

Hanne Liv Østtveit-Moe

# Facilitating Internationalization

- The role of INTPOW for the renewable energy industry in Norway

Master's thesis in Globalization

Master of Science in Globalization – Global Politics and Culture

Norwegian University of Science and Technology (NTNU)

Trondheim, May 2012





## **Abstract**

Globalization forces companies to internationalize as markets are becoming more and more internationally integrated and competition gets tighter both at home and abroad. The role of a facilitator in internationalization is looked into in this thesis, more specifically the role of INTPOW as the Norwegian state's facilitator for internationalization of the renewable energy industry in Norway. This thesis emphasizes the role of networking and the arena where networking can happen as essential for internationalization. It also looks into the role of the public authorities in the facilitator organization. The role of the state is important as it provides access to persons and companies at a higher level than what the companies can achieve on their own. Through mapping competence and uniting the industry, a more conscious awareness of what the industry can offer is revealed both with the Norwegian authorities but also within the industry itself. A specific locally developed competency derived from years of experience from working with renewable energy in Norway is an important asset for Norwegian companies when entering international markets. Different stages in internationalization can be found and the role of the facilitator is seen to change accordingly emphasizing how the different stages needs different assistance with regards to international efforts. This study contributes to the gap in theory on facilitators for internationalization and the understanding of internationalization in the globalized world economy.



## **Acknowledgements**

This project could not have been done without the assistance of several individuals which I would like to thank for their invaluable contribution.

First of all, I would like to thank my supervisor Asbjørn Karlsen for good feedback and follow up through the process of writing this thesis. I would also like to thank Markus Steen for providing the initial connection to INTPOW.

Without INTPOW's open-mindedness and interest in my project this thesis could never been written. I would like to thank managing director Geir Elsebutangen at INTPOW for letting me into the organization, taking the time to meet with me and giving me access to market studies and other organizational documents. This has helped me understand more about the role that INTPOW plays for the renewable energy industry in Norway. I would also like to thank Morten Bygland at INTPOW for your time in interview and for giving me the chance to participate at an INTPOW event by inviting me to the conference in Oslo.

I would also like to thank Klaus Livik in Powel, Leif Røv in AAK, Jon Einar Værnes and Erling Legran in TrønderEnergi and Ola H. Norderhaug in Norconsult for your time out of your busy schedules to meet with me to help me get a better understanding of the role of INTPOW in your companies' internationalization.

I would also like to thank Kate Clark for much needed coffee breaks and moral support, as well as being a great proof reader with an eye for details.

Last but absolutely not least I would like to thank my supportive husband Martin Østtveit-Moe for sticking with me through this and for countless supportive pep talks when I felt it was just too much to do in too little time. Thank you for your support and comments and good discussions throughout the process – it has been absolutely invaluable. And I hope you have learned all of my mistakes before you start your own thesis! You really made it possible!

Trondheim, May 2012

Hanne Liv Østtveit-Moe



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## Chapter 1: Introduction

*“A consequence of globalization is that ‘abroad’ has come closer and that the world becomes smaller. In a world economy with integrated markets there are good opportunities for competitively strong Norwegian companies within many branches and sectors, at the same time as we meet challenges in the home market”* (The Norwegian Foreign Minister, Støre, 2011, my translation).

The process of globalization has redefined energy production and it is now seen more and more as an issue that needs to be addressed on a global scale. A growing demand for clean energy derived from renewable energy sources has created a significant market and focus on this industry worldwide. Environmental challenges over the past year, and especially the Fukushima nuclear disaster following the tsunami in Japan, have increased the focus on generating power from renewable and safe sources of energy for the future. This is especially evident in Germany and the UK with large initiatives in renewable energy production. Global warming is also an issue that is becoming more and more central in planning for the growing energy demands in the future.

The ‘EU 2020’ is the European Union’s growth strategy for the coming decade and focuses on ‘smart, sustainable and inclusive growth’ (European Commission, 2012). Energy production is no longer seen as solely a national matter, and the leaders of the world must collectively take actions by supporting the building of renewable energy sources. The Kyoto Protocol is a legally binding agreement to meet emission reduction targets for greenhouse gases and has played an important role in the renewed focus on these issues on a global scale. The EU has, through their EU 2020 strategy, set targets for sustainable growth which include an increase in the share of renewable energy to 20% by 2020 among the member countries. This requires a heavy investment in renewable energy in markets all over the European Union in the coming years if these targets are to be met. Only around 5,5 per cent of the EU power consumption was covered by wind power in 2010, and this share must increase considerably to be able to reach the EU-defined goal of 15 per cent coverage by 2020, and 20 per cent by 2030 (INTPOW, 2012).

Renewable energy constitutes the future in energy production, as oil and gas are non-renewable energy sources which will eventually dry out sooner or later. Creating new technology for the future is an important part of the focus on renewable energy. The debate around global warming has increased awareness that something must be done. Norway is in a different position than most other countries as the domestic energy consumption is nearly all provided by renewable energy from hydropower. This provides us with experience and competency in hydropower which can be important in countries in the EU to meet the 2020 targets. To meet these targets, countries throughout Europe have to develop renewable energy plants, and hydro- and wind power are along with solar power the most important sources of renewable energy to meet these demands. Norwegian companies have long experience from working in marine industries, fishing and shipping. When oil was discovered in the Norwegian Sea, specialized skills were developed in working offshore. These competencies can be extremely valuable for Europe now that the EU is about to push for a change in energy production in their energy markets.

The Norwegian Renewable Energy Partners (INTPOW) has in that relation produced so called 'competence maps' which outline the Norwegian hydropower industry and in the offshore industry where developments towards offshore wind are important. These two markets are the two main renewable markets that I will focus upon in this thesis. There are of course also skills such as solar power companies based in Norway, but looking at this from a knowledge perspective, the experienced and well-developed competencies from within hydropower and offshore and marine operations offer the most important Norwegian competencies to the international market. Many European countries possess large potential for water power that have not been developed, as they might lack the expertise and know-how that Norwegian companies possess. This is an important possibility for Norwegian power companies to apply their knowledge to new markets.

The Norwegian renewable energy industry has been an important actor in the Norwegian society for over a century. INTPOW works with businesses as diverse as hardware production of components through to software and IT-solutions to consultancy companies and banks which are all involved in the renewable energy industry in one way or another and have joined INTPOW as members. Despite their differences they have a common background in Norwegian industrial culture which means that many values and traditions can be found in common as they share a cultural and industrial history, which makes them institutionally close despite their differences.

## **Norwegian Renewable Energy Partners (INTPOW)**

With its about 40 partner companies in Norway, INTPOW is an organization established in cooperation between the Norwegian authorities and the Norwegian renewable industry business to promote internationalization and strengthen the value creation and employment within the energy sector. This is done through securing the widespread use of renewable energy through international cooperation. INTPOW is a key player in bringing Norwegian expertise abroad and create meeting places and help members to make new acquaintances. INTPOW is a networking organization, a joint venture between the Norwegian renewable energy industry and the Ministries of Petroleum and Energy, Trade and Industry and Foreign Affairs (INTPOW, 2011) which all have an interest in the Norwegian renewable energy industry. INTPOW works to strengthen the renewable energy industry in Norway through partnering and international expansion. Established in 2009 it is a public-private partnership project (INTPOW, 2011). Making a fruitful environment where the different parties may benefit from the flow of information and knowledge between businesses is part of the important role of the organization. INTPOW provides an arena for partners to meet, exchange experiences and discuss ideas with other members of the industry – from home as well as from abroad – where they can develop personal relationships that could turn into business relationships. INTPOW also aims to support competitiveness within and between actors in the renewable energy industry (INTPOW, 2011). INTPOW as an organization will also be presented further in chapter 4.

Technology and knowledge exchange between foreign and Norwegian business, mapping markets, establishing networks between Norwegian and international businesses are important aspects of the internationalization process of a company and are vital to the success of establishing an international business branch. It will be looked closer into how this process is seen from the members of INTPOW, through four informant companies in this study, as well as from INTPOW itself, through two employees, and how they see the role of INTPOW in the internationalization of the Norwegian renewable energy industry.

## **Norwegian Experience from Hydropower Production**

Norway is the world's sixth largest hydropower producer and the only industrialized nation meeting its domestic electricity demand almost exclusively from renewable energy (INTPOW, 2012). Renewable energy from hydropower has a long and successful history in Norway and the industrialization in Norway has been based on the easily accessible and cheap electrical power available from hydropower installations throughout the country. These were often located in rather remote areas where the hydropower potential that was available from waterfalls and rivers throughout the mountainous country could be exploited. Planned maintenance is one of the important keys to succeeding as a hydropower producer and was emphasized by one of the informants to this study. Many Norwegian companies are now looking to internationalize as they have valuable expertise to bring to the markets in South-eastern Europe, Asia, South America and Africa. Implementation of cutting-edge technology to support responsible environmental and social energy production is highly relevant with regards to internationalization of Norwegian expertise within the renewable energy industry and is essential for markets throughout Europe especially, but also many countries around the world. INTPOW helps Norwegian hydropower companies to use their knowledge and competency internationally by providing a networking arena and updated market information and events as well as bring important actors from Norway to potential markets and vice versa.

## **Norwegian Experience from Offshore**

Norway has long experience from marine activities in fishing and shipping. Since oil was discovered off the coast of Norway towards the end of 1969, the Norwegian competency from marine activities has formed the basis for a successful offshore energy production. *“The oil- and gas cluster [in Norway] can be seen as a development of the competency that was built up in the maritime cluster”* (Reve and Jakobsen, 2001: 180). Norwegian companies which work within this industry, have gained valuable insight into working offshore under rough weather conditions and continues to develop a specific offshore expertise. This is now highly relevant for a renewed focus on other offshore energy sources such as offshore wind power. Offshore wind is a form of wind energy which now is beginning to include installations further away from shore and in deeper waters, and many are already under construction in

British and German waters. These are highly important markets for Norwegian companies which have experience from working offshore taking in to consideration heavy weather conditions that may occur while working offshore.

This means that internationalizing is an important part of doing business in the renewable energy industry in Norway, especially for offshore wind energy production. This is a new and emerging market where several Norwegian companies aim specifically towards this market because of their long experience from working offshore within fishing, shipping and offshore oil and gas extraction. Offshore wind is in a position where the political will to create a home market in Norway seems to be lacking, but has an extensive commitment with regards to research and development (Hansen and Steen, 2011). This creates an environment and potential for international activity which INTPOW is working towards realizing on behalf of the industry.

## **Research questions**

This is a study of the organization INTPOW and its role in internationalization and I will look into to which extent the network affects the internationalization of its members through the initiatives it makes. Following is the main research question in this master's thesis:

*What is the role of the organization Norwegian Renewable Energy Partners (INTPOW) as facilitator for internationalization of the Norwegian renewable energy industry?*

A subordinate question will look into how INTPOW promotes cooperation both nationally and internationally and which aspects of the membership are most important to the members with regards to their internationalization. This relates to how the Norwegian renewable energy industry target new and emerging markets internationally and if INTPOW's market studies and events are of importance to the members in decisions regarding market entries.

Subordinate question a): *What is the role of INTPOW in promoting cooperation and new business partnerships between the members as well as with international actors with regard to their internationalization and choice of market entry?*

Another important subordinate question regards the role of INTPOW as a public-private partnership and how this determines the role of the network and the members who enter into

it. Looking into the Norwegian authorities' role in INTPOW is important as well as looking to see if there are benefits of becoming a member of INTPOW with regards to the contact with the Norwegian authorities.

This is covered by a second subordinate question b): *What is the role of INTPOW as a public-private organization and does this include a connection to Norwegian authorities that otherwise the companies would not have and is this channel of public involvement an important reason to engage in INTPOW?*

These subordinate questions will help answer the main research question as these are important aspects of INTPOW's role as facilitator for internationalization.

## **Outline**

This thesis is structured into 6 chapters. Introduction and presentation of the background for the research topic is in chapter 1 followed by literature review and theory discussion in chapter 2 which presents some relevant theoretical approaches and previous findings that have been important in the data collection and analysis of this study. It also includes important inspiration regarding internationalization and network in this research. Chapter 3 brings in the methodological background for this thesis and presents and discusses the approaches to data collection and analysis used in this thesis. In chapter 4 the organization INTPOW is presented and the four member companies of INTPOW that has informed on this research which all work within the hydropower or the wind power industry, or both. A discussion of the findings in this research will be found in chapter 5 where a thematic approach to the analysis has been used. The results from the discussion and theoretical implications of this have been summed up in the conclusion in chapter 6.

## **Chapter 2: Theory and literature review**

*“Theory is taken to be a set of explanatory concepts that are useful for explaining a particular phenomenon, situation or activity”* (Kitchin and Tate, 2000)

Theory is important in explaining findings and analysis done in this thesis. Especially important is looking into earlier research and theories about networks in the internationalization process and the role of a facilitator in the process of internationalization. These processes are all placed in the context of globalization and the global economy and the challenges that Norwegian firms are facing today is important to bring up front to set the agenda.

### **Globalization**

Globalization is an overarching global trend of more interaction and communication. Hubbart et al. (2005) point out that the last thirty years have probably seen the most rapid changing and ‘speeding up’ of the world in history especially with regards to technological and communicative innovations such as satellite communication and internet which have diminished the importance of spatial borders. As Dicken puts it in his book *Global Shift*, there are: *“Structural changes associated with the geographical rescaling – local, national, regional, global – of economic activities [...] the global economy has become increasingly multipolar”* (Dicken, 2007: 437). The world has become closely connected and innovations in the so called ‘time-space shrinking’ technologies have played a central role. Technical advances in transport and communication over the past century, and especially over the last few decades, has increased interaction across national boundaries and made internationalization of companies almost inevitable if they wish to stay competitive in an ever more globalized market economy.

Many scholars agree that there is no single definition of the term ‘globalization’ (Hubbart et al., 2005, Dicken, 2007, el-Ojeili and Hayden, 2006). As Hubbart et al. (2005) points out, globalization can be seen both as a process and an outcome of those processes, while Herod (2003) sees the movement from the local to the global scale as a process of developing networks of associations. Globalization can also be seen as ‘multilocal’, as some scholars

argue the global is really just local in several places (Gibson-Graham, 2002, in Herod, 2003). The concept ‘internationalization’ has, according to Carlsson and Dale (2011), merged into globalization, defined by Dicken (2007: 8) as “*both extensive geographical spread and also a high degree of functional integration*” of economic activity.

