



**LAHDEN AMMATTIKORKEAKOULU**  
*Lahti University of Applied Sciences*

# RUSSIA'S MARKET OPPORTUNITIES FOR FINNISH ENVIRONMENTAL TECHNOLOGY

Case: Ekomuovi Oy

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Inna Alexandrova

Lahti University of Applied Sciences  
Degree Programme in Environmental Technology

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ABSTRACT

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The objective of this study was to examine Russia as a target country for internationalisation, to evaluate the business climate, and to create an overall picture of the Russian environmental market, its current situation and opportunities for a Finnish company called Ekomuovi Oy. The company designs and manufactures thermoplastic products according to the needs of its customers. Like a majority of Finnish export-driven cleantech businesses, it is tempted to expand business to the East. Having already exported there, the company is interested to utilise its own potential and Russia's market opportunities better. The range of Ekomuovi has expanded since the company has become an agent of Europe Environnement Group, which specialises in gas and odour control engineering. Therefore, the necessity for this study is driven by the business needs.

The empirical part of the study deals with a market survey that has been conducted for Ekomuovi in order to understand if there is demand for the company's products in Saint Petersburg and Moscow, to find as many potential customers as possible, and to pinpoint competitors. According to the results obtained from the survey, the biggest potential for the relevant products lies in the field of water and wastewater treatment.

The study provides an overview of Russia's market, with a focus on an economic forecast, and also proposes to consider opportunities that may lie in distant regions with a business-friendly climate. Further, the study describes a background of Russia's environmental problems, analyses trends and dynamics of the environmental market in Russia, its key drivers and restraints, and focuses on the up-to-date perspectives for Finnish environmental expertise. The environmental market looks promising with strong demand for effective technologies in water and wastewater sector, waste management and energy saving. Recommendations on further research and issues to be considered before entering the market are provided.

This research is implemented as a case study and is based on both secondary and primary information.

Key words: Ekomuovi, Russia, market research, environmental technology, water treatment, internationalisation

Lahden ammattikorkeakoulu  
Ympäristötekniologia

ALEXANDROVA, INNA:

Suomalainen ympäristötekniologian  
markkinamahdollisuudet Venäjällä  
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TIIVISTELMÄ

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Tämän tutkimuksen tavoitteena oli tutkia ympäristötekniikan markkinoita Venäjällä sekä arvioida kansainvälistyviä Venäjän markkinoita ja luoda kokonaiskuva tämän hetkisestä ympäristötekniikan markkinoista. Venäjän markkinat ovat tänään potentiaalinen mahdollisuus kasvattaa yritysten tuottoa. Monet suomalaiset cleantech-yritykset ovat halukkaita laajentuman itään. Tutkimuksen kohdeyritys on Ekomuovi Oy, joka suunnittelee ja valmistaa kesto- ja erikoismuovituotteita moneen eri tarkoitukseen. Ekomuovin tuotevalikoima on kasvanut sen jälkeen, kun yhtiö teki partner-sopimuksen ranskalaisen kaasu- ja hajuhaittoihin erikoistuneen yrityksen, Euroopan Environnement Group:n, kanssa. Tutkimus on tarpeellinen selkeyttämään Venäjän markkinoiden mahdollisuuksia sekä haasteita ja antamaan tarpeelliset tiedot yritykselle Venäjän markkinoille menemistä varten.

Tämän työn empiirinen osa on markkinatutkimus Ekomuoville. Markkina-alueena on käytetty Pietarin ja Moskovan aluetta. Tällä alueella tutkimuksen kohteena on ollut selvittää potentiaaliset asiakkaat sekä osoittaa mahdolliset kilpailijat. Tarkoituksena oli löytää mahdollisimman monta uutta asiakasta, selvittää asiakkaiden vaatimuksia Ekomuovin tuotteille ja heidän tarvitsemilleen palveluille tutkimusalueella.

Tämän tutkimuksen tarkoitus oli kuvata yleisesti nykyisiä Venäjän markkinoita. Tutkimuksessa käsitellään yrityksen mahdollisuuksia yrittäjyyttä suosivilla alueilla. Se kuvaa tämän hetkistä tilannetta ja taustaa Venäjän ympäristötekniikan markkinoilla. Työssä näytetään uusia markkinatrendejä ja niiden dynamiikkaa Venäjän markkinoilla, sen avaintekijöitä ja rajoituksia. Nykyään Venäjän markkinoilla on tarjolla monia mahdollisuuksia suomalaisille ympäristöalan yrityksille. Ympäristömarkkinat näyttävät lupaavilta ja kysyntä kasvaa veden ja jäteveden käsittelyn sektorilla sekä jätehuolto- ja energiansäästötekniikassa. Tutkimus antaa yhtiölle suuntaa-antavia suosituksia toteutettavista toimista ennen viennin aloittamista.

Tämä tapaustutkimuksen toteutus perustuu ensi- ja toisen asteen tietoihin.

Asiasanat: Ekomuovi, Venäjä, markkinatutkimukset, ympäristötekniologian, vedenkäsittely, kansainvälistyminen

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## LIST OF ACRONYMS AND ABBREVIATIONS

AO; OAO	Open Joint Stock Company
APEC	Asia-Pacific Economic Cooperation
BD	Business Directory
BRIC	Brasil, Russia, India, China and South Africa
CEO	Managing Director, General Director
CIS	Commonwealth of Independent States
EURASEC	Eurasian Economic Community
EBRD	European Bank for Reconstruction and Development
G8	Group of Eight World’s Largest Economics
G20	Group of Twenty Major Economics
GDP	Gross Domestic Product
GOST	Russian National Standard
GRP	Glass Reinforced Plastic
GUP (ГУП)	State Unitary Enterprise
HDPE	High-density polyethylene
HPP	High-pressure polyethylene
IPCC	Intergovernmental Panel on Climate Change
IWA	International Water Association
IYP	Internet Yellow Pages
JSC	Joint Stock Company
LLC	Limited Liability Company
LO	Leningrad Oblast (Leningrad region)
MO	Moscow Oblast (Moscow region)
OJSC	Open Joint Stock Company
OOO (Ltd)	Limited Liability Company
PE	Polyethylene
PP	Polypropylene
PPP	Public Private Partnership
PPP	Purchasing Power Parity
PVC	Polyvinylchloride
RAVV	Russian Association of Water Supply and Water Disposal

RHDF	Russian Housing Development Foundation
RF	Russian Federation
SEZ	Special Economic Zone
SMEs	Small and medium-sized enterprises
STP	Sewage Treatment Plant
SUE	State Unitary Enterprise
TD	Telephone Directory
USSR	Union of Soviet Socialist Republics
WTO	World Trade Organisation
WGDP	Waste Generation and Disposal Project
WSS	Water Supply and Sanitation
WWTP	Waste Water Treatment Plant
ZAO (3AO)	Closed Joint Stock Company

# 1 INTRODUCTION

## 1.1 Background

*We are entering a new era in which environmental concerns are integrated fully into economic market regulation (Steiner 2006).*

*The Finnish home market is small and growth can only be achieved through the growing international market (Vapaavuori 2013).*

The field of environmental technologies includes all technological products and processes that support progressive economic orientation and sustainable development in environmental protection, efficient use and protection of natural resources, minimising of negative impacts on the environment, air pollution control and prevention, water conservation and water resource management, waste management and soil conservation.

Finland is a global leader in energy efficiency and clean technologies. Finnish cleantech business is growing faster than the domestic market, which is small and limited by only five million consumers. Thus, the Finnish environmental businesses are quick to utilise the potential and opportunities the neighbour markets offer.

This study is commissioned by Ekomuovi Oy, an expert in the field of thermoplastics. Along with other cleantech businesses, the case company is interested in internationalisation to the East. Since Ekomuovi has signed a partnership agreement with a French company called Europe Environnement, the range of products is sufficiently expanded. Nowadays gas and odour control engineering is a part of Ekomuovi's expertise. Therefore the subject is very topical.

In order to prepare a successful export plan, Ekomuovi needs to expand a customer database into Russia. I have conducted a market survey with the purpose to get in contact with Russian companies that operate in Saint Petersburg, Leningrad oblast and Moscow in order to understand the demand for the company's range of products in the Russian markets of environmental technologies, and to analyse competitors. Furthermore, the company is interested to introduce its products and



services to the potential customers and partners, to find out their attitude towards its business proposals, and to get general market information in the field.

It might be necessary to mention that my goal as a researcher has been among others to utilise my personal experience in doing business in Russia, and my half-year internship at Ekomuovi Oy, in comparing two neighbour countries in terms of business approach. Despite the fact that Russia and Finland are neighbours, their business worlds are quite different.

Therefore, before making decisions on a market entry it is vital for the case company to evaluate business culture challenges, in addition to actual demand, current and future economic conditions and competition environment of the Russia's market.

## 1.2 Objectives and Purposes

The objective of this study is to examine Russia as a target country for internationalisation, to evaluate the business climate, and to create an overall picture of the Russian environmental market, its current situation and opportunities for a case company.

In accordance with its purpose, the study outlines the situation in the Finnish cleantech market, analyses the future of the Russian economics in the light of business opportunities and challenges for Finnish environmental expertise in the Russian market. The study also describes the background of environmental issues in Russia, gives an overview of Russia's environmental sector and concentrates on the up-to-date perspectives for Finnish environmental expertise.

The empirical part deals with a market survey that has been designed to examine the demand for the products and services that Ekomuovi provides, such as chemical tanks for wastewater treatment, lamella clarifiers and process tanks for waste water treatment, filtering systems for communal purposes, sinks and pipes for surface treatment plants, surface coating service, large size plastic containers and others. Also the product range of Europe Environnement such as ventures,

droplet separators, flue gas scrubbers, activated carbon absorbers and bio-filters has been taken into consideration.

The objectives of the survey have been to introduce Ekomuovi products to the potential partners and to learn their attitude towards the Finnish company business proposal as well as to obtain general market information in the field.

The purpose of the market survey has been, along with understanding the demand for Ekomuovi products, to find potential customers, and to pinpoint competitors in the target market. The target area of the survey includes Saint Petersburg, Leningrad region and Moscow. Main indexes of these two megapolises are presented in Appendix 3.

The actual report on the demand for Ekomuovi products, containing all obtained information about potential customers and competitors, has been carried out and passed to the company's management.

### 1.3 Methodology

The thesis is a desk study, where the qualitative research method is used. Information for the analysis of the Russian economics and business environment is derived from secondary sources, mostly from the Russian Federal Statistic Service and Western analytical articles.

The market survey results are based on the primary data collected from the interviews with representatives of the companies, and on information derived from secondary sources via Internet i.e. websites of companies, media, branch statistics, business and social networks, forums and niche sites.

All results and obtained information is used for the analysis in the context of this study. Primary data gained in the process of the research is confidential and can be used for the commissioner's commercial purposes only.

As the list of companies contains confidential information as well, it has been exempted from this document before publication.

In Chapter 6 I present only the quantitative (statistical) results of the research in order to analyse opinions obtained in the research process.

#### 1.4 Previous Research and Limitations

A study has been done previously on internalisation of environmental technology commissioned by the case company. The study “A Market Survey for Environmental Market in Sweden”, a Bachelor Thesis in International Trade, was conducted for Sweden by H. Pykälä. The objective of the study was “to outline Ekomuovi’s potential for entry to the Swedish markets” (Pykälä 2011).

Since Finland and Sweden are close business partners which are similar in a majority of aspects i.e. business environment, legislation, culture and infrastructure, the author of the study concentrated mainly on the theoretical framework.

Thus, as an outcome of the previous research, Ekomuovi has already received theoretical knowledge sufficient for a start-up company on entering a new market, types of analysis in market research, segmentation and market entry modes.

Taking into account the facts that the internationalisation theory has been well-established in the previous study, it is not a purpose of this thesis to analyse different market entry modes. Besides, the exporting methods to enter the Russian markets, necessary documentation and requirements, legal issues and regulatory practices, and culture differences have also been widely researched.

What is unique about this thesis is that it analyses up-to-date information, forms a view on the main sectors of Russia’s emerging environmental market with respect to development, and gives a quick understanding of today’s demand and perspectives. Meanwhile vital recommendations on developing business in Russia are given briefly in the context of the study.

It is necessary to mention that, by the commissioner’s request, I have included to Chapter 5 information on the case company, its partner, their co-operation, customers and products, which is almost identical to that already presented in the previous study.

## 1.5 Thesis Structure

The thesis is divided into two main themes. In Chapters 2-4 the opportunities and challenges for Finnish environmental expertise are reviewed considering the economic and business climate background. Chapters 5-6 introduce a case company, the range of products and the results of a market survey that has been conducted for the company.

The introduction represents the background of the research, objectives and purposes, research content and methodology, and describes the previous study findings, research limitations and the structure of the research.

Chapter 2 gives an overview of the cleantech sector of Finland and a background for internationalisation of Finnish environmental expertise.

Chapter 3 presents background information on the Russian Federation as a country, overall picture of Russia as a target market for Finnish businesses, economic forecast, considerations on the ease of doing business and recommendations on most promising business areas for Finnish companies.

Chapter 4 gives a background of environmental key priority issues, market drivers and restraints, and reviews the up-to-date opportunities of the environmental market. Each of the main environmental sectors has been reviewed, particularly thoroughly the water and wastewater sector, from the perspective of demand for Finnish cleantech technologies, taking into account the products of the case company.

Chapter 5 introduces the case company, its French partner, the co-operation between companies, their activities, range of products and services, target customers and references.

Chapter 6 presents the actual market survey, data collection process, analysis and evaluation of obtained results, conclusions and relevant recommendations.

The final chapter summarises findings, conclusions, suggestions for further research and recommendations.

## 2 FINNISH ENVIRONMENTAL SECTOR (CLEANTECH)

*The cleantech business is one of Finland's economic focus areas in the future. The government has set the target of making Finland one of the world's leading countries in cleantech know-how. Finland aims to raise the turnover of its cleantech business to EUR 50 billion by 2020 and to increase exports in this field to more than EUR 37 billion. (Vapaavuori 2013.)*

There are some 300 environmental technology firms in Finland, in majority small-to medium-sized, of which about 20 per cent operate abroad as well. To support the know-how of Finnish environmental technologies, Government-funded technology centres known as Tekes (Technology Development Centres) and VTT (Technical Research Centre) support and enhance R&D in environmental technologies, thus creating a market with increased local competition. (U.S. Commercial Service 2007.)

Cleantech Finland is a network of Finnish cleantech companies and experts bringing the world's best cleantech solutions and expertise to companies and public-sector organizations that have environmental or energy-efficiency problems that need solving (Cleantech Finland 2013).

