



Market prioritization
within
Water and Waste Water Treatment Technology

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Swedish Trade Council
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SUMMARY MARKET PRIORITIZATION WATER AND WASTE WATER TREATMENT TECHNOLOGY

- There are significant ongoing investments in water and waste water treatment world-wide, creating substantial opportunities for Swedish companies active in this field
- In order to shorten lead times to business for Swedish water and waste water treatment technology companies, the STC has conducted market checks of 30 markets in order to make a first prioritization, with following main findings:
 - Markets vary a lot in terms of market maturity: some markets carry out investments in basic treatment (i.e. new plants) others are upgrading current installations to advanced treatment (i.e. upgrading),
 - The EU-Directive for WWT has created a large demand in the countries following this standard. Markets concerned by these standards, that are currently at an investment peak are Portugal, Spain, the Baltic States and some Central European States (Poland, Czech Republic, Slovakia)
 - Regarding non-EU markets India, Brazil and Turkey are interesting upcoming markets while Australia and Chile are currently at an investment peak
 - China and Russia are markets that offer a vast potential. However entry barriers are perceived to be quite high. This is why special attention needs to be taken when entering these markets
- It was concluded that Spain and Portugal offer both high market attractiveness and quite low barriers to entry
 - another twelve markets with high potential and relatively low entry barriers have been identified
- Most other markets either have less attractive opportunities or somewhat higher barriers to entry
 - a prioritization among new markets depends a lot on the situation of each individual company

CONTENT

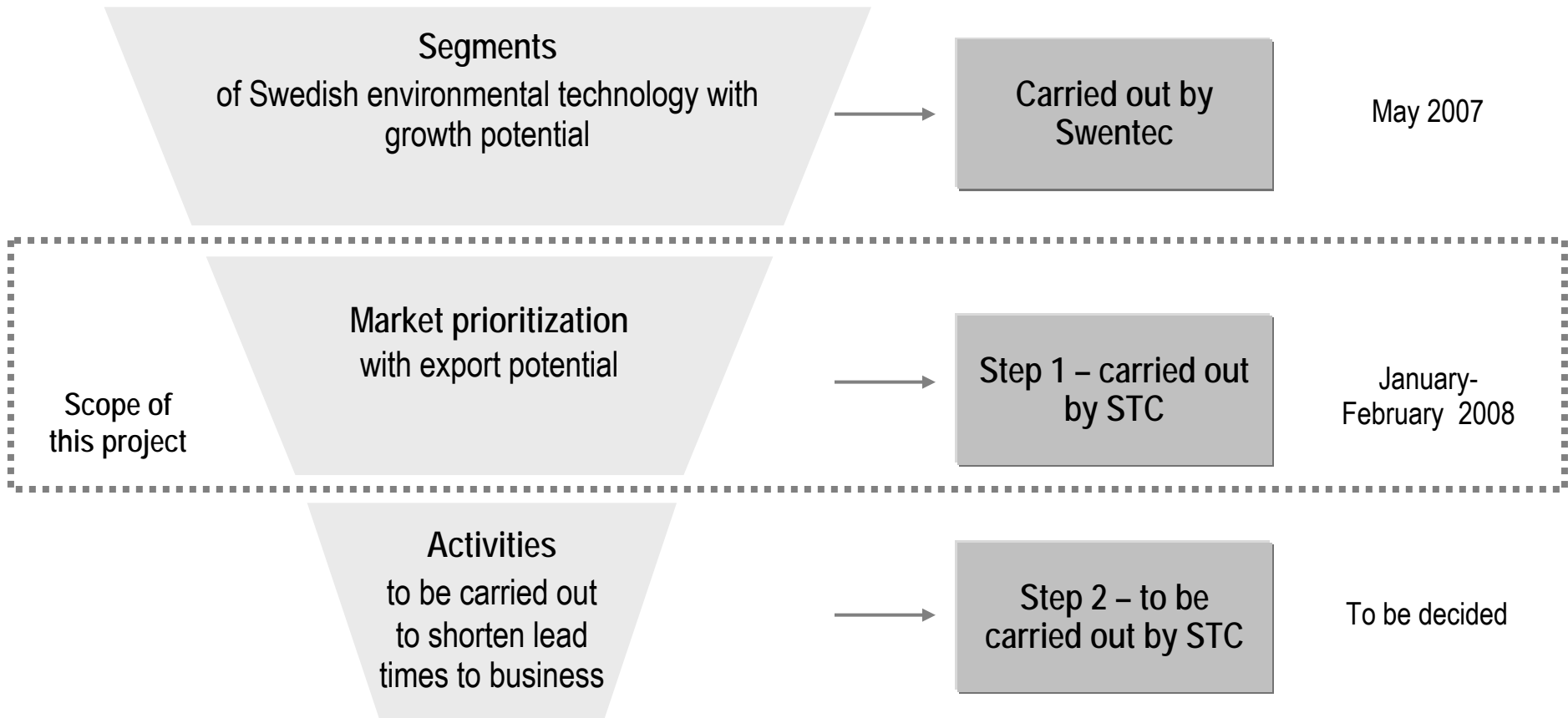
- Introduction
- Export market analysis
- Market prioritization
- Next steps
- Appendix

PROJECT BACKGROUND

- The issue of water as an indispensable resource has in recent years gained increased attention throughout the world. Global trends such as population increase, industry growth, climate change, increased water usage in agrarian production has led to an increase in the demand for water treatment technology throughout the world. Another more regional driving factor is given by the implementation of EU-standards in the EU and EU-candidate or affiliated countries.
- Swedish companies have a good position in water treatment, especially in sectors in which Swedish industry itself is strong, amongst others in the wood industry, iron and steel industry etc. This knowledge about water and waste water treatment can mainly be found among medium and small sized companies of which many have a good potential to export their products and services.
- In an assignment by the Swedish government, The Swedish Trade Council (STC) is promoting the export of Swedish companies within environmental technology (clean tech). Some specialized areas, where Sweden has been identified to hold a leading role have been prioritized by STC. The area of water and waste water treatment technology is one such a prioritized area.
- By supplying market information, analyses and action plans on selected most interesting markets, the STC is aiming to promote the export of Swedish companies from the area of water and waste water treatment technology and thus shorten the lead time to business for these companies. This study focuses on export opportunities outside the area of development-aid subsidized export projects. The following presentation is the result of a market prioritization and market checks carried out by STC in Q1 2008.

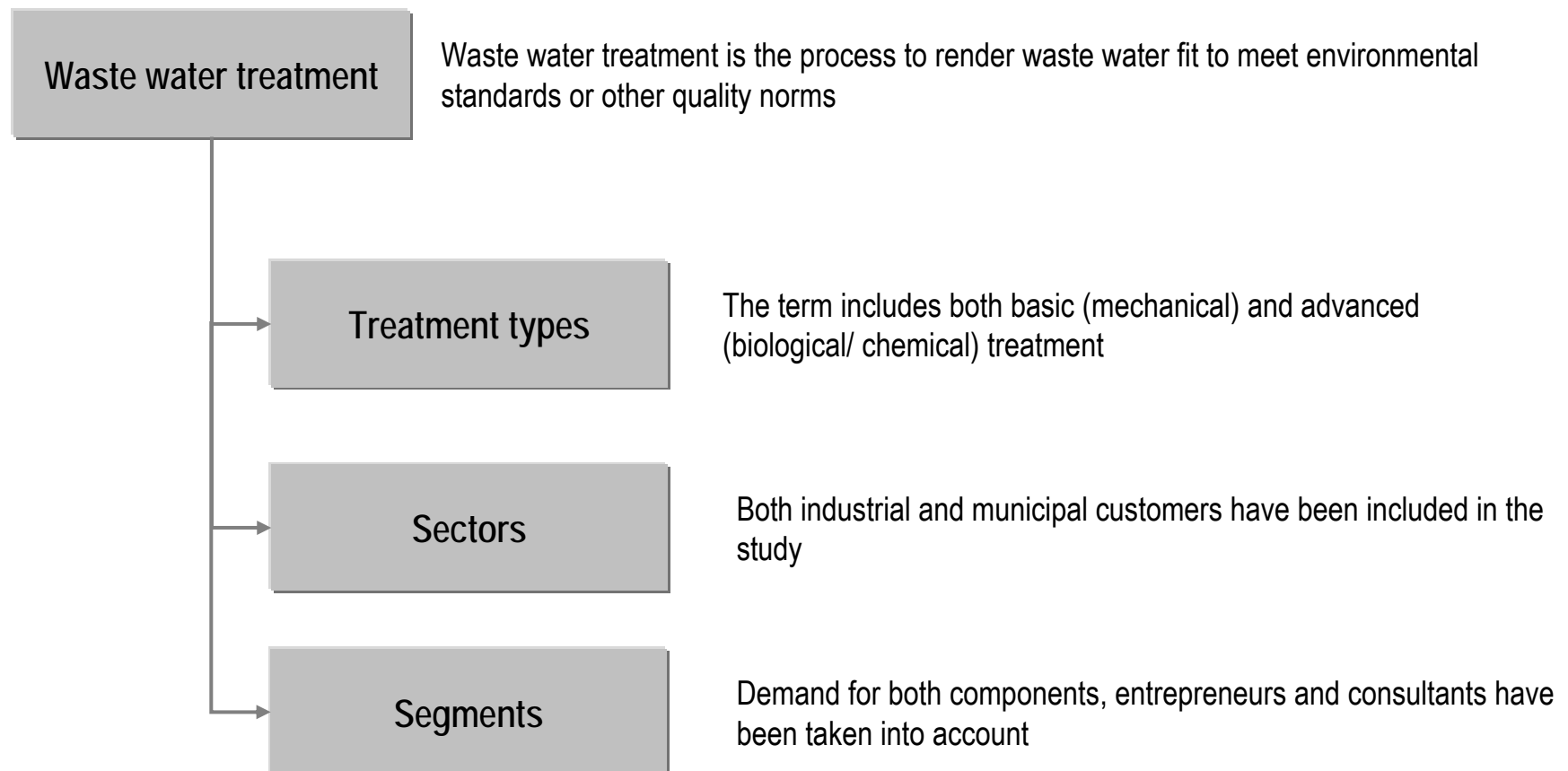


THIS PROJECT IS EMBEDDED INTO THE LARGER CONTEXT OF PROMOTION OF SWEDISH ENVIRONMENTAL TECHNOLOGIES





A BROAD DEFINITION OF THE WATER AND WASTE WATER TREATMENT MARKET WAS USED FOR THE STUDY



WHY PRIORITIZE?

