# HELPING FINNISH COMPANIES IN THE FIELDS OF ENERGY EFFICIENCY AND RENEWABLE ENERGY ENTER THE RUSSIAN MARKET:

A market research project conducted for the Finnish-Russian Chamber of Commerce

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Bachelor's Thesis September 2011

Degree Programme in International Business School of Business Administration





Author(s) KAIPAINEN, llona	Type of publication Bachelor's Thesis	Date 02.09.2011
	Pages 54 (44 + 10)	Language English
	Confidential	Permission for web publication
	() Until	(X)

Title

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Degree Programme

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Assigned by

The Finnish-Russian Chamber of Commerce

#### Abstract

This project-based market research was conducted for the Finnish-Russian Chamber of Commerce (FRCC). The FRCC promotes Finnish know-how into Russian markets by providing a variety of internationalization services for companies of all sizes and fields. The aim of the project is to assist the Finnish-Russian Chamber of Commerce to develop and expand its marketing efforts in Finland toward the Russian market. The target companies are Finnish companies working in the fields of sustainable energy, particularly companies working in the fields of energy efficiency and renewable energy.

The market research features both qualitative and quantitative perspectives. The secondary data was collected from Internet sources, books and articles. The primary data was collected by conducting survey of Finnish companies working in the fields of sustainable energy. The survey questions addressed, for example, the companies' previous experiences in using internationalization services, their needs for such services and their interests towards entering the Russian market.

Based on the research it appears that there is a strong interest and need in Russia for the Finnish sustainable energy know-how and support. The cooperation between Russian and Finnish companies has started well and works toward easing the process toward effective business cooperation. The enquiry shows that the Finnish companies are interested mostly in services which provide market knowledge of the target market, help in networking and help in funding. All of the companies had used internationalization services previously, and had mostly positive experiences in using them. Many were interested in expanding their business to Russia and large portion were eager to learn more in doing business in Russia. Recommendations are made for advancing this important business relationship.

#### Keywords

Energy efficiency, renewable energy, sustainable energy, internationalization services, export promotion services, Russia, Finland

Miscellaneous



Tekijä(t)	Julkaisun laji	Päivämäärä
KAIPAINEN, Ilona	Opinnäytetyö	02.09.2011
	Sivumäärä	Julkaisun kieli
	54 (44 + 10)	Englanti
	Luottamuksellisuus	Verkkojulkaisulupa
		myönnetty
	() saakka	(X)

Työn nimi

SUOMALAISTEN YRITYSTEN AVUSTAMINEN VENÄJÄN MARKKINOILLE ENERGIATEHOKKUUDEN JA UUSIUTUVAN ENERGIAN ALOILTA: Markkinatutkimusprojekti Suomalais-Venäläisen kauppakamarin toimeksiannosta

Koulutusohjelma

Degree Programme in International Business

Työn ohjaaja(t) CRAWFORD, Steven

Toimeksiantaja(t)

Suomalais-Venäläinen kauppakamari

#### Tiivistelmä

Tämä projektikohtainen markkinatutkimus on tehty Suomalais-Venäläisen kauppakamarin (SVKK) toimeksiannosta. SVKK edistää suomalaisen osaamisen vientiä Venäjän markkinoille tarjoamalla laajan valikoiman kansainvälistymispalveluita kaiken kokoisille eri alojen yrityksille. Projektin tavoite on avustaa Suomalais-Venäläistä kauppakamaria kehittämään ja laajentamaan markkinointiaan Suomessa Venäjän kauppaa kohtaan. Kohdeyrityksiä ovat suomalaiset yritykset kestävän energian aloilla, tarkemmin yritykset energiatehokkuuden ja uusiutuvan energian aloilla.

Markkinatutkimuksella on sekä laadullisen että määrällisen tutkimuksen piirteitä. Aineisto kerättiin Internet-lähteistä, kirjoista ja artikkeleista, sekä kyselyllä. Otantana ovat suomalaiset yritykset energiatehokkuuden ja uusiutuvan energian aloilla. Kyselyllä tiedustellaan esimerkiksi yritysten aikaisempia kokemuksia kansainvälistymispalveluiden käytöstä, sekä näiden palveluiden tarpeellisuutta. Lisäksi kyselyllä selvitetään yritysten kiinnostusta Venäjän kauppaa kohtaan.

Tutkimuksen perusteella voidaan päätellä, että Venäjällä on suuri mielenkiinto suomalaista kestävän energian osaamista ja sen tukemista kohtaan. Yhteistyö venäläisten ja suomalaisten yritysten välillä on alkanut hyvin edeten kohti tehokasta yhteistoimintaa. Kysely osoittaa, että suomalaiset yritykset ovat eniten kiinnostuneita palveluista, jotka tarjoavat markkinatuntemusta, apua verkostoitumiseen ja apua rahoituksen löytämiseen. Kaikki yritykset ovat aikaisemmin käyttäneet kansainvälistymispalveluita ja kokemukset niiden käytöstä olivat enimmäkseen positiivisia. Moni yritys oli kiinnostunut laajentamaan liiketoimintaansa Venäjälle ja suuri osa oli kiinnostunut oppimaan lisää Venäjän kaupan käytänteistä. Suositukset on tehty tämän tärkeän liiketoimintasuhteen edistämiseksi.

Avainsanat (asiasanat)

Energiatehokkuus, uusiutuva energia, kestävä energia, kansainvälistymispalvelut, vienninedistämispalvelut, Venäjä, Suomi

Muut tiedot

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## **1 INTRODUCTION**

#### 1.1 Introduction to the topic and project

As nonrenewable energy sources diminish globally and the greenhouse effect increases, the need for new technologies in energy efficiency and in energy production from renewable energy sources grows stronger. Finnish know-how in the field is recognized and its potential noted by its neighbor Russia. Many organizations and companies in Finland are promoting this Finnish know-how inside Russian markets. The Finnish-Russian Chamber of Commerce (FRCC) provides internationalization services for companies of all sizes and fields, including sustainable energy, in order to increase Finland's presence in the Russian market. The FRCC already provides a variety of services for Finnish companies willing to enter the Russian market, but identifying new companies to assist and service is a key goal.

This project-based thesis is conducted for the Finnish-Russian Chamber of Commerce, and aims to assist the FRCC to develop and expand its marketing efforts in Finland toward the Russia market. The research focuses on companies working in the field of cleantech, or more precisely, sustainable energy. These Finnish companies are working in industries such as energy efficiency and energy production from renewable energy sources. The term *clean energy* as well as *sustainable energy* will be used ahead to describe certain parts of this industry sector.

The thesis could be described as a client driven project in which a marketing plan development approach was selected as a key project component. The data collection methods feature both qualitative and quantitative approaches. The general idea of the enquiry was to determine the level of interest for export promotion services toward the Russian market. Desk research was conducted in order to establish a base of background information about the field, Finnish companies active in the field, and what needs they might be able to address in Russia.

#### 1.2 The Finnish-Russian Chamber of Commerce

The Finnish-Russian Chamber of Commerce (FRCC) is a non-profit organization that was founded in 1946. Its mission is to represent and advance the interests of companies that form trade relations between Finland and Russia. The FRCC is managed by a board of directors comprising a chairman, two vice-chairmen and three to eleven active board members. The board members and operations management work as a lobby for the FRCC members. Various work groups and projects are formed that aim to influence issues which concern the development of business between Finland and Russia. The registered office of the FRCC is located in Helsinki, and other offices are located in Moscow, St. Petersburg, Ufa, Yekaterinburg and Lappeenranta.

The FRCC provides companies a variety of services such as market research, company operations, export promotion, information, consultation and training. The FRCC serves clients from a broad range of fields, and companies that choose to become members enjoy certain benefits that are not available to non-members. These benefits are e.g. product and service discounts, advantages in receiving information and improving their business. (FRCC in brief. 2011.)

Two thirds of the FRCC members are small and medium-sized companies. Half of the non-member clients are small and medium-sized companies and other half larger companies whose capital exceeds 840,000 euros annually. There are approximately 850 members in the FRCC (12/2010), and some 750 of these are Finnish members whereas there are typically around 100 Russian members. (FRCC in brief. 2011.)

The FRCC is funded from several sources, with 80% consisting of its own funding, which includes membership fees, allowances, contributions, special funds, service fees and earnings from information and publication operations, while the remaining 20% is funded by the Finnish Ministry of Trade and Industry. (FRCC in brief. 2011.)

The Finnish Russian Chamber of Commerce is keeping up its values of customer orientation, professional competency and economic viability by providing a variety of different kinds of services for its clients. These include, for example, logistics, financing, recruiting, legal matters, human resource management and financial management, taxation, customs formalities, certification, company culture and/or customs. In order to provide the most up-to-date and practical knowledge, the FRCC provides experts in these respective fields. The FRCC also organizes seminars and briefings about topics of current interest. The strongest growing areas and cities in Russia are featured as potential economic development targets for investment. (SVKK:n koulutus ja seminaarit. 2011.)