According to Santtu Hulkkonen, Executive Director of Cleantech (2013), the Finnish cleantech business has become a key driver for the Finnish economy and a major player in the global cleantech market, with a market share of over one per cent. Finland's share of the global GDP is approximately 0.4 per cent, so relative to GDP, Finland is one of the world's leading cleantech nations. (Hulkkonen 2013, Eurostat 2013.)

The Finnish cleantech business was one of Finland's fastest-growing sectors in 2012 with annual growth of 15 per cent and EUR 24.6 billion of combined turnover for cleantech business. Hulkkonen says that particularly small companies expect sales growth up to 29 per cent for 2013. Environmental technology business is strongly export-driven – the majority of cleantech companies get more than half of their turnover from abroad. (Hulkkonen 2013.)

According to a Cleantech survey, 39 per cent of Finnish companies in 2013 consider Russia the most interesting key market in the near future after China (43 per cent).

As shown in Figures 1 and 2, more than a half of Finnish cleantech companies provide with energy efficiency solutions, and these account for more than a third of total industry turnover. Almost half of the companies also have operations in renewable energy production, transfer or distribution. (Cleantech Finland 2013.)

### Cleantech key business areas, %

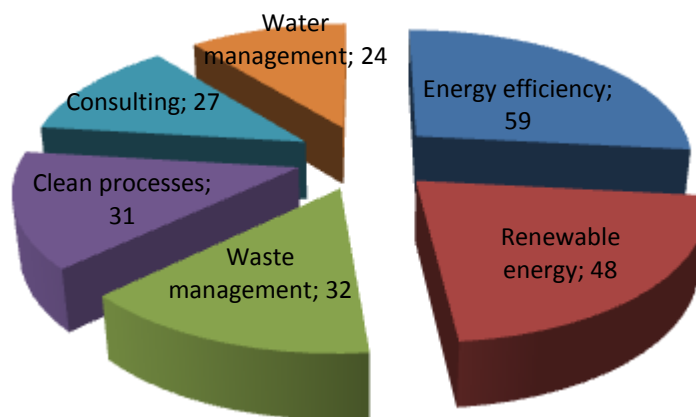


FIGURE 1. Distribution of Finnish cleantech companies by market segments (Cleantech Finland 2013, chart made by the author)

## Turnover of Cleantech key areas, %

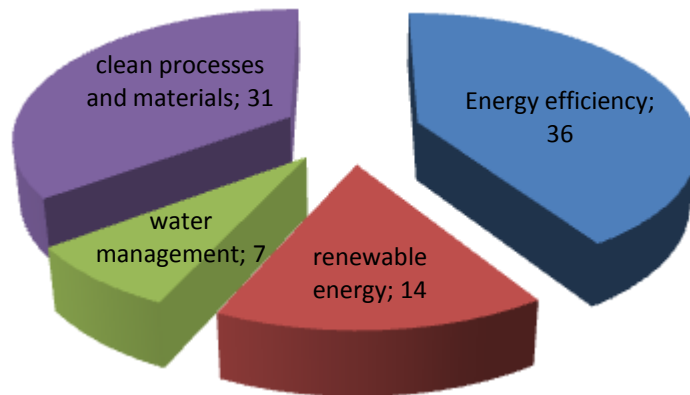


FIGURE 2. Distribution of Finnish cleantech turnover by segments (Cleantech Finland 2013, chart made by the author)

Finland's export of water products and services is also growing industry.

According to Finnish Water Forum (2013), a joint network of the Finnish private and public water sectors, Finland has considerable expertise in water resources management and protection, as well as in water-related technology, planning, construction, and research. The goal of Finnish Water Forum is to represent and promote Finnish water know-how globally.

The intensive co-operation between sectors has promoted the environmental consciousness in Finland. However, more efficient networking and developed export efforts should be made for the Finnish model to be exported more efficiently.

(Vapaavuori 2013)

### 3 RUSSIA AS A TARGET MARKET

An internationalising company should carefully consider the variables of the marketing environment when making decisions. A large number of forces shape the marketing environment. The various forces could be classified as falling into either the direct market environment or the external market environment. The direct market environment includes customers, the company, and competitors. The external business environment evaluation, also known as PEST-analysis, stands for Political, Economic, Socio-Cultural and Technological Factors. (Kotler 2000, 29.)

#### 3.1 Market Overview

The Russian Federation (hereinafter- RF) is the largest country in the world in terms of territory. It covers more than one-eighth of the Earth's inhabited territory with its land area of 17 million square kilometres. Russia extends across the European continent and the entirety of Northern Asia, spanning nine time zones and five climatic regions. The country stretches from the borders with Estonia, Latvia, Belarus, Ukraine and Turkey in the west, passing Kazakhstan, Mongolia and China to reach the Pacific Ocean. It takes over eight hours by plane to fly from Moscow to Vladivostok on the Pacific coast. Russia is the ninth most populous nation in the world with population of 142.5 million people as of 2013 (Rosstat 2013). Over 70 per cent of the population lives in urban areas.

The Federal subjects include the 46 oblasts (regions), the 21 republics, the nine krais (territories), the seven Federal Districts, the two federal cities, the four autonomous okrugs and one autonomous oblast, each category of which has different powers. There are 1,095 major cities and towns in the RF, but with less than 15 of them have a population over one million each. The largest cities are Moscow, Saint Petersburg, Novosibirsk, Yekaterinburg and Nizhny Novgorod.

Russia is a federal presidential republic. The executive power is split between the President (currently Vladimir Putin) and the Prime Minister (currently Dmitry Medvedev), but the President is the dominant figure. The legislature is represented by the Federal Assembly of Russia. It has two chambers: the State Duma – the



lower house, and the Federation Council – the upper house. The judicial power is vested in courts and administered by the Ministry of Justice. (RT Russiapedia 2013.)

The RF is a multiethnic society. The largest ethnic groups include Russians (82 per cent), Tatars (4 per cent) and Ukrainians (3 per cent). While Russian is the country's official language, it is also the mother tongue of over 80 per cent of the population. Other languages are used in ethnic minority regions. English is not widely spoken, although knowledge of the language is expanding, especially in the major cities. The major religions in the country are Russian Orthodox, other Christian denominations, and Islam. (Rosstat 2012.)

According to the Russian statistics agency Rosstat, 11.2 per cent of Russians live below the poverty line. The wages of 15.8 million people is below 6510 RUR per month (approximately €150). Labour force as of Quarter 1, 2013 is 75.5 million. Average gross salary as of Quarter 1, 2013 is 29,020 RUR (approximately € 670). (Rosstat 2013.)

Because of geographical peculiarities of Russia's vast market and an incomplete transition from central planning, there are significant geographical and demographical disparities in the wealth distribution. Undeveloped infrastructure causes serious logistical challenges outside of major cities (U.S. Commercial Service 2012). Russia's economic development is increasingly affected by outlying resource-rich regions: poorly developed, thinly populated areas in Siberia and in the northern areas of the European part of Russia.

In Kagansky's (2010, 36-37) view there is a "centre-border inversion" that corresponds to the contrast between the large, closed Soviet economy and the small, open Russian one. People in the old Soviet border areas of the RF learn of business and cultural developments not from the remote centre but from their foreign neighbours. Neighbouring countries are acting as financial and cultural centres, sources of investments and innovations, models for imitation, guarantors of environmental stability for many Russian areas (Finland for Karelia and the Karelian Isthmus, Germany for the Kaliningrad oblast, Japan and in part Korea for

the southern regions of Russian Far East, etc.). Also increasingly noticeable on Russia's fringes is the increasing presence of foreign populations.

Even more important is the inversion between the centre and the periphery. Kagansky states that the functional core of the Russian Federation is not so much the old, densely populated Central Russia as the young but undeveloped Northern Siberia. The economic centre of gravity in Russia is rapidly shifting to the northeast. Rising world energy and metal prices have increased the importance of these resource rich outlying regions of the country. (Kagansky 2010, 36-37.)

### 3.2 Economic Outlook

*With its rich natural resources, a well-educated workforce and a reforming industrial base Russia has the potential for substantial future growth (UK Trade & Investment 2012).*

As World Bank GDP ratings reveal (2013), Russia is the world's eighth largest economy by nominal GDP (US\$ 2.015 trillion), the fifth largest by PPP (US\$ 3.380 trillion) and it has the highest per capita GDP (US\$ 14,247) of the BRIC countries. Russia has overtaken Germany as the fifth largest economy in terms of purchasing power parity. Russia is ranked 43<sup>rd</sup> in GDP per capita by PPP (US\$ 23,549). (World Bank 2013.)

The Russian retail market is the eighth largest in the world and the fourth largest in Europe. Russia's leading trade partner countries are Netherlands, China, Germany, Italy, Ukraine and Turkey.

Russia's economy is still recovering from the economic crisis that started in 2008, with GDP growth at 3.4 per cent for 2012. Russian GDP growth and the surplus/deficit in the state budget are closely linked to world oil prices.

According to Frost & Sullivan (2011), crisis management after the deep collapse in 2009 has been broadly appropriate. The recovery has been supported by increased oil prices, stronger domestic demand and more flexible exchange rate. It is projected that Russia will continue to see positive economic indicators. Growth will be driven predominantly by the recovery of domestic consumption and in-

crease in industrial production. Development of the industrial sector will also contribute growth in the water and wastewater market, especially in highly water related power, oil and gas and mining industries. (Frost & Sullivan 2011.)

The Bank of Finland (hereinafter-BOFIT) forecasts the Russian economy to pick up after a sharp slowdown in 2013 as recovery in the global economy gets underway. According to BOFIT, the slight decline in the oil price during the period of 2013-2015 will weigh on Russian economic growth. GDP growth should slightly exceed three per cent per year in 2014 and 2015 as the recovery of world trade gives a small lift to Russian exports. As the Russian economy was exceptionally susceptible to imports soon after the 2009 recession, BOFIT expects imports to rise at about 5–6 per cent a year during 2014 and 2015, as shown in the Table 1. (BOFIT 2013.)

TABLE 1. Russian GDP and import volumes, realised and projected growth (per cent) (BOFIT 2013).

	2008	2009	2010	2011	2012	2013f	2014f	2015f
GDP	5.2	-7.8	4.5	4.3	3.4	1.8	3.3	3.2
Imports	15	-30	26	20	9	4	5	6

Sources: Rosstat, BOFIT Forecast for Russia 2013-2015 (f=forecast)

Despite slowing growth, and reduced public and private investment programmes, opportunities do remain due to the Russian oil and gas boom. It remains a long term market of great potential for Finnish exporters and investors.

In August 2012 The World Trade Organisation (WTO) welcomed the RF as its 156<sup>th</sup> member. Russia is also a member of CIS, APEC, EURASEC, G20, G8 and other organisations.

Russia's accession to the WTO is going to liberalise overall trade and create more opportunities for Finnish exports. Russia's average import tariffs will gradually be reduced from almost 10 to 7.8 per cent. Finnish manufacturers and exporters will have more certain and predictable market access as a result of Russia's commitment not to raise any import tariffs above the negotiated rates.

Environmental technology and service companies should keep their eyes open to take full advantage of Russia's WTO commitments and compete on a level playing field with other foreign businesses as Russian demand rises for products that can address the country's environmental needs. (Coalition for U.S.-Russia Trade 2012.)

### 3.3 Russia as Finland's Trading Partner

Finnish exports to Russia in 2012 increased by 7 per cent, and Russia was Finland's largest trading partner and the second largest export market after Sweden and the only market, along with the USA, where exports have grown. The volume of trade was €16.2 billion in 2012, of which exports amounted to €5.7 billion and imports to €10.5 billion. Exports to Russia consisted mainly of machinery and equipment, chemical products, paper and board products, and food products. Imports from Russia are primarily raw materials. Russia accounted for about 12 per cent of Finland's service exports in 2012. (Stubb 2013.)

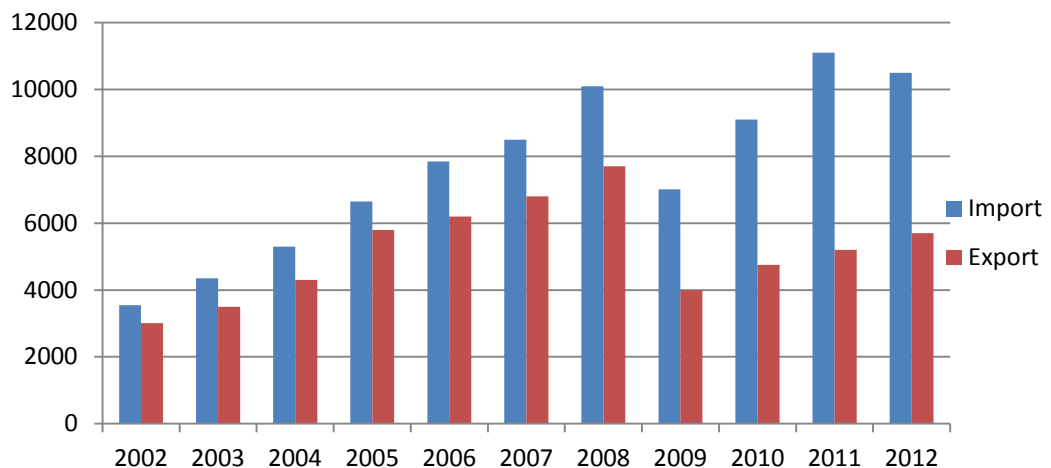


FIGURE 3. Finnish and Russian Trade 2002-2012 (Tullihallitus 2012, Stubb 2013, chart made by the author).

The magnitude of trade with Russia is reflected on trade barriers, of which the most important encountered are customs clearance procedures. Enterprises experience the complex and cumbersome customs procedures as problematic; they are

time-consuming, require a lot of (manual) work and thus are costly for enterprises. (Stubb 2013.)

Notwithstanding trade barriers, Finnish exporters to Russia as well as Finnish companies doing business in Russia consider this development very positive and companies look to the future with optimism. In particular, the manufacturing companies are in a positive mood; trade has gone well in 2012, and export volumes are expected to continue rising in 2013. (Venäjän-kaupan barometri 2013.)

According to the survey conducted by Team Finland in 2013, 46 per cent of Finnish SME has reported Russia being the number one country of Export Market Interest, while only 16 and 15 per cent have voted for Sweden and China respectively (Stubb 2013.)

### 3.4 Doing Business in Russia

Conducting business in Russia may be impeded by burdensome regulatory regimes, inadequate protection of intellectual property rights, extensive corruption and inadequate rule of law, inconsistent application of laws and regulations, lack of transparency, excessive government interference in business matters and other market access barriers, such as protectionism (U.S. Commercial Service 2012).