- Focus and long term commitment are essential to success

Entering a new market requires a substantial commitment in terms of time and money especially in relation to the resources of small companies' resources

Before entering a new market the following factors need to be evaluated:

- Customer demand and buying criteria
- Technology level
- Access to financing
- Laws & regulations
- Local and international competition
- Business climate & culture

When entering a new market the following need to be created:

- Sales & distribution network
- Local references
- Customer contacts
- Brand recognition
- Local networks (Swedish companies, sub-suppliers, consultants, politicians, etc)

Substantial scale and learning curve effects exist per country

RELEVANT ORGANIZATIONS IN SWEDEN

SWENTEC

Swedish Environmental Technology Council

- Governmental initiated organization
- Mission of strengthening competitiveness and business opportunities of Swedish environmental technology companies
- Conducted a study mapping the competitive advantage of Swedish waste water companies

SWWA

Swedish Water and Wastewater Association

- Industry association for water and waste water treatment plant operators
- Mission to increase cooperation within economical, administrative and technological aspects

ASSET

The Association of Swedish Environmental Technology Industries

- Network of Swedish environmental technology companies
- Mission of supporting development of an internationally competitive Swedish environmental technology industry

VARIM

Swedish Suppliers of Effluent and Water Treatment Equipment

- Industry association for consultants, entrepreneurs and product specialists within WWT
- Mission of increasing cooperation both internally and externally, e.g. with governmental organizations

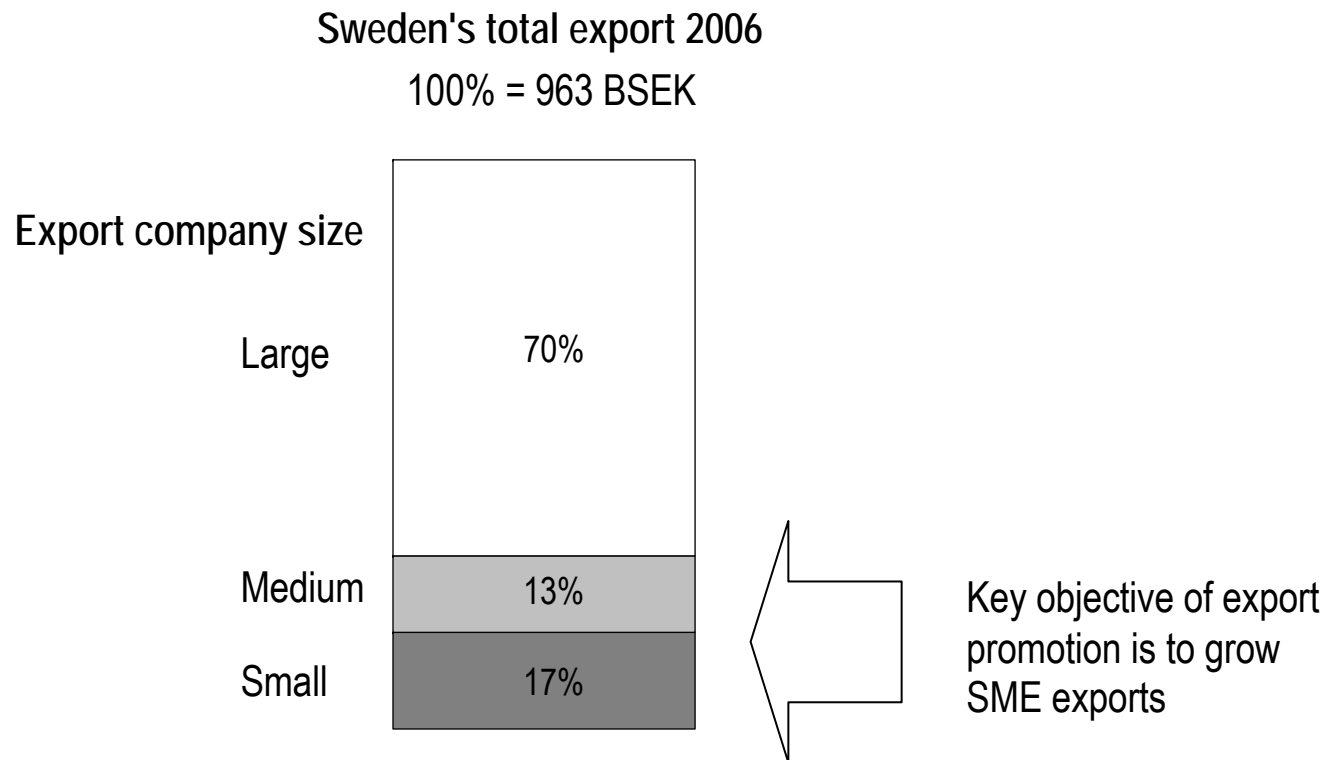
THE AIM OF THE PROJECT IS TO ENABLE SWEDISH COMPANIES TO INCREASE EXPORTS BY SEIZING BUSINESS OPPORTUNITIES

- This includes two sub objectives



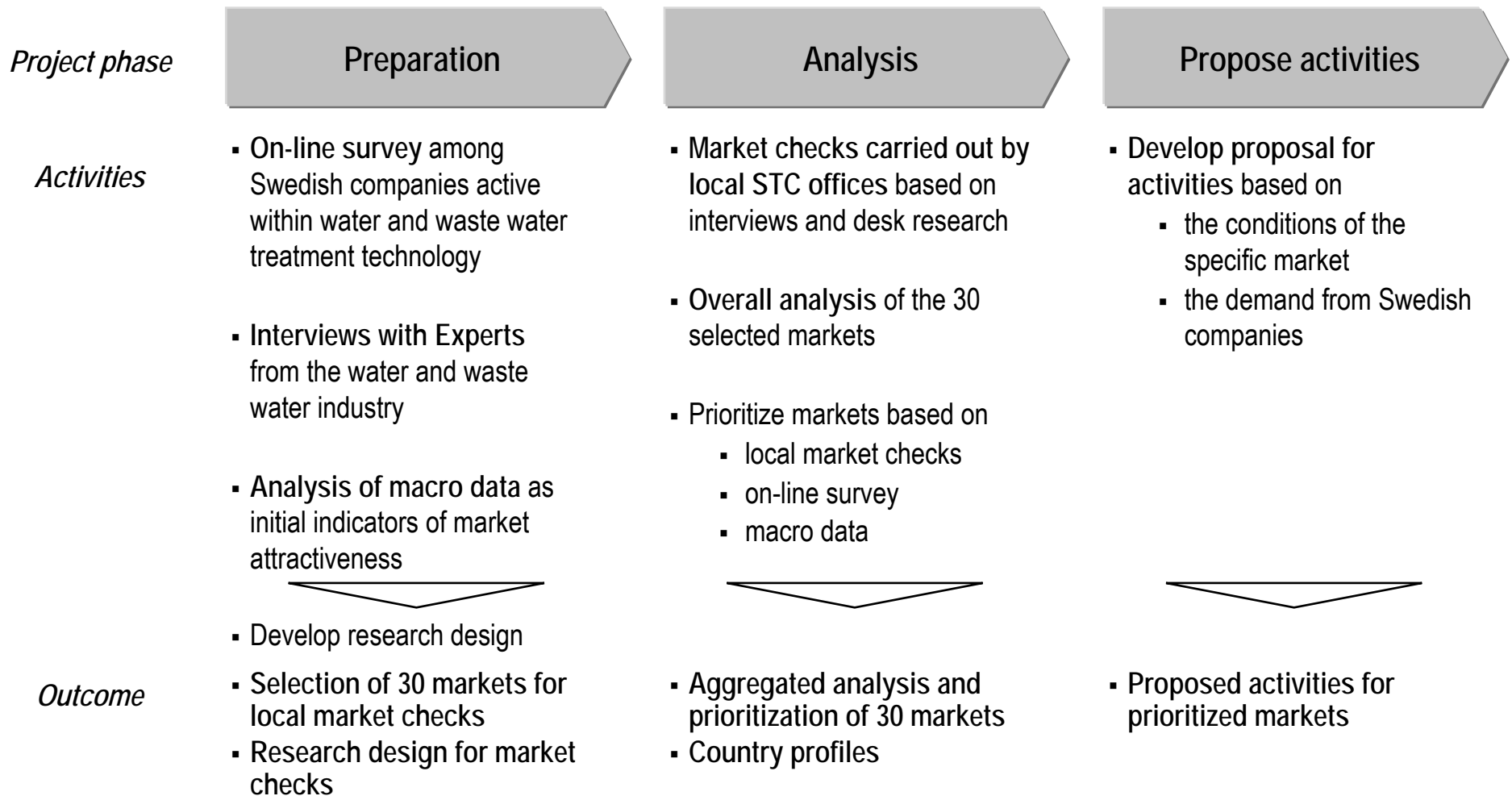
* This study does not include export opportunities financed by development-aid export projects