The FRCC also offers tailored marketing services, market research, networking and exhibition trips to Russia. These services help companies establish new contacts and business partners in Russia. (SVKK:n vienninedistämismatkat Venäjälle. 2005.) Bureaucracy, company culture and the interconnections between companies and public administration are one of the major problems faced when entering Russian market. This is why the FRCC offers to help companies determine the right actions and to create the needed contacts in order to enter the market with ease. (Yhteydet päättäjiin Venäjällä. 2011.)

The FRCC provides specialized marketing research services in Moscow, St. Petersburg and Ural. These include e.g. information about the customers, markets, competitors, competition and their operational environments. Each marketing research project is individually tailored to meet the specific needs of the customer. (Venäjän markkinoiden tutkimus- ja kartoituspalvelut. 2011.)

The FRCC also provides other services such as legal advising, company background clearance, guidance in recruiting and real estate, and advising in taxation and financial management. Also for the beginners in the field the FRCC offers a startup package, and for the companies which are already starting the process of establishing their business in Russia, there is available a services package that covers the processing of all the vital factors that need to be taken care of before entering the market. (Suomalais-Venäläinen kauppakamari. 2011.)

In 2011 the Finnish-Russian Chamber of Commerce is organized a "Clean city" –project in order to promote exportation to Russia (FIN = Puhdas kaupunki– vienninedistämishanke 2011). This project brought together Finnish know-how in the fields of cleantech in order to explore Finnish companies' market potential especially in the fields of water supply and sewerage, waste management and energy saving. The areas of infrastructure and energy savings in Russia will open new export and business opportunities for Finnish companies working in the field. (Puhdas kaupunki –kansainvälistymishanke 2011. 2011.)

The Clean city project entails a promotional trip to Russia. During this trip the company representatives can present their services and products to the local companies, after which it is possible to conduct more extensive discussions and negotiations with potential clients and partners. (Puhdas kaupunki – kansainvälistymishanke 2011. 2011.)

# 2 THEORETICAL BACKGROUND

## 2.1 What is cleantech?

Sustainable business, environmental business, cleantech and clean technology are all terms used when describing activities that are beneficial to the environment. These are not to be confused with the terms environmental technology or "green tech", which were popularized in the 1970s and 1980s (Cleantech definition. 2010).

The term *cleantech* is a rather new term, but nowadays is used commonly in Finland. The Finnish-Russian Chamber of Commerce uses this term, which is why it is chosen to be the common term used in the text ahead.

According to Cleantech Finland®, the term cleantech defines all services, processes, products and technologies which prevent or reduce the harmful actions on environment. The term is also meant to include profitability, quality and efficiency. (Sharing curiosity. 2011.) Based on Cleantech Finland's activities the major areas of cleantech are air protection; clean processes, materials and products; energy efficiency; green construction; measuring, analysis and automation; renewable energy; waste management; water and waste water and finally Smart Grid (Solutions. 2011).

Cleantech Group explains that cleantech is all about new technology and related business modes that provide solutions to global challenges while offering competitive returns for investors and customers. Where in the past greentech or envirotech has stood for "end-of-pipe" technology with limited opportunities for promising returns, cleantech is trying to solve ecological problems with new technology and science such as biomimicry and biology. (Cleantech definition. 2010.)

According to Cleantech Group, the purpose of cleantech is to provide firstclass performance at lower costs, while reducing negative ecological impact and improve the productive and responsible use of natural resources. (Cleantech definition. 2010.)

#### 2.2 The definition of sustainable energy

#### Energy efficiency

The prime objective in energy efficiency is the cost effective reduction of greenhouse gas emissions. The common EU objective is to increase energy efficiency twenty percent by the year 2020. Energy efficiency is not only important because of being part of the climate policy but also because of the self-evident reasons, such as securing the energy supply, reducing costs and other environmental points of view. (Energy efficiency. 2011.)

Statistics Finland describes energy efficiency as the efficient usage of heat and energy. This includes minimizing the loss in energy and heat production as well as saving energy and heat e.g. by using triple-glazed windows, components associated with low energy construction, technical improvement measures for construction and heat pumps. Minimizing the usage of fossil fuels in heat and energy production (fossil fuels stand for oil, coal, natural gas and peat). Also measurement, monitoring and other functions related to energy efficiency belong under this definition. (Lämmön/energian tehokas käyttö.2009.)

#### Renewable energy

The renewable energy market is composed of the consumption of electricity, which is generated through geothermal, solar, wind and hydroelectric means, and also through wood and waste combustion (Renewable energy in Russia. Industry profile. 2010, 7). Peat on the other hand is classified in Finland as slowly renewable biomass fuel (Renewable energy sources. 2010).

#### 2.3 Finnish sustainable energy market

#### Energy efficiency

The Ministry of Employment and the Economy states on its website that when it comes to many energy conservation measures and using energy efficiently, Finland is one of the leading countries in the world. Examples of successful energy conservation measures in Finland are the co-generation of heat and electricity, broad coverage of energy efficiency agreements and the systematic implementation of energy audits. (Energy efficiency. 2011.)

Energy conservation usually means the improvement of the use of energy in a way that specific energy consumption is reduced. Then again, specific consumption means relative energy consumption calculated per product unit or by service. According to the Ministry of Employment and the Economy this can be calculated, for example, per tonne of product produced (MWh/tonne) or per cubic meter (KWh/m3). (Energy efficiency. 2011.)

The International Energy Agency (IEA) has stated that in co-generation with high efficiency and low emissions, Finland is the 'model for the world'. Finland has been investing in energy efficiency for decades covering the entire chain from energy production to its end use. The areas where Finnish technologies are significant are e.g.:

- Combined heat and power generation (CHO) or co-generation
- District heating and cooling
- Efficient industrial processes
- Automation and environmental measurements
- Smart grids and power electronics

(Energy efficiency. 2011.)

#### Renewable energy

When it comes to decreasing greenhouse gases in energy production and fighting climate change, renewable energy sources, as well as energy efficiency, play a substantial role. The European Union set a target where the share of renewables in energy use is targeted to increase to 20 percent by the year 2020. The EU has set a goal for Finland to increase the share of renewable energy use from the level of 25 percent to 38 percent by 2020, which is among the highest in the EU. (Renewable energy. 2011.)

Nowadays, Finland is one of the world's leading users of renewable energy sources. One quarter of Finland's total energy consumption comes from renewables. This accounts more than one quarter of Finland's total power generation. Finland's most important renewable sources of energy are bioenergy (in particular wood and wood-based fuels), hydropower (a.k.a. water power), wind power, solar energy and ground-source heat. (Renewable energy sources. 2010.)

The national energy and climate strategy sets out to increase the use of renewable sources of energy and their share of energy consumption. Besides energy saving, this is one of the most effective ways of reaching Finland's climate targets. The strategy also supports exporting the industry's technology, which is becoming already one of the major parts of Finnish exports. (Renewable energy sources. 2010.)

With decades of experience in the field, Finnish companies have a strong position in exporting bioenergy technology covering the entire chain of production. Also, Finnish companies in the forest and energy industries are at the moment developing new generation biofuels from wood-based raw materials as well as non-wood and non-food vegetable matter. (Renewable energy. 2011.)

Since the 1890s, Finland has been investing on development work for solar cells, heating systems and panels. Nowadays, Finnish technology is used worldwide for powering telecom base stations, health centers, water pumping and schools in remote areas, especially in developing countries. (Renewable energy. 2011.)

From the beginning of the 21<sup>st</sup> century until 2008, the global wind power markets have grown 25-30 percent annually. This makes wind power one of the world's fastest growing fields of cleantech. With only 0.3 percent in wind power production of the Finnish electricity consumption, Finland still has significant wind power technology providers with advanced technologies in the markets worldwide. (Renewable energy. 2011.)

In 2008, world solar photovoltaic (PV) market installations gained its highest record of 5.95 gigawatts with respective growth of 110 percent over the previous year. It is expected that this growth will continue. (Renewable energy. 2011.)

According to the IEA, cutting emissions to half by year 2050 would require investments of EUR 825 billion per year but it would decrease oil demand by 27 percent per year. With the additional investments of EUR 300 billion per year from now till 2050 the current global carbon dioxide emissions level could be maintained the same. (Renewable energy. 2011.)

#### 2.4 Russian sustainable energy market

#### Energy efficiency

According to Dvorkovich, there are two factors that make the Russian economy vulnerable in the age of globalization to e.g. economic crisis, energy efficiency that is too low, and too high a dependence on natural resource exports. Russia has been depending a lot on the rich endowment of energy sources it has, which is why it is lagging behind its partner-competitors in many areas of energy efficiency. Still, some decent accomplishments have been made. Between 2000 and 2008, the energy intensity of the Russian GDP decreased by one-third and electricity intensity dropped by 30 percent. Although these look like reasonable results, Dvorkovich states that only the easy changes have been made and now is time to go deeper to find out the potential and take a step to the next level in energy efficiency. (Dvorkovich 2009.)

In order for Russia to be globally competitive, it must at least catch up with most advanced countries when it comes to energy efficiency, says Dvorkovich. Russian Federation president Dmitry Medvedev has set high goals for increasing energy efficiency in Russia. Medvedev has stated that the Russian economy must be modernized, where energy efficiency is on the agenda. By the year 2020, energy efficiency of the Russian economy must be increased by 40 percent, which means that it must be taken seriously and with inclusive measures. (Dvorkovich. 2009.)