In the last 3–4 years, Russia has actively started to improve the country's business climate with reforming its legislation and simplifying official procedures. In 2010 at the order of the RF government, the World Bank began implementing the project 'Doing Business in Russia' in order to compare conditions for setting up companies, registering property, obtaining construction permits and getting access to electricity in 30 regions. (Yakovlev 2013, 10, Janczys 2013.)

President Vladimir Putin's initiatives to improve Russia's position in the World Bank and International Finance Corporation's "Doing Business" ratings appear to have worked. Since 2011 the Agency for Strategic Initiatives (ASI) has done a lot of work on the development of roadmaps for reducing barriers in getting construction permits, changing customs regulations, stimulating exports, and also

introducing new standards for the activities of regional governments for providing an attractive investment climate. (Yakovlev 2013,10, Zagorodnov 2013.)

According to the latest World Bank's Ease of Doing Business survey, Russia improved its ranking by twenty positions for 2012, finishing in 92nd place of 185 countries, following a concerted reform effort and widespread improvements in access to electricity. Such optimization concerns business registration, filing with non-commercial organizations and other red-tape procedures. (Zagorodnov 2013).

The results bring the country closer to meeting President Vladimir Putin's goal of bringing Russia from the 120th place to the 20th place by 2018 through a series of "road maps" designed to reduce bureaucracy and cut red tape. Today's results show the first tangible signs of success as recognized by a major international body. Russia edged ahead of China in the index, which placed at number 96, and placed higher than any of BRIC countries. (Zagorodnov 2013).

The business landscape in Russia has changed in the last decade and now more and more foreign nationals are starting businesses in the country, attracted to the opportunities for growth and space for new ideas in the Russian market.

What can cause problems for those doing business in Russia? There are many factors, according to the businesspeople interviewed. One serious threat is the constant bureaucracy and corruption risks: for example, when leasing premises, one will have to go through multiple inspections by the fire department, sanitary and epidemiological inspection service, and so on. However, these types of red-tape obstacles are also present in China and Europe. (Janczys 2013.)

### 3.5 Where to Do Business in Russia

Many Finnish companies have already taken advantage of business opportunities in Russia. According to Zashev & Kaartemo (2008), 77 Finnish companies have their subsidiaries in Saint Petersburg and 69 in Moscow. Finnish companies make just under two per cent of all direct investments in Russia. For example, there are only two Finnish companies known that have invested in Nizhny Novgorod, the

city with a population of over one million. Still, Russia can offer more opportunities.

For many Finnish small and medium-sized enterprises (SMEs) Russia is only a destination for exports and the SMEs are often satisfied with their dependence on one or two distributors. However, there is a risk that, in the global economy, the Russian distributor can easily find a new supplier that offers better terms. Besides, that way, the Russian distributor retains all the information of the market. Particularly at risk are those companies that do not manufacture the goods themselves, but act as intermediaries to Russians. (Zashev & Kaartemo 2008.)

Zashev & Kaartemo (2008) advise the managers of Finnish companies to avoid such risks by reassessing the company's business strategy in the current market situation, including their own distribution networks, sales offices and regional offices. The Russian market offers more than just the ability to export. The business strategy has to take into account the very value of investment and know-how in the Russian logistics and business culture, in regional markets and marketing. Each exporter needs to improve its position as the incumbent supplier with its own knowledge, experience, and growth strategy for Russia.

In the eyes of Finnish small companies, Russian market is limited to Moscow and St. Petersburg. However, the country is not limited to the two largest metropolises. Business opportunities may be as distant places as Sverdlovsk, Bashkortostan, known for its oil, innovation hub of Dubna, or Kemerovo, the coal capital.

Russia operates a growing number of Special Economic Zones (SEZ). There are currently four technological implementation zones : Zelenograd (Moscow), Dubna (Moscow region), Saint Petersburg and Tomsk; three industrial and development zones: Elabug (Tatarstan), Lipetsk, Sverdlovsk region ("Titanium valley"), as well as several tourist and recreation zones and three port zones in the RF. The businesses located in these zones are offered benefits, which can enable foreign companies to overcome market access issues in Russia. (RUSSEZ 2013.)

Russian companies of Moscow and St. Petersburg often operate with many western companies as intermediaries between them and Russian customers. By

working directly with businesses located in regions, the company can increase profits as well as reduce the risk, and it does not have to be dependent on any Russian partner. (Zashev & Kaartemo 2008.)

Regional markets have not yet developed up to the level of Moscow and St. Petersburg. Thus, the number of western companies in the regions is lower, as is the cost of labour. Regional markets are also a great business opportunity, but only for those companies that are willing to invest in knowledge and experience, and to make a careful and goal-oriented business strategy.

The leaders of Finnish companies are afraid of losing their money in the difficult market in Russia. Prejudices and fears are largely the legacy of the last decade. The risk analysis should, however, be based on the fresh knowledge of the dynamic market. (Zashev & Kaartemo 2008.)

In fact, the biggest risk for Finnish companies is that they are not going to use actual opportunities to expand and broaden their business to Russia currently, when the Finns still have a competitive advantage. An over-cautious approach to the market when a company is aiming at market shares at the lowest possible cost can improve the short-term results, but it never brings a supportive and sustainable position in Russia, which would safeguard the company's profitability for decades. (Zashev & Kaartemo 2008.)

To summarise this chapter, it might be appropriate to mention that according to Lossan (2013), The Public Opinion Laboratory (LIOM) has published its ranking of the most business-friendly Russian governors, which is presented in Figure 4.

Topping the rankings of business-friendly Russian governors, according to LIOM, are the heads of the Sverdlovsk Region, the Khanty-Mansi Autonomous District, and the Republic of Tatarstan. The three leaders have different business promotion models, but the basics are the same – transparency and effective tools to support small and medium-sized businesses. (Lossan 2013).

The Sverdlovsk Region is one of the fastest-growing in Russia, LIOM said in its study. Its location, developed manufacturing sector and research institutions provide a strong foundation for modernization and development in the region, while



new projects can attract increasing volumes of investments and support entrepreneurship. The region's investment policy envisions its transformation from an old industrial region into a high-tech centre. (Lossan 2013).

The Khanty-Mansi Autonomous Area, which ranks second in the list of business-friendly regions, is in a different situation because of its somewhat unique status. On the other hand, the area is an oligopoly, home to oil and gas giants Rosneft, Gazprom, LUKOIL, Surgutneftegaz, TNK-BP, Slavneft and Russneft. The dominance of these companies complicates business development on a regional scale. The authorities are currently trying to reduce the influence of oil and gas majors by promoting small and medium-sized business. (Lossan 2013.)

Like the Khanty-Mansi Autonomous District, the Republic of Tatarstan places great importance on small and medium-sized business, having developed the relevant infrastructure since 2004. Specifically, the region established the first Russian Technopark Idea, founded the Investment and Venture Fund of the Republic of Tatarstan, opened a leasing company for small businesses and later set up a network of business incubators. The authorities focus on innovation and export – high-tech companies and exporters enjoy subsidies and preferential loans. The total volume of investment projects submitted to the Tatarstan bank exceeds 100 billion rubles (about \$3.2 billion). (Lossan 2013.)

The regions that narrowly missed out on a top spot include the Zabaikalye Territory, Chechnya, the Jewish Autonomous Region, Adygea, the Volgograd and Orenburg Regions, Kalmykia, and the Kemerovo and Murmansk Regions. The ranks depended on a variety of factors, including the proximity of the region to Moscow companies. (Lossan 2013.)



FIGURE 4. The Ranking of leaders and outsiders among Russian region governors (Lossan 2013).

## 4 ENVIRONMENTAL PERSPECTIVES FOR FINNISH EXPERTISE

### 4.1 Investments in Environmental Protection

There are over 50 heavily polluted cities across Russia. The environmental issues have been neglected by the public administration in the USSR for a long time but now the Russian Government see the improvement of the environmental situation in Russia as a top priority. Government representatives and a wide range of experts from the Ministry of Health of the Russian Federation and Ministry of Natural Resources and the Environment consider major pollution problems and risks related to air, water and soil throughout Russia.

When prompted on environmental issues, Russians consider water pollution to be the most serious, followed by fresh water shortages, along with the depletion of natural resources and air pollution. In one year, 893 tons of suspended solids, 19.7 thousands tons of oil, 160 tons of ammonium nitrogen, about 50 tons of phosphate and iron come to the rivers (Efimov 2013).

Finland is seen as a role model for preserving clean nature and substantial source for environmentally friendly solutions and products. Santtu Hulkkonen, the Executive Director of Cleantech Finland (2012), says that there is a clear need to improve the effectiveness and co-operation of the public administration for setting and adapting new regulations, incentives, allocating funds and making action plans for environmental improvements. Attitude and cultural change is already happening. (Cleantech Finland 2012.)

The Ministry of Natural Resources of the RF developed the legislation to enhance the system of ecological monitoring and also to introduce the system of ecological audit and financial incentives for companies to implement the advanced environmental technologies.

Figure 5 shows a positive trend in reduction of atmospheric air pollutions and wastewater discharge in recent years, while waste generation in Russia is growing fast. Today Russia generates around 5 billion tons of waste annually, including 36

million tons of municipal solid waste. In the last several decades Russia's waste output has been growing faster than industrial production.

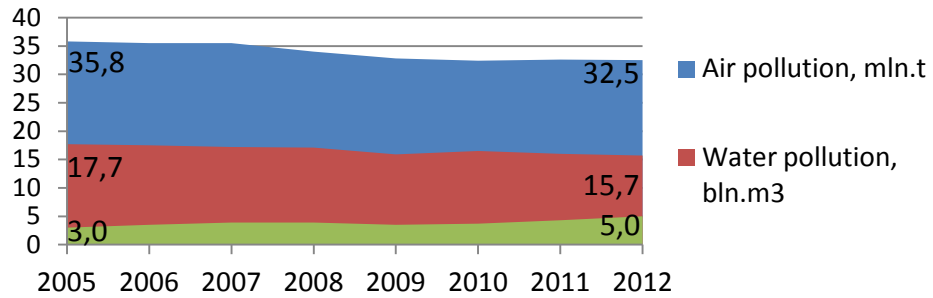


FIGURE 5. Annual amounts of air pollutant emissions (million tons), wastewater discharge (billion m3) and generation of waste (billion tons) in Russia (Rosvodresursy, Rospirodnadzor, Rosstat 2013, chart made by the author)

### Environmental protection expenditures

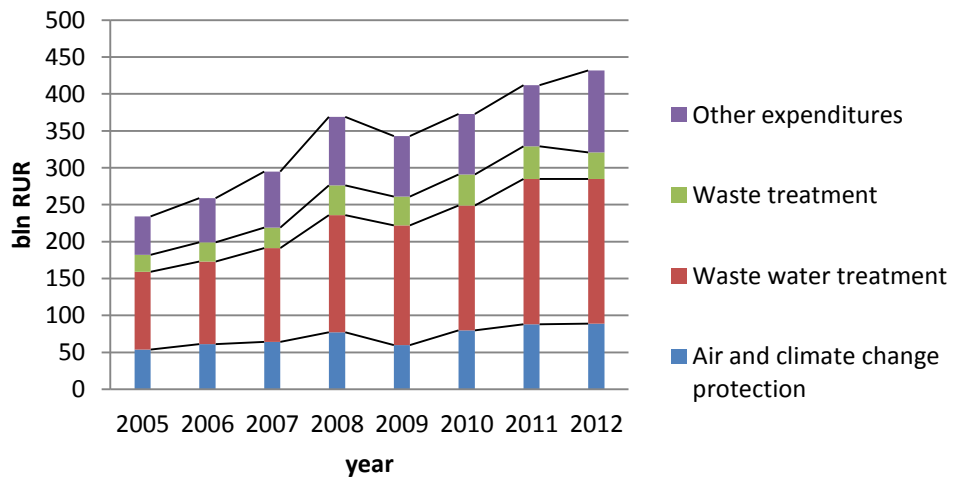


FIGURE 6. Volumes of expenditures on environmental protection in Russia, billion RUR. (Rosstat 2013, chart made by the author)

As shown in Figure 6, over the last seven years expenditures for environmental issues have doubled from 234 billion RUR as of 2005 to 432 billion RUR as of 2012.

According to Rosstat data (2012), the fixed capital expenditure for environmental protection and rational use of natural resources (all kinds of economic activities) is RUR 95,7 billion (EUR 2,2 billion), 72 per cent of which are internal investments accounted for RUR 69 billion (EUR 1,6 billion) and distributed as follows:

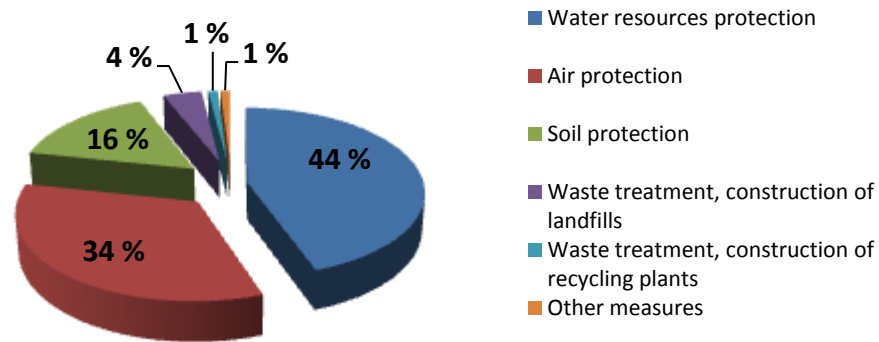


FIGURE 7. Investments in environmental protection (Rosstat 2012, chart made by the author)

According to different estimates, the total Russian market for environmental technologies and products is estimated at between \$700 million and \$1 billion with current rates of the growth of the market between 20-25 per cent a year.

A half of Russia's production assets are more than 25 years old while domestic manufacturers only meet forty per cent of Russia's demand for environmental technologies, making Russia an important market for foreign companies providing equipment and services for water treatment, solid waste management, air purification, and other environmental projects (Coalition for U.S.-Russia Trade 2012).

In its WTO accession agreement, Russia has committed to provide national treatment and allow 100 per cent foreign ownership of companies providing environmental services, including sewage, refuse disposal, sanitation, noise abatement, and landscape protection services (Coalition for U.S.-Russia Trade 2012).

The opportunities for Finnish environmental expertise in water treatment, waste management, energy saving, energy efficiency and renewable energy resources are analysed below.