Internationalization is the firm’s response to the process of globalization. Firms need to stay competitive and able to keep up with new innovations and competition both in the home market and abroad. The global market economy forces firms to internationalize more rapidly than before (Johanson and Vahlne, 2003). The increase in market size and access to new markets are important reasons for internationalization, as well as staying competitive. Thrift (1994b, 1996 in Hubbart et al., 2005) sees reflexivity and networking at the heart of the global economy. Dicken (1997, in Hubbart et al., 2005) also recognize a trend in the operation of ‘global’ companies that there is a growing emphasis on global networks. He points out that government actions are highly significant in establishing and sustaining national comparative advantages in the current global economy, and these are interesting points keeping in mind that INTPOW is a state-initiated public-private networking initiative that aims to internationalize the Norwegian renewable industry.

### **The role of the state**

The renowned economist Charles Kindleberger stated some 40 years ago: “*The nation state is just about through as an economic unit*” (Dicken, 2007: 173). Many see globalization as a process which will result in a borderless world following the leaps in communication and transport technology. Dicken sees this view as misleading, and claims that “*every government, whatever its political complexion, intervenes to varying degrees in the operation of the market*” (Dicken, 2007: 173) and that the state works as a regulator of foreign investment and industry. The nation-state has an extensive range of regulations it can use to control and stimulate economic activity – INTPOW is an example of a tool used by the Norwegian government to boost the renewable energy industry Norway by encouraging networking and internationalization. By doing so, innovation and upgrading are encouraged, which give the industry more competitive advantage (Dicken, 2007), something that is important for a vital industry to continue to work and function in Norway. This relates directly to one of the

subordinate questions in this thesis regarding the role of INTPOW as a public-private cooperation.

## **Facilitator**

The concept of an external facilitator in internationalization has not received much research attention, as Welch et al. points out (1996). Their study, however, looks into an organization which was established to bring together support for Australian firms in the process of bidding for a major international project in China. They point to network establishment, personal relationships with Chinese, and how this enhanced the essential market knowledge as important effects of the facilitator. The networking within the organization as well as access to information flows and contacts developed in the network with other parties are highlighted as essential for the companies who joined the organization in their study. The organization in Welch et al. (1996)'s study plays a similar role to what INTPOW does, as it established an umbrella function and facilitated relationship building, and it too was supported by the public authorities. Welch et al. explains: "*The facilitator can play a pivotal role in providing the formal forum, the vehicle, the support infrastructure (including its network base), and key personnel*" (Welch et al., 1996: 601). The arena, or what Welch et al. terms the formal forum, is essentially the most important aspect of the role the facilitator organization played in their study.

An external facilitator in international project marketing is important because "*the development of effective relationships between a broad mix of suppliers and with the purchasing organization(s) is a prerequisite of successful project operations*" (Welch et al., 1996: 579-580). Welch et al. points out that from the project purchaser's perspective there is a high level of uncertainty and risk involved and assurance is sought through trust in a particular supplier. This is why networking is so important in internationalization because it builds personal and social contacts with key persons and companies which again lead to possible project allocations. Their study also points out how this formal framework is essentially the basis for the development of a personal and professional network in the organization. Their case can be illustrative of the potential impact such supportive organization can have on building knowledge and networks in the preparation for bidding for

a major international project. They also point to how this is a means that governments can use to support industries and help them win major international projects.

In this study INTPOW is the organization investigated, and the roles I look at relate to many of the same problems as those in the study of Welch et al. However, INTPOW does not focus on only one project, but has several ‘branches’ within hydropower, wind power, solar power et cetera, and also aims toward internationalization in general, not one particular project in one particular country. There are differences in the cases, but the theoretical implications from this case study are important in the study of INTPOW as facilitator for internationalization. The roles of INTPOW can thus be expected to be more varied as it is an organization that serves several needs of its members. There are also several aspects of the role of INTPOW that are not covered in this study, but which I will focus on such as the role as facilitator for network building and a connection to the public authorities regarding representation and participation at events with international business delegations.

## **Localization**

Where a firm chooses to localize can be essential for the survival of the firm when a closer integration of national and international markets occur and competitiveness is measured on a global scale rather than on a national one. As Dicken notes: “*Economic activities tend to cluster or agglomerate in particular kinds of location*” (Dicken, 2007: 29). The cluster approach was first introduced by Porter (1990; 1994; 1998; 2000, in Malmberg, 2003) and one definition of cluster, given by Porter, follows:

*“A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. The geographical scope of the cluster can range from a single city to a country or even a group of neighbouring countries”* (Porter, 2000: 254, in Malmberg, 2003: 450).

The scale of geographic concentration is kept very elastic in this definition of cluster, and I see this as useful for this study of INTPOW as a facilitator for internationalization of the Norwegian renewable energy industry. INTPOW brings together companies that are interconnected and associated from a particular industry, and at a national scale. INTPOW creates arenas for networking and other events throughout the year. In this understanding of

cluster, INTPOW holds a role as a facilitator of internationalization through enhancing the 'cluster reputation' (Zyglidopoulos et al., 2006) on behalf of the energy cluster in Norway.

One part of the activities that companies in a cluster are dependent on is the marketing of Norwegian competency and Norwegian companies as a whole for the international markets. An example by Reve and Jakobsen (2001) regards the Norwegian seafood cluster, where the companies pay a fee to finance international marketing which is done by the Norwegian Seafood Council (Reve and Jakobsen, 2001, NSC). One company does not have incentives to do the marketing on behalf of the industry, and the state makes an arrangement on behalf of the whole industry. INTPOW is however a membership organization, but works with regards to internationalization efforts for the whole renewable energy industry in Norway, although they natural focus on their member companies.

Several Norwegian researchers have pointed to the different Norwegian clusters (Reve and Jakobsen, 2001, Isaksen et al., 2008) and the important implications of innovation and competency they hold. The renewable energy industry combines companies from several cluster affiliations in Norway within the hydropower, wind power, parts of the offshore cluster in oil and gas and the solar and bio energy sources as well as diverse new and alternative renewable energy sources. They are all part of the Norwegian energy cluster in some way or another and have a common cultural background.

It has been argued that a cluster organization can assist its members in internationalization by providing resources and a general 'cluster reputation' which the individual companies can benefit from when entering a new market where they may be unknown (Zyglidopoulos et al., 2006). INTPOW provides input to the cluster reputation through supply chain overviews and competence maps within the different renewable industries. The events and the connections INTPOW has abroad also contribute to the cluster reputation which assists the members of the cluster in their internationalization. INTPOW promotes the Norwegian renewable energy industry as united and collectively able to bring important knowledge to markets abroad. This is especially important for the small and medium sized companies who will not have the resources to build their own reputation from scratch, which is a highly time-consuming and resource demanding process.

INTPOW has external links to markets in Europe such as the UK, Germany, and several other countries – termed by Malmberg as 'global connections' (Malmberg, 2003) – as well as connections through the state to embassies and offices of Innovation Norway throughout the

world. External linkages are more and more essential for the firm in today's globalized world economy, and global connections and links to the outside are important for a cluster's well-being to make sure a cluster grows and stays updated on new innovation in related clusters around the world (Malmberg, 2003). Increased focus on the ability to innovate to sustain industrial competitiveness and seeing that "*innovations predominantly occur as a result of interactions between various actors*" (von Hippel, 1988; Håkansson, 1987; Lundvall, 1992, in Malmberg, 2003: 145) highlights the importance of the connections from the Norwegian renewable energy industry out to international markets and partners.

## **Proximity**

Internationalization theory, specifically the Uppsala School of Internationalization (Johanson and Vahlne, 1977) suggests (which I will return to below) that markets with relatively close mental proximity are easier to enter. The notion that 'the more proximity there is the more innovation will come' has been criticized by Boschma (2005). Place and geographical proximity has been assumed to be essential to facilitate interactive learning and innovation, which are essential to internationalization, but Boschma points out that "*effective interactive learning and innovations require an absorptive capacity open to new ideas (the cognitive dimension) [...] it seems that cognitive proximity is a prerequisite for learning*" (Boschma, 2005: 72). He notes that geographical proximity is important as it facilitates informal relationships and may play a complementary role in building and strengthening the other dimensions of proximity: social, organizational, institutional and cognitive proximity (see table on the next page). The dimensions presented in the table are taken from Boschma (2005) and presents the different forms of proximity. They are all important dimensions of proximity, and that is a prerequisite for establishing a personal relationship based on trust that can develop to become a business relationship through informal networking. The most important dimensions in this study are the cognitive dimensions, which Boschma points out is a prerequisite for learning, and the institutional proximity which exists between the members of INTPOW and other companies belonging to the energy cluster in Norway as they come from the same cultural and institutional background.

<b>Five forms of proximity</b>	<b>Key dimension</b>	<b>Too little proximity</b>	<b>Too much proximity</b>	<b>Possible solutions</b>
<b>1. Cognitive</b>	Knowledge gap	Misunderstanding	Lack of sources of novelty	Common knowledge base with diverse, but complementary capabilities
<b>2. Organizational</b>	Control	Opportunism	Bureaucracy	Loosely coupled system
<b>3. Social</b>	Trust (based on social relations)	Opportunism	No economic rationale	Mixture of embedded and market relations
<b>4. Institutional</b>	Trust (based on common institutions)	Opportunism	Lock-in and inertia	Institutional checks and balances
<b>5. Geographical</b>	Distance	No spatial externalities	Lack of geographical openness	Mix of local 'buzz' and extra-local linkages

(Five forms of proximity: some features in Boschma, 2005: 71).

Malmberg points to how “*the knowledge structures of a given geographical territory are more important than other characteristics [...] when it comes to determining where we should expect economic growth and prosperity*” (Malmberg, 2003: 146), but also notes that “*relational proximity need not coincide with the type of spatial proximity that follows from permanent co-location*” (Malmberg, 2003: 458). With regards to INTPOW it effectively has a function as a facilitator for internationalization of the renewable section of the energy cluster in Norway by building on relational proximity both with other Norwegian companies, but also to develop relationships with potential partners from abroad at events arranged by INTPOW at several occasions throughout the year. INTPOW is a Norwegian-wide network which unites firms through cognitive and institutional proximity as they share a common background, experience and business culture (Boschma, 2005) which is referred to in this thesis as ‘the Norwegian competency’ which we will return to in chapter 5. Their common cultural background makes them institutionally close and this is important in their networking purpose.

Recent research on the internationalization process of firms has shown that it was driven by their network ties (Majkgård and Sharma, 1998, Sharma and Blomstermo, 2003, Coviello and Munro, 1997) and network theory often emphasised close geographical proximity as an advantage in inter-firm learning. The case study in Sharma and Blomstermo’s article shows

that the internationalization process of Born Globals<sup>1</sup> is influenced by their network ties (2003: 744). Also Coviello and Munro (1997) find that small software companies' internationalization is facilitated through their network – both formal and informal connections – as they combine the stage and network approach to internationalization in their study. We will return to the network concept below, but first look at theories of internationalization.

## **Traditional Internationalization Theory**

*“An important implication of the process view of internationalization is that development, integration, and transfer of knowledge should be regarded as a critical aspect of strategic management of internationalization”* (Johanson and Vahlne, 2003: 90).

The Uppsala Internationalization Model (Johanson and Vahlne, 1977) – called by some the U-model – is assumed to be the general incremental internationalization model (Andersen, 1993 in Majkgård and Sharma, 1998: 5, Coviello and Munro, 1997). Another and relatively newer approach to look at internationalization regards the so called Born Globals, which we will return to below under new internationalization theory. The U-model will be elaborated upon first.

The U-model (Johanson and Vahlne, 1977) states that internationalization is knowledge-driven. Experiential knowledge of firms is emphasised as necessary for internationalization, which is knowledge gained through personal, hands-on firm experience in a specific market. Exposure to international markets can also help firms to gain knowledge on the institutional level, the business level and the internationalization level (Eriksson, Johanson, Majkgård, & Sharma, 1997 in Sharma and Blomstermo, 2003: 740). Institutional knowledge concerns knowledge of current rules and regulations while business knowledge concerns clients and demands. Internationalization knowledge forms the ‘absorptive capability’ of the firm (Cohen

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<sup>1</sup> Born Globals, also referred to in the literature as: International New Ventures and Global Start-ups. In this paper born globals will be used to coin firms who have a rapid and early internationalization from inception to avoid confusion between the different terminologies used for this kind of firm. This concept will be discussed under New Internationalization Theory on page 16.

& Levinthal, 1990 in Sharma and Blomstermo, 2003: 741). These are all very important for a firm's internationalization.

The U-model focuses on internationalization as a gradual and evolutionary process where incremental learning at the firm level is key driver for the internationalization process (Gruber-Muecke, Sharma and Blomstermo, 2003). The theory does not refer to any particular type of firms, which makes it easier to apply in a given context, although it has traditionally been connected to export activities in manufacturing industry. However, internationalization has, over the last few decades, been seen as an increasingly important strategy for achieving competitive ability among firms and in trade (Carlsson and Dale, 2011), illustrated by this quote from the European Commission (2004 a, 7 in Carlsson and Dale, 2011: 191):

*“Foreign partnerships, foreign investments and cross-border clustering represent viable ways to facilitate exchange of knowledge and technology and to strengthen international business strategies of SMEs<sup>2</sup>. Such international activities cover both outward (e.g. sales/export) and inward (e.g. import or access to knowledge) activities along the value chain”.*

The Uppsala School assumes the process of internationalization to be path dependent, building on prior knowledge held by founders and managers at the firms (Nordman and Melén, 2008). Since knowledge is developed gradually (Johanson and Vahlne, 2003), incremental internationalization happens through a process of gradual commitment of resources in the foreign market, usually exports, then followed by a marketing subsidiary followed by foreign production (Johanson & Wiedershem-Paul, 1975 in Sharma and Blomstermo, 2003: 741). The U-model argues that a firm bases its choices of international market selection and market entry on its current stock of experience. ‘Experiential knowledge’ is obtained through interaction in the business network with other firms and having operations in those markets (Nordman and Melén, 2008, Johanson and Vahlne, 2003).