SWEDEN'S EXPORT IS DOMINATED BY LARGE COMPANIES – FOCUS OF THE PROJECT SHOULD BE OPPORTUNITIES FOR SME'S



However, the presence of large Swedish companies can help as a door opener for SME's

THE PROJECT IS DIVIDED INTO THREE STEPS

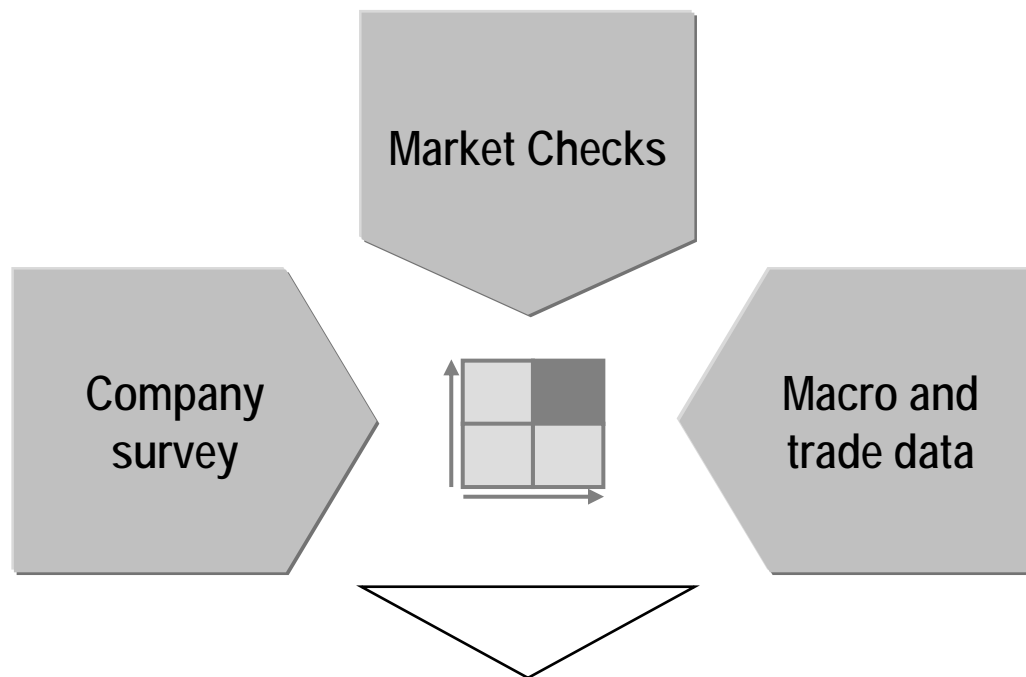


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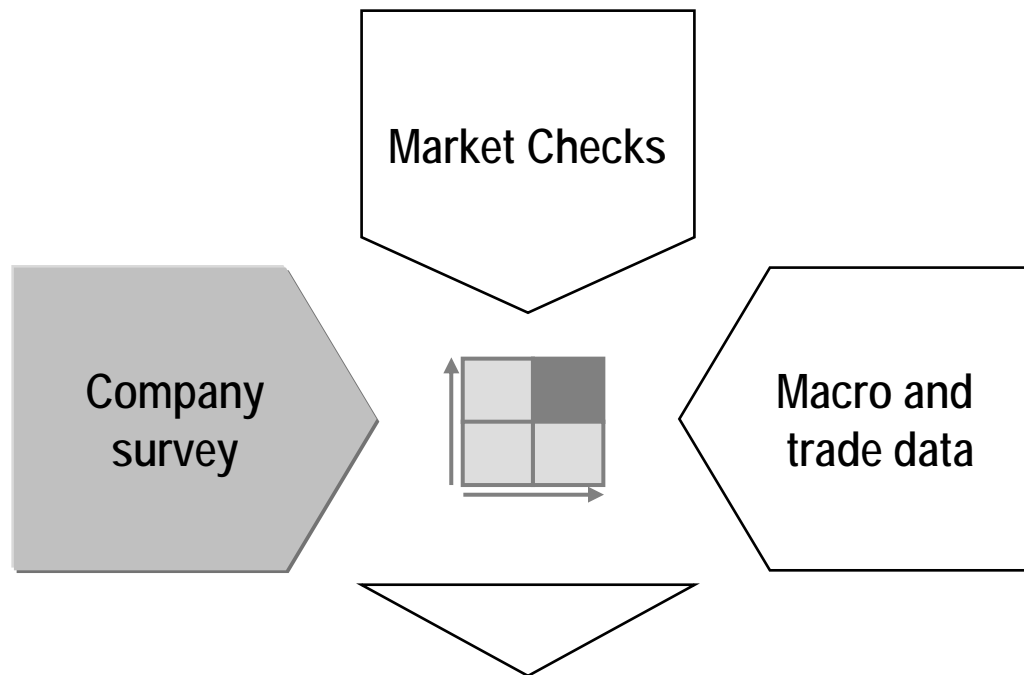
- Introduction
- Market analysis
 - The company perspective and trade data
 - Local market checks
- Market prioritization
- Next steps
- Appendix



THE PRIORITIZATION WAS BASED ON INPUT FROM THE COMPANIES, MARKET CHECKS AND ON TRADE DATA

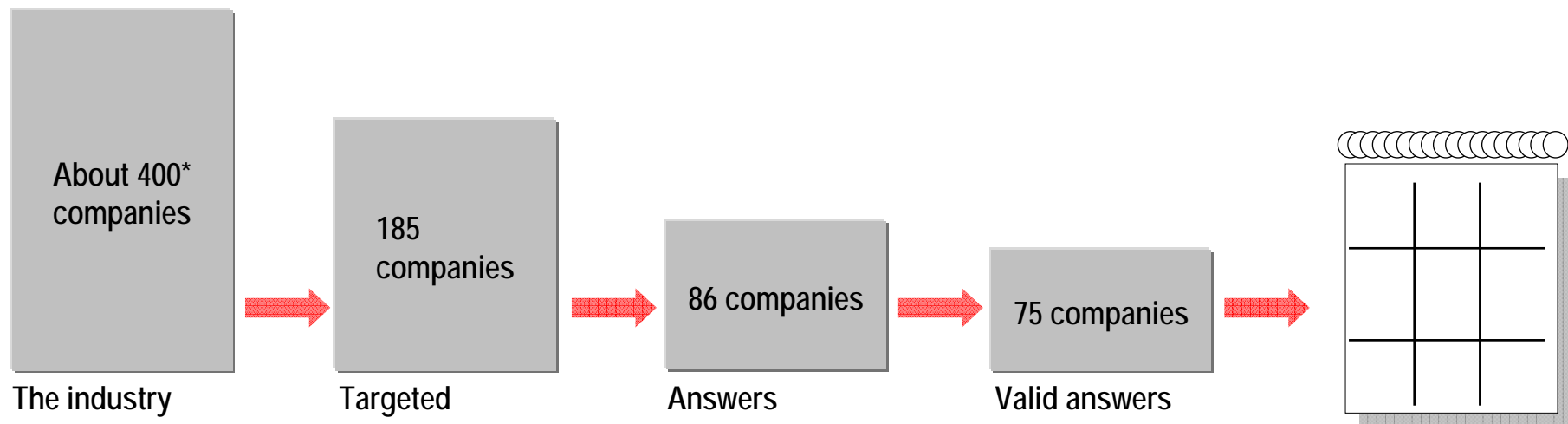


INFORMATION ABOUT PREFERRED EXPORT MARKETS COLLECTED BY A SURVEY AMONG SWEDISH COMPANY IN THE FIELD



Prioritization of markets

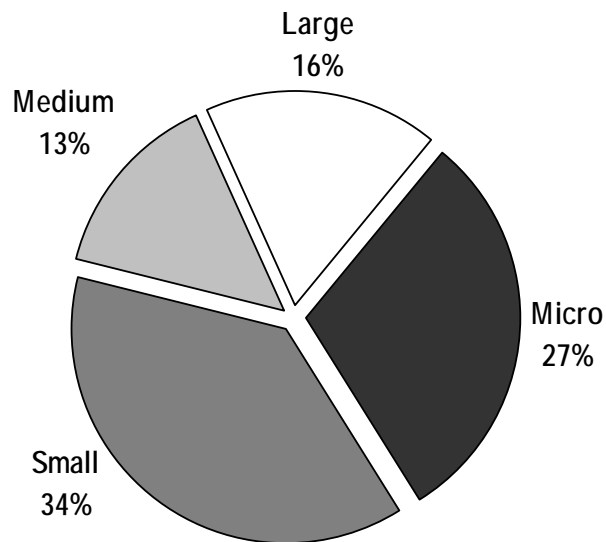
75 COMPANIES NAMED THEIR CURRENT AND PLANNED EXPORT MARKETS VIA AN ON-LINE SURVEY