#### 4.2 Water and Waste Water Sector

*New solutions are needed for managing the world's water problems and the Finnish water sector's skills could be harnessed better than they are today to improve global water conditions and to promote Finnish exports (Ninistö 2012).*

One fifth of the world's fresh surface and groundwater is located in Russia, but only one per cent of surface water sources in Russia meet hygienic requirements ensuring the safety of public drinking water, according to the Sysin Institute of Human Ecology and Environmental Health (Efimov 2013).

The water utilities sector is one of the largest in Russia, with a total of 8,801 water supply systems and centralized water supply used by almost 107 million people resident in 1,095 towns and almost two thousand urban-type settlements. The total length of water mains in Russia's population centres is 463 thousand kilometres, including 201 thousand kilometres in towns. The capacity of water supply systems is estimated at 90 million cubic metres per day, with towns accounting for about 71 million cubic metres per day. (U.S. Commercial Service 2012.)

Public utility services include electricity, gas, heat and water supply, water discharge, wastewater treatment and household solid waste management. Each part of public utility complex is governed by separate laws, but all these services have in common significantly dilapidated infrastructure and obsolescence of technologies used. The consequences of these factors are the poor quality of utility services provided and the significant costs incurred by service providers. At the same time, there is a high capital capacity for renovation projects. The public utility infrastructure is municipally owned (in St. Petersburg and Moscow it is owned by the respective subject of the Russian Federation) and is transferred for management to municipal and state unitary enterprises (MUP/GUP) incorporated and owned by the state administration. (Beiten Burkhardt 2013.)

In 95 per cent of the municipalities both the water supply and the rights to water cleaning are managed by local Vodokanals, municipal unitary enterprises. The Russian municipal water supply system includes water inlets, pumping stations, water preparation and purification stations, water supply networks and water sanitation stations. There are more than 800 Vodokanals in the RF. (Danish Water Service 2009.)

Szyplinska, Research Analyst of Frost &Sullivan, states that water supply and wastewater treatment facilities are in most cases outdated and require immediate modernisation and replacement with modern treatment solutions. 38 per cent of WWTP in Russia require reconstruction. Approximately 75 per cent of the infrastructure must be replaced in the next five to ten years. (Frost & Sullivan 2011.)

According to Frost & Sullivan (2011), the total size of the Russian water and wastewater treatment equipment market in 2010 was \$917.5 million. It is expected that the market size will almost double and reach \$1,699.1 million in 2017, growing at a compound annual growth rate (CAGR) of 9.2 per cent from 2010 to 2017.

According to Russian President Vladimir Putin, the country's government plans to invest \$20 billion in water management and infrastructure by 2020 and to open the water sector for private investment (Reuters 2009).

Due to financial aid from international agencies, governmental support in the privatisation of water utilities and growing opportunities for foreign entrants, a clear perspective is emerging for the development of the Russian water and wastewater treatment sector (Frost &Sullivan 2011).

The Russian water market includes such business opportunities as Public Private Partnerships, engineering/consultancy, opportunities for specialist equipment producers, pipeline rehabilitation and wastewater treatment technologies.

#### 4.2.1 The Pure Water Federal Target Program

The Russian government plans a large-scale modernisation of the water sector through the improvement of legislation and management system to the upgrade water supply facilities. The programme aims to improve water quality and waste water treatment processes and to stimulate private investment.

The Pure Water Federal Target Programme for 2011-2017, signed in December 2010, aims to increase coverage of water and wastewater services in Russian regions, to reach 95 per cent for safe water supply coverage and 84 per cent of wastewater collection and treatment by 2017. Total funding of the programme (all sources) is RUR 331.8 billion.

Almost all regions of the Russian Federation have submitted their water projects and regional target programmes. A number of the RF regions, such as Northwest region and Saint Petersburg, the Republic of Bashkortostan and Volgograd, Novgorod, Orenburg, Penza, and Yaroslavl regions have started the implementation of the water projects on their own through attracting private investors and using the public-private partnership approach. (Russian Water Association 2013.)

Privatisation of water facilities is generating new opportunities for the private sector ownership which is expected to grow from the current 10 per cent of the urban population to 16 per cent in the near future.

Russian Vodokanals have already demonstrated an increasing interest in privatisation. Therefore, establishing a strong and long-term partnership with local partners enhances success and ensures access to the water and wastewater market.

It is estimated that a sum of \$10.32 billion of private investments is required to complete the necessary upgrades, refurbishment and new build for water and wastewater infrastructure in Russia (Frost & Sullivan 2011.)

#### 4.2.2 Key Opportunities in the Water and Wastewater Market

Since the share of the federal and local budgets is only about 6 per cent of the Programme funding, the Russian government is positively looking at private invest-



ments when modernising industry. As the Pure Water Federal Target Programme is aimed at promoting innovations and development throughout the water supply and wastewater discharge industry, it creates good opportunities for treatment equipment manufacturers and distributors. Potential exists also for pumps, pipes and chemical suppliers, service providers as well as civil construction companies specialised in water-related works. (Frost & Sullivan 2011.)

Over the coming years the main focus is on reconstruction of facilities and introduction of tertiary treatment for better nitrogen and phosphorus removal from wastewaters. A shift towards development of modern ultraviolet, ozone and membrane separation treatment is also expected in the water treatment segment, with decrease of traditional chlorine disinfection. Advanced treatment technologies have already been successfully implemented in large Russian metropolises, like Saint Petersburg where all drinking water is treated with ultraviolet technology before being supplied to the customers. It is expected that other Russian cities will follow this trend. (Frost & Sullivan 2011.)

The City of St. Petersburg is constantly developing its wastewater treatment. The current reconstruction of the Northern Wastewater Treatment Plant is a part of the Neva Direct Discharges Closure Programme (2006-2015) aimed at collecting all wastewater generated in St. Petersburg (population 5.0 million) to biological wastewater treatment plants and to treat the wastewater according to HELCOM recommendations and EU directives. The overall cost estimate of the programme is EUR 900 million. The programme is financed by EBRD, NIB, EIB, NDEP, SIDA, Finnish Ministry of the Environment and local resources. Furthermore, Pöyry has prepared an operational plan for the Northern sewage tunnel collector, automation designs for the sewage tunnel pumping station and a design for reconstruction of the Central Wastewater Treatment Plant. (Pöyry 2013.)

Increasing focus on sludge treatment is also projected in Russia for the coming years, concentrating mainly on reducing sludge volumes, safe storage and incineration. At present the incineration of sewage sludge is not a widely applied method in Russia but it is expected to become more important, mainly for large metropolises suffering from disposal problems. The reconstruction of the metro-

politan sewage treatment facilities using the modern technology for nitrogen and phosphorus removal and the introduction of UV disinfection is the main direction of development. (Frost & Sullivan 2011.)

#### 4.2.3 Advanced Water Treatment Technologies Used in Russia

According to a marketing survey, carried out by the technical management of Veolia Water Solutions & Technologies, the following technologies are the most interesting to be applied on the Russian water management market:

- Lamellar settling tanks: for clarification of drinking water, primary settling of wastewater, tertiary coagulation of phosphorus, and rainwater treatment;
- Bioseparation /membrane activation: treatment of industrial wastewater, domestic effluents from small and medium-sized sources (mainly in holiday resorts);
- Membrane filtering technologies for treatment of drinking and process water, reverse osmosis for process water;
- Bio-filtering: elimination of nitrogen (nitration - denitration);
- Anaerobic technologies for pre-treatment of industrial wastewater;
- Thermal processing of sludge - drying and incineration;
- Thermal pre-treatment of sludge before anaerobic digestion;
- Oxidation of raw or digested sludge in wet phase. (Veolia Water 2013.)

#### 4.2.4 Key Municipal and Industrial End-Users

The highest growth potential of water and wastewater market development in the Russian municipal sector exists in cities with populations over 500,000, supported by governmental funds and external financial institutions. Development in long-term perspective is connected with expansion of the cities, construction of new facilities and increasing treatment capacities. (Frost & Sullivan 2011.)

Although the Government's aim is to finance modernization of water systems in small cities as well, cities with populations below 500,000, supported by regional funds, however, are relatively less attractive for private operators. Big private operators are interested to operate only in big cities with population exceeding

200-300 thousand people, paying no attention to small distant towns and rural areas (Martusevich 2008, 12).

As the number of PPPs is expected to increase in Russia, it will also facilitate a strong drive towards improved and operational efficient water and wastewater infrastructure in those cities. In the long-term perspective smaller agglomerations are also projected to attract investments once the large and medium sized cities are covered. (Frost & Sullivan 2011.)

The key industrial Russian end-users such as power, oil and gas and mining industries are expected to help maintain the growth of the water and wastewater sector. Expansion of thermal and nuclear power capacity, as well as the global demand for oil and gas from Russia, are expected to drive demand for more energy efficient and compact treatment solutions, including water reuse and application of zero liquid discharge technologies. In mining industry, by 2013 Russia is targeting an increase in coal production that will boost the demand for minimizing the impact of large runoff streams and metals-laden wastewater on the local environment. (Frost & Sullivan 2011.)

Despite the harsh reality and necessity to overcome present challenges in the municipal and industrial sectors in Russia, perspectives for the water and wastewater market development over the coming years are highly optimistic (Frost & Sullivan 2011).

## 4.2.5 Key Market Drivers and Restraints

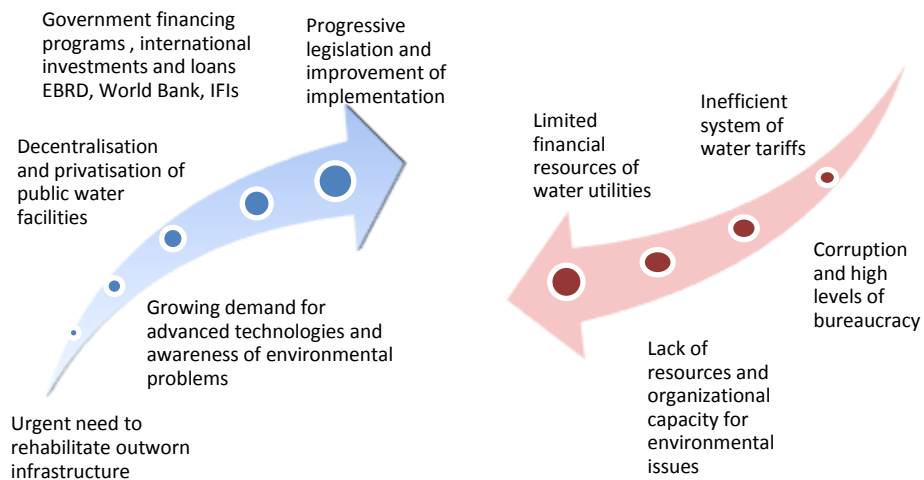


FIGURE 7. Key market drivers and restraints (Frost & Sullivan 2011, chart made by the author)

According to Frost & Sullivan (2011), progressive legislation, financial programmes of the Russian Government, private investments in municipal and industrial sectors as well as urgent need to rehabilitate outdated and outworn main water and sewerage facilities support the recovery of the Russian Water and Wastewater Market. The Figure 7 illustrates substantial restraints that continue hampering growth of the market despite of strong market drivers that enable investments and catalyse growth. The main factor which hampers development of the market is limited financial resources of water utilities. (Frost & Sullivan 2011.)

## 4.3 Waste Management

### 4.3.1 Waste Management in the Two Megacities

Being neglected for many years, the problem of waste management has finally become one of the most critical economic and environmental problems in Russia. The economic growth of the two megapolises is accompanied by increasing volumes of waste, but problems exist all over Russia. To date Russia has accumulated 90 billion tons of solid waste, including industrial and residential, only a mi-

nor part of which is currently processed or recycled. There are very few facilities for specific or hazardous waste utilisation while technologies for its collection and management are practically absent. (Tekes 2013.)

This problem has recently driven federal, regional and local governments to develop a more efficient and environmentally safe waste management market. In 2010 the Russian Government announced plans to recycle 20 per cent of solid waste by 2016. Moscow, Saint-Petersburg and several other large regions in Russia announced projects to build waste sorting and waste processing plants.

The City of Saint Petersburg recycles about 30 % of waste, which is significantly above the Russian average of about 4 %. Two waste processing plants and two landfills that currently serve the City are not capable to process the rest 70% of the 350 thousand tons of waste that the city generates annually. St. Petersburg plans to obtain four new waste processing plants that are part of its waste management plan until 2014. A new project of waste treatment plant in Yanino, next to the site of the existing waste processing plant MPBO-2 has already started on the basis of a public-private partnership (PPP) with the City. The facility will be transferred to the City upon the expiration of the PPP agreement, which is set for 30 years and with an option to extend the term. (ANS e.V. 2013.)

#### 4.3.2 Key Opportunities in the Russian Waste Management Market

It is expected that government support will largely drive the market towards more efficient operation in terms of waste processing and environmental safety. The Russian Government initiates more and more public-private partnership projects in the sector, trying to attract foreign companies to the Russian waste management market. Heightened government and public awareness, coupled with initiatives and programmes attracting Russian and international investors, promise to open up lucrative opportunities in this market. (Frost & Sullivan 2010.)

In Russia, waste service tariffs are increasing, driving market revenues persistently every year. In the view of an analyst of Frost& Sullivan, given that the tariff rates are low, market expansion is guaranteed. In addition, public pressure is further supporting market prospects. With growth in tariffs on waste management

services, existing market participants will be able to develop better strategies and more efficient processing methods. Moreover, higher tariffs will attract more investments as foreign and international waste management companies enter the market, thereby propelling market growth. (Frost & Sullivan 2010.)

Russian industry lacks expertise in waste to energy technologies, sludge ash utilisation and other areas of waste management. There is strong demand for effective technologies for solid waste processing, effective technologies for liquid waste collection and processing and optic sorting of solid wastes. (EVD 2008).

The demand for municipal waste management and waste processing technologies particularly in Moscow and Saint Petersburg will grow within the next 5 years. The market looks promising for almost any contemporary technology of collecting, processing and utilisation of municipal, industrial and hazardous waste.

Within the framework of Team Finland Future Watch Process, Tekes (2013) has recently started a new foresight project in Russia, whose main purpose is to identify development trends in solid waste management and make a survey of business opportunities for Finnish companies in a 3-5 year perspective. An insight on what technologies are most promising for their application in collection and transportation, sorting and treatment, disposal and landfill and recycling has a certain value for Finnish businesses operating in this sector. (Tekes 2013.)

The key components of the waste management market include: solid waste management, water treatment and air purification.

#### 4.4 Energy Saving and Energy Efficiency

##### 4.4.1 Main Indicators of the Potential for Energy Efficiency in Russia

Russia is the third largest energy consuming country in the world with growing demand for energy. It consumes more energy per unit of GDP than any of the 10 largest energy consuming countries. Vast domestic energy supply, cold climate and inefficient technologies have ensured that high energy intensity remains endemic to every sector of the economy. The middle class of Russia is growing

together with the country's economy, which demands improvements in energy efficiency and comfort levels of buildings.