According to Business Week, Medvedev has described the energy efficiency situation in Russia as "depressing". This is because Russian factories use up four to five times more energy than their colleagues in Western countries. Plenty of heat will get lost before it reaches consumers because of the wasteful district heating systems. (Amstell 2009.)

When it comes to funding the institutional changes, Medvedev's plans has been criticized. Questions that have arisen consider what kind of incentives will be used and how to motivate large companies making the changes for saving energy. One plan is to collaborate with other nations. Teaming up with other nations on the matter could bring Russia the needed funds, technology and know-how. In order to meet these goals, Russia has at least already turned to Germany and China. (Amstell 2009.)

Dvorkovich announces that in order to meet the goals Medvedev has set, energy efficiency must be improved in energy production, transformation, transmission and use in all areas. Generation facilities fired with coal and gas must be renovated and new power stations must be constructed with the latest technology used. (Dvorkovich 2009.)

Modernizing the Russian economy requires policy initiatives, which is why the Commission on Modernization has been established. The Commission's priorities include researching, developing and implementing the latest technologies in the medicine, information technology and nuclear energy sectors as well as developing space and telecommunications systems and radically increasing energy efficiency. (Dvorkovich 2009.)

#### Renewable energy

In 2010 the Russian renewable energy market produced total revenues of \$6.9 billion, while compound annual growth rate (CAGR) for the period of 2006-2010 had a value of 2.5%. When comparing the Russian CAGR to the French and German markets, the growth doesn't seem relevant. During the same period of time, the French had a CAGR of 7.3% and Germany 12%. Their market values were respectively \$7.9 billion and \$16.7 billion. The performance of the Russian renewable energy market is expected to accelerate by a CAGR of 7.3% for the period of 2010-2015. (Renewable energy in Russia. Industry profile. 2010, 9.)

Russia has great potential for the development and implementation of all renewable energy sources. It has a unified power system that connects approximately seventy localized energy systems and enables power to be transmitted across the national grid. Wind power generation has great potential in Russia with the majority of wind turbines located along the seacoasts. Approximately 15% of Russian domestic electricity generation derives from hydropower, and biomass is also showing great potential. (Renewable energy in Russia. Industry profile. 2010, 13-14.)

When compared to other countries, especially in Western Europe, it appears to be less common in Russia for retailers to offer 'green ' tariffs to end-users with guarantees that the electricity was generated from renewables. The lack of proper legislative, low electricity and gas tariffs and low public demand on renewable source of energy are the reasons hindering the development and investment in renewable energy projects. The transformation of the stateowned monopoly RAP UES of Russia into several state-owned and private companies has liberalized the electricity market, which opens the market to new entrants. (Renewable energy in Russia. Industry profile. 2010, 14.)

Although Russia is a leading candidate for renewable energy development, the movement away from non-renewable "dirty power" is hindered by the lack of proper legislative and investment capital. The main obstacle is still the low prices attached to the dirty energy. The quantity of oil and gas, and the fact that low prices are subsidized by the Russian government, does not make the costly transition to renewable energy appealing. The prices for gas range between \$40 and \$50 per thousand cubic meters. While the prices for traditional power remain this cheap, it is no surprise that within Russia there is not enough pressure on the government to force it to expand its renewable energy practices. The public demand is far less than in countries where public opinion has raised the call for more renewable energy. (Wookey. 2008.)

Russia has a major capacity for renewable energy. Because of its unique power system power can be transformed across the country, creating the opportunity to establish renewable products in remote areas of the country. The potential of biomass output in Russia is about 15,000MW, from sources like sewage, cattle manure and lumber waste. The use of lumber is becoming more dominant in Russia and impressively almost 9% of the world's hydro resources are located in Russia. There is potential in geothermal output of around 3,000MW while also solar power has great potential despite the northern location of the country. Naturally the potential for solar power exists especially in Russia's southern regions. (Wookey. 2008.)

When it comes to wind power, Russia has again great potential. The mountainous regions as well as coastlines are primary land for wind farms. Wookey suggests that just twenty-five percent of Russia's untapped wind energy potential could reach to 175,000MW. This is approximately the same amount generated from the wind farms in Europe today. (Wookey. 2008.)

## 2.5 Finnish market opportunities in Russia

A large amount of energy is constantly going to waste while the demand in energy keeps growing. Between the years 2006-2030 the world's primary energy demand is expected to grow annually by 1.6 percent on average. (Energy efficiency. 2011.)

In order to meet the obligations set by the EU, Finland must increase enormously the use of wind energy, biogas, heat pumps, biomass and woodbased energy. This demand is expected to boost technology development in the field of renewables and strengthen Finland's position in the global market as a provider of Finnish technology and know-how. (Renewable energy. 2011.)

A recent study of 800 Finnish cleantech companies indicates an averaged 10-30% growth expectation for these firms, and for some even more. The driving forces of national EU-targets and legislation in the environmental sector in general are expected to push Finland into major changes in the cleantech field. (Great growth expectations. 2011.) While the demand for sustainable energy grows, the Finnish-Russian Energy Club (FI Suomalais-venäläinen Energiaklubi ry) was established in 2010 to meet the challenges and possibilities the Finnish-Russian co-operation can offer in the fields of energy efficiency and renewable energy sources. Subsequently, a Memorandum of Understanding (MoU) was signed for cooperation between Finland's Ministry of Employment and the Economy and the Russian Ministry of Energy. After the adoption of Russia's new energy strategy in 2009 through 2030 and the recognition of the new law on energy efficiency in 2009, the Russian Energy Agency was founded to execute the actions of energy efficiency and the energy strategy. Because there is equivalent agency existing in Finland, the Finnish-Russian Energy Club was founded to meet goals of the MoU and for engaging communication with the Russian Energy Agency. The founders are the Federation of Finnish Technology Industries, Lahti Science and Business Park, Finnish Energy Industries, Fortum Oyj and Pro-Team Group Oy. (Suomalais-venäläinen Energiaklubi ry, 2011)

The aim of the Finnish-Russian Energy Club is to promote business between Finnish and Russian companies, and so creating new contacts and networks is one of the goals of the FREC. It also aims to identify possible joint projects and organizing public events while promoting investment in Russia. The FREC has co-operation with the Finnish-Russian Chamber of Commerce. (Suomalais-venäläinen Energiaklubi ry, 2011)

According to Kivelä, the secretary of the Finnish-Russian Energy Club (FREC), the Russian is investing in energy efficiency and energy saving solutions. This has created favorable market conditions for the Finnish knowhow in these fields. Due to the recent events in Fukushima, the German decision to withdraw from nuclear energy and new methods to utilize shale gas, Russia has been rethinking its energy strategy. At the moment there are approximately 15 members in the Finnish-Russian Energy Club and several new ones are planning to join in the near future. Kivelä describes the relation between the FREC and the Russian Energy Agency well functioning. In the Russian point of view, the interest towards projects and co-operation is

considerable, but there might be the question of funding. Even though almost all the Russian companies are interested in Finnish know-how lack of credibility to rise funding limits most joint projects from realization. (Kivelä 2011.)

Kivelä explains that the Russian authorities see technology related to bioenergy, including especially biofuel boilers, as the top of the Finnish knowhow in the field. However, due to the Energy Club activities, today Russians start to recognize the Finnish expertise also in the fields of district heating, transmission of electricity and the energy efficiency in building construction. Although the interest towards the Finnish co-operation is high, the collaboration is not axiomatic. According to Kivelä the biggest challenges the Finnish companies might face when getting into Russian trade are finding eligible targets of investment and Russian partners. As the Russians usually would like to get to know their business associates before getting to the actual business, all the Finnish companies do not share the same tradition and long background in Russia. (Kivelä 2011.)

# **3 RESEARCH METHODS**

## 3.1 Research problem

The aim of the research is to assist the Finnish-Russian Chamber of Commerce to develop and expand its marketing efforts on behalf of Finnish companies that would like to enter or expand their business in the Russian market.

In order to reach this goal, the Chamber needs to identify those Finnish companies working in the field of sustainable energy, and to assess these companies' interests towards entering Russia. Therefore it is relevant and urgent to determine whether these companies are interested in using internationalization services provided to them as regards the Russian market, and as well to determine more precisely what kinds of services are most needed. Therefore, the primary research questions addressed here are:

- 1. What Finnish companies, working in the field of sustainable energy, would be interested in exploring their market opportunities in Russia?
- 2. Would these companies be interested in using internationalization services?
- 3. If so, what kinds of services would they be willing to use?

## 3.2 Method and methodology

## Method

Because of the nature of inquiry, a market research approach was selected as a research strategy framework. More suitably, instead of calling this a thesis, it is more precisely described here as a client driven project. This approach was chosen because it meets the best the needs of the client, the Finnish-Russian Chamber of Commerce.