*“The impact of experiential knowledge of the selection of foreign market arises from the psychic distance between the home market and the foreign one”* (Majkgård and Sharma, 1998: 6-7). Psychic distance relates to the feeling that a culture is very different from one's own, initially defined as *“factors preventing or disturbing the flow of information between potential or actual suppliers and customers”* (Nordström and Vahlne, 1992, in O'Grady and Lane, 1996: 311). INTPOW can help to shrink the psychic distance and establish trust by offering an arena to network and get to know actors from potential new markets as well as providing

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<sup>2</sup> SME = Small and Medium sized Enterprises.

market studies and relevant information about those markets. The findings in Majkgård and Sharma's (1998) study show that the fundamental process of foreign market entry depends on the accumulation of experiential knowledge. Success of entry depends also on a well-developed network of exchange abroad and they conclude that "*contracts and alliances may be as effective in seeking foreign market entry as ownership-based foreign market entry modes*" (Majkgård and Sharma, 1998: 31).

## **New Internationalization Theory**

Concepts such as Born Globals, International New Ventures, or Global Start-ups have been introduced to academia to coin the phenomenon of firms who have an early and rapid internationalization from inception (Nordman and Melén, 2008). Born Globals are generally newly founded firms with no organizational history, but where the founders and managers bring with them experience and knowledge to the start-up that highly influences the internationalization of such firms (Madsen & Servais, 1997; McDougall, Oviatt, & Shrader, 2003; McDougall, Shane, & Oviatt, 1994 in Nordman and Melén, 2008). New models of internationalization focus on networks and business relationships as a way of explaining the rapid internationalization processes of Born Globals (Johanson and Vahlne, 2003: 83). This train of thought is central to my research on internationalization through INTPOW as we will get back to, networks have a highly important role in creating meeting places for social encounters and new business relationships to begin as arenas where the companies are allowed to present themselves and meet possible partners or customers in other countries. Some scholars even go as far as to say that the old models of incremental internationalization are no longer valid (Johanson and Vahlne, 2003). This statement has been made on the background of observations made by several researchers that global competition and accelerating technological development in communication have forced firms to internationalize earlier and faster than before and thus cannot the old models account for the processes now happening in internationalization.

On the other hand, "*several scholars have found that experiential knowledge is integral to the internationalization process of Born Globals*" (Autio et al., 2000; Sharma & Blomstermo, 2003 in Nordman and Melén, 2008: 175), so the stage theory aspect from the earlier models of internationalization seems to still have a place in theories of internationalization. Founders

and managers of Born Globals have significant international experience before establishing their firms and this experience is developed through personal networks of customers and contacts. This has shown to be an important driver for the international development of those firms as the network may provide opportunities for the newly established companies (Nordman and Melén, 2008). The emphasis put on networks is especially important with regards to this research, as well as keeping in mind the incremental stepwise thinking of the older internationalization model. Fletcher mentions four approaches to internationalization of the firm: ‘stepwise’, ‘learning’, ‘contingency’ (Fletcher 2001, Welsch & Loustarinen 1999) and ‘network’ (Fletcher, 2011). These are all important aspects to keep in mind when looking at the companies’ internationalization processes through INTPOW. I will draw on traits from both traditional internationalization theory of incremental and stepwise processes and the network perspective from the newer models of internationalization to look at internationalization through INTPOW. First, the network aspect will be looked into as it is a central topic in this research.

### **Network in internationalization**

*“Business networks are an efficient source of information to gain [...] knowledge and for small to medium-sized firms to speed up their learning about internationalization”* (Johanson and Mattson, 1988 in Chetty and Campbell-Hunt, 2003: 7).

Johanson and Vahlne’s (2003) research shows that close, lasting relationships are considered extremely important between firms who do business together. Trust is a key work in networking as it facilitates increased access to knowledge and competence which is an important aspect for the firms who want to engage in such networks. Even though the firms do not have direct connections through a supply chain they will benefit from knowing of each other and exchange ideas and knowledge. *“Collaborating through business networks, however, enables small to medium-sized firms to accelerate their internationalization process and to achieve success beyond what they could achieve alone”* (Coviello and McAuley, 1999; Lu and Beamish, 2001 in Chetty and Campbell-Hunt, 2003: 5).

These sort of network connections is what Coviello and Munro (1997) term *informal network* connections, while *formal network* connections are direct supplier-buyer relationships. Through personal relationships on a professional level networks are established and connected between individuals across both formal and informal networks throughout the industry. In this study the term ‘network’ will be used both in the formal and informal sense of the word, much like Coviello and Munro coined it. The main emphasis is on how the informal network can be a way in to establishment of formal network connections in the future. Network in this study refers to the relationships that exist between businesses both as a direct line of supplier to buyer, but also as competitors and sharing a common interest being part of the same industry.

INTPOW has created arenas for the specific fields of hydropower, wind power and solar power, where they have forums to meet and get to know the actors from within the Norwegian industry as well as international actors. It is an arena that is open for discussion and knowledge sharing. Events arranged by INTPOW are not exclusively open to members of the organization, and can thus be seen as networking arenas for the industry per se where they can come together to learn and exchange experiences and build on each other’s competencies, whether they are members of INTPOW or not. The nature of relationships between members of a network will influence strategic decisions and involve resource exchange among members (Sharma, 1993 in Coviello and Munro, 1997: 365). Coviello and Munro continue by noting that as networks are relationship based, opportunistic behaviour is expected to be minimised and controlled because members value relationships rather than discrete transactions. Trust is established.

Client-following is a form of formal network internationalization strategy which means that an already existing relationship in one country is kept up when the buyer decides to internationalize by bringing the same supplier from the home market to new operations abroad. This entry form is regarded as an easier form of internationalization for the suppliers as it regards continuing an already existing relationship, and does not include a process of creating new relationships in the new international market. Within a business network perspective, where business networks are defined as “*sets of interconnected business relationships*” (Anderson et al., 1994 in Johanson and Vahlne, 2003: 92), “*all barriers are associated with relationship establishment and development*” (Johanson and Vahlne, 2003: 93). This view emphasises the relationship as the essential part of creating new business connections, be it in the home market or abroad. This has by certain scholars been termed as a

specific kind of knowledge; ‘know who’ and is explained to be “*knowledge of potential collaborators with complementary specialization through informal, interpersonal (face-to-face) interaction in the professional community*” (Asheim, Coenen and Vang, 2007; Christopherson, 2002 in Asheim and Hansen, 2009: 430-431). Knowledge is a key word when debating the importance of network relationships. Network ties of firms are firm specific and very difficult to imitate. As a source of information about what goes on in the market, network connections may give benefits to those who get the information early, as Sharma and Blomstermo points out: “*firms placed centrally in a network receive more, better and early knowledge compared to their competitors*” (Sharma and Blomstermo, 2003: 744).

“The Strength of Weak Ties” by Granovetter (1973) has been influential in network theory as he suggests that weak ties are seen as important for individuals’ opportunities while strong ties “*lead to overall fragmentation*” (Granovetter, 1973: 1378). Other scholars have followed up this train of thought, for example Rogers who note that: “*weak ties supply more novel knowledge than strong ties*” (Rogers, 1980 in Sharma and Blomstermo, 2003: 745) and Sharma and Blomstermo: “*...the ties that firms have may help them to go international by supplying information about clients and markets*” (2003: 740). The weak connections increase the network size and also the possibility for new information to reach the right people at the right time. Chetty and Campbell-Hunt (2003: 9) see business networks as enabling small to medium sized firms to “*proceed faster with their international growth instead of a gradual step-by-step process*”.

The role of INTPOW is important with regards to this as INTPOW creates an arena for networking and knowledge sharing. It is important to keep both large and small members in the network over a longer period of time, because it is a place for information from other members as much as information about new market opportunities. The strength of such informal network connections is important as firms who have a large amount of informal connections have an advantage over those that are purely engaged in formal network connection with its own suppliers or buyers. Formal network connections may to a certain extent restrain a firm from searching for new knowledge. It is also easier for a firm to maintain a larger number of informal connections than strong ones because strong connections take up more time and resources (Granovetter, 1973).

## **Cross-cultural networking**

*“Firms rely on their networks to learn about new markets and how to overcome the institutional and cultural barriers in order to conduct business there”* (Chetty and Campbell-Hunt, 2003: 8).

Networking is important in the internationalization process also regarding the cross-cultural dimension. Holden (2002) writes in his book on cross-cultural management: *“networking is the activity of creating pathways to resources, competencies and capabilities needed by an organization”* (Holden, 2002, p. 43). He emphasized how it is crucial to the learning of an organization to be able to draw on resources and competencies from the global operations of a company, for example through informal network connections in INTPOW. Companies which do not possess this experience from global operations can learn from those who do.

Johanson and Vahlne (2003) see the network model of internationalization as borderless and the challenges to internationalization are associated with barriers to relationship establishment in general rather than the focus of national markets as separate entities. Johanson and Vahlne see the gradual development of relationships in business networks as incremental and that ties will become stronger as the firms commit themselves more to the relationship (Johanson and Vahlne, 2003: 93). They expect internationalization to happen through a development of the firm’s existing relationships and national borders are seen as irrelevant to the process of in creating new relationships. The study by Gertler and Vinodrai (2005) presents a critical assessment of this view by examining industrial practices of German firms’ operations in North America. They conclude on the notion that learning which happens in one operation of the firm does not necessarily have any major impact on the firms practises in the home country and thus concludes that the global corporate learning does have boundaries, even borders that need to be crossed.

The problem with the incremental model of internationalization is that it does not take into consideration the country-specific institutional and cultural barriers which are a part of entering into a new country market which Holden (2002) points out. Although they point out

that the importance of national and cultural boundaries are now seen as less relevant in general than previously believed (Johanson and Vahlne, 2003: 98), the network perspective goes beyond just incremental internationalization but suggests that a firm's strategy "*emerges as a pattern of behavior influenced by a network of relationships*" (Coviello and Munro, 1997: 366). Internationalization can, with this in mind, still be seen as an incremental process, but how this happens and whether or not there are specific stages to this is still debated.

INTPOW provides an arena for actors from international markets can come to Norway to learn about the business here, but also bring actors from the Norwegian business on delegations and to conferences in other countries to learn about their markets and meet new people there. This is an important side of the cross-cultural networking as social encounters can reduce the psychic distance between people and this ultimately means that the barriers to engagement in international markets are lowered to a certain degree.



## **Chapter 3: Methodology Chapter**

This study is based on an embedded case study research approach where four member companies of INTPOW as well as staff from INTPOW were interviewed using a semi-structured qualitative interview technique as the major method of data collection. An interview guide was used for all the interviews. All of the informants were contacted by email prior to the interview where I briefly presented my research topic. All the informants have positions within their companies' international activity and they were all familiar with INTPOW and have been involved in activities through INTPOW, consequently they know the organization well. I also attended one networking event arranged by INTPOW in Oslo as an observer. Secondary data such as market studies and material from INTPOW events as well as general information from the companies' websites has been used as background information in the selection process, prior to interviews and prior to the event I attended. The interviews were recorded, transcribed and then analysed thematically, comparing the answers from the different companies with each other and with how INTPOW saw their own role with regards to the different topics.

### **Case Study Research Design**

The research design is the framework for the collection and analysis of data (Bryman, 2008, Yin, 1994). Choice of research design reflects decisions about what is important to find and what sort of questions will be answered through the chosen method of data collection and analysis. A qualitative methodological approach has been chosen because the research questions and objectives ask for answers that only a qualitative approach can give which are detailed and descriptive findings of firms' perceptions and attitudes regarding INTPOW and its efforts for internationalization of the renewable energy industry in Norway. The case study approach is generally preferred when 'why' or 'how' questions are posed and a case study can be 'exploratory', 'explanatory' or a 'descriptive' case study (Yin, 1994).

*A "case study entails detailed and intensive analysis of a single case ... [such as] a single organization"* (Bryman, 2008, p. 52). This research is based on an embedded case study design (See figure 2.4. in Yin, 1994: 39) which means that within the case study there is more

than one unit of analysis. This case study approach allows for a deeper understanding of the process of internationalization through INTPOW, and the research will focus upon this, seen from several angles with regards to the different informant companies. The case study is about a single organization, INTPOW, but data collection has happened both within that organization, through interviews and observation, but also using member companies as informants and interviewing them about their relationships to the organization INTPOW and the network there. One pitfall with using embedded case study design is that there might be too much focus on the subunits of analysis which makes the larger unit lose its principal focus and attention (Yin, 1994). Being aware of this problem and tackling it consciously can help avoid falling into this pitfall.

Semi-structured interviews, participant observation and document analysis are methods used to produce the data found in this research. A deductive approach where theory comes first has been important for this research, although there is a certain interaction between theory and empirical information which cannot categorize this research to either a deductive or inductive approach. This is in fact the case with most qualitative research as going back between the empirics and the theory is important in the process of understanding the findings. I have tried to find theory that treats the issues that I have focused upon in my questions for the companies and tried to make a comparable data collection to more easily be able to discuss important topics regarding internationalization through INTPOW in relation to my findings. This could, with further research, be part of an inductive theory construction, by for example using a multiple case study design or replication of this study could ensure consistency in findings which would be part of the development of new theory in this field.

Thematic analysis has been used to process, analyse and interpret the findings of the study. By combining findings from my own research and previous knowledge through literature search I look for similarities and differences between the companies' attitudes to the role of the network INTPOW as a facilitator for internationalization. The companies' perceptions and experiences of being a partner in the network INTPOW has been central to this research to be able to develop an understanding of its role in the companies' own processes of internationalization and international activity.