Russia has started focusing more on issues related to energy efficiency and green building and this is supported by a 2009 decree vowing to reduce Russia's energy consumption by 40 per cent by the year 2020. (Global Impact Consulting 2013.)

According to the experts of Coalition for U.S.-Russia Trade (2012), it is estimated that Russia must invest US\$ 320 billion in residential and public buildings, industrial facilities, transportation, electricity, and heating systems to reach desired energy efficiency levels. Russia's Federal Grid Company is planning to invest US\$15 billion in energy storage and smart grid technology in an effort to reduce electricity loss by 25 per cent.

#### 4.4.2 Opportunities in Energy Efficiency Market

Russia presents opportunities to Finnish know-how companies to improve energy efficiency including local and autonomous heating, optimisation of energy consumption, modernisation of centralised systems, energy storage, waste-to-energy, road construction materials, green buildings, renewables; and environmental technologies including biofuels, biomass, water and waste treatment.

Overall, opportunities in this market depend upon economic trends and national construction programs. As the Russian economy is growing, construction is also on the rise, along with many huge construction projects. Some of them are mentioned below.

As a host of the 2018 FIFA World Cup tournament, Russia is planning the construction of 16 state-of-the-art stadiums in 13 cities, mostly in Western Russia. Each stadium will have a price-tag between \$70- \$300 million. For this purpose, the Russian Government plans to spend over USD 9.4 billion. The larger share of this funding will be spent after 2013. (U.S. Commercial Service 2012.)

According to the plan of expanding Moscow boundaries, Moscow will double in size, annexing 144,000 hectares to the current territory. This area is likely to add 60 million sq.m of housing and 45 million sq.m of commercial real estate.

Furthermore, there are several large-scale green sustainable projects in Saint Petersburg that present some opportunities for Finnish expertise. For instance, a project called Sem Stolits in Southeast of Saint Petersburg utilises the principles of energy efficiency including a collector heating and water supply system, specially designed sanitation facilities and energy-efficient insulation and windows. Sem Stolits is to be completed within 15 years. (Global Impact Consulting 2013.)

#### 4.4.3 Demand for Energy Efficient Technologies and Materials

Russian companies continue to demand construction equipment and tend to prefer to purchase from Western manufacturers when quality is essential. However, price is also important, and Russian consumers are likely to opt for cheaper products. Thus the Western companies can face strong competition with Chinese producers. (Lychuk, Evans, Halverson & Roshchanka, 2012.)

There is a demand for district heating systems transmitting heat in the form of hot water, from a centralized boiler or cogeneration plant through a network of pipes, as well as demand for individual boilers, gas heaters and traditional stoves.

According to the Russian Government, about 70 per cent of Russian the world' largest district heating infrastructure has been constructed before 1990. It needs to be replaced in the near future because of low efficiency of heat boilers (about 73 per cent compared to 85-95 per cent in Western Europe). Developed foreign technologies could revamp Russia's district heating system, saving billions of dollars avoiding many emissions. (Lychuk et al. 2012.)

In the sector of Heating Ventilation and Air Conditioning and Controls the demand is growing for heat metering and control solutions, air conditioning and ventilation. In particular, there is a demand for air pipes, air gates, mufflers, valves, duct ventilators, lighting control systems and thermal insulation. (Lychuk et al. 2012.)



#### 4.5 Renewable Energy

According to current assessments, the economic potential of renewable energy in Russia amounts to at least 4.5 billion tons of coal equivalent used per year. A Presidential decree set a target of 4.5 per cent from the current 1 per cent use of renewables (not including large hydropower projects with generation capacity greater than 25MW) by 2020. The decree mainly includes the potential for more solar and wind energy. In order to achieve the projected volumes of electricity production, commissioning of generating facilities (small hydroelectric power plants, wind, tide, geothermal power plants, thermal power plants) using biomass as one of the fuels with an aggregate installed capacity up to 20 GW should be realised within the stated period. (IFC Russia Renewable Energy Program 2011.)

## 5 CASE COMPANY AND ITS PARTNERS

### 5.1 Ekomuovi Company Profile

Ekomuovi is a small enterprise established in 2001, operating in the field of thermoplastics. The company has 1600 sq. metres of premises located in Hollola, Finland, and it has operated there since 2009.

The owners of the company are Oy Pumpulohja Ab / Watman Engineering Ltd Oy and the management of Ekomuovi Oy. Watman Engineering Ltd Oy is a leading operator in Finland in producing water treatment plants, processes and water treatment equipment. The CEO of Ekomuovi Oy is Mr. Esa Pykälä.

Ekomuovi is an expert in the design and manufacture of units and individual products from thermoplastics and special plastics. The company takes an active part in its customers' production processes. Ekomuovi's professional services include installation, maintenance and spare part service. (Ekomuovi 2013.)

The company's mission is to improve its customers' cost-effectiveness and process management by specialising especially in different kinds of products based on thermoplastics and special plastics and complex units for their design, production, manufacturing processes and their maintenance, repairs and spare part care according their customer's needs and requirements (Ekomuovi 2013.)

### 5.2 Products and Customers of Ekomuovi

Ekomuovi products are, among others, different kinds of sinks and tanks, process equipments and pipes, extraction systems for industry, various types of air cleaning equipment (e.g. gas scrubbers and bio-filters), installations and maintenance. Ekomuovi has also made a lot of diverse container systems for clean water treatment, wastewater treatment and equipment for many special operations (such as oil- and dripping-extraction, sand separation and scrubbing). (Ekomuovi 2013.)

As Ekomuovi is mainly involved in individual projects, the company does not have just a certain range of products. Ekomuovi designs, customises and maintains its products working closely together with its clients. The key customers operate in the fields of water processing, environmental technology, chemical industry, surface treatment, surface coatings, and the process industry. (Ekomuovi 2013.)

To mention a few references, Ekomuovi has delivered numerous chemical dosing tanks and systems and coatings for St. Petersburg, Vodokanal WWTPs, as a part of Clean Baltic Sea project in co-operation with Kemira Oyj, John Nurminen Foundation and the Finnish Ministry of Environment (Ekomuovi 2013.)

Among Ekomuovi's customers are most of the Finnish surface treatment plants, many big process and chemical industry companies such as Kemira Oyj, Lassila & Tikanoja Oyj, Uponor Oyj, Finnair Oyj, Abloy Oy, Outotec Oyj, Normet Oy, Sandvik Mining and Construction Ltd, Oy Galvatek Ab, WatMan Engineering Ltd Oy, and many municipal water treatment plants. The complete reference list is wide, it can be found on Ekomuovi's website. (Ekomuovi 2013.)

The company has also done a lot of collaboration with Lahti Science and Business Park (LADEC). Ekomuovi Oy also belongs to the Cleantech Cluster and the local Minicluster of Russia. (Ekomuovi 2013.)

Lately Ekomuovi has joined the Export Partner Group water & biogas project-2013 (Export ring) for Russia, together with several other Finnish companies operating in the field.

Since 2010 Ekomuovi has been a partner of a French company, Europe Environnement, which specialises in gas and odour control engineering and equipment.

### 5.3 SWOT Analysis of Ekomuovi

The strengths and weaknesses of Ekomuovi describe the current situation in the company, while the opportunities and threats help to understand the possible future of the company. In addition to different factors of a SWOT analysis that has

been previously carried out by the CEO of Ekomuovi, I take into consideration some opportunities and threats for Ekomuovi in relation to the entry to the Russian market.

Ekomuovi sees its strengths in long experience and expertise in manufacturing goods and equipment from thermoplastics. The skilled production personnel, international trade know-how and strong knowledge of selling consulting services are in the top of Ekomuovi's strengths. Thanks to spacious and functional premises, Ekomuovi has the possibility for manufacturing larger and wider entities. The company has good contacts with project suppliers and active networking with other companies and organisations. The reliability of the company and keeping the schedules can also be considered its strengths. (Pykälä 2013.)

The opportunities are broad to a small and flexible company, as the water and environment technologies show potential and are strongly increasing industries. Ekomuovi could also seek for more opportunities to be involved in suitable buy-outs and to co-operate with other domestic and international operators. The company also has the opportunity to use new technologies and production equipment in its business as well as to produce bigger entities according to the needs of project houses. Furthermore, Ekomuovi sees its opportunities in export, outsourcing, networking and recruiting. (Pykälä 2013.)

Weaknesses of the company lie in strong but narrow know-how processes, engineering insufficiency, limited personnel and other resources in large projects, too few active customers and key clients, too irregular finding and developing new business contacts (Pykälä 2013.)

New manufacturers and/or competitors are some of the main threats for Ekomuovi in the domestic market as well as when operating internationally. The company depends too much on key customers. Any changes in ownership, e.g. joint ventures and mergers for other companies, can also be seen as a threat. Import and export operations are challenging. Furthermore, changes in the world economics and legislation and unsuccessful recruitment can influence the company's activities. (Pykälä 2013.)

Taking into consideration entering the market of Russia, the list of threats together with opportunities is getting wider. Potential opportunities and threats relevant to the internationalisation to the target market are outlined precisely in Chapter 7.

#### 5.4 Europe Environnement Company Profile

Europe Environnement was founded in 1993 in Aspach le Haut, France. The construction of their first plant started in 1996 and as their operations expanded, the construction of the 2<sup>nd</sup> production plant started in 2002. Europe Environnement entered the stock market in 2003 and by 2010 the company has acquired Protech-Air, Ventacid and Amced Inc. Nowadays the company is a part of the Europe Environnement Group. To meet the growing demand for its products, the company has recently invested in a new manufacturing facility of 12 000 sq. metres and a land site of 3.6 hectares. (Europe Environnement 2013.)

Europe Environnement designs and manufactures gas and odour systems. The subsidiaries of Europe Environnement manufacture products as follows:

Europ-Plast (Europe) - Ventilation

Protech-Air (Europe) - Dust Treatment

Ventacid (Europe) - Gas Treatment (Eastern Europe)

Amced Inc. (the USA) - Adsorption/ regeneration of solvents

Amplast (the USA) - Gas Treatment (USA Market)

Altogether, Europe Environnement employs 250 people. Europe Environnement, Europ-Plast and Protech-Air operate in the head office in Alsace, France. The two other plants are situated in the USA and in Hungary. The agents and partners of Europe Environnement operate all over the World.

ACD Plast	Agent: Spain
AES	Agent: Russia
Air Vision	Agent: Belgium, Luxembourg, Netherlands
Air Technology Systems Ltd.,	Partner: United Kingdom
Devise Engineering,	Agent: Greece
EiE Consultant Inc.	Agent: Canada

JBA Automation	Agent: Switzerland
METEC / AUROVENT	Agent: Portugal
Polymold Products	Partner: India
Ventec Maroc,	Agent: Morocco
VONA	Agent: Turkey
Wilhelm Tell Consulting	Agent: Poland
UNIVERSAL	Agent: UAE
Ekomuovi Oy, Partner: Finland, Sweden, Denmark, North-western Russia. (Pykälä 2013.)	

### 5.5 Products and Customers of Europe Environnement

The Europe Environnement Group designs and manufactures gas and odour control systems. The range of products is wide and includes different gas scrubbers, odour control systems, bio-filters, bio-scrubbers, activated carbon and zeolite adsorbers. (Europe Environnement 2013.)

In the field of air pollution control the company uses such technologies as chemical treatment, biological treatment and active carbon adsorption. There are different types of gas scrubbers used for chemical treatment. Europe Environnement manufactures three types, i.e. random packed scrubbers, spray gas scrubbers and venturi scrubbers. The choice of which type to be used depends on the characteristics of the gas/pollutant to be removed. (Europe Environnement 2013.)

Europe Environnement Group manufactures its products using combination of three technologies: thermo-plastic manufacturing, aeraulic-ventilation and chemical engineering. The company uses mainly thermoplastics, such as PP (polypropylene), HDPE (high density polyethylene), PVC (polyvinylchloride), PVDF (polyvinylidene fluoride), PE-EL (electrically conductive polyethylene), PP-EL (electrically conductive polypropylene). Also solutions with Stainless Steel or Fiber Glass can be provided if necessary. (Europe Environnement 2013.)

Europe Environnement provide the engineering and manufacturing of scrubbing systems, bio-filters, odour control and VOC removal systems, adsorption on

activated carbon, corrosive, toxic and odorous gas removal, maintenance and after sales services, scrubbing and absorption processes, biological gas treatment, activated carbon and zeolite adsorption treatment, turnkey facilities from initial specifications to start-up, compliance study for surface treatment, feasibility pre-study, gas emission sampling, gas analysis and ventilation checking.

The biggest customers for Europe Environnement come from waste water treatment industry and composting industry. The company has done surface treatments to chemical industry, big installations to WWTP and composting plants. They have also made installations to foundry industry just to mention a few. The biological treatment of gases is an increasingly important method at the moment. Europe Environnement has many references in the bio-filtration sector and has started research on bio-scrubbing. (Europe Environnement 2013.)

The operation of the company is based on projects, so the reference list is wide and worldwide. Europe Environment has produced installations and big entities for WWTP and metal process industry, for example in Brazil, China, Belgium, Spain and the United Kingdom. (Pykälä 2011.)

### 3.3 Co-operation of the Companies

By the summer of 2010, Ekomuovi signed a partnership contract with Europe Environnement, which made Ekomuovi Europe Environnement's Agent in Finnish, Swedish, Danish and Northwest Russian markets. Ekomuovi operates as an Agent and partly as an Original Equipment Manufacturer (hereafter OEM)<sup>1</sup> in alliance with Europe Environnement. Ekomuovi intends to manufacture as much as it can in its premises in Hollola. (Ekomuovi 2013.)

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<sup>1</sup> OEM manufactures equipment or components that are purchased and retailed under the purchasing company's brand name. In other words, OEM refers to the company that originally manufactured the product. (Wikipedia 2013).

## 6 MARKET SURVEY

The marketing strategy process includes three important phases: (1) Understand Customer, (2) Analyse Market, (3) Analyse Competition (Kotler 2003, 7).

Conducting a market survey on the demand for a company's products and services in the target market area is the first step to identify opportunities, potential customers, business partners as well as competitors. Then the company should determine its customers in order to achieve clear customer segmentation, whether they are consumers (B2C) or companies (B2B)<sup>2</sup>. Segmenting divides customers into groups based on similar needs as well as their purchasing and consumer habits. After that the company can choose the most suitable segments for its business.