The project was envisioned as employing a mixed, flexible methods approach. According to Robson (2007), a flexible design allows for evolution during the research process, and decisions on how to proceed depend to a considerable extent on what is found during the data collection process. In fixed design the design is largely specified and sorted out before the data collection. Robson explains that in the past, design approaches have been commonly described as either qualitative or quantitative, qualitative usually offering a more flexible design and quantitative a more rigid, fixed design. (pp. 22 - 23.)

Based on Robson's theory, in this thesis collecting the information for the theoretical background can be specified as a fixed design, whereas the most part of the thesis, like planning, implementing and analyzing the enquiry and the results, can be defined as a flexible design.

This thesis can also be qualified of having both the features of qualitative and quantitative way of research. Mostly it is conducted by using qualitative method. Hirsjärvi, Remes and Sajavaara (2009) explain that in qualitative research the aim is to examine the subject as comprehensive as possible. The aim is to find out or reveal facts instead of verifying already existing statements. (p. 161.) On the contrary in quantitative research it is essential to make conclusions based on previous researches (op. cit. p.140).

#### Methodology

The thesis was conducted first by identifying the purpose of the research and the methods of execution. It was decided that conducting a survey meets the best the goals of the client. Firstly, all the Finnish companies working in the field of sustainable energy needed to be located along with their contact information. The resulting survey was designed to take a short amount of time to complete. Ten primary questions plus four questions concerning the contact information of the company were chosen for the instrument. The survey answers comprised the major part of the inquiry and the desk research provided the necessary background perspectives, and also helped to design the instrument's questions. The background information also provided an introduction to the sustainable energy markets in Finland and Russia.

## 4 IMPLEMENTATION OF THE ENQUIRY

#### 4.1 Collection of the company database

The goal was to locate all the Finnish companies working in the field of clean energy and to send them the instrument. In the web pages of the EK business forum, there is a list of 64 Finnish companies working in this field. The source seemed reliable, because of the discussions I had with the administrator of the forum. This was also the recommendation that the Finnish Russian Chamber of Commerce gave me. Besides, the enquiry was sent to companies found from the web pages of Cleantech Finland, which also maintains a company listing of the players in the cleantech field. In the fields of renewable energy and energy efficiency there were 21 more companies that were not included in the list in the EK business forum.

All together the enquiry was sent to 84 companies. The enquiry was executed by using *SurveyMonkey.com* which provides services such as Internet enquiries and questionnaires. After the enquiry was created in the SurveyMonkey.com system, the url link for completing the survey was sent to all 84 companies via email. The email addresses were searched from the company home pages and the person for contact was chosen to be the CEO of the company in case. If this information was not found, the company was contacted using other existing email addresses. In the email, a request was made to pass on the email to the CEO or any person in charge on this matter. In the request letter the person in charge was invited to be a part of improving the international promotion services of Finnish-Russian Chamber of Commerce by completing the enquiry. By doing this the answerer will also be a part of this thesis. The respondent was then of course thanked for his or her participation. The letter for request is attached in appendixes 1 and 2.

The email containing the request letter and a link for completing the enquiry was sent in the spring of 2011 four times, all within a period of one month. After the first email was sent to all 84 companies, another email reminder to participate was sent to the companies that had not yet completed the enquiry. The language used in the enquiry and letter for request was Finnish. Finnish was chosen instead of English to make the enquiry more appealing to answer as all the companies the entire sample comprised Finnish companies.

## 4.2 Formation of the enquiry

The core of the enquiry was to find out e.g. what kind of companies there are in Finland working in the fields of energy efficiency and renewable energy; what is their current situation when it comes to internationalization and what are their interests and expectations towards exporting to Russia. Also the most important questions concern the companies' needs and interests for internationalization services and what kinds of services they would care to know more of. The questions about previous experiences of using internationalization services were also enquired in order to identify the companies' willingness in general about using these kinds of services.

## 4.3 The questions

The first questions numbered from 1 to 4 concern the contact information of the company in case (see appendix 4). This information is inquired for the use of the Finnish-Russian Chamber of Commerce only and the answers are not revealed in this thesis. The FRCC can use the contact information in the future for contacting these companies e.g. when it comes to providing services useful to them. These could be potential future clients for the FRCC if they are not already clients.

The questions numbered from 5 to 14 are the most essential part in the enquiry and the actual subject of research (see appendix 4). These questions are more precisely described ahead.

## Question 5: What size is your company based on the number of personnel?

The first question clarifies the size of the company based on the number of personnel working in the company. The given options are based on the definition given by Statistics Finland. According to Statistic Finland Finnish enterprises can be categorized into four groups. These are micro enterprise, small enterprise, medium sized enterprise and large enterprise. (Tilastot suomalaisista yrityksistä 2005.)

## Question 6: What are your company's main activities?

According to Statistics Finland, environmental goods and services are categorized by 17 classes, of which three concern energy efficiency and production of renewable energy sources (see ahead the classification). These classes are *Production of energy from renewable sources*, *Heat/ energy* 

saving and management and Minimization of the intake of fossil resources for raw material for uses other than energy production, where the first two classes are again subcategorized into more detailed classes. (Classification of environmental goods and services (Statistics Finland's version) 2009.)

Statistics Finland defines environmental business as an activity that concerns the prevention of environment pollution or production saving natural resources. Environmental technology can be company's main activity or side business. One part of environmental business is environmental technology. Environmental business decomposes production into several standard industrial classes. Environmental business is not line of business itself but it involves numerous different industry sectors. (Environmental goods and services sector. 2011.)

# Classification of environmental goods and services (Statistics Finland's version) 2009

- Protection of ambient air and climate by reducing greenhouse gas emissions
- Protection of ambient air and climate by other means than reducing greenhouse gas emissions
- Wastewater management
- Waste management
- Protection and remediation of soil, groundwater and surface water
- Noise and vibration abatement
- Protection of biodiversity and landscapes
- Protection against radiation
- Research and development activities for environmental protection
- Other environmental protection activities
- Management of water
- Production of energy from renewable sources
- Heat/ energy saving and management
- Minimisation of the intake of fossil resources for raw material for uses other than energy production
- Management of minerals
- Research and development activities for natural resource management
- Other natural resource management activities

(Classification of environmental goods and services

(Statistics Finland's version) 2009.)

Question 7: Which markets outside of Finland are you presently active in?

In year 2010 Finland's leading exporting countries were German, Sweden, Russia, United States, Netherlands, Great Britain and China (Finland exports of goods by country 2010. 2011). Based on this information, these options are given to choose the countries of exporting. There was also the possibility of answering "other countries" after which the space is left for the answerer to write the names of the countries. "Our company only operates in domestic markets" is as well given as an optional choice of answer.

#### Question 8: Which markets have your company considered entering?

This question is formed as an open question, giving the answerer a possibility to share his/her interests towards not only a country but also a specific market area.

#### Question 9: How often does your company use internationalization services?

In order to find out how familiar and willing these companies are with using internationalization services, this question was relevant to ask. There were given these options for an answer: continually, rarely, occasionally and not once.

Question 10: If your company has used internationalization services then what kinds of? You can choose multiple choices.

This question has possible choices of answer but also included an option to answer "others". With this question it is intended to figure out what kind of export promotion services have the answerers used before. The optional choices of answer were: joint projects (e.g. joint trips), education and seminars, export promotion trips, help for networking, funding, market knowledge, legal services and others. These choices were given as the FRCC offers e.g. these services. The answerer could choose only one answer or many answers or choose to not answer at all. Question 11: What kinds of experiences have your company had of using export promotion services? You can choose multiple choices.

It is valid information to know if the companies have either had positive or negative experience of using export promotion services. This helps to understand which services could be necessary or unnecessary and why and could these services be developed somehow. The choices were given for an answer: Gained more market knowledge, Learned feasibilities of international business, Gained more customers, No benefit gained, and Other benefit. For the option Other benefit, there is left space for an open answer.

Question 12: Is your company interested in learning more about the feasibility of doing business in Russia?

With this question it is seen which companies surely could be interested in learning more of doing business in Russia which then gives the FRCC a straight answer which ones could be their possible clients, and next then to find out what kind of services they could be interested in. The obvious choices to answer are: Yes, No and Not of current interest.

Question 13: In which area of export promotion services would you like to learn more of?

Here it is more precisely asked what kind of services the answerers would be open to use or learn more about. These options were given for an answer: joint projects (e.g. joint trips), education and seminars, export promotion trips, help for networking, funding, market knowledge, legal services and others. The answerer could choose only one answer or many answers or choose to not to answer at all.

Question 14: What kinds of matters concern you when it comes to exporting to Russia?

The last question was left open to give the answerer the possibility to tell his/her straight personal opinion about exporting to Russia. This way the answerer might give some information that did not already come up with the questions before and reveal of the top of the head opinion.

# **5 RESULTS**

Out of the 84 companies the enquiry was sent to, 25 companies responded. In order for the results to be comparable, one answer was cut out from the analysis of the results. One participant completed the enquiry twice and gave two exact same answers. This is why the second version was excluded from the analysis. The final number of completed surveys was 24, producing a response rate of 28.6%.

All the obvious spelling mistakes have been corrected and the translation from Finnish to English has been done as precisely as possible. One participant answered in English for the open questions therefore these texts are translated to Finnish in appendixes 5 and 6.