Time constraints were a key concern throughout this research, as it is a master's thesis of merely a few months from start to finish. A change of the case occurred at the very beginning of this research which made preparations in advance difficult. I used connections at the university to get in touch with INTPOW initially, and have used INTPOW to get access to the

firms that I have studied. This is referred to as a 'gatekeeper' (Bryman, 2008) as it is used as a facilitator to gain access to organizations. Getting in touch with informants has been easy in some cases, and much more challenging in others. Being able to use INTPOW as a 'gatekeeper', as it is an organization they know of, has been important in being able to get access to some of the informants as I approached them to ask for their time and an interview. Since they knew of the name INTPOW they could relate to my project and understand how they could contribute, thus making them more open for an interview. I did contact other companies that are not included in this study, as they simply did not get back to me or was not interested in being part of this study. Not all informants were easy to access, which affected the interview methodology as telephone interviews were conducted. This is discussed in the interview section further below.

## **Gatekeepers**

A gatekeeper is used as a facilitator to gain access to organizations and informants (Bryman, 2008). I was able to first get access to INTPOW through a PhD student at NTNU, Markus Steen. He knew of the organization and had contacts there already through his own research. Through meeting with people at INTPOW and referring to the organization when contacting interviewees I found it easier to get access. I chose the companies independently from the list of members, one exception was at one occasion when I asked one of the staff members at INTPOW to help me find a specific kind of firm to interview to get the best possible spread in my informants, as I had trouble finding and contacting someone from that segment of the industry myself. This was however the exception as I for the most part contacted the companies myself, but referred to INTPOW. This helped to get easier access to the informants and my inquiry would be passed on to the correct person within the company since they knew of the name INTPOW and could relate, which also made it easier for them to accept to meet with me. I was also invited in to a networking event arranged by INTPOW where I attended as a student researcher. Access to documents, studies and market reports produced by INTPOW for their members was given to me by the Managing Director of INTPOW. I could not, without these contacts have accessed the documents otherwise as they are available exclusively to members of the network. The problems with using gatekeepers and referees can be that they can choose someone more positively tuned to the organization than if I had found

a random member of the organization myself, but the questions of access made me decide to use this method anyway. I don't see this as highly influencing the findings of my study as I found other informants myself, although further research of the topic may uncover other findings than those I have found in this particular study.

## **Sampling**

Purposive sampling is a non-probability form of sampling (Bryman, 2008) and is one way of ensuring good correspondence between the research questions and the sample. By using purposive sampling to choose which partners in INTPOW to interview, I tried to cover as much variety as possible as a base for the research but keeping in mind the time constraints I restrained the sample to four companies in addition to speaking directly to INTPOW. Selection of informants have been done to try to get a wide as possible view by bringing in different voices to the study to see what the role of INTPOW is in their internationalization. This will again broaden the range of answers and thus cover more than only one side which renders it more trustworthy. The companies were selected from the list of member companies, and only at one occasion did I ask INTPOW to help me get in contact with a specific company. I contacted all the companies and arranged interviews with them myself.

For this research I chose to bring in two companies who are small and work as suppliers in the value chain, respectively one within water energy (Powel) and one within wind energy (AAK). Neither of these companies have much international experience, although they do have presence internationally, but common for the two is that they are consciously working to become more internationalized and use INTPOW and the network available through the organization to become more internationally active. In all the informant companies I talked to the person in charge of international activity which had knowledge about the company's relations with INTPOW. This was done to make sure that I did get answers from someone who knew about INTPOW and their engagement in the international field.

To show the other side of the kind of members who are in INTPOW I chose to interview two large companies, TrønderEnergi which is a major hydropower energy company in Mid-Norway, that has made one investment abroad and is in the operational phase of international activities along with Norconsult, an engineering consultancy company that has been international for some 50 years and have great experience from working in international

markets. Why these companies are member has been interesting to look into, which we will get back to in the analysis section of this thesis.

Both the small and less internationalized and the larger internationalized companies are members of INTPOW, which was a priority criterion for me in the selection of informants for this research. As well as seeing the participating companies' side, interviews with key personnel at INTPOW were conducted, as it is both important and interesting to see how INTPOW itself looks upon the services that they provide. The strengths to such a sample is that I have two categories, which to a certain extent can be compared and analysed as representatives of two different groups of members of INTPOW. A weakness is that deviations such as one company having strong opinions that is not shared by many others about what INTPOW is for them and should be for others may be overly emphasised, but that is the problem in any case study as it is the cases studied that will form the background for the analysis. I found that the importance of the public-private dimension of INTPOW, which I will get back to later, was very different between the companies; some of them didn't see it as important at all while for others it was the most important dimension of their membership. Having two companies in each category was reassuring to make sure I had found data and opinions that were not only the views of a single company, but something that was in common for several members. A comparative analytical design can be a good means to show to a certain degree the differences between the companies compared with the degree of internationalization. This approach does not provide assurance that deviations are singled out, but bringing in an observation was important to give an overall impression of how INTPOW is seen from the member's perspective.

## **Methods for Data Collection**

Primary data has been the main source of data collection and this has been achieved by conducting interviews and doing a participant observation at a conference arranged by INTPOW in March 2012. Emphasis is put on primary data collection during the course of this research as this provides important first-hand knowledge of how the firms understand the role of INTPOW in their internationalization strategies and how INTPOW sees their own role in this.

Document analysis has been used as a complementing source of data collection, and especially market studies and other material from INTPOW has been valuable as a background and help for me, as an outsider, to understand how the organization works. Web pages of the companies have been important in the selection process as well as for background material and preparation for interviews and the conference. Yin points out that “*documents play an explicit role in any data collection in doing case studies*” (Yin, 1994: 81) One of the advantages of using documentation in case study research is their originality as they are not created specifically in relation to the case study and will thus show a ‘real world’ impression of the purpose that the document served or serves. Documents produced by INTPOW will naturally reflect their perspective and can be biased, which I have brought into consideration when handling the documents.

## **Interview**

The benefits from using semi-structured qualitative interviews are many and getting answers to previously studied and prepared phenomenon in the prepared questions as well as being open for the possibility for the informant to come up with new and interesting angles to the research are among the most important benefits of this method. This is also called ‘open-ended’ (Yin, 1994) interviews. Using interviews can be seen as a method of collection relatively ‘unbiased data’ that has not been interpreted by another researcher first, as is the case with secondary data and document analysis, but is a ways in which the researcher and the researched together construct ‘intersubjective understandings’ (Crang and Cook, 2007). “*One of the most important sources of case study information is the interview*” (Yin, 1994). How the informant sees the interviewer may affect the answers given in a given setting and trust is a key word here. I built up the interview deliberately by asking relatively low-risk questions which would help build the trust relationship and thus make it easier to ask more sensitive questions later on in the interview when the informant had come to know me as a researcher and a more trustful relationship had been established. I would focus on the company and their internal international activity first, and the position of the informant in the company. Once we had established a basic trust I guided the interview more towards INTPOW and its role and how INTPOW were important to their company. Finally I focused on how the informant and his company viewed success in internationalization.

An interview guide was used, but not followed 'to the dot', as the setting of a semi-structured interview allows for new questions to arise and topics to come up in a natural order, not necessarily the same order as in the interview guide. The benefits of using such a technique is that it allows for a natural conversation where information and new ideas can flow more freely than under controlled and firmly structured interview settings most often used in quantitative studies. In a qualitative study as this one where understanding perceptions and attitudes towards the network and their role is key, each interview setting was different, and should be so too.

Two of the interviews were conducted in their respective companies' offices in Trondheim and two of them were conducted over the telephone as it was difficult for us to meet in person. This was a good method because it allowed access to people whom I would normally not be able to meet. One of the interviews were even conducted in the evening when the informant was back in his hotel room after a conference that day. He was too busy to talk to me during the day, but was open to talk over the phone that evening. That was a great opportunity for me as he would not normally have had the time to meet with me to conduct an interview person-to-person within the limited time frame I have been working under. Limitations to using telephone interview are of course that the personal contact is very limited, as we neither see each other nor can observe non-verbal expressions and context around the interview setting itself. However, my experience was positive as it allowed me to contact people who otherwise were busy and I was able to meet with them relatively quickly, which was an important factor for me. In one of the telephone interviews we spoke for longer than a normal meeting, and I got more information since he was not in his office where other tasks were waiting. I also found the informant in this particular interview to be quite relaxed and open to give thorough answers giving the time it needed to explain his opinions and thoughts around the processes, while others were quite limited to the time that was set aside in a busy schedule for my interview.

The differences found with the informants are interesting findings both in the sense of how the companies view themselves, but also in relation to how they view other members of INTPOW. The informants undoubtedly have an intention behind what they say in an interview which is based on what they think I am looking for as a researcher and their position in the network, possibly also to try to affect my findings. On the other hand, they might feel that their company is different in a way from other members of INTPOW and one informant emphasised that to me during the interview:

*“I think we probably are a little atypical INTPOW member because we are so proactive ourselves”* (AAK, my translation).

In the preparation phase I tested the interview guide on a fellow student to go through and get feedback and to test myself if I had come up with questions that would provide the answers I were looking for. The test round was helpful, and a revised version of the interview guide was made after the test interview which was then used for all the interviews. Keeping an open dialogue where the informant could bring up important issues relating to the questions in the interview guide was important and open questions were used as an instrument to obtain this goal. The interview guide can be found in the appendix.

## **Participant Observation**

Participant observation is an important methodological tool to understand more of the context of the study undertaken for this research. I was able to attend one conference arranged by INTPOW in Oslo on the 7th of March 2012: INTPOW’s 3rd Offshore Wind Supply Chain Conference. As I had been in contact with both the Managing Director and a Consultant and Regional Director at INTPOW during my work with this master’s project, I was allowed to attend the conference free of charge as a student observer from NTNU. Access is one of the major problems when using this kind of method as this event would not have been open to me as a researcher without my prior contacts within INTPOW. Bryman (2008) writes about this role, as he calls it ‘participant-as-observer’ and sees it as a less debated role in doing ethnographies because the people attending the conference knew that I was a researcher which makes it an overt role, my name tag said NTNU as well as the list of attendants showed that I came from a university and not from within the industry. Ethnography usually entails engagement with people in a social setting, and usually for a longer period of time (Bryman, 2008). I was only present for one day, but considering how the network is organized, through gathering at such events, this was still important as I was present the same amount of time as the other participants at the conference, and got the same input as the others. Parttaking at this one event provided me with knowledge of how they do their networking, and I was able to have interesting conversations with people as there were several ‘networking breaks’ throughout the day and hear their thoughts about networking in INTPOW and its role in internationalization.

Through this event I also got input from several people that I could normally not have reached over in this short amount of time by conducting interviews, and perhaps not even been able to meet because of their busy schedules. I could of course not get as much information from them as what I got from the informants through interviews, but as they were all more or less accessible to talk to as we were in the same place, many people shared their views and opinions on the presentations and lectures from the program of the event and I was able to ask questions and get their impressions in the networking breaks. Although I was not able to ask people the same questions as those I had prepared for the interviews, many interesting observations were made and they have helped me to understand the context of the networking event better.

## **Document analysis**

Market studies and material produced by INTPOW for the events as well as internet pages of companies and INTPOW's website have all been useful sources of background knowledge. This is secondary data, which is information already gathered and available to use (Flowerdew and Martin, 2005). The market studies and supply chain reports made by INTPOW are not publicly available, but only for members of the network. I was allowed access to some of these documents which have been valuable to be able to learn about the internal communication with members and what they emphasise in their work. An important part of understanding the mechanisms is just this; going through the documents and information given to the members companies. Looking at and analysing these documents will be important in the understanding of how INTPOW works. Choosing material is a very important point regarding such data, and determining the meaning of the documents for this research keeping in mind its original purpose. The official status of the material obtained from INTPOW gives it an authoritative quality that is reassuring with regards to content, although it might be producing a biased view of INTPOW and its partner firms.

## Data Analysis

Qualitative data are not as rigidly defined as quantitative data, and Dey (1993, in Kitchin and Tate, 2000: 230) suggests that “*the core of qualitative analysis consists of the description of data, the classification of data and seeing how concepts interconnect*”. Analysing is thus important so that research does not end up being about gathering data and presenting raw material. Analysis is about describing, interpreting meaning, explaining and understanding the data and determines how the data collected refers to the overall intention of the study. After that stage it is possible to determine the interconnectedness and finally determine relationships and meaning in the findings (Kitchin and Tate, 2000).

Thematic analysis (Bryman, 2008) is one of the most common approaches to analysing qualitative data, and is the one used in this research. This approach is useful for this research as semi-structured interviews will give recurring answers about the same topics in several interviews and although different answers may come out, they revolve around the same questions and give a basis for comparison and a basis for interpreting meaning. Structuring these answers thematically is helpful in the analysis of the data, and major themes in this research include internationalization phase, strategies and the role of INTPOW as facilitator for internationalization. Looking at INTPOW’s role as a public-private association and what this means for the work it does and its members as well as INTPOW’s role in creating an arena where networking can happen are important aspects. Using a thematic method to identify key issues can be very useful, as some of these topics may not be stated clearly as a single answer to a question as some topics may be more laden topics of conversation.

There are critiques of this strategy of analysis which focuses on the de-contextualization of the data and loss of the narrative meaning given by the informants. Dey (1993, in Kitchin and Tate, 2000: 230) describes his approach to qualitative data analysis with an omelette analogy; He suggests that you cannot make an omelette without breaking the eggs and beating them together, and says it is the same way with data analysis: you cannot do it without breaking down data into bits and ‘beating’ the bits together. I will keep this in mind when analysing the data using thematic analysis and try to ‘beat’ the bits together to bring out the meaning from my findings.

## **Validity and reliability**

Reliability and validity are important criteria to establish and assess the quality of research. Although, developed and used initially to assess quantitative research (Bryman, 2008), it is often the same criteria that are used to establish the quality of qualitative research as well, although alternative terms have been used by some researchers. Validity refers to the soundness, legitimacy and relevance of the research while reliability refers to the consistency and repeatability of the research conducted (Kitchin and Tate, 2000, Bryman, 2008). There are four important criteria to assess the quality of a case study research design (Yin, 1994: 33) which are common to all social science methods; construct validity, internal validity, external validity and reliability. They will all be treated separately in this section to clarify with regards to this research.

Construct validity assesses the quality of the operational measures for the concepts in this study. This can be done through using multiple sources of evidence, as in this research 4 different companies have been chosen with varied international experience. Construct validity is according to Yin (1994) especially problematic in case study research, and it has been pointed out by critics that in many case studies the collection of data can be undertaken without sufficiently rigorous measures which may leave room for subjective impact on decisions in the data collection period.