A response rate of 50% indicates high commitment from respondents

THE SURVEY SAMPLE REPRESENTS ALL COMPANY SIZES AND ACTIVITIES OF THE INDUSTRY

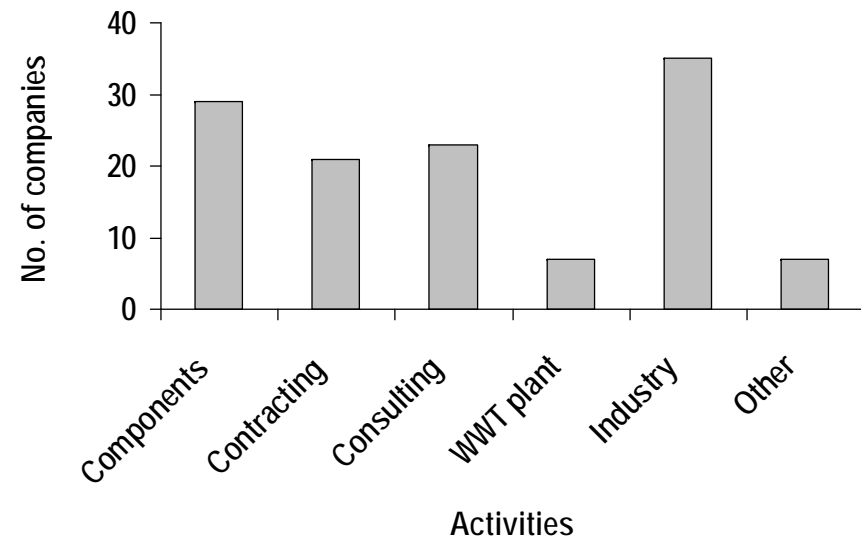
Company sizes



EU-definitions of company sizes (by turnover):

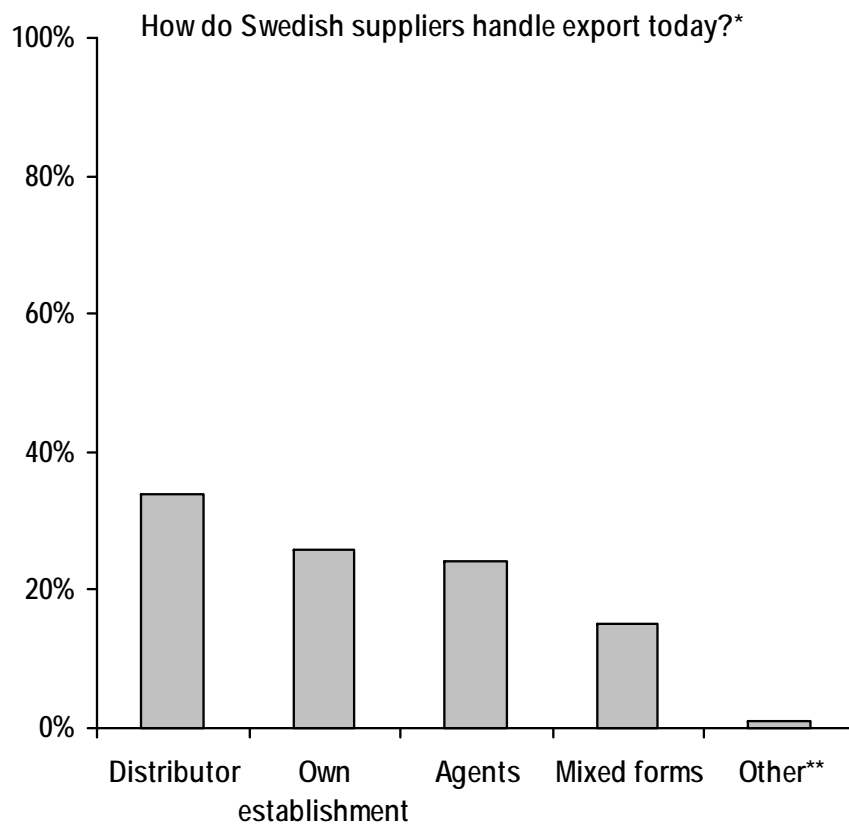
| | |
|------------------|--------------------|
| Micro: ≤ 2 MEUR | Medium: 10-50 MEUR |
| Small: 2-10 MEUR | Large: > 50 MEUR |

Core activities



The survey gives a good indication of expansion plans of the industry as whole

MOST SMALL SWEDISH COMPANIES WITHIN THE SEGMENT SELL VIA DISTRIBUTORS OR AGENTS



**e.g. Sales from another office, Joint-Venture

How are export markets reached today?

- Large companies and system suppliers usually prefer to work with own establishment
- Small and medium sized companies and specially suppliers of components usually work with resellers and partners
- Co-operations between large and small companies can be fruitful for small companies



THE PREFERENCES OF SWEDISH COMPANIES WERE BASIS OF SELECTION OF MARKETS FOR MARKET CHECKS

| | | | | |
|--|------|---|--|--|
| Companies wanting to establish business within 5 years | many | Russia, Ukraine | Canada, Czech Republic, Estonia, Hungary, India, Latvia, Lithuania, Slovakia | Denmark, Finland, Germany, Norway, Netherlands, Poland, Spain, UK, USA |
| | some | Argentina, Chile, Croatia, Mexico, Slovenia, Switzerland, Thailand | Brazil, Ireland, Portugal, Romania, South Africa, Turkey | Australia, Belgium, China, France |
| | few | Algeria, Egypt, Israel, Morocco, Namibia, New Zealand, Nigeria, Saudi Arabia, Taiwan, United Arab Emirates, Greece, Vietnam | Italy, Japan, Malaysia, South Korea | |
| | | few | some | many |
| | | Companies present today | | |

- Strong current presence on “classical” Swedish export markets, i.e. mostly near European markets
- New-EU members and East European countries seen as interesting new markets
- Generally low activity and interest in southern developing markets

-  Markets seen as especially interesting new export markets
-  Markets with strong presence of Swedish companies

INTERVIEWS WITH A NUMBER OF BRANCH EXPERTS PROVIDED FURTHER INPUT

- minor adjustment in the selection was made

"It can be difficult to make privatization initiatives of municipal waste water cleaning work properly. [...] One market, where privatization has worked well is Chile"
Lars-Ingvar Nilsson, former CEO Purac

"Initially the new EU member states can be regarded as interesting export markets. However you have to assess the real demand by analyzing country by country how the laws and regulation are applied locally"

**Olle Hammarström, President,
Föreningen Svensk Miljöteknik (ASSET)**

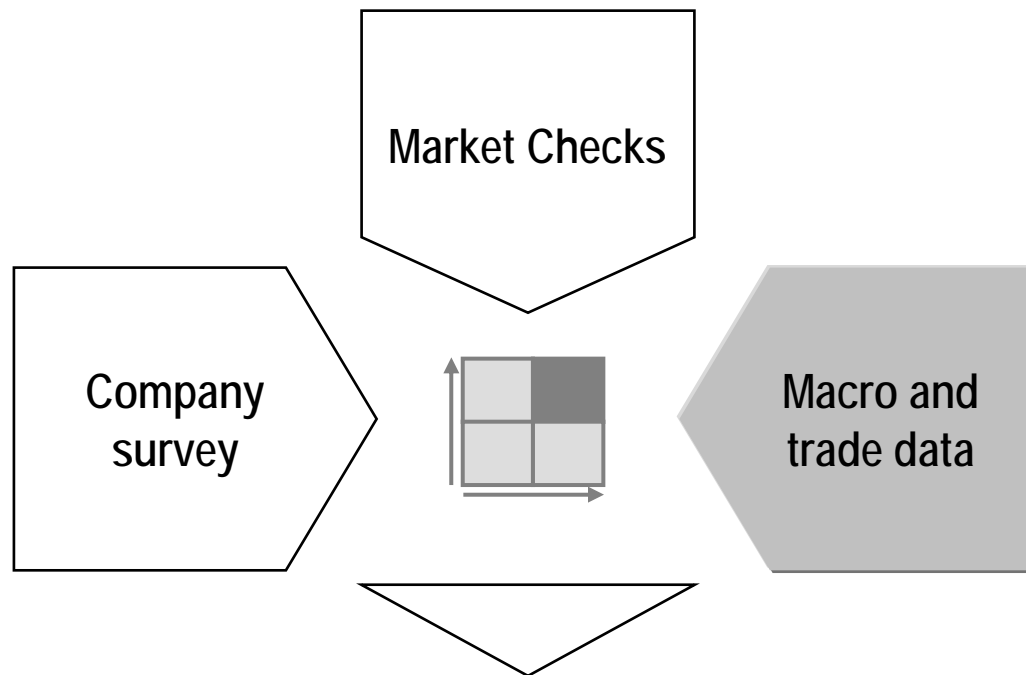
"Generally you can say the larger the market, the higher the number of international competitors present. So it could be that smaller markets are more interesting for mid-sized Swedish companies"

**Leif Nilsson, Sales manager,
Malmberg Water**

"On some markets, e.g. France and Germany, too many large and strong companies are established, making an entry very difficult."