The first four questions solicit the participant's contact information. Name, email-address, postal address and phone number are covering the first questions. This information will not be revealed in this thesis and it is given only for the use of the Finnish-Russian Chamber of Commerce. The actual results of the primary enquiry are analyzed based on questions four to fourteen.

## **Company size**

The aim of this question was to identify companies in Finland that are working in the field of sustainable energy, and particularly their size based on the number of personnel. This information can be useful when thinking about developing internationalization services. Larger companies might have different kinds of needs, e.g. compared to micro enterprises. Also it can reveal the nature of the market by giving a general perspective of what kind of enterprises are commonly working in these fields.

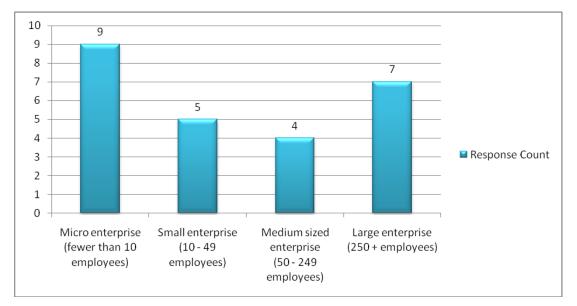


FIGURE 1. What size is your company based on the number of personnel?

The question concerning the size of the enterprise shows that most of the enterprises are micro enterprises with fewer than 10 employees. The results between the enterprise sizes were divided rather evenly. Large enterprise was the second most answered choice, numbering 7 totals.

## Line of business

The question about the enterprise's line of business was targeted to produce a picture of the market in Finland in general. What kinds of players are out there and in which sectors do these operate are the question needing answers.

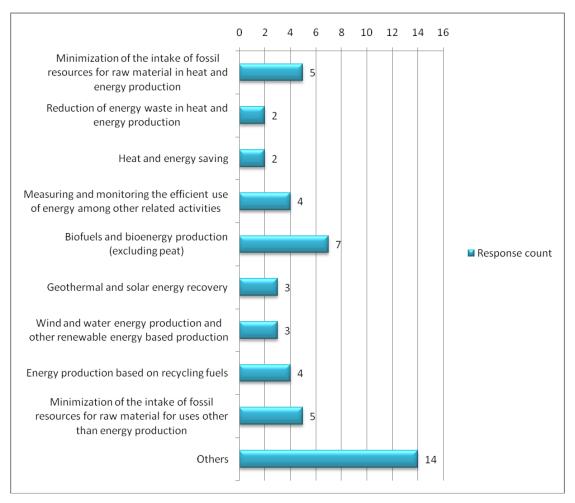


FIGURE 2. What are your company's main activities?

As it is seen in the figure 2, most of the participants felt the need to answer "*others*". Out of the 49 answers 14 chose others and described what kind of business are they in. The businesses represent various types:

#### "Waste water cleaning"

"Supplier of energy efficient solutions for the entire life cycle."

"Enterprise resource planning (ERP) systems in the field of bioenergy."

"Funding of renewable energy projects and emission reduction projects."

"Steel products, steel construction and mechanical engineering products."

"Energy efficiency in the use, transmission and distribution of energy."

"Wind farm manufacturing"

"Biogas plant design and contracting and environmental consulting."

"Improving efficiency in electronic drives."

"Wind power construction"

"Electric power and automation technology"

"Electric motor speed adjustment and power control in renewable energy production."

"Biogas energy devices"

"Renewal of waste and water maintenance services."

The reason for the large amount of *others* can be explained by the diversity of the field. There are a great number of companies working in the cleantech sector that might not be specifically defined under this field. Another way of explaining this is that the response options for this question could have been chosen better, provided that a more extensive literature review had been conducted.

Besides others the most answers got "Biofuels and bioenergy production (excluding peat)" with the response count of seven. Five answered "Minimization of the intake of fossil resources for raw material for uses other than energy production" as well as "Minimization of the intake of fossil resources for raw material in heat and energy production". All the other options were chosen rather evenly as seen above in Figure 2. The choice of answering more than one option was given which quite many took advantage of.

#### **Exporting countries**

The aim of the question was to clarify whether the companies were already active in Russia, and more generally, do they currently conduct business outside of Finland. This question is complementary to the question concerning whether the companies are familiar already with doing business in international markets and Russia.

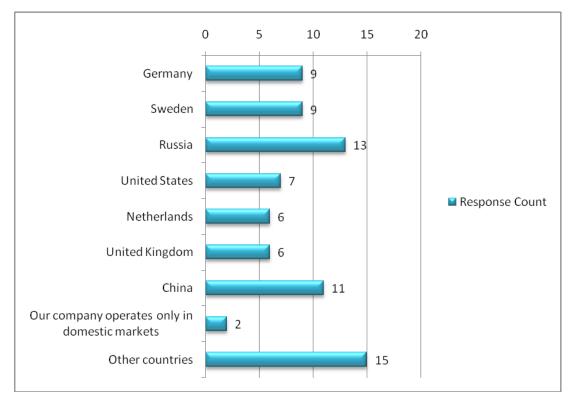


FIGURE 3. Which markets outside of Finland are you presently active in?

Only two of all the participants answered "*Our company operates only in domestic markets*" when asked in which markets outside of Finland is the company active in. Whereas "*other countries*" got the most, 15 answers and Russia the second most with the response count of 13. With the all together response count of 78, Russia comprised almost 17% of all the answers. The other exporting countries are seen below:

"Chile, Australia, Brazil, Peru, India, ......"

"Norway"

"Baltic countries, Belarus, Bulgaria"

"Thailand, Vietnam, Ghana, Spain, Poland"

"Ukraine"

"e.g. India"

"Many other countries"

"Hungary, Taiwan, Portugal"

"South-Korea"

"France, Estonia, Latvia, Lithuania, Japan" "France, Portugal" "Export to almost 100 countries" "Export to over 100 countries" "Estonia, Czech Republic, Singapore, Egypt" "Africa, India, Nepal, Middle-East"

#### **Expanding businesses**

Out of the 24 respondents, 17 answered to the open question concerning expanding business to other markets. It was seen in the results that many companies would be interested in expanding to Russia and/or Eastern Europe. Six of the respondents answered only to Russia and three said Eastern Europe would be the market of interest towards expanding, as seen also in the answers below (the answers for "*Russia*" are not seen below):

# "We should expand to the former Soviet Union and in Eastern Europe"

"Ukraine"

Some companies showed their interests towards Asia, Germany and other countries. As seen in ahead, the opinions of the rest of the answers are divided quite evenly into different interests.

"Sweden, Norway, Germany, Canada"

"Brazil"

"Strategic goal is to expand in the developing markets"

"Asia"

"China, United States"

"Mediterranean region, Asia"

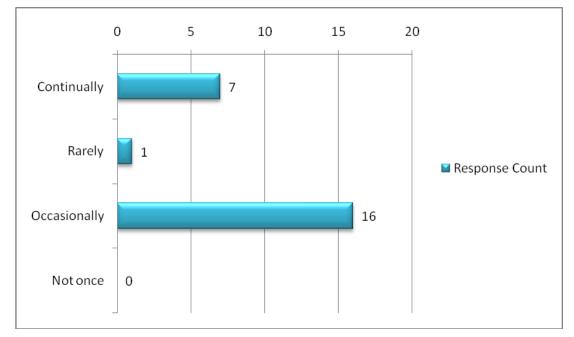
*"Previously mentioned"* (In the question number 7 the respondent answered Sweden, Russia, and others: France, Estonia, Latvia, Lithuania, Japan. Here the answer Russia is not yet counted for the four who chose it too so this will make it a fifth answer for Russia)

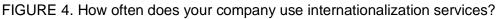
"Germany"

"Africa, Nepal, India"

## The frequence in the use of internationalization services

By asking about the frequency of using internationalization services, the aim was to determine whether and how frequently they are using them.





Apparently the companies are aware of the fact that there are internationalization services available and are not afraid to try them. This question shows that all the respondents had sometime previously used internationalization services. This is because none of them choice the option "not once" when asked about the use of these services. "Occasionally" was chosen by 67% of the participants. Seven said their company uses internationalization services continually and only one answered that they use them rarely. It must be noted that in this question the options given can be misleading for some. The definition of these terms is not accurate, which means that if a company uses internationalization services *once a year*, some company might define the use as rarely and some occasionally.

## **Export promotion services**

The intention of this question was to identify what kinds of export promotion services are the companies already familiar with.

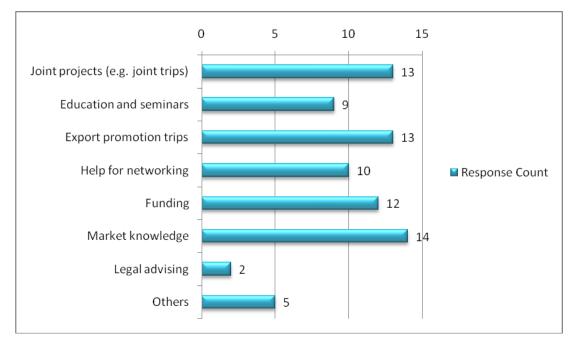


FIGURE 5. If your company has used internationalization services then what kinds of?

