribution generally look like within a municipality concerning wind power issues?
      4.2.1. Is there in general any actor within the municipality that has a leading role?
5. *Describe common resistant or aggravating circumstances that arise when interacting with municipalities.*
   5.1. In contrast, which general supportive or facilitative circumstances occur in the interaction with the municipality?
6. Which improvements would you like to see from the municipality that would add most value for you?
7. *In negotiation, which are the most important questions being discussed?*
   7.1. Does the municipality put demands on the wind power developer, in terms of certification, repute, references, economical conditions etc?
      7.1.1. Is this regulated in writing or verbally?
      7.1.2. Are there certain policies for this?
   7.2. How is the potential involvement from local entrepreneurs being treated?
8. *Do municipalities have a clearly defined working process when setting up a wind power farm?*
   8.1. Are certain aids/tools used for this purpose?

Municipalities' degree of competence/development level

9. Mention and rank the three most important factors in order to evaluate a municipality's degree of competence/development level concerning wind power projection.
10. Are there any measurable lead time, when interacting with a municipality, which would show how effective a municipality is when it comes to setting up wind power farms?
11. How often do you encounter recommendations in regards to allocation of resources and other compensation models like: community fund, local ownership etc?
12. Do you use wind power plans and/or other policies when interacting with municipalities?
13. Is municipalities' degree of competence/development level an important factor in the decision basis for setting up a wind power farm?
    13.1. Can this result in that a municipality that is evaluated to have better prerequisites to deal with wind power projection is chosen over one that is less developed in this context?

Interviewees Nordisk Vindkraft AB

Name	Position	Location	Interview
Karl-Johan Svanvik	Head of Land Management	Göteborg	Face-to-Face
Mattias Törnkvist	Development Project Manager	Göteborg	Face-to-Face
Martina Wettin	External Consultant	Göteborg	Face-to-Face
Roland Lord	Former Development Manager	Göteborg	Face-to-Face
Maria Fransson	Consultant	Göteborg	Face-to-Face
Maria Löwkrantz	Senior Development Project Manager	Göteborg	Face-to-Face

Table 2 Information from interviewees at Nordisk Vindkraft AB

Appendix 2- Interview Questions Municipalities

Semi-structured interview

Purpose

The objective with the interview is to investigate how the relationship between municipality and wind power company looks like, and to identify factors affecting the effectiveness in this relationship. Focus is on the relationship in the development stage, which involves the wind power company's first contact with the municipality to the municipal approval (for Big Facilities).

Initial contact

1. How many wind power companies have you been in contact with in your municipality?

2. Which wind power companies does the municipality have contact with today?

3. Has any wind developer carried out several wind power projects in your municipality?

4. *How has the contact looked like?*
   - 4.1. How have you been contacted?
   - 4.2. Who at the wind power company generally contacts you? Position? Field of responsibility?
   - 4.3. Is there a clear role distribution concerning wind power in your municipality?

The relationship

5. At what occasions do you interact with the wind power companies?

6. Try to describe a general interaction process from initial contact to your approval. For example if your relationship undergoes different phases?

7. How does the relationship with the wind power company looks like, short- or long term?

8. Does your municipality have any goals concerning wind power establishment? Energy policies?

9. How is your relationship with wind power companies affected by its' reputation, certifications, size etc?

10. How does the political system affect the relationship with a wind power company?

11. How is the relationship between you and the wind power company affected by other extern circumstances? For example the public?

12. How do you look upon the power structure in the relationship between you and wind power developer in the view of your veto?
    12.1. Have you used it? If yes, when and why?
    12.2. Do you have certain routines when it comes to motivating for not approving a wind power farm?

Effectiveness in the relationship
Effectiveness in a relationship means the ability to achieve the respective goals of each party as effectively as possible.

13. Which factors do you experience govern the effectiveness in your relationship with the wind power company?

To be flexible in a relationship means the ability to adapt to changing circumstances in a smooth and constructive manner.

14. How do you value flexibility in your interaction with the wind power company?

15. How do you manage the situation if a wind power company wishes to establish their activities in an area that is not part of the areas appointed for wind power developments?

16. Which conflicts, based on your experience, have occurred between you and the wind power company in the development stage of the wind power project?
    16.1. Have there been conflicts that have been solved in a manner leading to an improved relationship between you and the wind power company?
    16.2. Have there been conflicts so infected that they were not able to solve?

17. How is the allocation of resources managed in your municipality in regards to community funds etc?

18. How important is it for you to have trust for the wind power company?

19. How do you value communication exchange in the relationship with the wind power company?

20. How do you prepare local labor and competence before a planned wind power project?

21. Has it occurred that a wind power company utilized resources in terms of competence and local corporations within the municipal boundary when developing a big wind power farm?