**Roger Bergström, CEO, Swedish
Water & Wastewater Association**

MACRO AND TRADE DATA GAVE FURTHER INPUT ON MARKETS WITH CURRENT EXPORT POTENTIAL



Prioritization of markets



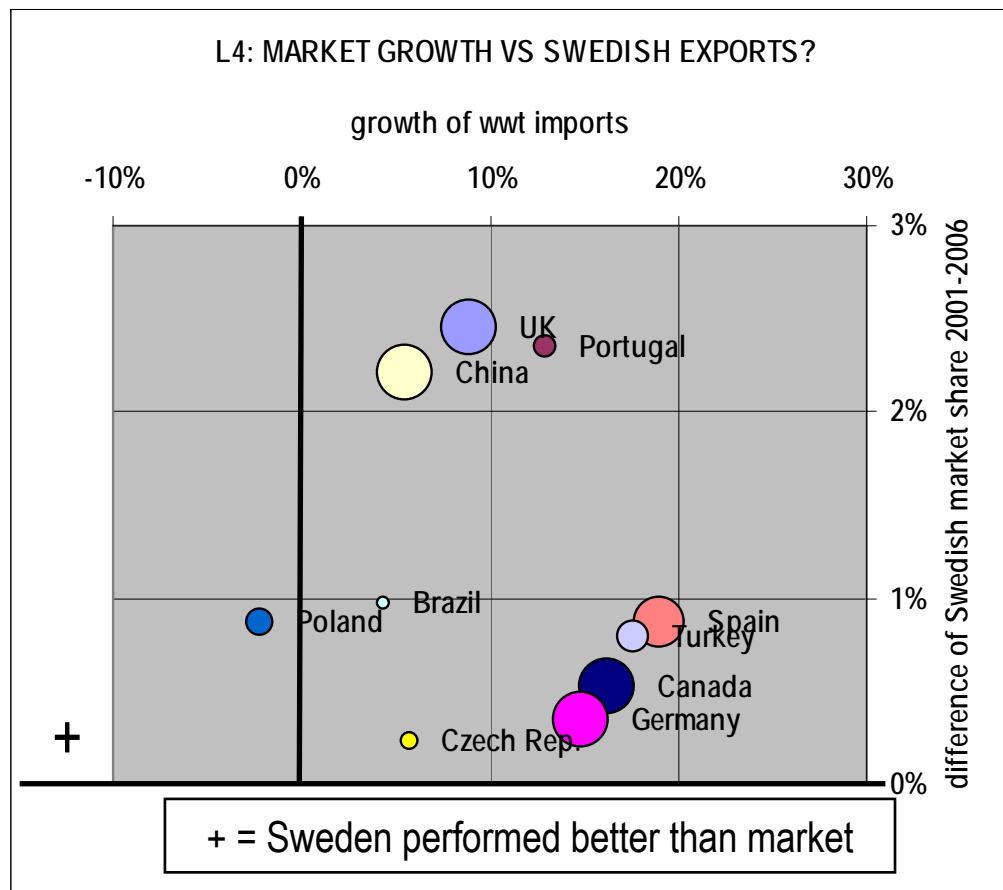
RECOMMENDATIONS FROM THE ANALYSIS OF TRADE FIGURES: FOCUS ON GROWTH MARKETS WHERE SWEDEN IS STRONG

- Emerging markets like India, Russia but also Romania and Croatia have the most dynamic growth
- Sweden has large export only to some of the world's largest importers of wwt-equipment
 - High presence in USA, UK, France and Germany
 - Relatively low presence in Russia, Canada, China and India
- Sweden's most important wwt-export markets are USA and close markets such as DE, UK, DK and NL
 - Sweden holds a considerable market share in the Nordics and Baltic's
 - Still a low share on markets such as Russia, Ukraine, India and Hungary
- Sweden has managed to grow its market share on markets such as China, UK, Portugal and Poland
 - On the other market share has been lost on most other markets

Focus on strengths: increase market shares further in UK, China, Portugal and Poland
Further to improve foothold on emerging markets such as India, Turkey, Romania and Croatia

SWEDEN HAS MANAGED TO GROW ITS MARKET SHARE ON SOME EXPANSIVE MARKETS

- also gained share in Poland, a market with decreasing imports (!)



Swedish share has increased

Sweden has done especially well in:

- UK, Portugal, China

Sweden has done better than average in:

- Brazil, Spain, Poland, Turkey, Canada, Germany, Czech Republic

➔ Swedish companies/ products seem to have a competitive edge on these markets

30 COUNTRIES WERE SELECTED FOR A LOCAL MARKET CHECK



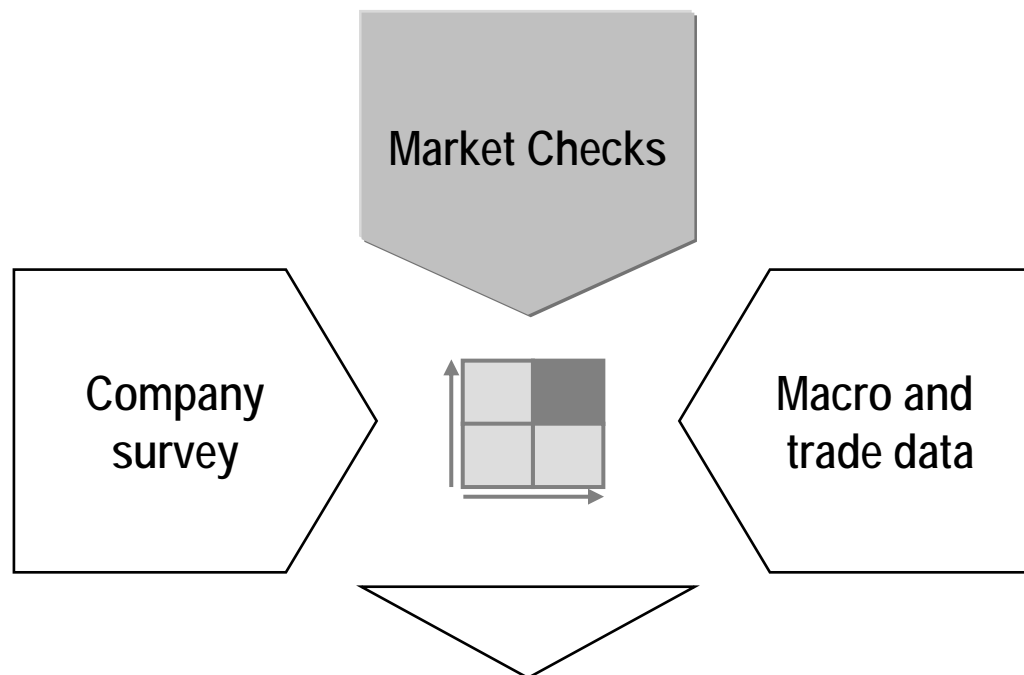
*Classification according to Swedish Trade Council's regional structure

CONTENT

- Introduction
- Market analysis
 - The company perspective and trade data
 - Local market checks
- Market prioritization
- Next steps
- Appendix