Services that provide information concerning what market to enter are the most cited, with 14 responses, based on this survey. Joint projects as well as export promotion trips were also popular with 13 responses each as seen in Figure 5. Not far behind, funding seems to be a service bought by most of the companies. All these services mentioned before represent half of the respondents, meaning that 50% of the respondents have at some time before used these services. Services providing help for networking, education and seminars, legal advising and others are the least answered choices. When asked for the other services not mentioned the responses were:

"Finpro's smart projects"

"Finpro's consulting services"

"Marketing researches, services for partner search"

"Organizing joint trips, exhibitions in co-operation with other actors. Executing market research."

"You have to go there yourself if you really want to get something done."

# Experiences of using export promotion services

Here in this question it is asked what kind of experiences the companies have had using export promotion services. The aim is to find out whether the companies been satisfied with the services they have used before and if have, then in what way.

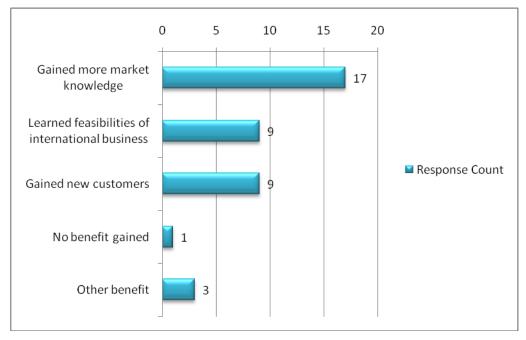


FIGURE 6. What kinds of experiences have your company had of using export promotion services?

Only one of the respondents answered "*no benefit gained*". This means that approximately 96% gained some kind of benefit of using export promotion services. Mostly the respondents felt that they gained more market knowledge, which was the most answered option with 17 responses. This is about 71% compared to the total number of respondents (24). Of the

remaining choices, 37.5% chose to have learned feasibilities of international business as well as gained new customers. Other benefits cited are:

"Visibility in the target market" "Foreknowledge of the markets and the means of the markets" "Political support when travelling with minister"

## Interests towards the feasibility of doing business in Russia

The aim of the question, as obvious as it is, is to identify how many of these companies would be interested in learning more about the Russian trade. This is almost a straightforward question designed to identify how many of the companies would be interested in exploiting the services of the Finnish-Russian Chamber of Commerce.

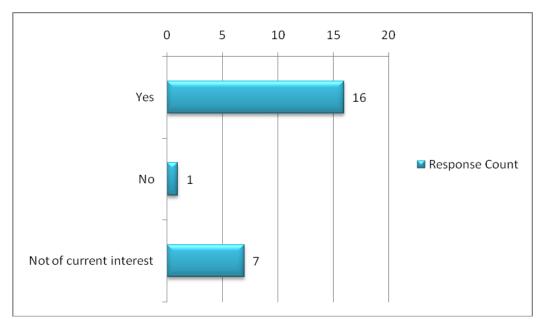


FIGURE 7. Is your company interested in learning more about the feasibility of doing business in Russia?

Approximately 67% of the respondents are interested in the feasibilities of doing business in Russia. Sixteen respondents chose "*yes*" whereas only one chose "*no*". Seven answered that the matter was not of current interest, totalling about 29% of the answers. In general it can be said that the responses were remarkably positive in the point of view of the FRCC.

#### Interests towards export promotion services

This question set out to identify what kinds of services need to be provided and developed for the use of these. The answers of this question could be strictly used as a guide to what services the FRCC should develop for the companies working in the field of clean energy. However it should be noted that answers represent the opinions of the 24 companies in the field of sustainable energy, and that the question limited to export promotion services concerning only Russian trade but in general. Although this question was positioned right after the one inquiring about the interests towards learning more about the Russian trade, quite many could have assumed that the services means especially export promotion services concerning Russia.

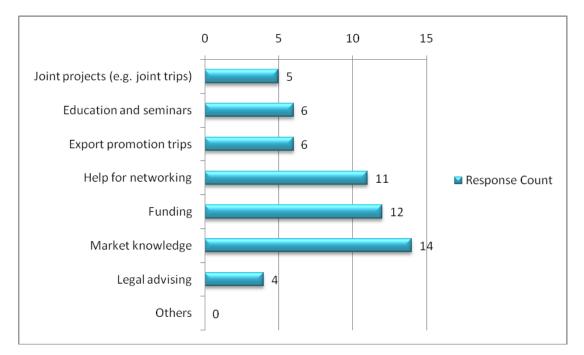


FIGURE 8. In which area of export promotion services would you like to learn more of?

Half of all the respondents would like to learn more about services providing market knowledge. The next most cited answer concerned funding, with 12 responses, and 11 participants indicated that they would like to learn about services providing help with networking. These three answer choices represent approximately 64% of all the answers (58). The rest of the choices

were selected quite evenly, and these included education and seminars, export promotion trips, joint projects, and legal advising. There was also a possibility to choose the open-ended answer – "*others*", which no one chose.

### Thoughts about exporting to Russia

The last question explored views that the respondents might have towards exporting to Russia. The aim was to explore for possible hints that might help the FRCC to develop export promotion services.

"The market is non-predictable, culture."

"Intellectual Property Rights in Information Technology"

"Russian business culture and the lack of political will to contribute to cleaner technology."

"Changes in the market and difficulties in predictability of markets."

"Finding suitable distribution channels."

"The market has not yet evolved for the production of photovoltaic panels by thin-film technology."

"At the moment too large market area and too grand projects compared to the prospects of our company."

"Finding suitable connections"

"Sufficiency of own resources."

*"It is a pretty large country. Language barriers. Currency. Cultural differences. The way of doing business. Needs for energy savings."* 

"Lack of infrastructure, missing transportation, lack of crane companies, lack of roads."

"Corruption, instability of the enforcement of laws, criminality"

"Finding right connections."

"How to really get the money from the Russians for us and from where the Russian money can be found – from London."

### 6 **DISCUSSION**

Based on the background information gathered for the thesis, it can be said that there are great opportunities for companies in the fields of energy efficiency and renewable energy in Russian markets. The potential is particularly relevant because Russia is such a large country, with different kinds of circumstances and great variety in its landscape. As the Russian sustainable energy market has not yet reached the level of many other European countries it will certainly provide possibilities for new entrants to enter the market. The Finnish-Russian co-operation has already started, as the adaption of the Russia's new energy strategy (2009) gave a positive push towards this co-operation. The Finland's Ministry of Employment and the Economy and the Russian Ministry of Energy have entered into agreement on the matters of co-operation between Finnish and Russian companies in the sustainable energy fields. The Russian Energy Agency was founded in Russia to meet the goals of the two ministries while in Finland the Finnish-Russian Energy Club was founded as well. This all appears to be a huge step forward in the sustainable energy business point of view. The co-operation seems more promising than ever and it could be a favorable time for the Finnish companies to start or expand their business opportunities in Russian markets.

The aim of conducting the enquiry for the Finnish companies in the fields of energy efficiency and renewable energy was to provide guidance for the Finnish-Russian Chamber of Commerce in the matters of their internationalization services. The enquiry was developed by the thought of finding possible clients for the FRCC and most importantly determining the companies' experiences in the use of internationalization services and exploring their thoughts and interests towards exporting their business services to Russia. The deeper meaning of the enquiry entails finding out how the FRCC could develop their services to better suit the companies in the fields of sustainable energy.

It certainly needs to be taken into consideration that 84 companies were targeted with the enquiry and 24 companies responded. Plus, there are likely more than 84 companies working in the field that were not identified as potential participants in this study. Based on the response rate of 28.6% the ability to generalize the findings across all companies in Finland working in the field is limited.

The results of the enquiry show that most companies are micro enterprises while on the other hand there is not much of a difference in the response rate of the large companies. The assumption could be made that most of the companies in the field are micro and large enterprises. Nevertheless, it could also be that micro enterprises are more willing to answer an enquiry like this because they could have the most need for internationalization services. On the other hand, while the business and technology evolves constantly and new enterprises are established, it appears to be reasonable to conclude that there are many small players in the field.

There are various different kinds of applications under the term sustainable energy. Based on the results, it is hard to tell which fields are the most common ones. It appears to me that there are companies in all kinds of fields when it comes to energy efficiency and renewable energy. Quite many companies are working somehow with biogas (production or equipments) and improving energy efficiency by developing more efficient solutions.

Most of the respondents are already active in Russia which was one of the most relevant factors when asked companies' exporting countries. A few of the companies are also interested in expanding to Russian markets, which is of course positive news.

All of the participant companies have used internationalization services before, which gives a nice ground for answering the other questions concerning these services. The companies are generally familiar with services because most of them are using the services at least occasionally. Here it should be acknowledged that the term "occasionally" may mean one thing to one person and something else to another. Therefore, it may have produced more accurate results if straight amounts for options such as, once a year, once in half a year and so on were used.