Internal validity relates to how a causal relationship is established, especially how one condition leads to others and does not relate to exploratory studies but rather to explanatory or causal case studies (Yin, 1994). One important threat to the internal validity of a research is the effect that spurious results have on the final findings of the study. For case study research specifically internal validity refers to the problem of making inferences (Yin, 1994).

External validity relates to its generalizability which is an issue that is highly debated considering case study research. The most commonly recognized way of generalizing, and the one preferred in quantitative research, is 'statistical generalization', although Yin (1994) argues that this is less relevant when doing case studies. In statistical generalization the findings are generalizable because the sample has been drawn to be representative of a given population (Bryman, 2008). For case study research Yin (1994) emphasizes that cases are not 'sampling units', rather the selection should be based on theoretical reasons and multiple case studies and the aim is instead to seek 'analytic generalization': "*In analytical generalization,*

*the investigator is striving to generalize a particular set of results to some broader theory”* (Yin, 1994: 36). The generalization must be tested by looking at more than just one case, which is why I have chosen to look at 4 different companies in this study.

Reliability concerns the repeatability of a study, and to ensure this criterion it is important to be open about methods of data collection and analysis and be open about what kind of data has been used to provide as much as possible on the background from which the research has been done. “The goal of reliability is to minimize the errors and biases in a study” (Yin, 1994: 36).

### **The role of the researcher**

My role as a female and young researcher in a predominantly male-dominated industrial network could have posed difficulties, for example regarding how all my informants have been male. Rather, I have seen the problem to come more from a mentality difference, as I come from outside of ‘their’ world of technology and engineering being a social scientist researcher. Traditionally the researcher is assumed to be in an authoritative position in an interview setting as it is the one who sets the agenda (Briggs, 1986; Kress and Fowler, 1979 in Schoenberger, 1991: 182), although as Schoenberger points out, conducting corporate interviews changes the roles and the power balance is inversed in many cases. The persons interviewed for this research have all been experts in their fields, and leaders of the international divisions in their respective companies. I don’t see this as having caused many problems in my data collection process though, as I have tried to learn about their operations and met prepared both to interviews and the event where I was observer, but interviews were indeed skewed towards what the informants found most interesting on the topic of INTPOW and internationalization, but not to the extent that I felt out of control as researcher and I got highly interesting findings through all my interviews. I think meeting prepared and up to date on the companies and their operations helped give me credibility as a serious researcher because I understood what they were talking about and could follow their trains of thought. Of course, I cannot know if they have adjusted what they are saying to suit my level, or to protect their interests from too much attention.

## **Conducting the research**

During the course of working with this master's thesis I interviewed four different companies which are members of INTPOW as well as interviewing two central persons within the organization itself. In addition to using interviews I also participated at an event for offshore wind supply chain in Oslo and observations from this event have been important findings. Secondary data such as web pages and information material from INTPOW have been used as support during the process and as background material in preparation for interviews and attending the event with INTPOW.

The interview with Powel AS was held at their offices in Trondheim with the International Business Developer, Klaus Livik on the 10.02.2012.

TrønderEnergi was interviewed at their offices in Trondheim on the 27.02.2012. The Vice President International Business Development, Jon Einar Værnes and Managing Director of TronderPower Ltd (Uganda), Erling Legran were present in the interview.

The interview with the leader of Marine and Renewable Support Services, Leif Røv, in AAK Group AS was conducted by telephone on 08.03.2012.

The responsible for international division in Norconsult, Ola H. Norderhaug was interviewed by telephone on the 23.03.12. He is also on the board of INTPOW, which he has been since its initiation in 2009.

The initial meeting with INTPOW was on 04.01.2012 in Oslo with Managing Director of INTPOW, Geir Elsebutangen at INTPOW's offices. In addition was Morten Bygland, Consultant and Regional Director at INTPOW, interviewed by telephone on 14.02.2012. I also attended INTPOW's 3<sup>rd</sup> Offshore Wind Supply Chain Conference in Oslo, 07.03.12 as a participant observer.

## **Limitations**

Time constraints have been central in this research as it is a project with a time frame of 18 weeks; from January to the beginning of May 2012, literature review, information gathering

and writing up included. This has limited the amount of data that could be collected and analysed, but also access to data has been difficult at certain times during this project. Access to the right person within the right company was in some cases easily granted, but others had very busy schedules and were unable to be part of this research. A solution with regards to time constraints and geographical distance, since some of the interviewees were travelling and participating at conferences, was to use telephone interview. One strength in using telephone was the possibility for the informant to take as little time out of his busy schedule as possible, and I could still be able to get important input for my research. I believe this made data collection easier, as some of the informants would most likely not have had the time to meet with me in person within the time frame that I had.

There are both strengths and weaknesses to the process of selecting different companies as informants as they provided answers according to their own understanding of the topics and may or may not be representative for the most part of the members of INTPOW. Of course a small selection of companies cannot represent all the members, but since I chose to talk to two larger and already internationalized companies and two smaller and less internationalized companies for comparison I have two cases on each side to counteract deviations in a single company's answers. Another important limitation to research is whether I, as a researcher, affect the results found in my understanding of them and I am aware that interpretations may vary between researchers. There could also have been put certain restrictions on the documents provided for me by INTPOW and by the informant companies which is out of my knowledge. A case study, however, seeks to understand one case, and the informants have provided important information from their points of view which have been used in the analysis of the research question in this study.

Getting access to documents used by INTPOW at events or to inform members on supply chain, competency maps et cetera were provided for me during this research. INTPOW benefits from this research as they can find out how it is seen from their members' side, and it would be a reason to be open, although it is impossible to know if certain things have been held back, but it is of course important to reflect on this for the limitations of this study.

## **Chapter 4: Presentation of INTPOW and the selected cases**

### **Presentation of INTPOW**

INTPOW was initiated by the Oil- and Energy Minister and the Energy Council (Energirådet) and founded in 2009 as an independent non-profit organization which works to promote internationalization of the renewable energy industry in Norway. INTPOW has five employees with varied experience from project management and business development, international investment banking and experience from the energy sector both nationally and internationally (INTPOW, 2011). As a networking organisation, INTPOW recognizes the importance of creating networking opportunities for the member organizations on national, regional as well as international levels and introduces businesses from Norway to foreign markets through participating on international travel with Norwegian official delegations and organize events where international actors are invited to come to Norway. In addition to this, INTPOW communicates on behalf of their members at conferences abroad and bring key persons from networks and important markets to events in Norway to present the industry at home. Through a wide contact network within the energy market both in Norway and abroad, INTPOW is able to introduce and support their members through partner participation in international markets and projects. INTPOW communicates directly with Norwegian authorities facilitating framework conditions in the support of industrial international expansion for its partners (INTPOW, 2012).

Another important part of their work is to provide information about markets and inform its members through developing market analyses for specific markets. Through knowledge of the foreign markets, the Norwegian renewable energy industry can better target their strategy for internationalization. INTPOW has also produced overviews of the Market and Supply Chains within the different energy industries such as hydropower and wind power in Norway to be able to introduce and map the Norwegian competencies and businesses who works within the different renewable industries (INTPOW and Innovation Norway, 2011). This mapping of competencies is important both to be able to present the companies in the different parts of the value chain, but also to promote this as a complete value chain and show that Norwegian companies can bring important expertise to every part of the chain.

INTPOW has 36 ‘partners’, companies which are members of the organization. INTPOW terms the companies *partners* in all their communication, but because INTPOW is organized as a membership organization where there is an annual membership fee, determined by the size of the company and the total turnover, I choose to call them *member* organizations in this study instead of partners as I find it appropriate to avoid possible confusion of terminology. The criteria for INTPOW membership is that the company has an office in Norway and that it is involved in export of products or services from Norway (intpow.no, 2009b). INTPOW emphasises their services in providing client seminars and workshops, being a networking organization and a provider of market information.

### **Sample choice**

The four companies selected for this research represents 4 out of the 36 member companies in INTPOW. The companies in INTPOW belong to many different clusters within the Norwegian energy cluster, but they all belong to one or more of the main categories hydro, wind, solar, bio and other renewable energy sources. The four companies in this research represent hydro- or wind power or both. With regards to type of company there are companies that work as suppliers, with services, consultants, project owners, energy producers, work with resource mapping, R&D, investor or finance and system suppliers (intpow.no, 2009a) among the members of INTPOW. The companies in this sample represent suppliers, services, consultants, energy producers, resource mapping and system suppliers. This covers a large portion of the different types of companies in INTPOW. This was a conscious choice, as these are highly important markets for the Norwegian competency and experience from a century of hydropower and long traditions in the marine industries.

### **Presentation of companies and their competency**

#### **Powel AS**

Powel was established in 1996 with 37 employees from Sintef Energy Research in Trondheim (Powel, 2011). Powel has through different investments and subsidiaries developed to become

a large IT company that delivers smart grid and hydropower planning software for short time planning and optimizing real time information and monitoring for hydropower production and services in relations to their software products. Internationally they promote two products: production and grid connection. Their main areas of focus are: smartgrid, hydropower planning and software on infrastructure to local authorities. Powel's competency revolves around IT solution for hydropower planning and their software aims at making hydropower electricity production more efficient. They deliver their solutions mainly to power companies in the Nordic countries Norway, Sweden and partly Denmark, and via sales agents in other countries outside the Nordic region. Powel sees a good home market as essential for their international developments.

### **AAK Group AS**

There are 166 employees in total in the AAK Group and it delivers services throughout the whole value chain from commissioning to decommissioning. AAK was founded in 1987 although the renewable energy business area is a new business arena within the group and has 6 employees. It is a part of the parent company and can thus draw on resources there if necessary, but is a separated business area with its own budget. They can contribute with services to the planning phase, installation, operation, maintenance as well as dismantling within both onshore and offshore wind projects. AAK had their first offshore wind contract in 2009 on a demonstration park project. They work actively in onshore wind projects in Norway to build competency while continually preparing for offshore wind projects abroad. AAK have specialized their competency through combining experience from turbines with experience from marine operations and exterior work to provide a specific competency for offshore wind. This includes important experience from working with great heights offshore, in the splash-zone et cetera as they have been delivering services to large actors in the oil and gas industry on the Norwegian continental shelf.

AAK finds it essential to have a good home market and a track record in wind. Their main international markets within offshore wind are the UK and Germany but they define their target areas as the whole of the North Sea and the Baltic Sea region. Their internationalization process has been going on for two years now mainly focusing on offshore wind in UK and Germany, and they have been a member of INTPOW since 2011.

## **TrønderEnergi AS**

TrønderEnergi is a large energy company with long traditions from generating electricity from hydropower and was founded in 1950. It now employs 490 people. The name TrønderEnergi was launched in 1997. It is based in Trøndelag (Mid-Norway), and has invested in hydropower technology by building a hydropower plant in Uganda which has been central in their contribution to this research. Their internationalization initiatives concern investments and competency and Eastern Africa, Uganda specifically, and is TrønderEnergi's only international focus area. TrønderPower Ltd. started in 2007 and the power plant was up and running by 2009, and they were thus already internationalized through their subsidiary TrønderPower Ltd. when INTPOW was founded in 2009. TrønderPower Ltd. has 22 local employees in Uganda and the power plant produces 82 million kilowatt-hours. In 2011 was the profit in the TrønderEnergi Business Group 358 million NOK (TrønderEnergi AS).

## **Norconsult AS**

Norconsult is the largest engineer consultancy company in Norway with a long tradition of international work, especially in hydropower technology with a total revenue of 2,6 billion NOK. With just over 2300 employees is Norconsult by far the largest consultancy engineering company in Norway. The company started early in the 1900's and worked in hydropower already then. The name Norconsult first appeared in 1956 as an umbrella organization that Norwegian engineering companies used when working abroad. Norconsult is a part of the Energy Council and has been at the board of INTPOW since its initiation in 2009. Norconsult has worked on international projects in more than 150 countries over the last 50 years and is considered to be among the best in hydropower engineering in the world. Norconsult cooperates with Norwegian companies internationally and focus on markets mainly in South-America, southern Africa and Southeast Asia.

## **Chapter 5: Analysis Chapter**

In this discussion I will combine the findings from the different informants in the analysis to reveal similarities and differences in how they view the role of INTPOW in their internationalization and international activity. I will do so by using a thematic analytical approach by bringing together the findings and the theory sections which looks into previous work on these issues. By looking at how the role of INTPOW as a facilitator for internationalization is experienced by members of the network and how they see themselves and their role, I want to discuss the implications of the findings in this study in this chapter.

The different roles assigned to INTPOW by the different company informants are interesting findings and we will look closer into several of them in this chapter. Looking back to the theories of internationalization, the U-model claims that lack of knowledge about foreign markets and operations is the main obstacle to internationalization (Johanson and Vahlne, 2003). This is perhaps the most important role INTPOW has in facilitating internationalization through the flow of knowledge it creates both in being an arena for information sharing between the members as well as an open dialogue with the outside and the information provided to members via market reports, competency maps and supply chain overviews which presents the capacities within the different disciplines, water, wind, solar and bioenergy. Internationalization is discussed first and a deeper discussion of the role of INTPOW as a network facilitator and creator of arena for information and knowledge exchange and a meeting place is treated following that section. A discussion of proximity in relation to markets and the role that INTPOW has in facilitating market access follows a discussion on the Norwegian competency and competitive advantage in those markets. At last is a discussion of the role as public and private that INTPOW holds and what this means for the members.

### **Motivation for internationalization**

There are many different motivations for internationalization. This section looks into what motivated the informants and their companies to take that step out of the comfort zone and engage in international activity. Growth and market expansion are obviously important

reasons coming from a fairly small country like Norway, with extensive competency from within different renewable energy sources. In Norway most of the hydropower sources that are regulated for power production have already been developed and there seems to be little political will to launch an offshore wind adventure in Norway (Hansen and Steen, 2011). AAK specifically targets offshore wind as a business area, and sees internationalization as inevitable to achieve working within this area. AAK seeks to work within offshore wind both in UK and in Germany because that is where the markets are right now. They are looking at specific markets, and use INTPOW to get the connections and network they need to get there. The home market does not provide enough opportunities for further development thus expansion into new markets is an important motivation.