22. How do you look upon wind power in relation to other common interests?

23. How do generally look upon the national areas for wind power development that the government has appointed?

Suggestions of improvement

24. How do you think the wind power companies shall act in order to make the relationship with you more effective?

25. On the contrary, is there anything that you think can worsen the effectiveness?

26. Is there anything a wind power company can do to ease/obstruct a municipal approval?

27. Can you think of any factors, that has impact on your relationship, that neither you nor the wind power company can affect?

28. Have you learnt anything from interacting with wind power companies?

29. Conversely, do you think there is something that they need to learn from you in order to improve relationship effectiveness?

Interviewees Municipalities

Name	Municipality	Position	Location	Interview
Maria Söderlund	Varberg	Acting Head of Town Building[134]	Varberg	Face-to-Face
Karl-Axel Jansson	Laholm	Planning Secretary[135]	Göteborg	Mail
Lars Thomsson	Gotland	Local Government Commissioner and Wind Power Coordinator	Göteborg	Phone
Alisa Basic	Motala	Head of Local Planning[136]	Göteborg	Phone
Erna Pezic	Falköping	Architect/Urban Planning[137]	Falköping	Face-to-Face

Table 3 Information from interviewees at the municipalities

134 ”Tillförordnad Stadsbyggnadschef”
135 ”Planeringssekreterare”
136 ”Detaljplanechef”
137 ”Kommunarkitekt”

Appendix 3- Central authorities for wind power

Authority	Main responsibility	Role concerning Wind Power
Work Environment Administration ("Arbetsmiljöverket")	To ensure that laws of working environment are being followed.	To make sure that wind power stations fulfill current market regulations.
Swedish Board of Housing	Administer issues concerning built environment and economy of land- and water areas.	Improve planning of wind power expansion.
Electrical Safety Administration ("Elsäkerhetsverket")	Responsible for questions concerning electrical safety and electromagnetic compatibility.	Ensures that the wind power facility fulfill electrical safety regulations.
Swedish Energy Agency	Expert authority that promotes usage of renewable energy sources.	Promotes a radical expansion of wind power.
Swedish Armed Forces	The outmost security politically organ of Sweden.	**Consultive body** which can stop wind power project if they interfere with their interests.
Land Survey ("Lantmäteriet")	Provides society with information regarding geography and real estates.	Can adjust real estate to better fit wind power purposes.

Swedish Civil Contingencies Agency ("Myndigheten för samhällsskydd och beredskap")	Develops and supports the society's capability to handle accidents and crisis.	Prepares rescue efforts for possible accidents in conjunction with wind power facilities.
Environmental Protection Agency ("Naturvårdsverket")	To create a good habitat for every living organism, both now as well as for future generations.	Promotes a sustainable expansion of wind power as an environmentally friendly energy source. They have authority to appeal a permit decision.
National Post and Telecom Agency ("Post- och Telestyrelsen")	Responsible for electronic communication containing Telecom, Radio and IT.	**Consultive body** which provides the wind power company with contact information for concerned radio operators.
National Heritage Board ("Riksantikvarietämbetet")	Handles questions concerning cultural environment and heritage.	Gives guidance and knowledge for municipal planning of wind power projects.
Sami Parliament ("Sametinget")	Looks after issues that affect Samian culture in Sweden.	Participates in community planning and watches that Samian needs are respected.
Forest Agency ("Skogsstyrelsen")	Ensures laws and regulations within forestry are being followed.	Gives advice and leaves information about valuable nature- and culture environments in the forest.

Swedish Meteorological and Hydrological Institute (SMHI)	Performs measurements and observations of air and water in Sweden.	Cooperates with the Swedish Armed Forces when investigating whether a wind power establishment interferes with the weather radar.
Swedish National Grid ("Svenska Kraftnät")	Controls the backbone for electric power and has the system responsibility for Sweden's electric power supply	**Consultive body** which supports wind power research as well as looks into holistic solutions for wind power connections.
Swedish Transport Agency ("Transportstyrelsen")	Develops regulations that govern safe and sustainable transports within railway, air, sea and road.	Ensures that the wind power establishment does not interfere with each way of communications means.
Swedish Transport Administration ("Trafikverket")	Responsible for building, running and supporting public roads and railways, as well as an effective utilization of the infrastructure is taking place.	Provides municipality, County Administrative Board and power producing company with basic data when planning for wind power establishments.

Table 4 Basic information about the most central authorities involved in the development process of a Big Wind Power Facility