According to the provided answers concerning the experiences and interests towards international services, an assumption could be made that many of these companies have used a service to gain market knowledge, and as well, many answered that the benefit gained from the use of the services in general was gained market knowledge. It seems that the companies are familiar with these kinds of services and even satisfied with the results they have got previously, and would be open to use these services again. Also *funding* had almost the same reaction but not as strong. Help for networking seems to be one service that also could be interesting in the point of view of the companies studied here.

The enquiry showed remarkably positive results concerning the companies' interests towards learning more about the feasibilities of doing business in Russia. Approximately 67% were interested and only one was not at all interested. The rest answered "not of current interest," which is not a negative answer itself. For the Finnish-Russian Chamber of Commerce this is an excellent result. Now the FRCC knows that there are companies in the field that would be interested in using their services or at least hearing what they are providing. All of the respondent companies that chose *yes* for this question can now be contacted and offered FRCC services.

The results show that even though there is interest towards the Russian markets, some concerns are on the minds of these companies. The general worries concern finding partners and also the difference between various aspects of how society and business works in Russia (politics, criminality, bureaucracy etc.).

The implementation of the enquiry was rather successful. The results can be used for the benefit of the Finnish-Russian Chamber of Commerce even though the response rate could have been higher in order to get even more comparable and reliable results.

## 7 CONCLUSION

When it comes to many energy conservation measures, using energy efficiently, and the use of renewable energy sources, Finland is said to be one of the leading countries in the world. Finland has been investing in energy efficiency for decades covering the entire chain from energy production to its end use. With tens of years of experience in the field of renewable energy, Finnish companies have a strong position in *exporting* bioenergy technology covering the entire chain of production.

While Finland is at the top of the game in the energy efficiency and renewable energy fields, Russia is still lagging significantly behind. However, there are some crucial goals set for improving energy efficiency and using renewable energy in Russia. In order to meet these goals, drastic measures need to be taken into use.

Based on the research made for this thesis it appears that there is a need in Russia for the high level know-how of the fields of sustainable energy whereas Finland already is one of the leading countries in the field looking for investments and new markets to enter. The co-operation between Russia and Finland has started well and works in order to ease the companies of both countries toward business cooperation. The Finnish-Russian Chamber of Commerce is doing its part in furthering this partnership by providing a variety of internationalization services.

The enquiry made for the Finnish companies in the fields of sustainable energy showed that companies were interested mostly in services which provide market knowledge of the target market, help in networking and help in funding. All of the companies had used internationalization services and had mostly positive experiences in using them. Many were interested in expanding their business to Russia and a large number of them were eager to learn more about doing business in Russia.

### 8 **RECOMMENDATIONS**

The subject for this thesis was chosen by the client entity, the Finnish-Russian Chamber of Commerce. Between the FRCC, my thesis tutor and me, the general subject for the thesis was created. In the beginning the suggestion of the FRCC was to make a research of the cleantech field in Finland but it was too broad an area to study, which led me to the sustainable energy field. The subject itself was interesting although there were plenty of new information to be learned about the field before starting this project. This is why so much time was taken to build the background information, in order to learn more about the field in Finnish and Russian contexts. Collecting the information was rather challenging, because there is a dearth of literature about the topic, particularly as regards recent developments in the field.

The process of implementing the enquiry started with gathering information of the companies and designing the instrument. It took almost a month to get all the responses.

Considering that the instrument contained a significant number of open-ended questions, the response rate is quite good, and due to the qualitative nature of the primary questions it can safely be concluded that there is a need for the services of the Finnish-Russian Chamber of Commerce in the field of sustainable energy in Finland. I would suggest promoting services that are especially suited for micro and small enterprises, the kinds of services that do not require great investments or commitment to a long lasting project. It seems that many companies would be interested in gaining more market knowledge and finding more about Russia, but there remains still, in some cases, some prejudice toward the Russian market and doing business with Russians. These are not necessarily unjustified, certainly there are concerns when entering the Russian market, but preconceptions should not stand on the way for new opportunities. This is why it is important to provide these companies (from which many are rather new companies and might not know the market and field well yet) with the right information and market knowledge.

While small and medium sized enterprises might not yet have the resources for entering the Russian market, the larger enterprises might already have. These companies could use help in networking and finding partners among other services.

Co-operation with the Finnish-Russian Energy Club seems highly relevant from the FRCC point of view and co-operation could provide great opportunities for both. This is why I suggest close contact with companies and organizations in the field.

The resulting business conducted between Finland and Russia in the field is urgently needed, because protection of the environment and conservation of energy sources is vital for all nations.

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### **APPENDICES**

### Appendix 1. The request letter for completing the enquiry (Finnish)

Kyselykutsu,

Tällä kyselyllä selvitetään suomalaisten puhtaan energia-alan yrityksien kansainvälistymispalveluiden käyttöä ja tarpeellisuutta. Kysely, ja tulosten analysointi on oleellinen osa opinnäytetyötäni, jonka toimeksiantajana toimii Suomalais-Venäläinen kauppakamari. Kyselyyn vastaaminen vie korkeintaan 10 minuuttia. Antamianne tietoja käytetään ainoastaan Suomalais-Venäläisen kauppakamarin tarpeisiin eikä yhteystietojanne mainita opinnäytetyössäni.

Suomalais-Venäläinen kauppakamari toteuttaa eri toimialojen vienninedistämishankkeita ja opinnäytetyöni tarkoituksena on tutkia suomalaisen cleantech-osaamisen mm. puhtaan energia-alan toimijoiden tarpeita vienninedistämispalveluille, jossa tämä kysely toimii tiedonkeruuvälineenä. Kyselyllä kartoitetaan yritysten kokemuksia kansainvälistymispalveluiden käytöstä, vienninedistämispalveluiden tarpeellisuutta sekä erityisesti yritysten kiinnostusta Venäjän-kauppaa kohtaan. Pyydän teitä vastaamaan kyselyyn perjantaihin 15.4.2011 mennessä. Kyselyn vastauksia käytetään vienninedistämispalveluiden parantamiseen, sekä suomalaisen erityisosaamisen viennin edistämiseen. Osallistumisenne kyselyyn on erittäin arvokasta ja sillä pääsee vaikuttamaan kansainvälistymispalveluiden kehittämiseen.

Ystävällisin terveisin,

Ilona Kaipainen

Jos haluatte lisää tietoa kyselyyn liittyen, olkaa hyvä ja ottakaa yhteyttä sähköpostitse: ilona.kaipainen.hib@jamk.fi

### Appendix 2. The request letter for completing the enquiry (English)

Letter of request,

The aim of this enquiry is to establish the use and necessity of internationalization services of Finnish companies in the field of sustainable energy. The enquiry and the analysis of the results is essential part of my Bachelor's thesis, which is executed for the use of the Finnish-Russian Chamber of Commerce. Completing the enquiry will take maximum of 10 minutes. The information given is used only for the use of the Finnish-Russian Chamber of Commerce and your contact information will not be revealed in the thesis itself.

The Finnish-Russian Chamber of Commerce executes export promotion projects for different fields of business. The aim of my thesis is to research Finnish companies in the field of cleantech and more precisely in the field of clean energy and their needs towards export promotion services, where this enquiry functions as a mode of collecting the information. With this enquiry it is to be established the experiences in using internationalization services, the needs for export promotion services and especially the interests towards the Russian trade. I ask you to complete the enquiry by the Friday 15<sup>th</sup> of April 2011. The responses of the enquiry are used for the development of the internationalization services and promoting export of the Finnish special knowhow. Your participation in the enquiry is very valuable and a way of influencing the development of internationalization services.

With best regards,

Ilona Kaipainen

In case of need for more information, please feel free to contact via email <u>ilona.kaipainen.hib@jamk.fi</u>.

## Appendix 3. Questionnaire for the enquiry (Finnish)

- 1. Nimi (muotoa etunimi sukunimi)
- 2. Sähköpostiosoite
- 3. Postiosoite
- 4. Puhelinnumero
- 5. Minkä kokoinen yrityksenne on henkilökunnan määrän perusteella?
  - () Mikroyritys (alle 10 henkeä)
  - () Pieni yritys (10-49 henkeä)
  - () Keskisuuri yritys (50-249 henkeä)
  - () Suuri yritys (250+ henkeä)
- 6. Mitkä ovat yrityksenne toiminnan painopisteet?

() Uusiutumattomien energialähteiden käytön vähentäminen lämmön ja energian tuotannossa

() Lämmön ja energian tuotantoon liittyvän hävikin vähentäminen.

() Lämmön ja energian säästötoimet (esim. kolminkertaiset ikkunat, matalaenergiarakentamiseen liittyvät komponentit, rakennustekniset parannustoimenpiteet, lämpöpumput).

() Tehokkaaseen energiankäyttöön liittyvä mittaus ja seuranta sekä muut siihen liittyvät toimet.

() Biopolttoaineiden ja bioenergian tuotanto (poislukien turve).

() Maalämmön ja aurinkoenergian talteenotto.

() Tuulivoiman ja vesivoiman tuotanto sekä muihin uusiutuviin energialähteisiin perustuva energiantuotanto.

() Kierrätyspolttoaineisiin perustuva energiantuotanto

() Uusiutumattomien energianlähteiden käytön vähentäminen energiahuollon ulkopuolisilla aloilla

( ) Muu.....