For Powel, another important motivation for internationalization is to stem competition from other companies and keep good employees in the company by offering an international portfolio and more career opportunities. Working in an international environment will also stimulate innovation, which is very important to continue to have a good product base according to Powel, as this quote shows:

*“[Internationalization] will contribute to boost growth, contribute to increased profitability, it will contribute to innovation, it will contribute to maintain our market position [...] it will contribute to stem new competitors”* (Powel, my translation).

TrønderEnergi wanted to make use of their human capital as well as make an investment in Uganda and it is their only international engagement at this point. Their motivation for internationalization was that they knew something about building and operating a hydropower plant and they wanted to use the resources that were unexploited in Uganda to provide electricity for the Ugandan market. Norconsult on the other hand has a long history in international activity and use their knowledge and experience in many countries around the world. They are specialized in hydropower engineering and work on projects in South-America, Africa, Asia and Europe.

The most important job for INTPOW with regards to motivation is to make the Norwegian companies understand which opportunities are out there, especially where there is no home market to exploit, or little new developments. INTPOW works to facilitate the transfer to international operation on behalf of its members. Several small companies aim towards for example offshore wind markets in UK and Germany, but may be too small to get access in to the large consortiums. Through networking in INTPOW and through their international

contacts they may be able to either follow the internationalization strategy client-following, also called ‘piggybacking’, or join forces with other small companies to be able to present a larger service. The large companies on the other hand which oftentimes work in the oil- and gas industries and have a small focus on offshore wind are harder to convince, as there are still a lot to do on the Norwegian continental shelf within that segment, and their renewable interests has lost some focus.

**Internationalization of the renewable energy industry**

Traditional internationalization theory, exemplified by the U-model internationalization theory explains internationalization as incremental in a stepwise manner. The informants all placed their companies in different ‘internationalization stages’ which follows the logic of the U-model internationalization theory (Johanson and Vahlne, 1977) and one of the 4 approaches Fletcher (2001) introduces to internationalization. The steps are showed in the diagram below:

<b>Internationalization phases</b>		
<b>Presale</b>	<b>Business-to-business</b>	<b>Operation</b>
Powel  Norconsult?	AAK	TrønderEnergi  Norconsult

The names of the different phases are drawn from the interviews, as this gives a good understanding of how the informants see themselves and their companies in the internationalization process. The presale phase has a lot to do with convincing new markets and Powel works to make companies understand how their solutions can contribute to better profitability. They use INTPOW in that matter as a facilitator to learn about new markets and market studies provided by INTPOW is seen as very useful in that process. Powel emphasized the importance for them to attend seminars and events organized by INTPOW both to meet potential partners, but also as an arena to present themselves and they used the network provided by INTPOW actively to make their brand known by participating at events, conferences, giving speeches, getting to know more people in the industry and actively

seeking out possible new markets through INTPOW. Following up these contacts and giving them an offer are part of the presale phase. Powel exploits the extended network in INTPOW as well as other instruments in their own network as means to gain commercial success in internationalization. Joining official delegations to new markets and meeting local actors there takes them into places they could not have achieved otherwise by themselves. These are important aspects of the role INTPOW plays in the internationalization process for Powel in their presale phase of internationalization. Meeting people and exchanging experiences and knowledge through discussion with other companies as well as networking at events organized by INTPOW makes the membership a good investment. INTPOW also provides high quality market studies and information which is valued by Powel in their search for new potential markets.

AAK was in a presale phase one year ago, but now consider themselves to be in the 'business-to-business' phase of internationalization. They have been working much in the same way as Powel is doing now, but feel they have reached a point where they want to slow down on marketing and work with the contacts they have already obtained during their presale phase. The business-to-business phase is characterized by contacting businesses directly, arranging meetings and going through processes of becoming prequalified for jobs in companies they wish to work for. INTPOW is still important for them to stay updated on market information and participate at events internationally and to stay in touch with contacts within the network, but AAK is very proactive themselves in contacting costumers directly. One specific advantage that was pointed out of being a part of the network in INTPOW is that it is a place where large developers will present projects or plans and it is a way for smaller companies to stay alert to emerging opportunities and meet companies that they can work with, possibly in Norway with onshore wind, such as AAK, and possibly large international offshore wind projects in the future. AAK emphasized that even though they saw themselves in the business-to-business phase, it is still important to stay updated about what happens in the markets.

TrønderEnergi and Norconsult were both internationally active for some time before INTPOW was founded in 2009. INTPOW is to TrønderEnergi a database of contacts and a meeting place for companies who share their experiences and is an arena to discuss solutions. Knowledge and experience sharing is seen as essential to the role of INTPOW for their international activity as well as having INTPOW as a helping hand on issues relating to contact with authorities, occupational health and safety and international rules and regulations. They see themselves in the operation phase of internationalization, where

INTPOW is seen to have an important role as network facilitator and an arena to share experiences. These are important topics we will get back to later on in this chapter. The operation phase is an important part of internationalization, illustrated by this quote from TrønderEnergi:

*“Once you first get out there, a lot of new questions arise [...] we will in principle stay in this country for 25 year to operate. So there are many years left.”* (my translation).

Norconsult emphasised that they did not consider INTPOW’s role as mainly a marketing consultant and a facilitator in getting jobs for its members, but rather an arena for information flow, knowledge exchange and networking which forms the basis for the firms’ own internationalization. To them, the most important role of INTPOW is as a representative of the industry working with Norwegian authorities and as a coordinator and organizer of international political delegations and events which focuses on renewable energy. However, as an additional source of information and contacts, INTPOW can be useful in the search for new markets. Norconsult are continually considering entering new markets, which is why they have been placed both within the operational internationalization phase as well as in the presale phase in the diagram above. They are present worldwide, but in markets where they do not have contacts already themselves INTPOW can play an important part in the presale phase.

INTPOW plays a central role in facilitating network connections and providing market information in the presale phase, which is emphasised as important for internationalization of small and medium sized companies and born globals (Johanson and Vahlne, 2003, Fletcher, 2001). In the business-to-business phase, INTPOW’s role is less obvious, but still an important place to stay updated and know the right people. In the operation phase, however, the networking arena and relationship building of internationalization is crucial as being able to exchange experiences and meet other companies and learn from each other is vital in the operation phase as there are new challenges which arise. This means that INTPOW plays a role in all these phases with regard to facilitating access to international markets and gain access to them.

## Strategies for Internationalization

In some cases, small supplier companies will follow the large established companies from their home market into international markets. This is called ‘client-following’ or ‘piggy-backing’ and is a strategy applied by some of the informants in this study. AAK in particular, was open about their intentions by using this strategy and they work proactively towards large companies who are involved in wind energy both in Norway, but also in other Nordic or European countries:

*«... They use us as a supplier [...]. What they work on today in the UK is a project [...] which is under construction today. There they already have turbines up and running now. And then you probably understand why [X company] is so interesting for us» (AAK, my translation).*

For Powel, client-following could also be a useful method for internationalization. Their technology could form part of an international project that a Norwegian company operates in a foreign country. Even though Powel uses mainly partners with reseller agreements in countries outside of their defined home market. Client-following can come from informal network connections that turn into formal network connections or they may come from already existing formal network connections in the home country which are brought with them when a large company engages in a large international project for example.

TrønderEnergi went to Norfund when they first decided to internationalize. As INTPOW was started after they were already in operation their focus has been on the importance of network and the ability to meet others who face similar problems and challenges in the same region. TrønderEnergi focuses on operating their power plant in Uganda and have no further strategies for new projects internationally.

Norconsult use INTPOW’s network in their search for new markets, but they are already present many places around the world where they have contacts and are well reputed. INTPOW can provide information about markets where Norconsult does not have experience and Norconsult can provide information back to INTPOW from areas and markets where they are operating today to benefit other companies in the network. As Norconsult has long traditions in internationalization they do not have an explicit internationalization strategy, but continuously pay attention to new and emerging markets.

AAK is the company closest to what we can call a Born Global in this research project. The section of AAK that works towards renewable energy has brought in competency from the offshore oil and gas section of the company and combined it with new windmill competency through strategic hiring, especially experience with turbines. They have focused on working in offshore wind where they know there is a growing international market. The competency in the persons who work there are the most important not the history of the company itself, which is a typical trait of a Born Global-company. Their internationalization strategy has been to focus on creating a competency, and combination of competencies and experience that is very relevant for what they want to engage in. These human resources are their strongest card on their path to internationalization and they actively work to develop that competency, which we will get back to below.

### **Problems in internationalization**

Internationalization is not just about expanding markets and broadening the horizon. One problem with an incremental model of internationalization is that it does not necessarily take into consideration the country-specific institutional and cultural barriers that are an essential part of entering a new market. Gertler and Vinodrai (2005)'s study is an example of a case where borders seem to be real obstacles for inter-firm learning in internationalization.

INTPOW works with governments and international network organization to try to make it possible for Norwegian companies to enter into hydro- or wind power markets in other countries. Many obstacles are laid out on the internationalization path and INTPOW encourages small companies to join forces, or to use the client-following strategy to enter into a foreign market. This approach might prove to be an easier way in to internationalization. For Powel, a software company, another problem arises regarding IPRs (intellectual property rights). It has become evident when internationalizing that new innovation and technology must be developed to avoid problems with IPRs, as there are problems when the laws regulate the market differently with regards to ownership and protection of rights. TrønderEnergi has met difficulties relating to cultural differences in trying to operate the hydropower plant in Uganda as the Norwegian and Ugandan attitude towards maintenance are very different. They consider being good at maintenance as a prerequisite for success. To counteract such problems, TrønderEnergi have held courses for their employees both in cultural understanding

to decrease the gap between the differences in culture and technological courses to handle the equipment installed.

Feedback from the informants I have interviewed during this research period have been varied, but several of them have uncovered that INTPOW should have a stronger role and focus on occupational health and safety and international rules and regulations to provide help to its members when they face these issues in their international operations. Several of the informants brought up a need for specific seminars on how international law affects the Norwegian renewable energy industry when going international. This was seen as something they wanted INTPOW to emphasise more on. A specific focus is how regulations and occupational health and safety should be followed in an international operation and guidance on such questions in international operations.

### **‘The Norwegian competency’**

INTPOW is a networking organization that facilitates internationalization on behalf of the Norwegian renewable energy industry, and this industry forms part of the energy cluster in Norway. As touched upon in the literature review, Zyglidopoulos et al (2006) argues that a cluster organization can assist its members in internationalization through enhancing its ‘cluster reputation’. INTPOW promotes the Norwegian competency within the different renewable energy industries which enhances the reputation of the energy cluster in Norway, even though INTPOW only focuses on the renewable energy industry. Other organizations are established, for example INTSOK, for the Norwegian oil and gas industry, to do the same job. INTPOW and INTSOK are co-located and both work to promote their own section of the Norwegian energy cluster’s internationalization with support from the government.

The Norwegian renewable industry shares commonalities such as a national culture, or ‘mindset’ derived from experiences from both hydropower and offshore activities in Norway through centuries. As INTPOW has emphasised, this mentality has proven important for the success of Norwegian companies also in other parts of the energy cluster such as in maritime activities and in the oil and gas business. The focus on planned maintenance and on catching the problem before it arises is essential to this success. This shared culture among the members has an important dimension of localized knowledge, as it has evolved out of necessity for planning to survive the cold winter months until the next harvest and it is a

competency that has evolved in Norway through centuries of farming and fishing. This Norwegian competency provides a common reference frame which is the basis for cognitive proximity between the members, even though they belong to different groups within the energy cluster in Norway. INTPOW has emphasised how this Norwegian ‘mentality’ has a strong focus on maintenance, and this is seen as an essential competitive advantage for Norwegian companies when going international. TrønderEnergi especially emphasised the long traditions in Norway from developing, and operating hydropower plants and human capital was essential in their internationalization, as this quote shows:

*“We believe we know something about hydropower development”* (TrønderEnergi, my translation)

For TrønderEnergi has maintenance been the most important part of their operation. Investment was once, but operations last for decades and they emphasise that it is all about becoming the best at operation and maintenance. Through years of experience from hydropower electricity production they bring with them important competency within maintaining and operating a power plant. AAK deliberately works to build up a specific competency to serve offshore wind markets by combining their 25 year experience from offshore oil and gas through strategically hiring persons with competencies on turbines and through working on onshore wind projects in Norway. Norconsult has specialized their knowledge on hydropower engineering through many years. Powel is a software company with a specific software solution for hydropower which may help it to be more profitable as it monitors live conditions that may affect the profitability.

## **Market**

Close geographical position to offshore wind markets both in the UK and Germany can be seen as advantageous for Norwegian companies and hydropower markets in Southern and Eastern Europe are also relatively close. As the U-model (Johanson and Vahlne, 1977) suggests, markets with relatively close mental proximity are easier to enter. Geographical distance is not equal to mental proximity, but can facilitate social interactions which in time build relationships across cultural boundaries. Many companies within the renewable energy industry in Norway, especially in offshore wind, have worked or have parts of their business in the oil and gas industry on the Norwegian continental shelf. That is a market which has

been predominately international since its beginning with large transnational corporations present. Especially larger and well established companies see large portions of the North Sea as their home market, so to speak, as does AAK as this quote shows:

*“If you imagine the North Sea and the Norwegian continental shelf today, then we are already halfway to England, right? So it is not so much further over to the UK”* (AAK, my translation)

Smaller companies may need more help in realizing the potentials of such markets in the UK or Germany (Hansen and Steen, 2011) especially small suppliers based in Norway may see the distance and cultural and language difference as a barrier to internationalization. INTPOW can be a helping hand in providing market studies and advice on strategies regarding internationalization as well as using their contact network in for example the UK to establish contact relations. Scholars see cognitive proximity as essential for internationalization, but acknowledges that geographical proximity can facilitate other kinds of proximity (Boschma, 2005). This is the important part for many members of INTPOW with relation to international contacts to markets where they want to enter. The advantage of INTPOW having members which are already well internationalized is that small companies can learn from them, such as Norconsult. For INTPOW it is important to bring such actors in as they can be a source of experience from working in foreign markets and provide important market insight for other companies who are in the early phases of internationalization. This may help increase the cognitive proximity both through inter-firm learning between Norwegian companies with different experiences or when international actors are invited to Norway to participate at events, or even when INTPOW brings members on international conferences to present their companies and learn about a specific market. Official delegations are also an important arena for companies to learn about and meet new markets and actors in those markets. This was particularly emphasised by Norconsult as an important part of internationalization through INTPOW. Through social contact trust can be developed, which Welch et al. (1996) pointed out as essential to win an international contract.