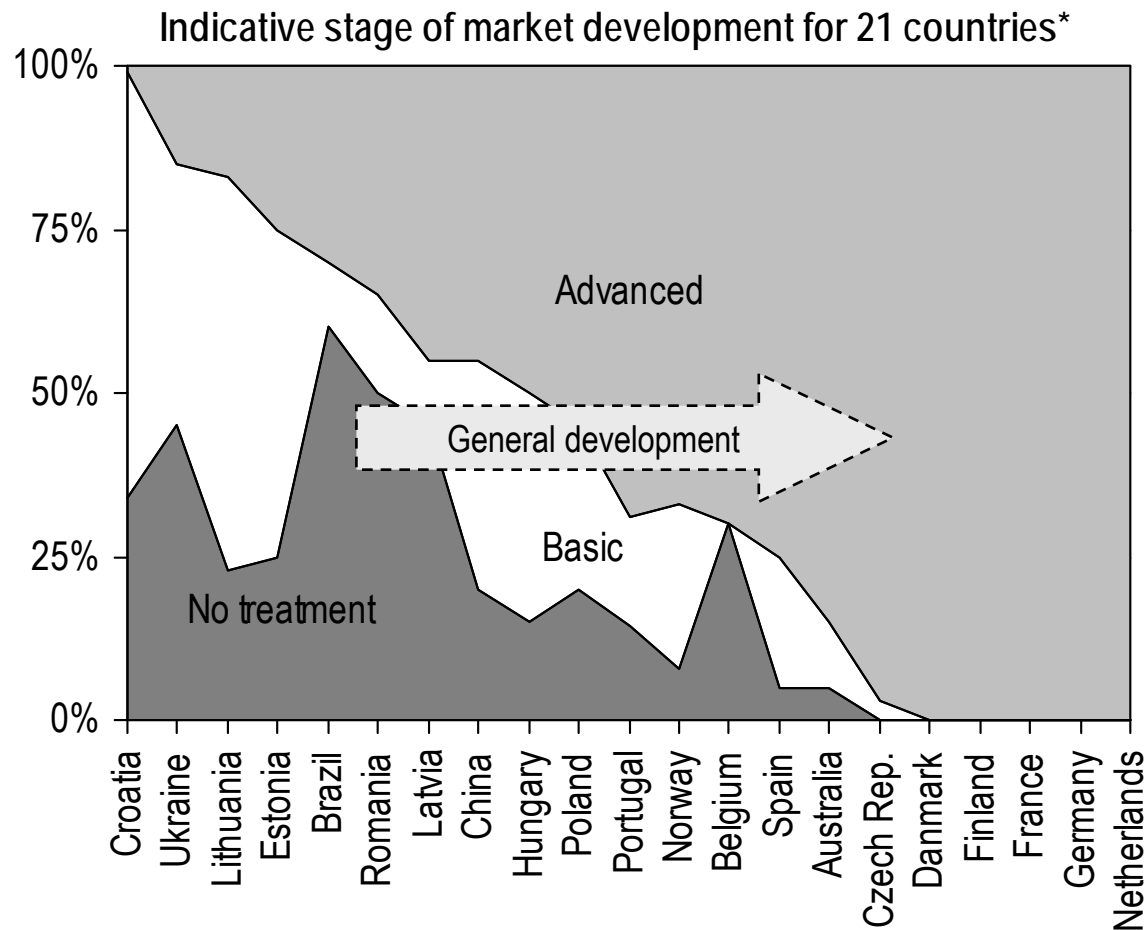


THE MARKET CHECKS ANALYZED THE DEMAND AND INVESTMENT SIDE OF THE SELECTED MARKETS



Prioritization of markets

TWO STAGES OF MARKET DEVELOPMENT CAN BE IDENTIFIED: a) INVESTMENTS IN BASIC AND b) ADVANCED TREATMENT



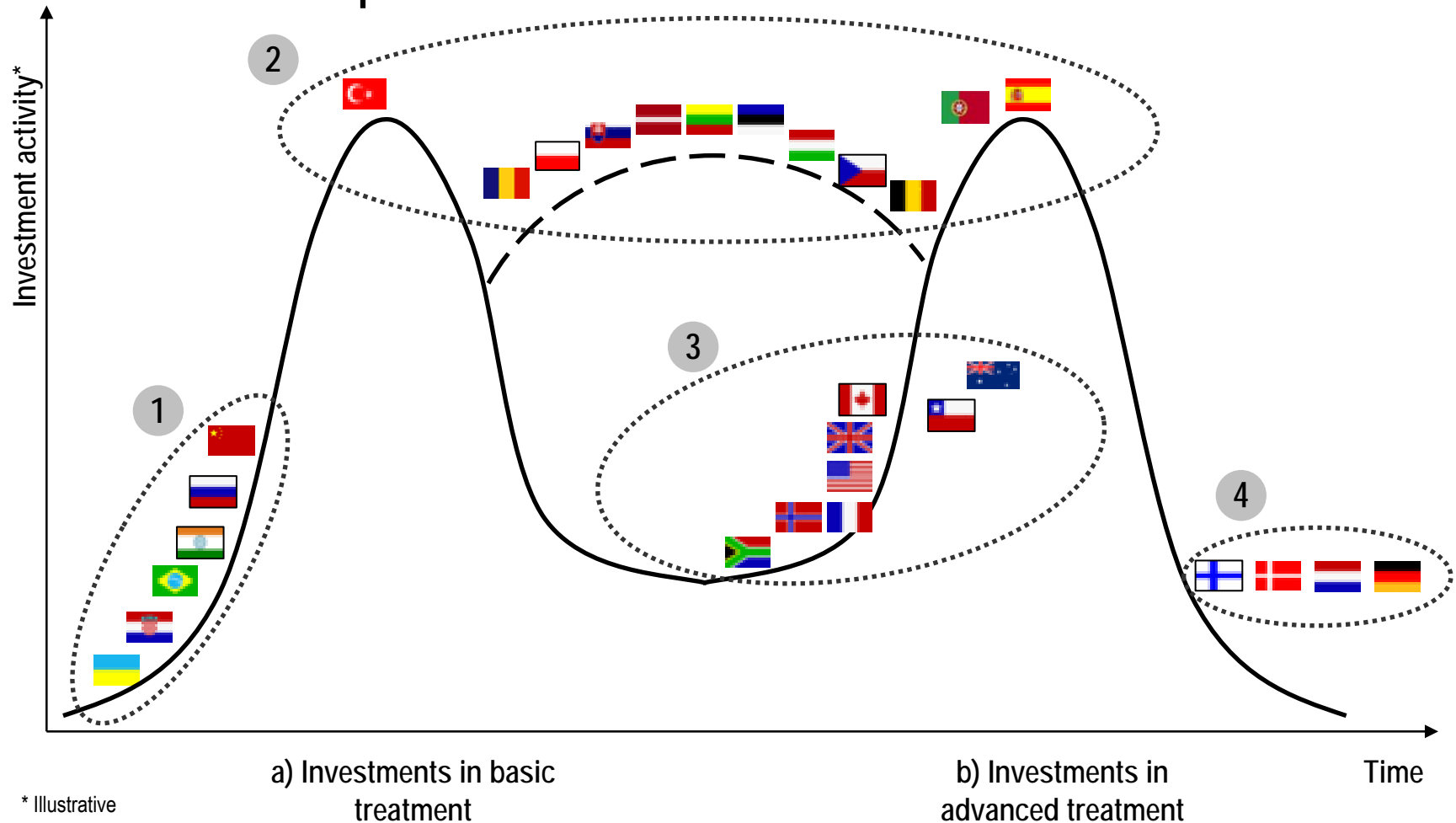
Analysis:

- A first stage is to have a high share without treatment. Often rural areas remain so for a longer time
- As a first measure to reduce pollution basic treatment is introduced
- Advanced treatment is introduced in a third phase

*The shares are estimates and should be considered as indicative. Data was not available for all markets
Source: STC analysis based on interviews and desk research by STC local offices For details, see country reports.

THE MARKETS ARE IN DIFFERENT STAGES REGARDING INVESTMENT IN WATER AND WASTE WATER TREATMENT

- Four investment phases can be identified



* Illustrative

a) Investments in basic treatment

b) Investments in advanced treatment

Time

COUNTRIES IN INVESTMENT PHASE 2 ARE THE MOST ACTIVE

- Those in phases 1 and 3 are about to engage in investment activities

- 1 China, Russia, Ukraine, Brazil, India and Croatia
 - Emerging markets starting to invest in environmental programs. Invest mainly in basic infrastructure.
 - Water treatment is included, but the investment plans are not always explicit or implemented transparently
 - ➔ Business opportunities up-coming. Get into position to realize these opportunities
- 2 Turkey, Romania, Poland, Slovakia, Baltic States, Hungary, Czech Rep., Belgium, Portugal and Spain
 - Markets that have not invested much in water treatment in the past
 - Are now working towards fulfilling EU-standards
 - ➔ Good opportunities to enter these markets, e.g. by establishing partnerships
- 3 Chile, S. Africa, USA, UK, Norway, Canada, France and Australia
 - Markets that have done investments in water and waste water treatment in the past
 - Are now developing strategies in order to improve the existing plants and installations
 - ➔ Good to prepare for to seize market opportunities within shortly
- 4 Germany, Denmark, Finland and the Netherlands
 - Markets that have invested in water and waste water treatment both in the past and relatively recently
 - These are the leading markets having highly developed technology
 - ➔ Opportunities might exist for advance products (e.g. energy recovery) or as sub-suppliers of specialized products



THE BRIC-COUNTRIES WILL INVEST HEAVILY IN WATER ISSUES

- Large budgets and short time spans

| Country | 2010 | 2012 | 2014 | 2015 | Other |
|----------|-----------------------|-----------------------|------|----------|------------------------------|
| China | € 44 bn ¹⁾ | | | | |
| Russia | € 7 bn ²⁾ | | | | |
| Brazil | € 5 bn ³⁾ | | | | |
| India | | € 26 bn ³⁾ | | | |
| France | | € 8 bn | | | |
| Portugal | | € 3 bn | | | |
| Spain | | | | € 19 bn | |
| Slovakia | | | | € 5,3 bn | |
| Romania | | | | | € 5,7 bn (2018) |
| Turkey | | | | | € 34 bn (2023) ⁴⁾ |

¹⁾ Total 5-year plan for water from 2006

²⁾ estimated to 30% of total environmental plan from 2002-2010

³⁾ estimated to 30% of budget for total environmental plan

⁴⁾ total water budget

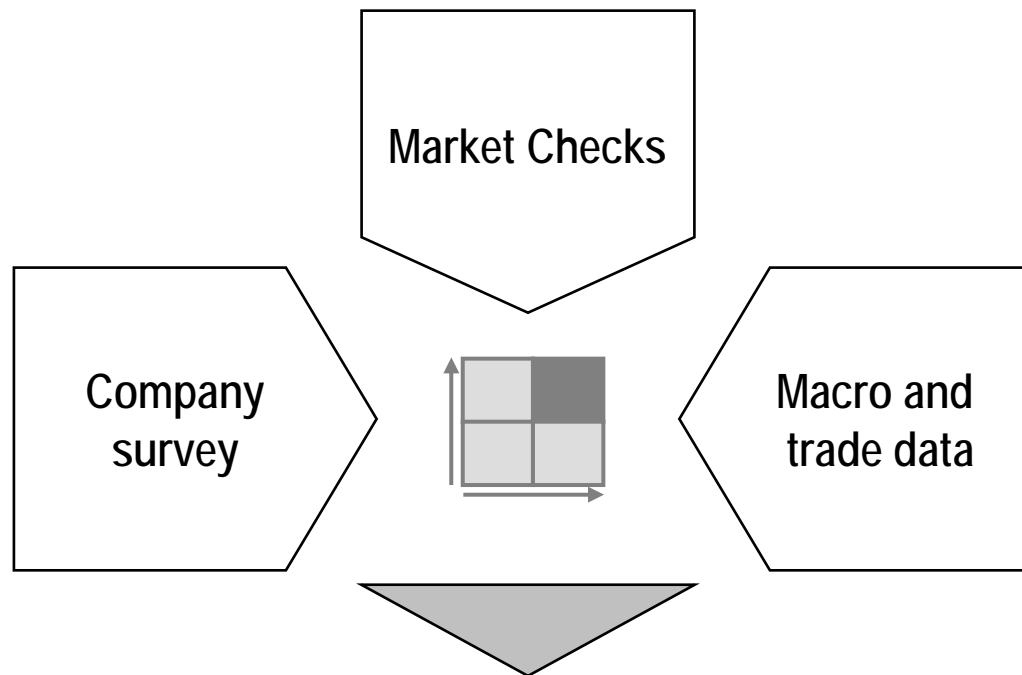
THE MAJORITY OF MARKETS NEED GENERAL INVESTMENTS IN THE MUNICIPALITY SECTOR TODAY

| Main sector | Industry | Industry and Municipality | Municipality |
|------------------|---|--|---|
| Main need | <ul style="list-style-type: none"> • Chile • Russia • Brazil | <ul style="list-style-type: none"> • India • Spain • UK • Croatia • China | <ul style="list-style-type: none"> • Hungary • Latvia • Poland • Portugal • Slovakia • Ukraine • Romania • Norway |
| Upgrading need | | | <ul style="list-style-type: none"> • Czech Republic • Lithuania • Estonia • France • Turkey • Canada • Belgium |
| Specific need | | <ul style="list-style-type: none"> • USA | <ul style="list-style-type: none"> • Australia |
| Maintenance need | <ul style="list-style-type: none"> • Finland | <ul style="list-style-type: none"> • South Africa • Denmark | <ul style="list-style-type: none"> • Germany • Netherlands |