When conducting marketing research, the researcher can gather secondary data, primary data, or both. Secondary data are data collected for another purpose i.e. previous studies, analyses etc. Primary data are data gathered for a specific purpose or for a specific research project. Kotler (2000, 103) advises researchers to start their investigation by examining secondary data to see whether their problem can be partly or wholly solved without collecting costly primary data. Secondary data provide a starting point for research and offer the advantages of low cost and ready availability.

The data collection phase of marketing research is generally the most expensive and the most prone to error. Kotler defines major problems that may arise in the case of surveys as follows. Some respondents will not be reached at once and must be recontacted or replaced. Other respondents will refuse to cooperate. Some others will give biased or dishonest answers, which can affect the results of the study. (Kotler 2000,103.)

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<sup>2</sup> Most small businesses sell to other businesses or to consumers, and the acronyms B2B and B2C represent these relationships in abbreviated form (Kotler 2003, 53).



## 6.1 Data Collection Process

First of all I have searched a dozen search engines such as different business directories known as Internet yellow pages (IYP). When seeking for new contacts in Russian Internet (Runet) I have mainly used databases of Allinform.ru and YP.ru for the first step of my research. All websites of business directories are listed in the Appendix 1.

Next I have studied information obtained from the companies' websites in order to understand the company's potential as a partner, its range of products, services, technologies and objectives. Also, I have sought all relevant information about a company's activity, as to understand its reliability, via social networks, forums and niche sites, particularly in case any relevant information is not available on the company's webpage.

While investigating websites I have made phone calls to reach a company's representative (the respondent) by phone in order to present the case company shortly as well as obtain more information and contact details.

Then I have mailed a business proposal and an introductory letter containing information on Ekomuovi, its products and objectives, to potential customers and partners.

I have also sent a complete set of promotion materials to the respondents having expressed interest and/or asked for additional documentation.

After that, I have followed up, mailed and/or phoned those that have expressed a certain interest in discussing further partnership. Meanwhile I have been gathering empirical data in Excel.

Then I have evaluated and analysed the results and have made conclusions.

Finally I have written a report containing the results of the market survey for Ekomuovi.

After that the company's management has been expected to decide for itself the way to continue exchanges, to arrange meetings and to discuss further co-operation with new potential customers.

## 6.2 Selection of Respondents

All in all, during this research more than 150 contacts of companies operating in Russian case regions have been found in Internet using different search engines. A list of all companies in alphabetical order is presented in Appendix 4.

In total, telephone interviews have been conducted with representatives of 148 companies that operate mainly in Saint Petersburg and Moscow regions including:

- companies that provide water supply and its maintenance;
- companies that provide water cleaning systems;
- companies that provide sewage engineering;
- companies that provide utility systems;
- construction companies;
- companies that provide pipes and fittings;
- companies that provide protective coating services;
- companies that provide industrial ventilation and gas cleaning equipment.

The initial results presented in Table 2 indicate that the biggest potential for Eko-muovi in Russia is the water treatment market. According to data obtained from different business directories, there are 245 companies that provide water supply and water treatment in Saint Petersburg and the Leningrad region, and 466 companies in Moscow and the Moscow region.

It should be mentioned that companies are generally presented in most business directory sections without identification of the companies' specifics. The majority of listings are plain and contain only the name, phone number and/or website of the company.

A majority of the companies in these fields run their own Internet websites with information about their activities. These websites have been studied during the market research in order to reveal the companies' particular activity. At the next

stage the selected companies have been interviewed. Some companies that do not possess their own websites have been also interviewed.

It might be important to notice that many companies mentioned in the above sectors run various activities. So, they are mentioned in several sections of TD. For example, JAMA Engineering is mentioned in at least five sections of Saint Petersburg YP as a company that provides water supply and sewerage as well as water purification systems, vacuum sewer systems, also gas boilers and heating units as well as ventilation systems. Besides, some companies operate in Saint Petersburg as well as in Moscow and they have their representative offices in many regions.

TABLE 2. Amount of companies in Saint Petersburg/Leningrad region and Moscow/Moscow region listed in the Yellow Pages Telephone Directory sections

The Yellow Pages section	Saint Petersburg and Leningrad region	Moscow and Moscow region
Water supply and water treatment	245	466
Water supply and sewerage	81	204
Utility systems, engineering	191	115
Construction companies	881	936
Public utility (housing services)	614	162
Water cleaning equipment	80	152
Ventilation systems	266	428
Protective coatings	56	35
Pipes and pipe fittings	217	290

### 6.3 Potential Customers

In accordance to the range of products/services Ekomuovi Oy provides, 154 companies have been found using different search engines. The representatives of 148 companies have been interviewed with the aim to learn their attitude concerning Ekomuovi proposals. As can be seen in Figure 8, the majority of the

companies interviewed operate in the city of Saint Petersburg and Leningrad region (N=117), less than a quarter are based in Moscow (N=24), and 9 companies operate in several other Russian cities.



FIGURE 8. Number of respondents, by cities

Among the companies mentioned above there are companies that provide water supply, water cleaning, water treatment, sewage engineering, utility systems, protective coating services and surface treatment, industrial ventilation and gas cleaning.

The companies participating in the survey can be roughly sorted by activities as presented in Figure 9.

It is important to mention that e-mails including presentation materials and the business proposal of Ekomuovi have been sent as personal appeal letters to responsible persons of companies separately, to prevent Ekomuovi's ads from being classified as spam.

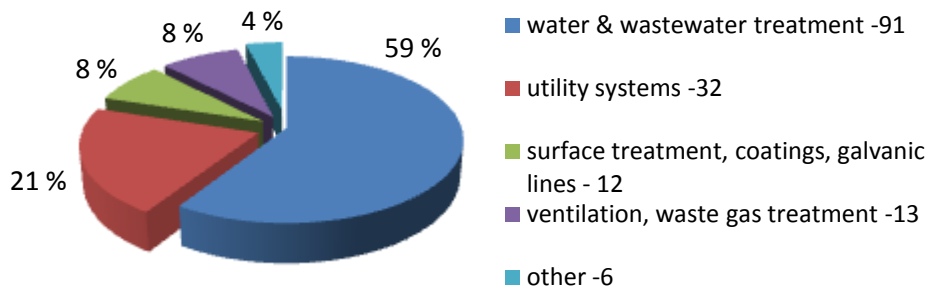


FIGURE 9. Rough classification of companies by activities (N=154)

The results of this survey are as follows:

Having studied Ekomuovi's business proposal, 23 companies (16%) out of 148 interviewed have showed an interest in a partnership with the Finnish company. Among them there are 13 companies that operate in the field of water treatment, one company that provides protective coating services, seven companies that provide utility systems and two companies that operate in the field of industrial ventilation and gas cleaning, as shown in Figure 10.

In general, would your company be interested in Ekomuovi's offer? (Percent of respondents, N=148)

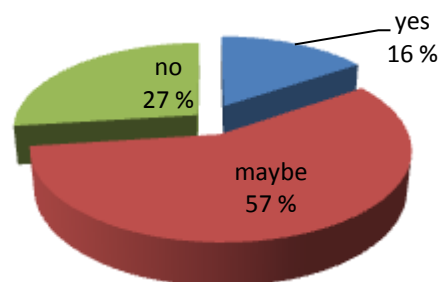


FIGURE 10. The response percentage for answers "yes, maybe, no"

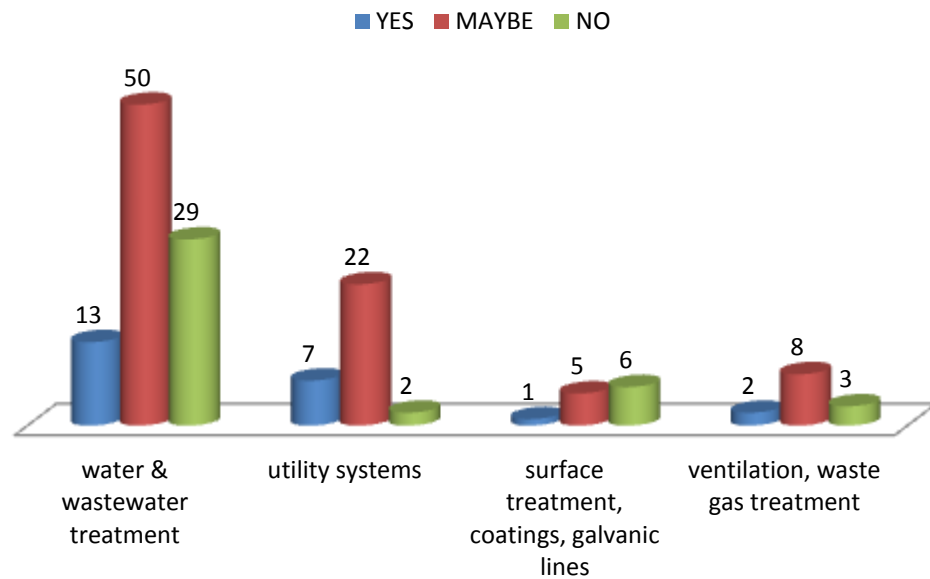


FIGURE 11. Number of respondents by field of operation (N=148)

In total, 13 companies operating in the water treatment sector out of 91 companies interviewed as potential partners, including three companies-competitors considering a partnership, show an interest in Ekomuovi proposals and are ready to have negotiations with Finnish company representatives. There are also seven companies out of 32 providing utility system services that express very positive attitude and readiness for having negotiations. Altogether, 20 positive answers out of 123 can be considered a relatively good starting point.

About a half of water sector companies (54%) and 71% utility system providers among all interviewed, are not ready to negotiate currently, but consider the cooperation possible “in principle”. They promised to keep Ekomuovi’s contact information in the company’s database to come in touch later on their own in case of possible further projects. Ad materials together with the business proposal have been delivered to the companies by e-mail.

The results, analysed in accordance to the basic fields of activity and the area of operation, are presented in Figures 12 and 13 respectively. As one can see, there are significantly more positive responses gained from Saint Petersburg (17%) compared to Moscow (7%).

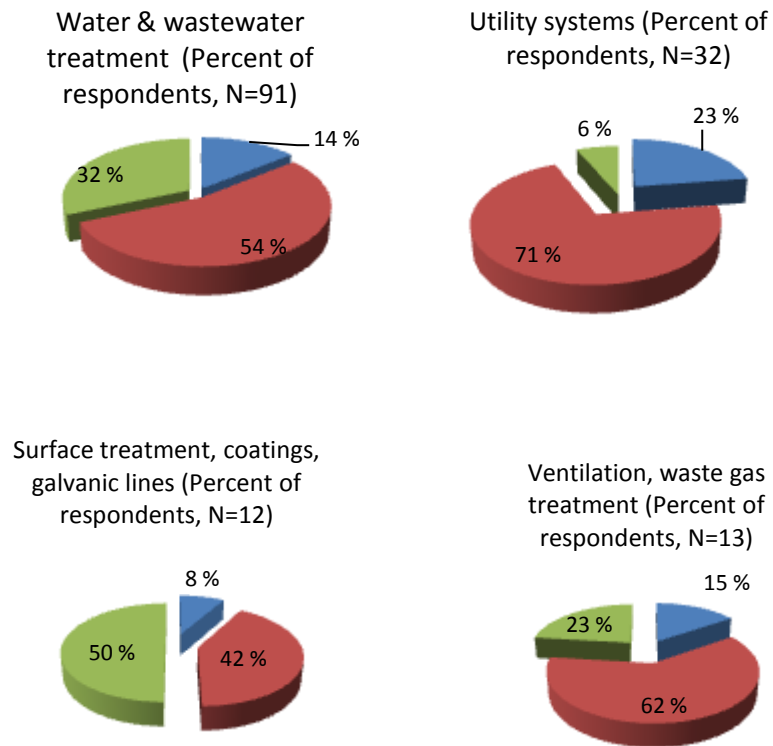


FIGURE 12. The percentage of respondents sorted according to the basic fields of activity.

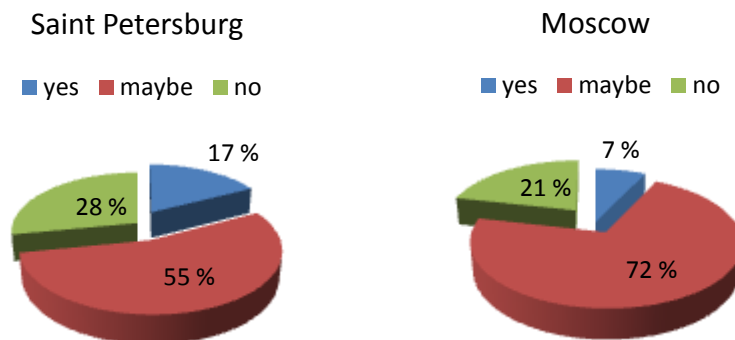


FIGURE 13. The percentage of respondents sorted by area

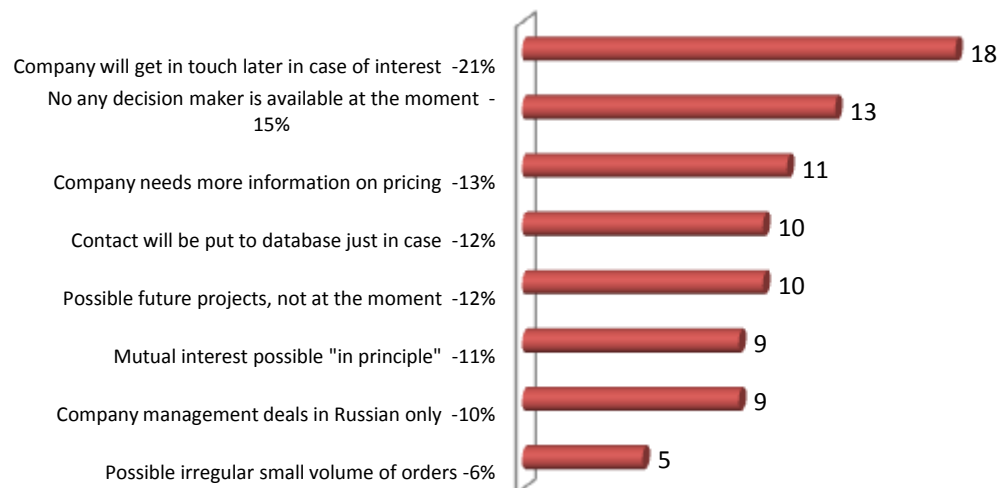


FIGURE 14. The most common reason of the “Maybe” answer, number and per cent of respondents (N=85)

“We will get in touch later in case of interest” is the most common reason to postpone decision, and one fifth of respondents have answered that way.

“Our manager is absent now, leave your information and he/she will get in touch later in case of interest” is the second most popular answer, meaning almost the same as the previous one.