For the larger companies that were interviewed for this study, their international engagements are spread out over large portions of the world, with specific emphasis on markets in Africa for both TrønderEnergi and Norconsult, while the latter also has engagements in South-America and Asia as well as in diverse European countries. In their cases, the problem of psychic distance and cultural barriers can be much more of a problem than for example AAK which has defined an area for their international developments within the North and Baltic

Sea region. Networking and learning from other Norwegian companies which have or have had operations in the specific countries or in a specific market are therefore a good way to counteract such problems of market access and problems in the operational phase.

### **Importance of Home Market**

Having a strong home market is seen as a prerequisite for success in internationalization by several of the informants in this study. One example is Powel;

*“If you lose focus on the home market [...] that means that we lose both internationally and at home in the long run”* (Powel, my translation).

Also for TrønderEnergi and AAK the home market is essential, both in the sense that it gives a stronger financial base for a risky international project, which was important for TrønderEnergi when they were looking for partners in their project in Uganda and loans to finance it, but on the other hand experience and knowledge developed in the home market are essential human capital necessary in the internationalization process. Hansen and Steen (2011) points out in their study that the lack of a home market is what the businesses in Norway working towards the offshore wind market consider as the biggest disadvantage in positioning for the international market. Hansen and Steen also point to other researchers (Lewis and Wiser, 2007 in Hansen and Steen 2011: 17) who have found that a stable home market of a certain size has been a central factor for successful industrial development within wind power in other countries, as it has been for hydropower in Norway.

AAK has focused on building a competency within the Norwegian market, but in onshore wind projects, as a way to specialize and get in contact with companies which are involved in offshore wind projects abroad. There is no market for offshore wind in Norway (Hansen and Steen, 2011) and the only offshore wind pilot project in Norway has not had any Norwegian suppliers (aftenbladet.no, 2010). The problem is that projects in offshore wind are not seen as profitable enough compared to the petroleum extraction industry (Furdal, 2011). The companies which want to be a part of this market must internationalize as there is no market in Norway and they must do that to be able to follow innovations and new knowledge developments in the market. Large offshore wind projects are projected both in the UK and in Germany (Willow et al., 2011, Innovation Norway et al., 2011) which encourages

internationalization of the Norwegian offshore wind industry. INTPOW acknowledges that there is no home market for offshore wind and that a major problem is that the oil and gas market attracts most of the available competency in Norway with high salaries and a high activity level. This is also a disadvantage for offshore wind as many companies will put that on hold since there is so much to do in the oil and gas market. A few large Norwegian companies are the exception to that rule and have long traditions in oil and gas as well as deliver to the offshore wind industry internationally.

Several researchers have also pointed out how internationalization is driven by and facilitated by a company's network ties (Majkgård and Sharma, 1998, Sharma and Blomstermo, 2003, Coviello and Munro, 1997). An arena where suppliers and investors or large and small actors can come together may create opportunities of new partnerships, participate in projects and increase their knowledge of foreign markets. This is especially important for the smaller companies with little international experience so that they will not lack the essential knowledge to go international which the U-model claims can be an obstacle.

## **Networks**

*“...the ties that firms have may help them to go international by supplying information about clients and markets”* (Sharma and Blomstermo, 2003: 740).

Herod (2003) sees globalization as developing networks and Thrift (1996 in Hubbart et al., 2005) sees networking at the heart of the global economy. Both of these scholars see the networking arena as essential in internationalization. The same goes for INTPOW and all four informant companies which all stressed the importance of the network in INTPOW as important reasons to be members of INTPOW. This section relates to the first subordinate question in this thesis regarding how INTPOW facilitates cooperation between member companies and external actors in international markets. Networking provides opportunities for inter-company learning in an informal arena for relationship establishment which may also lead to formal network relationships, between buyers and suppliers, using the terminology from Coviello and Munro (1997) about informal and formal network connections. One

example of informal networking success through INTPOW comes from TrønderEnergi which has extended contacts with another Norwegian company that also has operations in Uganda:

*«... we met among others [XX company] and their supporters and they have been useful partners for us. We discuss with them and we meet them without having any particular agenda and just discuss [...]. You meet people. It becomes a meeting place. It becomes an arena.»* (TrønderEnergi, my translation)

INTPOW opens and facilitates an arena for networking and connection. Having a good network is seen as essential to be successful internationally by all the informants to this study. Johanson and Vahlne (2003) points out that increased access to knowledge and competency are important aspects of wanting to engage in networks. Learning about other Norwegian companies within Norway is also an important part of being part of INTPOW, as was mentioned during the interview with Powel:

*“... so I am getting a good dialogue with [XXX company] which makes turbine wheels. And we meet others too”* (my translation).

INTPOW has an extensive network with organizations and networks as well as authorities in other countries, especially important are their contacts through the cooperation with Innovation Norway and Norwegian embassies through their role as a public-private cooperation, which I will get back to below. An example of external linkages at the Offshore Wind Supply Chain Conference where I participated was that representatives from industrial networks from Germany and the UK came to hold presentations to show what possibilities exists in their markets for Norwegian companies and to make contacts in the Norwegian offshore supply chain and learn about the industry. INTPOW works to stay updated on the most important markets internationally and knows through their connections and relationships which markets needs what sort of competency and try to match them with Norwegian companies, members of INTPOW, that they know possess that specific competency. INTPOW has a large international network of contacts which are available for the members to use, but AAK emphasises that it is up to the members themselves to use it and that INTPOW can only be the facilitator in providing the members with an opportunity to use those contacts and networks.

Presenting their companies at different events have been highlighted as important both by Powel and AAK, but also Norconsult emphasised the importance of an arena for presentation, both for small and large companies as they are speaking to a large section of the industry and

it creates an easier access to information and an enhanced information flow which is highly beneficial to the industry. It is also a good exposition for small companies to present their ideas and competency as well as it is a good arena for the large companies where they can talk to many people from the industry at the same time which demands less of their time outside of that arena.

*“INTPOW is at least per today more so that conferences are used as a meeting place, for the members to make new acquaintances and build networks” (AAK, my translation).*

The U-model emphasizes how knowledge develops gradually from experience and commitment to the foreign market and sees internationalization as an incremental knowledge-driven process. Johanson and Vahlne note that: *“only by doing business in a specific country is it possible to learn how customers, intermediaries, competitors and public authorities act and react in different situation. This subtle understanding of the market can never be replaced by general market information and surveys.”* (Johanson and Vahlne, 2003: 90). Conversely, INTPOW provides a combination of specific market information and first-hand meeting with actors from the markets to strengthen the experiential knowledge that Johanson and Vahlne deems unavoidable in internationalization. INTPOW creates an arena for its members for experience and knowledge sharing among members and actors from potential international markets. This arena is important in relation to help businesses make contacts in those markets and eventually go out and internationalize, when they have gained knowledge and found acquaintances which may lead to business cooperation.

An arena with good information flows makes it a place for knowledge exchange and experiential learning. It is a place where firms can exchange experiences and learn from each other, and meet potential clients from within the network in Norway and with contacts from outside and network with them and potential business relationships could be in the making. The information space where businesses can meet is therefore very important in the internationalization process and following activity, something which the informants emphasised in the interviews. An arena for exchanging experiences from operating in a foreign market can be important for those who are in the operational phase of their internationalization as well as those who have little international experience as they use INTPOW to become more internationalized. INTPOW creates an arena to help members deal with the global business world by inviting foreign companies, network representatives from other countries and business delegations who have an interest in renewable energy to come together at events. This arena works as a framework in facilitating internationalization for the

members. Opportunities as well as challenges have a place on this arena where members bring in experiences, knowledge and problems to the network and discuss them there.

### **The role of INTPOW as a public-private organization**

The role of the Norwegian state is visible in INTPOW as it was initiated by the Minister of Oil and Energy in cooperation with the Energy Council, and the ministries still play a central role to INTPOW as it is financed through the state budget and representatives from the Ministries of Petroleum and Energy, Trade and Industry, and Foreign Affairs are on the board of INTPOW. It is the Norwegian state's alternative for helping the Norwegian renewable energy industry to internationalize, and if a company contacts any of the ministries on internationalization issues they will be forwarded to INTPOW for assistance. This relates to the second subordinate question in this research, the role of INTPOW as a public-private cooperation and its connecting role between the state and the industry and channel of engagement between the two.

The arena where the Norwegian renewable energy industry is gathered is important in relation to the Norwegian authorities and their knowledge of the industry. INTPOW holds meetings which work as an arena to learn about what the renewable energy industry can bring to the table both nationally and internationally and what their interests for the future are and is a channel to the Norwegian authorities for them to know what goes on in the industry. It is a meeting point where both public and private actors can learn about projects and it opens up opportunities for the actors. INTPOW facilitates a dialogue on behalf of the industry with the authorities, which is an important reason to be member of INTPOW for Norconsult as this quote shows:

*“... and [it is] even more important that one stands united in a common front through INTPOW in cooperation towards Norwegian authorities”* (Norconsult, my translation).

INTPOW represents the industry on international business delegation, coordinating representatives from the industry to join the delegation and prepare visits and networking events in important markets for renewable energy. INTPOW also plays a role in planning and arranging events and meetings when official visits are coming to Norway and renewable

energy is on the agenda. Possibilities may also emerge from the public system that can benefit the companies directly, as this example from Powel illustrates:

*« after my presentation a representative from the Foreign Ministry came up to me and said that we actually have some money that you can apply for ... so there are actually economic means waiting for us»* (Powel, my translation).

In one way is the connection with the Norwegian government a way to give INTPOW more legitimacy internationally by being connected to Norwegian authorities and being a representative of the industry at government events where renewable energy is represented. INTPOW holds the role as the link between business and authorities (private and public), coordinator, and a voice for the renewable energy industry in Norway. Norconsult sees the industry as better represented at official delegation et cetera with INTPOW as coordinator than was the case before the organization was established in 2009.

*“It gives INTPOW a greater legitimacy and that I think gives INTPOW more power when they are abroad”* (Powel, my translation).

The network can also have a role in lobbying to try to affect the framework of laws and regulations internationally within the different energy markets. This has been specifically emphasised by the two companies which are already internationalized, TrønderEnergi and Norconsult, but was not mentioned by the two companies which are in the internationalizing process, Powel and AAK. This shows that perhaps the priorities change once a company has internationalized and there seems to be other needs for INTPOW in that situation which leads the two groups to see the possibilities in INTPOW differently. This relates to the different roles INTPOW needs to take on to be able to support the whole renewable energy industry business.

For small or little internationalized companies it is important for INTPOW to be a channel of information and new input, contacts with other members of the network across the industry and potential new clients to show that there are possibilities in markets outside of Norway and that the competency that many companies in Norway possess is needed in those markets. Having a well-developed network at home can be essential before going international. Meeting other Norwegian companies which have little knowledge of each other can create complementing cooperation partners which together can provide a longer supply chain. For the larger or more internationalized companies the channel of information is just as important, but serves a different purpose. The exchange of experiences and knowledge about markets are

emphasized as they contribute to innovation as well as being able to provide a contact network where they are already present in foreign markets. Innovation was emphasised as important motivations for internationalization across the different categories of firms.

Previous studies of internationalization have found two distinctive kinds of market-specific experience needed to move into a foreign market, business and institutional experience (Eriksson et al., 1997, in Johanson and Vahlne, 2003: 95). Business experience concerns the business environment of the company while institutional experience concerns such things as public regulations and laws of a country. INTPOW works on behalf of their partners to deal with both these issues by creating meeting places and working with law regulations and framework for international business in the foreign markets. This is one way of facilitating the internationalization process by reducing the psychic distance between countries. INTPOW has connections through its role as a public-private organization in Norway and can establish contacts with public bodies and companies that a company alone could not do on their own. The role of a facilitator between government and industry is essential in this matter, which also the study of Welch et al. pointed out in their study of an external facilitator for internationalization (Welch et al., 1996).



## Chapter 6: Conclusion

This master's thesis has examined the role of the organization INTPOW in facilitating the internationalization of the Norwegian renewable energy industry. The main research question in this paper has been: *What is the role of the organization Norwegian Renewable Energy Partners (INTPOW) as facilitator for internationalization of the Norwegian renewable industry?*

INTPOW itself promotes the organization as a networking organization and a provider of services such as client seminars and workshops, provide networking opportunities and offer market information (intpow.no, 2009c). The companies interviewed in this research are different in many ways, but the major differences between them are that two of them are large companies with a high degree of internationalization and they were already internationally active when INTPOW was founded in 2009, while the other two companies are smaller and less internationalized. The two latter companies have used INTPOW as an arena to create networks for themselves by participating at events, speaking at events and making use of the information and market studies provided by INTPOW. The two more internationalized have mainly used the arena as a place to meet other companies with common interests to share experiences and learn from each other. INTPOW is a meeting place for possible business partners and a milieu with an important flow of information and knowledge that is important to be part of.

To be able to answer the research question in this study, two subordinate questions have also been raised. The first is: *What is the role of INTPOW in promoting cooperation and new business partnerships between the members as well as with international actors with regard to their internationalization and choice of market entry?* INTPOW's roles are many, and can only be understood when put into context with the findings and the theoretical background, which I have tried to do in this thesis and especially in the previous discussion in chapter 5. INTPOW's role is first and foremost important to its members' internationalization as a creator of a networking arena. The arena is where networking and relationship building happens, information is shared, knowledge and experiences exchanged and new business relationships evolve. This is done to counteract the problems identified by theories of incremental internationalization which point to how lack of knowledge is the greatest obstacle to internationalization for a company. INTPOW supports competitiveness, but also

cooperation and innovation on the basis of knowledge exchange at arenas where the industry is gathered, such as events, conferences or on business delegations. Cooperation both nationally and internationally may be important in the long run for internationalization and events arranged by INTPOW are not exclusively open to members of the organization, as non-members can pay a fee to participate. INTPOW has a major role in creating this arena and facilitating and preparing the framework, but it does not have a role in direct ‘match-making’ between specific companies. Although, INTPOW do suggest that small companies should try to join forces or follow the internationalization strategy of client-following as there are high risks in internationalization and this may contribute to lower the risks. Their focus is on facilitating the important context for prosperous relationships to evolve. Internationalized companies contribute to other members of INTPOW by providing information from markets where they have activities which the smaller members can learn from and they can learn from each other at the same time.