CONTENT

- Introduction
- Export market analysis
- **Market prioritization**
- Next steps
- Appendix

THE FINAL PRIORITIZATION WAS BASED ON INPUT FROM THE COMPANIES, THE MARKET CHECKS AND ON TRADE DATA



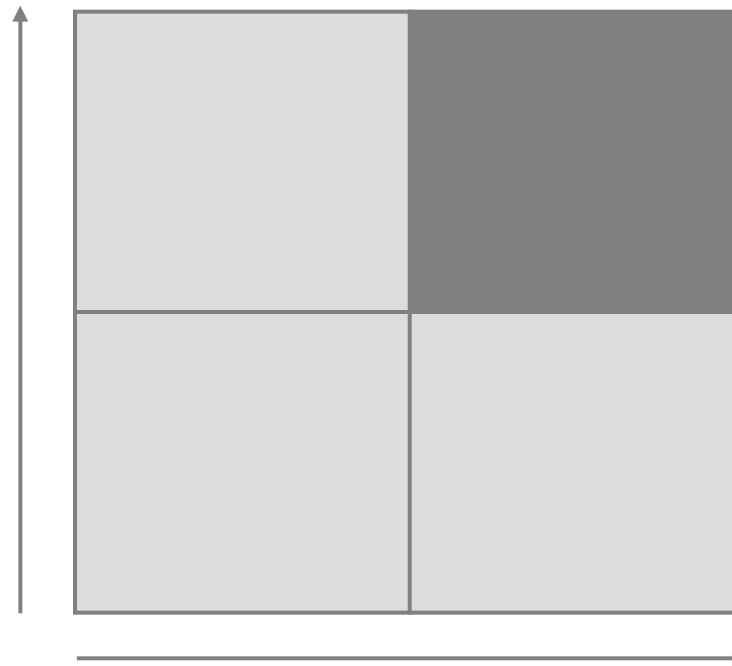
Prioritization of markets

MARKET POTENTIAL ASSESSED BY ATTRACTIVENESS AND EASE OF ENTRY

- The assessment builds on a number of factors

Market attractiveness

- Market demand
- Investment plans
- Market size
- Economic growth
- Political awareness



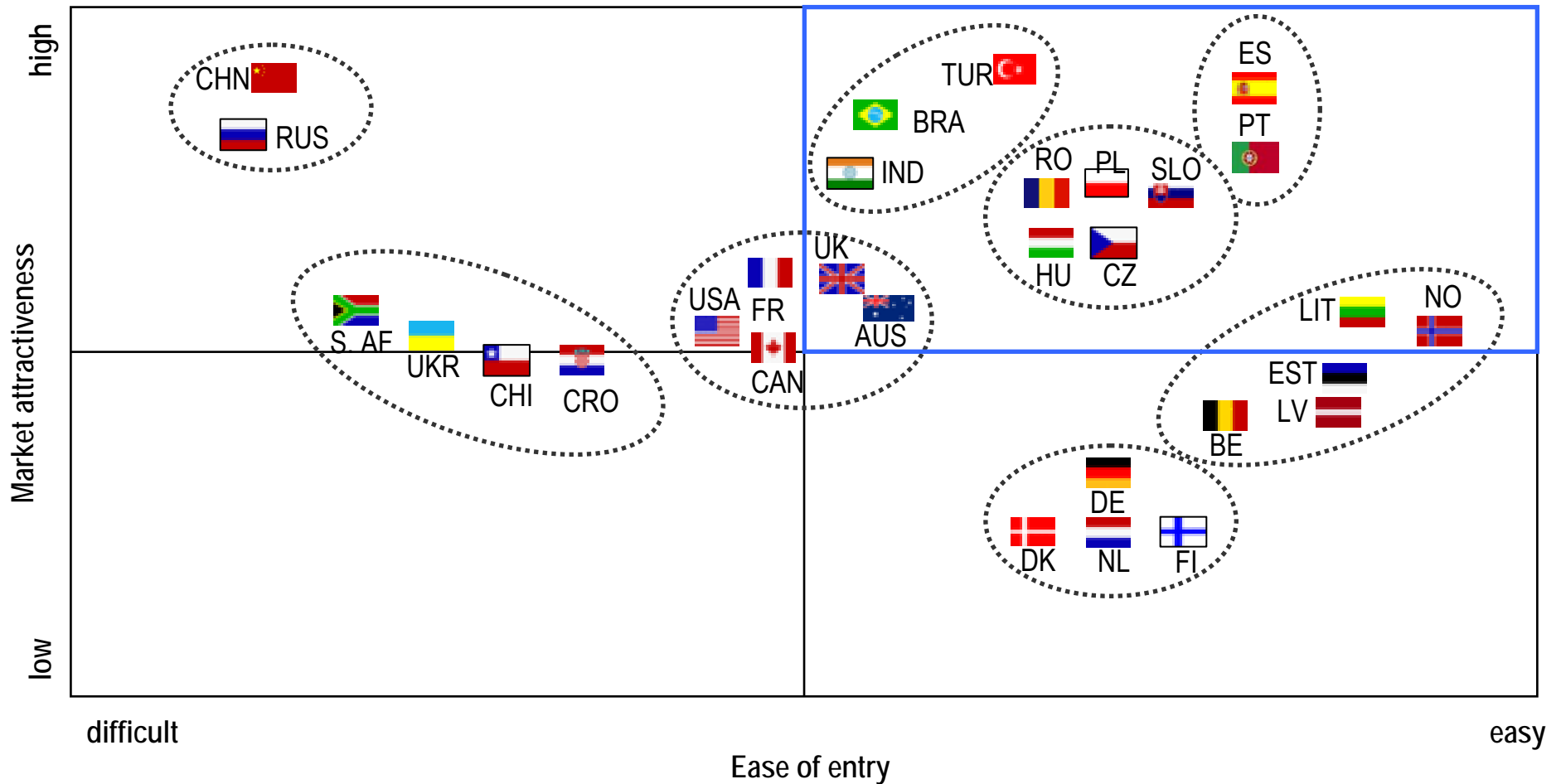
Markets with the highest potential, based on market attractiveness and ease of entry

Ease of entry

- Transparency and legal context
- Degree and type of competition
- Swedish presence
- Product adaptation requirements
- Geographical proximity