Taking into account the Russian mentality, by saying “Maybe later” a respondent generally means rather “no” than “yes”. While it may be true, nevertheless the results seem to be promising.

Indeed, only 9 out of 85 “maybe” respondents have reported having agreements with local partners only. However, they have never denied the possibility of cooperation with foreign companies as well.

Those 13 companies out of 85 that have required the price lists can be considered having a positive attitude. The next 10 companies reported having interest in further co-operation in the future.



All in all, the obtained results for the selection look optimistic even taking into account possible effects on the results such as mentioned by Kotler (2000, 103) errors and dishonesty of respondents.

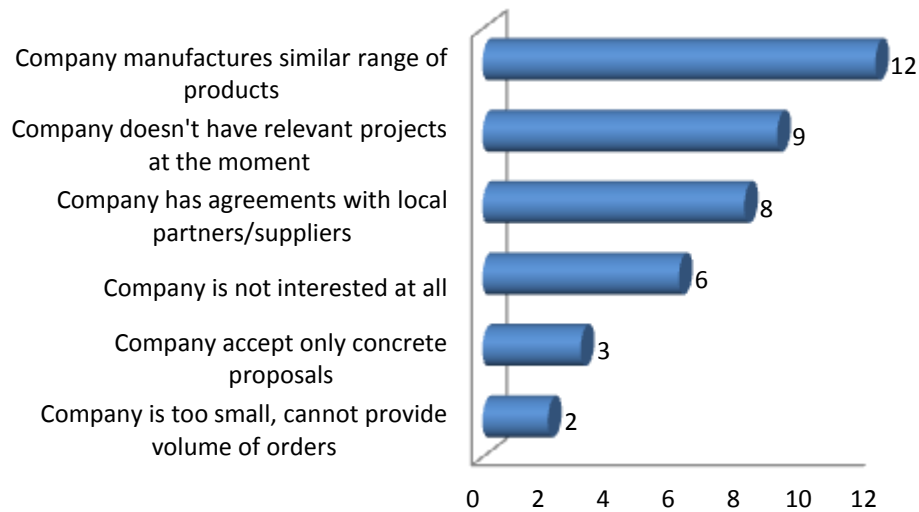


FIGURE 15. The most common explanation, following the "No" response (N=40)

#### 6.4 Competitive analysis

As can be seen in Figure 15, there are 12 companies that design and manufacture a range of products similar to Ekomuovi and provide similar services. However, it might be important to mention that in total 16 companies have been identified as competitors of the case company. These companies design, manufacture, install and maintain products from thermoplastics and fibreglass for water and wastewater treatment sectors, landfills, environmental technology and industries. Among them four companies have showed a big interest in Ekomuovi's proposal. Thus the case company can consider these four companies to be its possible partners.

Identifying competitors for analysis is not quite as obvious as it might seem. The demand-side based approach identifies companies by serving the same set of customer needs. The supply-side based approach identifies companies by resource base, technology, operations, and the like, to see, where they are similar to that of the case company.

The analysis may be an in-depth exploration of the top five competitors, or a larger number of competitors could be examined with less depth in the analysis.

Despite the commissioner's request to get all possible information, i.e. turnover, staff, references etc, only a few potential customers and competitors share their financial performance and annual reports in public.

Since financial information about companies is generally not available for public use in Russia, it is quite difficult to rank competitors according to their turnover or list of references. In this case, exploring competitor websites offers the only opportunity to examine what is working well for them, as well as what they offer via the Internet. The design of the competitor websites sets an immediate tone for the user experience, the level of professionalism, credibility, and usability.

(Withrow 2006.)

I have carried out the competitive analysis as an examination of a large number of websites, using a demand-side based superficial approach and taking into consideration the results of the interviews with representatives of the companies. Ranking in major search engines has also expanded into an examination of competitor's marketing efforts. My market survey has focused on comparisons of content and functionality of web pages for 16 companies offering plastic products for sewerage water systems in Saint Petersburg and Moscow that I consider noteworthy as competitors of Ekomuovi.

## 6.5 Internet Solutions for Business Promotion

During the thesis process, it became evident that many potential customers and competitors of Ekomuovi use social networking for promotion of their products, mostly Russian social network VK.com. Though Facebook's worldwide dominance is seemingly unstoppable, still, for a majority of Russians, it is just another option available. First of all, the company should provide its own website with up-to-date information. According to the results of my survey, a quarter of respondents have recommended the company to update their website with detailed information on the company's products available in the Russian language.

Furthermore, listings in Russian online business directories are an option. The top placement in the same market space in directories as well as in Google and Yandex (Russian search engine) is a definite advantage in attracting new users.

Promoting the business through online business directory listing is not free, but is a powerful tool to promote the company's products or services directly to a focused audience and to position the company among the leading providers.

The Russian Internet audience is growing together with the market growth. According to the Rosstat (2013), Russian Internet audience is 61 million in 2013 which is the largest one in Europe (13.6 per cent of all EU users). Russian is the second most widely used language in the Internet (in terms of websites' content). In 2012 there were 40 million users of mobile Internet in Russia (88 per cent growth compared to 2011).

While direct sales via the Internet of custom-made products seem somewhat complicated, yet promotion in Russian social networks, blogs, forums and niche sites can be quite fruitful.

## 6.6 Challenges in Conducting a Research

It is important to outline, that one of the challenges of carrying out market research in Russia is lack of relevant publications, i.e. analytical articles for public use. Compared to the USA, for example, where, according to Kotler (2000, 99) "the number of on-line government and business information sources is truly overwhelming and many offer information for free or a reasonable fee that should prove useful when conducting market research". The insufficiency of local publications has led to the use of the Western secondary sources, and has driven the necessity of primary data gathering.

Discovering many different search engines and sources to find out any relevant information consumes a plenty time. Some companies neither have their own websites nor even e-mail addresses available.

Many companies present themselves as specialists in different fields, offering too wide a range of different products, thus a classification of companies by activities and products is complicated for a non-expert.

Furthermore, the companies do not want to share any information to unknown people because do not trust strangers. Some secretaries do not introduce themselves, and then do not mention the CEO or other responsible persons' names either.

Lack of transparency can significantly affect the results and the reliability of this study. I also admit that some respondents can be dishonest. Some representatives have never been reached by phone, thus I could not obtain an opinion of an actual decision-maker. In this case, I have had to settle for an interview with a secretary.

The mailboxes of many companies have been full of spam leaving me no chance to send information by e-mail even in case of sending personal letters by prior arrangement. Some domains set limitations for mailing automatically.

When collecting and interpreting data, it has been a challenge to translate or transcribe the names and details of some companies into the English language.

Richness and diversity of the Russian language make interpreting technical information obtained from the websites and interviews quite complicated. Most of the Russian companies' websites provide information in Russian only. Only some have an English version. A language barrier is still an obstacle.

Lack of strong boundaries in research makes its implementation difficult and complicated. The scope of the market research should be limited more clearly.

In spite of the abovementioned difficulties, I find the research subject very topical. Moreover, I appreciate the opportunity to develop my skills as a researcher, and to expand my knowledge base in management and international trade.

## 7 FINDINGS AND CONCLUSIONS

The results of this research acknowledge that Russia's environment market is growing and a demand for relevant products of the case company is high, particularly in waste and wastewater treatment, waste management and energy efficiency. Construction industry and green building are also growing sectors with a high demand for energy efficient products and technologies, heating and utility systems.

Key market drivers are progressive legislation, the Russian Government financing programs and loans of World Bank and IFIs, increasing international investment, decentralisation and increasing privatisation of public facilities, growing awareness of environmental issues, and outworn water and sewerage facilities.

Finnish cleantech business growth and its environmentally friendly products and services should be exported more efficiently due to the limited opportunities presented by the domestic market.

Moscow and Saint Petersburg offer great perspectives for Finnish environmental expertise. Moreover, there are currently seven special economic zones in Russia and the number is growing. Besides, the governments of the Sverdlovsk Region, the Khanty-Mansi Autonomous District, the Republic of Tatarstan and some others regions develop effective business promotion models for small business support. Rising world energy and metal prices have increased the importance of the resource rich outlying regions of the country such as Northern Siberia.

The following conclusions can be drawn from the present study.

All in all, the environmental markets of Russia offer to Finnish cleantech businesses both opportunities and challenges. Summarising them, I pinpoint the general factors which are common for all segments of Russia's environmental market.

Opportunities:

- Russian authorities and industry have increased focus on environmental problems and they solve them by using advanced foreign technologies.

- Finnish companies are well known for their environmental know-how and respected for trustworthy, reliable and efficient operations.
- Many Russian companies lack experience and technologies; subsequently they need assistance in solving existing environmental problems.
- It is estimated that Russia must invest \$320 billion in residential and public buildings, industrial facilities, transportation, electricity, and heating systems to reach desired energy efficiency levels.
- Half of Russia's production assets are more than 25 years old.
- Russian environmental market is continuously growing with particularly high demand for waste and water management technologies and equipment.
- Domestic manufacturers only meet 40 per cent of Russia's demand for environmental technologies, making Russia an important market for foreign companies providing equipment and services for waste management, water treatment, air purification, and other environmental projects.
- Many Russian companies operating in the field are interested in Finnish innovations and are ready to co-operate in Saint Petersburg as well as in Moscow regions.

Notwithstanding the fact that the Russia's market is vast and receptive for the entry of Finnish businesses entry, a number of barriers still exist which may slow down or make the internationalisation to markets of Russia difficult.

#### Challenges:

- Factors restraining the private sector's investments such as high political and technical risks, cross-subsidisation, and inefficient tariffs on water and sewerage.
- Many legal regulations of environment aspects are developed but some are still incomplete.
- Potential corruption, bureaucracy and lack of transparency still exist.
- Intellectual property protection issues.
- Limited financial resources of utilities.
- The competition can be fierce.
- Culture differences, disparities and language barriers are still obstacles.
- Establishing trust and personal relationship consumes time and costs.
- Lack of respect and trust for organizations, distrust and fear of outsiders.

- Education of personnel is of very high standard while there is lack of familiarity with western business rules.

### 7.1 Suggestion for Further Research

This research has revealed many questions in need of further investigation.

Further research on exporting to Russian market is proposed to analyse the water and wastewater market deeper wherein a demand survey should be conducted separately for each segment and each potential region of exporting.

With such a wide range of products and services, the company should consider segmentation more thoroughly. Thus the company should divide marketing into smaller segments, to analyse them for separate marketing plans, and to carry out a separate market survey on demand for Ekomuovi's range for each group of products as to determine its own niche in the market.

It is necessary to take into account that reliability and validity of the survey can be sufficiently improved by properly made limitations prior to data collection and data analysis processes. Otherwise data collected can be contaminated due to lack of boundaries of research. Other problems I faced in the process of data collection should be taken into consideration as well.

As the next step I suggest that the waste treatment sector is investigated. This study has outlined the opportunities in the field of waste management. There are increasing demand for air purification equipment and landfill wells which are among the products of Ekomuovi.

Furthermore, I would recommend to the Finnish company to develop their internationalisation plan. Russia is regionally and functionally a diversified country with space for innovation. I advise the company to keep their eyes open also for the opportunities that may wait for the company away from the two megapolises, in the distant regions and special economic zones.

Carefully planning its business is a key to be successful and to be distinguished among the other companies in the Russia market.

## 7.2 Recommendations for Internationalisation

Along with specific knowledge of the situation, future, demand and competition environment of the target area an internationalising company should take into account business culture challenges.

Analysing continuously the Russian business environment is highly recommended, in order to be flexible, and to understand the Russian perspectives.

It might be necessary to invest in such critical success factors as language skills and cultural understanding. Since almost everything is based on personal contacts in Russia, it is quite important to make a good impression to a new potential customer.

A presence in the country is a must for successful sales. In direct exporting a co-operation with a reliable and experienced partner who knows the market and understands Russians definitely improves the chances of a successful export business. It is a critical step to find a trustworthy local representative, who is fully committed to the company and its products and responsible for acquiring new customers.

It is worth following the marketing efforts of the competitors, to learn their way of thinking, considering it a part of Russian business environment, even to copy them sometimes.

The company should use every opportunity for promotion of its products the Internet provides, to begin with updating its own website with detailed information in the Russian language.

During the interviews, it became evident that the demand for Finnish expertise is growing in many segments, and entering the Russian market of environmental technologies is considered possible and also successful notwithstanding the competition which is intense in the environmental sector.



Encouraged by the market opportunities, the case company needs to find its own niche and serious resource investments, to meet actual customers' needs, to be prepared to adapt to local business culture, and be ready for competition.

To summarise, entering and developing business in Russia is rewarding but it requires actual financial flexibility and serious human, capital and time resources together with a strong will to succeed.