- 7. Mihin maihin yrityksellänne on vientitoimintaa?
  - () Saksa
  - () Ruotsi
  - () Venäjä
  - () Yhdysvallat
  - () Alankomaat
  - () Iso-Britannia
  - () Kiina
  - () Yrityksemme toimii vain kotimaisilla markkinoilla
  - () Muut maat.....
- 8. Mihin maihin yrityksenne on harkinnut viennin laajentamista?

.....

9. Kuinka usein yrityksenne käyttää kansainvälistymispalveluita?

- () Jatkuvasti
- () Harvoin
- () Satunnaisesti
- () Ei ole käyttänyt lainkaan
- 10. Jos olette käyttäneet vienninedistämispalveluita, niin mitä? Voitte valita useamman vaihtoehdon.
  - () Yhteishankkeet (esim. yhteiset matkat)
  - () Koulutus ja seminaarit
  - () Vienninedistämismatkat
  - () Verkostoitumisapu
  - () Rahoitus
  - () Markkinatietous
  - () Juridiset palvelut
  - () Muut.....
- 11. Millaisia kokemuksia yrityksellänne on ollut vienninedistämispalveluista? Voitte valita useamman vaihtoehdon.
  - () Saatu lisää markkinatuntemusta
  - () Opittu kansainvälisen kaupan käytäntöjä
  - () Saatu uusia asiakkaita
  - () Ei hyötyä
  - () Muu hyöty.....
- 12. Onko yrityksenne kiinnostunut saamaan lisää tietoa Venäjän-kaupan käytännöistä?
  - () Kyllä
  - ( ) Ei
  - () Aihe ei ole ajankohtainen
- 13. Mistä seuraavista vienninedistämispalveluista kaipaisitte lisää tietoa? Voitte valita useamman vaihtoehdon.
  - () Yhteishankkeet (esim. yhteiset matkat)
  - () Koulutus ja seminaarit
  - () Vienninedistämismatkat
  - () Verkostoitumisapu
  - () Rahoitus
  - () Markkinatietous
  - () Juridiset palvelut
  - ( ) Muut.....
- 14. Mitkä asiat mietityttävät Venäjälle viennissä?

## Appendix 4. Questionnaire for the enquiry (English)

- 1. Name (first name, last name)
- 2. E-mail address
- 3. Postal address
- 4. Phone number
- 5. What size is your company based on the number of personnel?
  - () Micro enterprise (fewer than 10 employees)
  - () Small enterprise (10 49 employees)
  - () Medium sized enterprise (50 249 employees)
  - () Large enterprise (250 + employees)
- 6. What are your company's main activities?

() Minimization of the intake of fossil resources for raw material in heat and energy production

() Reduction of energy waste in heat and energy production

() Heat and energy saving

() Measuring and monitoring the efficient use of energy among other related activities

() Biofuels and bioenergy production (excluding peat)

() Geothermal and solar energy recovery

() Wind and water energy production and other renewable energy based production

- () Energy production based on recycling fuels
- () Minimization of the intake of fossil resources for raw material for uses other than energy production
- () Other.....
- 7. Which markets outside of Finland are you presently active in?
  - () Germany
  - () Sweden
  - () Russia
  - () United States
  - () Netherlands
  - () United Kingdom
  - () China
  - () Our company operates only in domestic markets
  - () Other countries.....
- 8. Which markets have your company considered expanding its business?
- 9. How often does your company use internationalization services?
  - () Continually
  - () Rarely
  - () Occasionally

() Not once

- 10. If your company has used internationalization services then what kinds of? You can choose multiple choices.
  - () Join projects (e.g. joint trips)
  - () Education and seminars
  - () Export promotion trips
  - () Help for networking
  - () Funding
  - () Market knowledge
  - () Legal advising
  - () Others.....
- 11. What kinds of experiences have your company had of using export promotion services? You can choose multiple choices.
  - () Gained more market knowledge
  - () Learned feasibilities of international business
  - () Gained new customers
  - () No benefit gained
  - () Other benefit.....
- 12. Is your company interested in learning more about the feasibility of doing business in Russia?
  - () Yes
  - () No
  - () Not of current interest
- 13. In which area of export promotion services would you like to learn more of?
  - () Join projects (e.g. joint trips)
  - () Education and seminars
  - () Export promotion trips
  - () Help for networking
  - () Funding
  - () Market knowledge
  - () Legal advising
  - () Others.....
- 14. What kinds of matters concern you when it comes to exporting to Russia?

## Appendix 5. Comments for enquiry question 6 (Finnish)

Mitkä ovat yrityksenne toiminnan painopisteet?

- 1. Jäteveden puhdistus
- 2. Energiatehokkaiden ratkaisujen toimittaja koko elinkaaren ajalle
- 3. Bioenergia-alan toiminnanohjausjärjestelmät
- 4. Uusiutuvan energian projektien ja päästövähennyshankkeiden rahoitus
- 5. Terästuotteet, teräsrakentaminen ja konepajatuotteet
- 6. Sähköenergian käytön, siirron ja jakelun energiatehokkuus
- 7. Tuulivoimaloiden valmistus
- 8. Biokaasulaitosten suunnittelu ja urakointi sekä ympäristöalan konsultointi
- 9. Hyötysuhteen parantaminen sähköisissä käytöissä
- 10. tuulivoiman rakentaminen
- 11. Sähkövoima- ja automaatiotekniikka
- 12. Sähkömoottorien nopeuden säätö ja tehon ohjaus uusiutuvan energian tuotannossa
- 13. Biokaasuenergia laitteet
- 14. Jäte ja vesihuoltopalveluiden uusiminen

## Appendix 6. Comments for enquiry question 6 (English)

What are your company's main activities?

- 1. Waste water cleaning
- 2. Supplier of energy efficient solutions for the entire life cycle.
- 3. Enterprise resource planning (ERP) systems in the field of bioenergy.
- 4. Funding of renewable energy projects and emission reduction projects.
- 5. Steel products, steel construction and mechanical engineering products.
- 6. Energy efficiency in the use, transmission and distribution of energy.
- 7. Wind farm manufacturing
- 8. Biogas plant design and contracting and environmental consulting.
- 9. Improving efficiency in electronic drives.
- 10. Wind power construction
- 11. Electric power and automation technology
- 12. Electric motor speed adjustment and power control in renewable energy production.
- 13. Biogas energy devices
- 14. Renewal of waste and water maintenance services.

# Appendix 7. Comments for enquiry question 14 (Finnish)

Mitkä asiat mietityttävät Venäjälle viennissä?

- 1. –
- 2. –
- 3. –
- 4. Ennakoimattomuus, kulttuuri
- 5. IT:n IPR (= Informaatioteknologian immateriaalioikeus)
- Venäjän bisneskulttuuri sekä poliittisen tahdon puute edistää puhtaampaa teknologiaa
- 7. Markkinamuutokset ja markkinoiden vaikea ennustettavuus
- 8. –
- 9. –
- 10. Oikeiden jakelukanavien löytäminen
- 11. Markkinaa ei ole vielä syntynyt ohutkalvotekniikalla valmistettavien aurinkosähköpaneelien tuotantoon
- 12.–
- 13. Tällä hetkellä liian suuri markkina-alue ja liian suuret projektit suhteessa yrityksemme mahdollisuuksiin.
- 14.—
- 15. Oikeiden partnereiden löytäminen
- 16.–
- 17. Omien resurssien riittävyys
- 18. Se on aika suuri maa. Kieliongelmat. Valuutta. Kulttuurierot. Tapa tehdä töitä. Tarpeet energiansäästölle.
- 19. Infrastruktuurin puute, puuttuva kuljetustoiminta, nosturiyritysten puute, teiden puute.
- 20.–
- 21. Korruptio, lakien täytäntöönpanon epästabiilisuus, rikollisuus

22.–

- 23. Oikeiden yhteyksien löytäminen
- 24. Miten venäläisiltä saa oikeasti rahat tänne meille ja mistä niitä venäläisiä rahoja löytyy Lontoosta.

# Appendix 8. Comments for enquiry question 14 (English)

What kinds of matters concern you when it comes to exporting to Russia?

- 1. –
- 2. –
- 3. –
- 4. The market is non-predictable, culture.
- 5. Intellectual Property Rights in Information Technology
- 6. Russian business culture and the lack of political will to contribute to cleaner technology.
- 7. Changes in the market and difficulties in predictability of markets.
- 8. –
- 9. –
- 10. Finding suitable distribution channels.
- 11. The market has not yet evolved for the production of photovoltaic panels by thin-film technology.
- 12.–
- 13. At the moment too large market area and too grand projects compared to the prospects of our company.
- 14.–
- 15. Finding suitable connections
- 16.–
- 17. Sufficiency of own resources.
- It is a pretty large country. Language barriers. Currency. Cultural differences. The way of doing business. Needs for energy savings.
- 19. Lack of infrastructure, missing transportation, lack of crane companies, lack of roads.
- 20.-
- 21. Corruption, instability of the enforcement of laws, criminality

22.–

- 23. Finding right connections.
- 24. How to really get the money from the Russians for us and from where the Russian money can be found from London.