INTPOW has connections into markets in many countries and a good case to use as example is the event I participated at during the course of this research, where the Norwegian offshore wind supply chain was gathered and representatives from networks both in Germany and the UK were present at the conference in Norway to meet with the companies and present their visions for their home markets and where they saw Norwegian companies and competency could contribute and be an important asset in their offshore wind projects and plans. INTPOW provides information about the supply chains within the renewable energy industries in Norway to show which competencies are present, and also to make the Norwegian companies more aware of their own competency and encourage companies within Norway to join forces and work together to gain success in international projects. The renewable energy industry in Norway can offer services along most of the value chain within several types of renewable energy, but especially well developed is the value chain in hydropower as it has been the major source of electricity in Norway for over a century. Norway has also developed important competency within wind power and solar power over the last decades.

The second subordinate question in this thesis relates to the role of INTPOW and its role as contact between the industry and the public authorities: *What is the role of INTPOW as a public-private organization and does this include a connection to Norwegian authorities that otherwise the companies would not have and is the channel of public involvement an important reason to engage in INTPOW?* Especially the more established internationally active companies emphasised INTPOW as an important representative of the industry and the

Norwegian authorities seem to have a better understanding of what the industry can bring in to development aid, international investments and other such projects now that INTPOW has an overview and knows the renewable energy industry. INTPOW works as a contact point between the authorities and the industry as well as a facilitator for internationalization. INTPOW's role as uniting the industry so that they stand stronger together means that it can have greater influence both in national and international frameworks regarding operations of the industry. INTPOW is co-organizer of events when renewable energy is on the political agenda, whether it is in Norway or on business delegations abroad. INTPOW also has an important role to clarify and present the Norwegian competency and provide that information to partners in interesting markets as well as to Norwegian authorities and to the industry itself. Creating competency maps makes an overview of what resources are available in the Norwegian market which may spur national business relationships as well as international relationships.

In this study the role of INTPOW as a facilitator for internationalization is focused around INTPOW as a networking provider through events and seminars where representatives from the industry can meet and exchange experiences, knowledge and information and build personal relationships. It is an organization which through its role as a public-private cooperation has influence and an important position towards positioning the industry internationally along with Norwegian official delegations and at official visits to Norway where renewable energy is on the agenda.

With regards to internationalization there are large differences between the different renewable energy industries and their maturity level in Norway, or how much experience the companies have within a specific field. INTPOW has not been around for very long, but for example the hydropower industry has a century old history in Norway and consists of a complete supply chain for hydropower services in Norway. With regards to offshore wind power, Norwegian companies possess experience that is useful, but because of lack of a home market, most Norwegian companies do not have hands-on experience from national projects and thus have a different outset than the hydropower companies that can show to great success in Norway and specific installations when selling their services abroad.

The member companies of INTPOW are in different stages of internationalization and demands different roles of INTPOW to help in their internationalization process. An important aspect that shows some of the contradictions founds in this study, is how the traditional incremental internationalization models mainly focused on the incremental

stepwise learning through hands-on experience in a specific market as the only way to achieve success internationally. In this study, the two most internationalized companies emphasized stronger the importance of network and knowledge exchange and knowing the right people as important aspects of membership in INTPOW than the two less internationalized companies. This also illustrates that the different internationalization stages seem to imply different needs from INTPOW, especially market knowledge was more appreciated by the less internationalized than by the already internationalized companies, and it seems to be a natural deviation as the two former are searching for information about markets while the two latter have found their markets but look for information and knowledge about working in those specific markets.

### **Limitation to the study**

There are obvious limitations to this study as it is a project that has been undertaken during the course of 18 weeks with a limited number of informants and limited possibilities to return to collect further information on specific topics or questions. As this is a case study, the aim of this study is not statistical generalization, but analytical generalization (Yin, 1994). The informants gave quite different answers and interpretations of INTPOW's role in internationalization of the industry, but also several opinions were found to be common to two or more of the informants. I selected four companies that are all members of INTPOW for interview of which two were of smaller and less internationalized size while two were of a larger and more internationalized size. Within the groups were of course differences, for example were they involved in different renewable energy sources which do not make them necessarily easily comparable, but they are seen as representatives of a wider membership of INTPOW. Their answers were different as some of them focused on INTPOW's role as mainly a marketing- and presale facilitator while others focused more on the public-private cooperation and the contact possibilities that exist there and did not see market information or other such efforts as the main focus of INTPOW's work at all. The companies chosen in the sample for this project are however only involved in hydropower and wind power. Solar power or bio power are not represented in this study, as these are newer sources of energy and does not have long traditions nor the same scale as especially hydropower has in Norway, and

offshore wind is a new emerging renewable energy source which builds on competency from other energy industries in Norway which makes it an interesting case as well, historically.

The selection of companies has been done to bring in a variety of companies to the study as well as keeping it small enough to be able to obtain a deep understanding during the short time span that was available to me. I selected the companies independently from the list of members except for one exception where I asked INTPOW for advice to find a specific type of firm. I contacted only companies who are members of INTPOW, and since events arranged by INTPOW are open to companies that work within renewable energy, but which are not members, this might have meant that the companies who are members of INTPOW are also more positive towards the organization. However, I did try to select different companies with regards to size and degree of internationalization. I talked to persons within the companies who were directly involved in INTPOW, however not all the businesses which were chosen were necessarily very actively involved in INTPOW, although some were highly involved.

Internationalization is a topic that has not been specifically discussed in the globalization studies of this master program, but instead globalization itself relates heavily to internationalization as such. Internationalization relates to both the process of going out but also to the international activities of a company or the search for new markets. Finally, the case study method has not been explicitly taught in methodology courses, but rather mentioned passing by discussions on other methods. This has meant that this has been a new experience for me using this research design and method of data collection. I do feel that it has been a good choice of method none the less as the case study is preferred when looking at contemporary events and the research question is of an exploratory nature to find out what the role of INTPOW is in the internationalization process of its members. It is in this way an exploratory research where the case study method is appropriate (Yin, 1994).

### **Theoretical implications**

This study has looked into the role of a facilitator for internationalization which is a public-private cooperation and thus supported by the Norwegian government. The literature on facilitators for internationalization is an area with little previous research and as far as I have revealed only one academic article has been published on the topic. Theoretical implications of the role of a facilitator have been little developed in internationalization theory. The theory

of facilitators has been extended through this study as it contributes to that gap, but further research on the topic is necessary to get a deeper understanding of the role of facilitators in these processes and also the role of the state in the facilitator. Important aspects of the role of INTPOW have been found to be a facilitator for industrial networking and creating arenas for the industry to learn about and meet representatives from international markets. In this sense, INTPOW also has a function as a cluster reputation enhancer.

The newer models of internationalization regarding the internationalization of so called Born Globals seem to point to important aspects of the internationalization process emphasizing the importance of network, and this view has been strengthened through this research. I have also found that networking was emphasised just as much by the larger and established companies as by the small companies in this study, which calls for modifications of the theory as it seems relevant also to established companies with already existing international activity. Networking is seen as essential for internationalization regardless of the size of the company in this study. This can to a certain extent be related to the globalization forces which accelerate internationalization and thus force companies to internationalize to stay competitive and keep up their market positions – both well-established and newly established companies. At the same time is keeping a focus on the home market important, and this study supports the notion that lack of home market has been found to be a problem for the internationalization of offshore wind, also found by Hansen and Steen (2011) in earlier studies. A good home market can be seen as an important prerequisite for success internationally.

INTPOW is regionally defined, within the Norwegian borders, but gathers businesses from different environments within the energy cluster in Norway under the common brand of renewable energy and also international actors to events. This seems to be an important finding which can be looked further into with regards to networking on professional or organization proximity, rather than the focus on geographical proximity which has been important in the understanding of a cluster for example. The role of such networking is to cross the boundaries between supplier and developer with experiences from both national and international projects and enhance inter-firm learning and sharing of knowledge and experiences. Through interactions and competency maps such as those provided by INTPOW, the industry can get a more conscious relationship to their own competency and knowledge of which other actors are in the market. A specific focus on the competency specific to Norwegian businesses can help them to trust themselves to try to seek international projects through cluster reputation enhancement.

## **Challenges for the future/future research problems**

This case study is by no means a completed study of which the last sentence has been written. There are many more aspects of the role of a facilitator in internationalization which could be looked deeper into. Networking in internationalization is highly relevant in an ever more globalized market economy with tighter integration of markets all over the world, but perhaps especially in Europe with the European Union and the common market. Further research can contribute to the understanding of the role of the state in industrial networking and facilitation of industrial development both nationally and internationally. Also, perhaps looking further than just focus on geographical proximity in networking and cluster forming, but rather see networking with background in a common field as fruitful both to suppliers, developers and investors. It may be a place for new opportunities to emerge and can be potential new directions for development of the industry. Global connections and connections between actors which have different experiences are important for a network to bring in novel knowledge and information and help its members to prosper.



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## **Appendix: Interview Guide**

### Spørsmål til intervju bedrifter

#### Bedriften

Intervjuobjekt: Stilling, lenge ansettelse

Bedriften: selskapsform?, når startet?, Norskeid? Antall ansatte i Norge/utlandet? fornybar energi hovedsatsning/delsatsning? Hvilket produkt lever dere til fornybar energi produksjon?

Type kunder: bedrifter? Kunders behov ifht internasjonalisering? Underleverandør/-er? Hvordan kommet i kontakt med dem?

Hva ser bedriften selv på som viktige faktorer for å opprettholde konkurranseevnen i sitt marked? Og konkurranseevne i internasjonalt marked?

Har bedriften et godt nettverk/gode kontakter i utlandet? Viktig for internasjonaliseringsprosessen? Er disse skaffet på egenhånd gjennom tidligere handelsforbindelser? Via andre nettverk?

Innenfor hvilken kategori innen fornybar vil du karakterisere som deres hovedområde? (vind, vann, sol, bio?, vedlikeholdsarbeid, andre?)

Hvilke land er dere engasjert i? Planer om å engasjere dere i? Ønsker?

#### Internasjonalisering

Satser dere sterkt på internasjonalisering?

Hva slags strategi har din bedrift i forhold til internasjonalisering? Mål? Eksport vs. Etablere seg i utlandet? Leverandør til norsk selskap som har flyttet ut?

Forventninger til internasjonalisering? Videre strategi?

Hva er de viktigste motivasjonsfaktorene for internasjonalisering?

Hvilke fordeler ser dere ved å være aktiv internasjonalt?

Hvilke utfordringer har dere opplevd eller gjør at dere muligens avventer en eventuell internasjonal satsning? Problemer? (Kulturforskjeller, kvalitet på arbeidskraft, teknologi, språk, kostnadsnivå, tilgang på informasjon, kundeforhold)

Er det enkelte satsningsområdet som er mer interessant å internasjonalisere enn andre i bedriften?

(kommer inn på intpow:)

Hvilke markeder internasjonalt posisjonerer dere dere inn mot? Bruker dere Intpow sin kunnskap og nettverk i dette?

Tar dere med Intpow på interne strategimøter om internasjonalisering og planlegging av internasjonale møter? Eller bruker dere dem som en arena for å møte andre?

Bruker dere andre nettverk eller andre kanaler i prosessen med å satse internasjonalt? Allerede eksisterende bedriftsnettverk?

## INTPOW

Når ble dere medlem?

Hvorfor har dere valgt å bli partner i INTPOW?

Hvordan vil du karakterisere INTPOW sin rolle i forhold til deres internasjonaliseringsstrategi?

Var dere internasjonalt engasjert før dere ble med i INTPOW og har dette endret seg noe siden medlemskapet?

Har det internasjonale engasjementet økt med hjelp av INTPOW?

Ser dere INTPOW som en viktig del av deres internasjonale satsning?

Bruker dere INTPOW som et nettverk/møtested med andre norske bedrifter? Evt. Med det offentlige?

Ser du på det at INTPOW er et offentlig-privat samarbeid som en styrke? På hvilken måte er dette viktig i det arbeidet intpow gjør?

Intpow jobber med myndighetsrelasjoner både i Norge og utlandet, er dette en viktig del av Intpow sitt arbeid for dere?

Hva gjør medlemskap i Intpow til en god investering for dere?

Intpow markedsfører norsk kompetanse under en felles «branding». På hvilken måte er dette en fordel for dere å være en del av? (større profil, assosiert med ønskede kvalifikasjoner etc?)

Nettverk i INTPOW sitt arbeid:

Ser dere på de andre partnerne i Intpow som konkurrenter eller samarbeidspartnere primært? Nettverksknytting mellom partnere i Intpow? Brukes de store bedrifter som springbrett gjennom «felles branding i INTPOW», eller utenom INTPOW?

Intpow har som mål å skape nettverk på tvers av forskjellige typer bedrifter også innad i Norge – ser dere på dette som viktig?

Føler dere at siden alle hører til samme bransje (fornybar) så forstår dere hverandre bedre ifht samarbeid?

Nyttig med seminarer, nettverksarrangement, idemyldring, markedsstudier/informasjon etc. fra INTPOW. Messer? Offentlig kontakt?

Råd og veiledning fra Intpow – har dere benyttet dette og ser på det som viktig i deres internasjoniseringsprosess?

Opplevelse av internasjonisering:

Hva karakteriserer du som suksesskriterier for internasjonisering? Noe dere selv har opplevd som har vært spesielt positivt/negativt, lært av andres feil?

Hvordan kan INTPOW best hjelpe med internasjoniseringsprosessen? Organisere samarbeid, introdusere kontakter, lokale forhold? Noe dere savner?

Hva konkret har dere dratt nytte av så langt fra samarbeidet med Intpow?