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## APPENDICES

## APPENDIX 1

## The List of Russian Business Directories

<a href="http://www.abspb.ru/">http://www.abspb.ru/</a>	ABONENT- Business pages Saint Petersburg
<a href="http://www.allinform.ru/">http://www.allinform.ru/</a>	All Petersburg and All Russian regions
<a href="http://www.dp.ru/">http://www.dp.ru/</a>	Companies of Saint Petersburg
<a href="http://www.gde24.ru/">http://www.gde24.ru/</a>	Business directories of Russian regions
<a href="http://www.moscow.ucty.ru/">http://www.moscow.ucty.ru/</a>	Moscow city business directory
<a href="http://www.mpi.ru/">http://www.mpi.ru/</a>	Business portal of Moscow
<a href="http://www.org78.ru/">http://www.org78.ru/</a>	Companies of Saint Petersburg
<a href="http://www.portbiz.ru/">http://www.portbiz.ru/</a>	Free business portal of Russia
<a href="http://www.rb.ru/">http://www.rb.ru/</a>	Russian Business.ru
<a href="http://www.regorg.ru/">http://www.regorg.ru/</a>	RegTorg.ru - Russian regional business portal network
<a href="http://www.spb24.net/">http://www.spb24.net/</a>	Companies of Saint Petersburg
<a href="http://www.uspb.ru/">http://www.uspb.ru/</a>	Business portal of Saint Petersburg
<a href="http://www.yip.ru">http://www.yip.ru</a>	Yellow Pages

APPENDIX 2

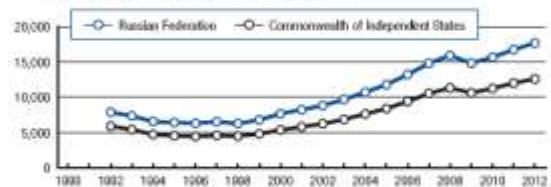
The Global Competitiveness Index of the Russian Federation (Schwab 2013)

# Russian Federation

## Key indicators, 2012

Population (millions)	143.0
GDP (US\$ billions)	2,022.0
GDP per capita (US\$)	14,247
GDP (PPP) as share (%) of world total	3.02

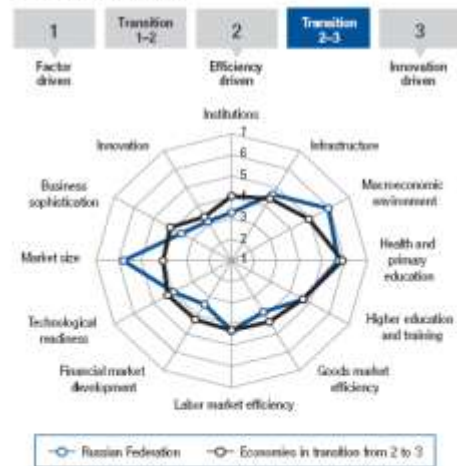
GDP (PPP) per capita (int'l \$), 1990-2012



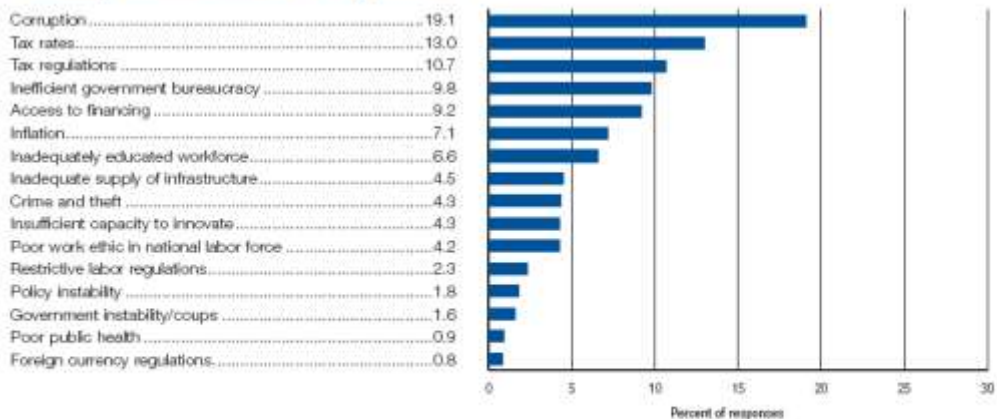
## Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
<b>GCI 2013-2014</b>	<b>64</b>	<b>4.2</b>
GCI 2012-2013 (out of 144)	67	4.2
GCI 2011-2012 (out of 142)	66	4.2
<b>Basic requirements (26.9%)</b>	<b>47</b>	<b>4.9</b>
Institutions	121	3.3
Infrastructure	45	4.6
Macroeconomic environment	19	5.9
Health and primary education	71	5.7
<b>Efficiency enhancers (50.0%)</b>	<b>51</b>	<b>4.3</b>
Higher education and training	47	4.7
Goods market efficiency	126	3.8
Labor market efficiency	72	4.3
Financial market development	121	3.4
Technological readiness	59	4.0
Market size	7	5.8
<b>Innovation and sophistication factors (23.1%)</b>	<b>99</b>	<b>3.3</b>
Business sophistication	107	3.6
Innovation	78	3.1

## Stage of development



## The most problematic factors for doing business



# Russian Federation

## The Global Competitiveness Index in detail

INDICATOR	VALUE	RANK/148	INDICATOR	VALUE	RANK/148
<b>1st pillar: Institutions</b>			<b>6th pillar: Goods market efficiency (cont'd.)</b>		
1.01 Property rights .....	3.0	133	6.06 No. procedures to start a business* .....	8	88
1.02 Intellectual property protection .....	2.9	113	6.07 No. days to start a business* .....	18	78
1.03 Diversion of public funds .....	2.5	113	6.08 Agricultural policy costs .....	3.0	134
1.04 Public trust in politicians .....	2.7	84	6.09 Prevalence of trade barriers .....	3.8	124
1.05 Irregular payments and bribes .....	3.2	109	6.10 Trade tariffs, % duty* .....	9.4	103
1.06 Judicial independence .....	2.7	119	6.11 Prevalence of foreign ownership .....	3.4	132
1.07 Favoritism in decisions of government officials .....	2.6	111	6.12 Business impact of rules on FDI .....	3.6	121
1.08 Wastefulness of government spending .....	2.8	99	6.13 Burden of customs procedures .....	3.3	124
1.09 Burden of government regulation .....	2.9	120	6.14 Imports as a percentage of GDP* .....	21.6	139
1.10 Efficiency of legal framework in settling disputes ...	3.0	118	6.15 Degree of customer orientation .....	4.1	113
1.11 Efficiency of legal framework in challenging regs. ...	2.8	120	6.16 Buyer sophistication .....	3.6	57
1.12 Transparency of government policymaking .....	3.8	101	<b>7th pillar: Labor market efficiency</b>		
1.13 Business costs of terrorism .....	4.7	112	7.01 Cooperation in labor-employer relations .....	3.9	112
1.14 Business costs of crime and violence .....	4.5	80	7.02 Flexibility of wage determination .....	5.3	41
1.15 Organized crime .....	4.2	111	7.03 Hiring and firing practices .....	3.9	77
1.16 Reliability of police services .....	3.0	122	7.04 Redundancy costs, weeks of salary* .....	17.3	85
1.17 Ethical behavior of firms .....	3.7	101	7.05 Effect of taxation on incentives to work .....	3.0	122
1.18 Strength of auditing and reporting standards .....	4.0	107	7.06 Pay and productivity .....	4.2	46
1.19 Efficacy of corporate boards .....	4.3	98	7.07 Reliance on professional management .....	3.8	105
1.20 Protection of minority shareholders' interests .....	3.3	132	7.08 Country capacity to retain talent .....	2.8	112
1.21 Strength of investor protection, 0-10 (best)* .....	4.7	100	7.09 Country capacity to attract talent .....	3.0	97
<b>2nd pillar: Infrastructure</b>			7.10 Women in labor force, ratio to men* .....	0.87	41
2.01 Quality of overall infrastructure .....	3.8	93	<b>8th pillar: Financial market development</b>		
2.02 Quality of roads .....	2.5	136	8.01 Availability of financial services .....	4.1	91
2.03 Quality of railroad infrastructure .....	4.2	31	8.02 Affordability of financial services .....	3.8	95
2.04 Quality of port infrastructure .....	3.9	88	8.03 Financing through local equity market .....	3.1	90
2.05 Quality of air transport infrastructure .....	3.9	102	8.04 Ease of access to loans .....	2.9	68
2.06 Available airline seat km/week, millions* .....	3,506.5	11	8.05 Venture capital availability .....	2.6	70
2.07 Quality of electricity supply .....	4.5	83	8.06 Soundness of banks .....	4.0	124
2.08 Mobile telephone subscriptions/100 pop.* .....	183.5	6	8.07 Regulation of securities exchanges .....	3.6	102
2.09 Fixed telephone lines/100 pop.* .....	30.1	38	8.08 Legal rights index, 0-10 (best)* .....	3	118
<b>3rd pillar: Macroeconomic environment</b>			<b>9th pillar: Technological readiness</b>		
3.01 Government budget balance, % GDP* .....	0.4	23	9.01 Availability of latest technologies .....	4.0	124
3.02 Gross national savings, % GDP* .....	28.5	32	9.02 Firm-level technology absorption .....	3.9	126
3.03 Inflation, annual % change* .....	5.1	91	9.03 FDI and technology transfer .....	3.7	125
3.04 General government debt, % GDP* .....	10.9	10	9.04 Individuals using Internet, %* .....	53.3	62
3.05 Country credit rating, 0-100 (best)* .....	65.9	39	9.05 Fixed broadband Internet subscriptions/100 pop.* .....	14.5	46
<b>4th pillar: Health and primary education</b>			9.06 Int'l Internet bandwidth, kb/s per user* .....	32.9	52
4.01 Business impact of malaria .....	N/Appl.	1	9.07 Mobile broadband subscriptions/100 pop.* .....	52.9	25
4.02 Malaria cases/100,000 pop.* .....	(NE)	1	<b>10th pillar: Market size</b>		
4.03 Business impact of tuberculosis .....	5.5	74	10.01 Domestic market size index, 1-7 (best)* .....	5.7	8
4.04 Tuberculosis cases/100,000 pop.* .....	97.0	94	10.02 Foreign market size index, 1-7 (best)* .....	6.1	7
4.05 Business impact of HIV/AIDS .....	5.6	65	10.03 GDP (PPP\$ billions)* .....	2,513.3	6
4.06 HIV prevalence, % adult pop.* .....	1.00	107	10.04 Exports as a percentage of GDP* .....	29.1	101
4.07 Infant mortality, deaths/1,000 live births* .....	9.8	58	<b>11th pillar: Business sophistication</b>		
4.08 Life expectancy, years* .....	69.0	101	11.01 Local supplier quantity .....	4.3	109
4.09 Quality of primary education .....	4.1	61	11.02 Local supplier quality .....	3.9	111
4.10 Primary education enrollment, net %* .....	93.4	79	11.03 State of cluster development .....	3.1	124
<b>5th pillar: Higher education and training</b>			11.04 Nature of competitive advantage .....	3.1	102
5.01 Secondary education enrollment, gross %* .....	88.6	75	11.05 Value chain breadth .....	3.2	114
5.02 Tertiary education enrollment, gross %* .....	75.9	14	11.06 Control of international distribution .....	3.7	105
5.03 Quality of the educational system .....	3.5	85	11.07 Production process sophistication .....	3.3	105
5.04 Quality of math and science education .....	4.3	56	11.08 Extent of marketing .....	3.9	90
5.05 Quality of management schools .....	3.6	113	11.09 Willingness to delegate authority .....	3.5	96
5.06 Internet access in schools .....	4.6	54	<b>12th pillar: Innovation</b>		
5.07 Availability of research and training services .....	4.1	76	12.01 Capacity for innovation .....	3.5	64
5.08 Extent of staff training .....	3.8	88	12.02 Quality of scientific research institutions .....	3.7	65
<b>6th pillar: Goods market efficiency</b>			12.03 Company spending on R&D .....	3.1	69
6.01 Intensity of local competition .....	4.5	113	12.04 University-industry collaboration in R&D .....	3.6	64
6.02 Extent of market dominance .....	3.5	93	12.05 Gov't procurement of advanced tech products .....	3.1	108
6.03 Effectiveness of anti-monopoly policy .....	3.5	116	12.06 Availability of scientists and engineers .....	3.8	90
6.04 Effect of taxation on incentives to invest .....	3.0	125	12.07 PCT patents, applications/million pop.* .....	6.1	43
6.05 Total tax rate, % profits* .....	54.1	124			

## APPENDIX 3

## Moscow and St. Petersburg as Megacities: Main Indexes and Facts

	MOSCOW (Excluding New Moscow)	SAINT PETERSBURG
Territory, sq.km	1100	1439 incl. the suburbs
Population, 2013, million people	10.4 officially 20 including migrants (tourists)	5.03 officially 2.7 economically active (2012) 7.5 including migrants (tourists)
Population in 2020, million people	(+13 % ) 11.3-12.3 officially up to 30 including migrants	(+10 % ) 5.5 officially 8.25 including migrants
Unemployment rate	0.81%	1.14 %
population density, 2013 person/sq.km	10383	3288
GRP	\$520 billion in 2012 (share national GDP 20.49%), per capita \$44,774	\$68 billion in 2012, per capita \$13,750
Current situation, 2013	<p>The largest financial, international and business centre. Chemical, metallurgy, food, textile, furniture, energy production, software development and machinery industries. 17% of retail sales in Russia and for 13 per cent of all construction.</p> <p>Moscow's capacity to undertake necessary improvements in core utility, social, and transport infrastructure is aided by its high investment capacity.</p> <p>One of the most world's wealthy city governments: city budget for 2013 \$50 billion (1.5 trillion RUR) Profit tax, personal income tax, and excises, are fully regulated by federal legislation, contribute up to 80% cent of operating revenue. Oil and gas tax payments -15 % of city revenues</p> <p>Hub and spoke business</p>	<p>Europe's 4th largest city, trade gateway to Scandinavia → Europe. Water gateway : the Neva River → the Gulf of Finland → the Baltic Sea. Large number of international corporations and banks</p> <p>Ranked 1st among other Russian regions according to the number of SME per 100 000 residents</p> <p>Economic growth in 2012 accounted for 12.5%</p> <p>Financial and industrial centre of Russia,</p> <p>Scientific and educational centre, information technology leader</p> <p>2nd highest per capita income in Russia with rising incomes</p> <p>Leading industries: Machinery, vehicle and equipment manufacturing, electronic and optical equipment, food, including beverages and tobacco; metallurgy</p>

	<p>operating model, Diverse and dynamic socio- economic mix, TechSavvy citizens connected 24/7</p> <p>Mega-corridors: Moscow – St. Peterburg, Moscow – Nizhny Novorod</p> <p>Use 7 mln m3 of fresh water per day: 81%-population (400 litres/person), 11%- industry, 8 % - municipal needs</p>	<p>and metalworking; chemical production.</p> <p>Priority sectors/clusters:</p> <p>Automotive, pharmaceutical, shipbuilding, power plant engineering, information technology, radiology, electronic engineering.</p> <p>Technological Innovation centre in Strelna, Saint Petersburg SEZ</p> <p>Main trade partners: China 13.6, Germany 9.9 , Finland 7, Netherlands 6.8, UK 6.3%</p>
Scenarios / strategy of development – 2020 vision	<p>National and International Financial Services Centre: 25-30per cent of Russia’s GDP will be produced in Moscow (2025)</p> <p>20per cent of Russian population will live in Moscow agglomeration</p> <p>The city will grow 2.5 times (Big Moscow, + New Moscow :1600 sq. km)</p> <p>Skolkovo – “future/ideal town”: 4E principles: ecological soundness, ergonomic efficiency, energy efficiency, and economic efficiency.</p> <p>150 km of new tracks and 70 stations will be opened in Moscow Metro</p> <p>Global economic force on its own</p>	<p>Centre of high-tech industry: 50per cent of GRP – industry and related services (including R&amp;D 6per cent - engineering, software development, etc.)</p> <p>Increasing of environmental security</p> <p>Major investments in healthcare infrastructure</p> <p>Growth in prosperity (highly-paid working positions (increasing of salary on 100per cent)</p> <p>Development of attractive urban environment</p> <p>Strengthen the status of cultural center (education, culture, tourism)</p> <p>The first region by investment climate “High potential - moderate risk”</p> <p>The second region by investment potential</p>