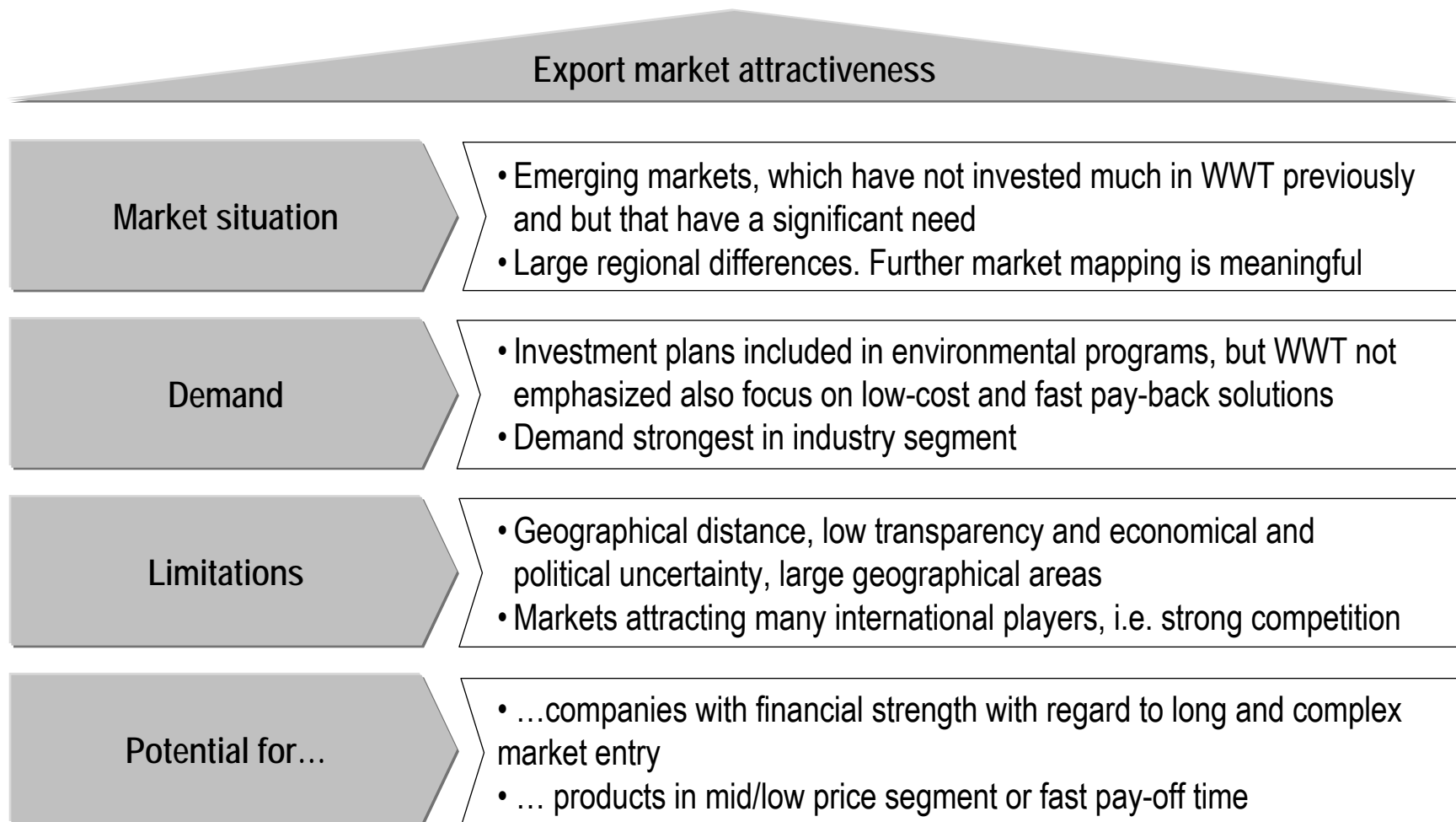
“SNAPSHOT” MARKET GROUPINGS AND PRIORITIZATION

- 8 clusters of markets may be identified



CLUSTER 1 – RUSSIA AND CHINA

- Markets with substantial opportunities, but also high barriers to entry





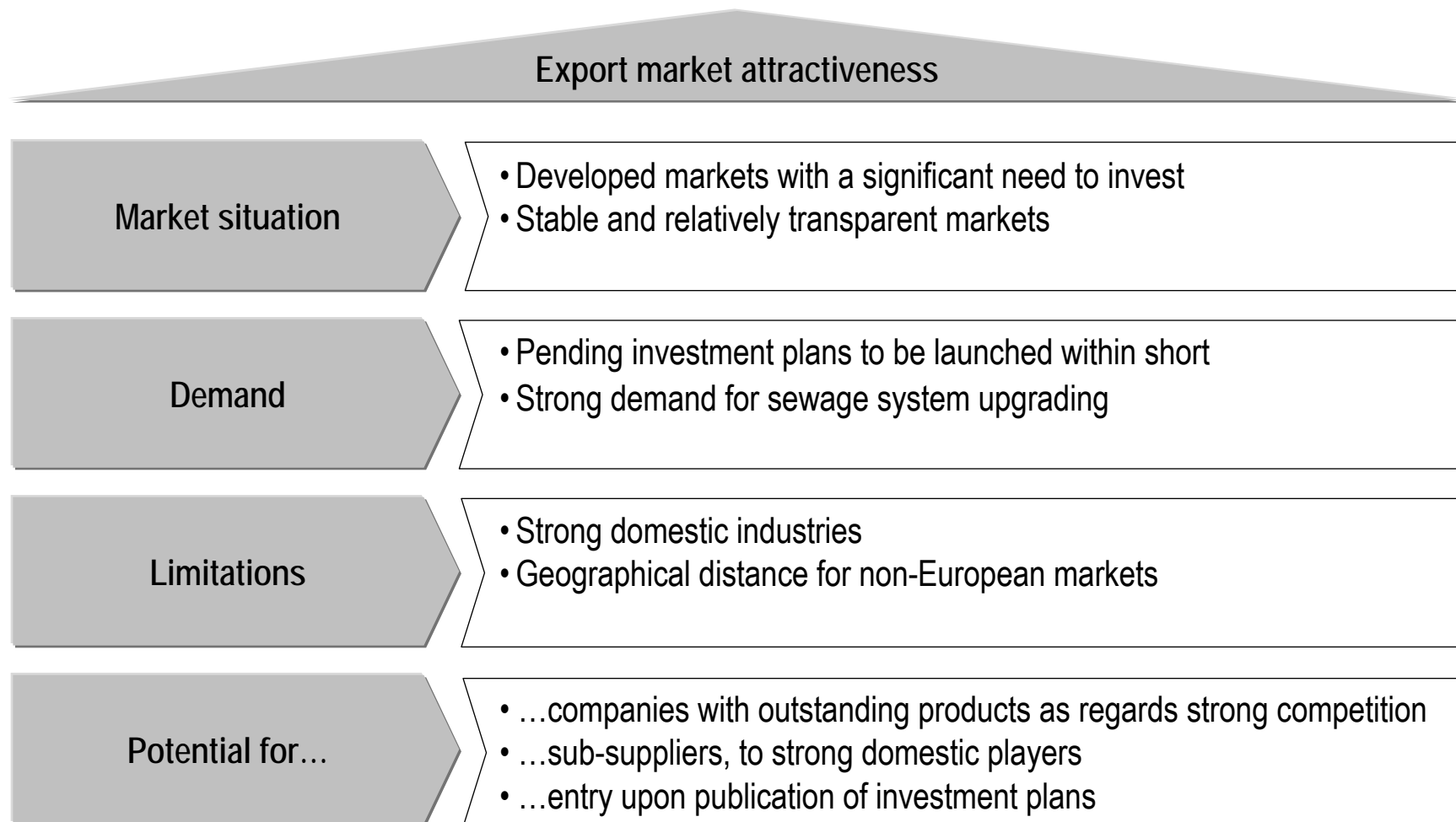
CLUSTER 2 – SOUTH AFRICA, UKRAINE, CHILE AND CROATIA

- Low investment today, interesting in medium-term



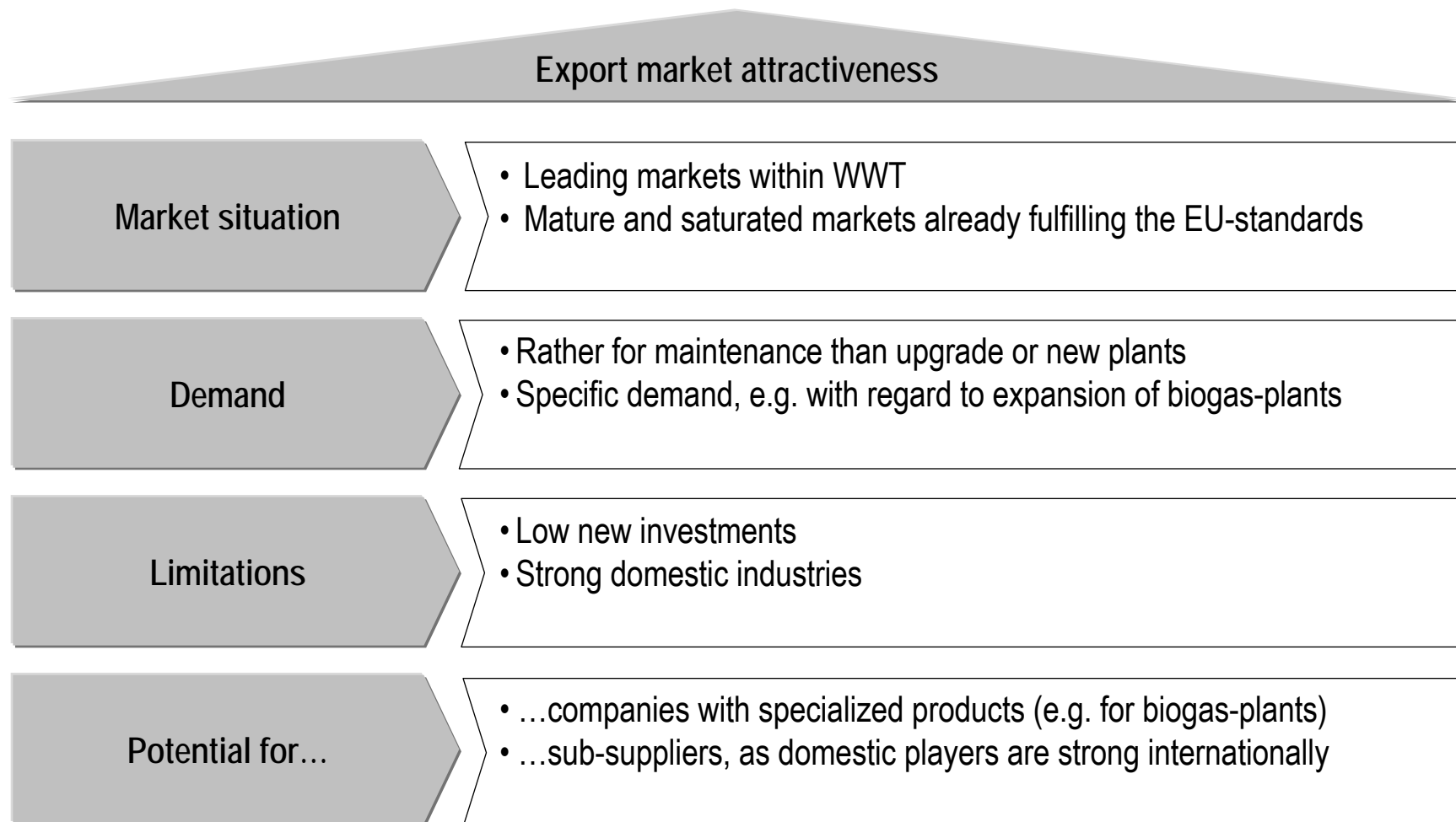


CLUSTER 3 – USA, CANADA, UK, FRANCE, AUSTRALIA - About to launch investment plans





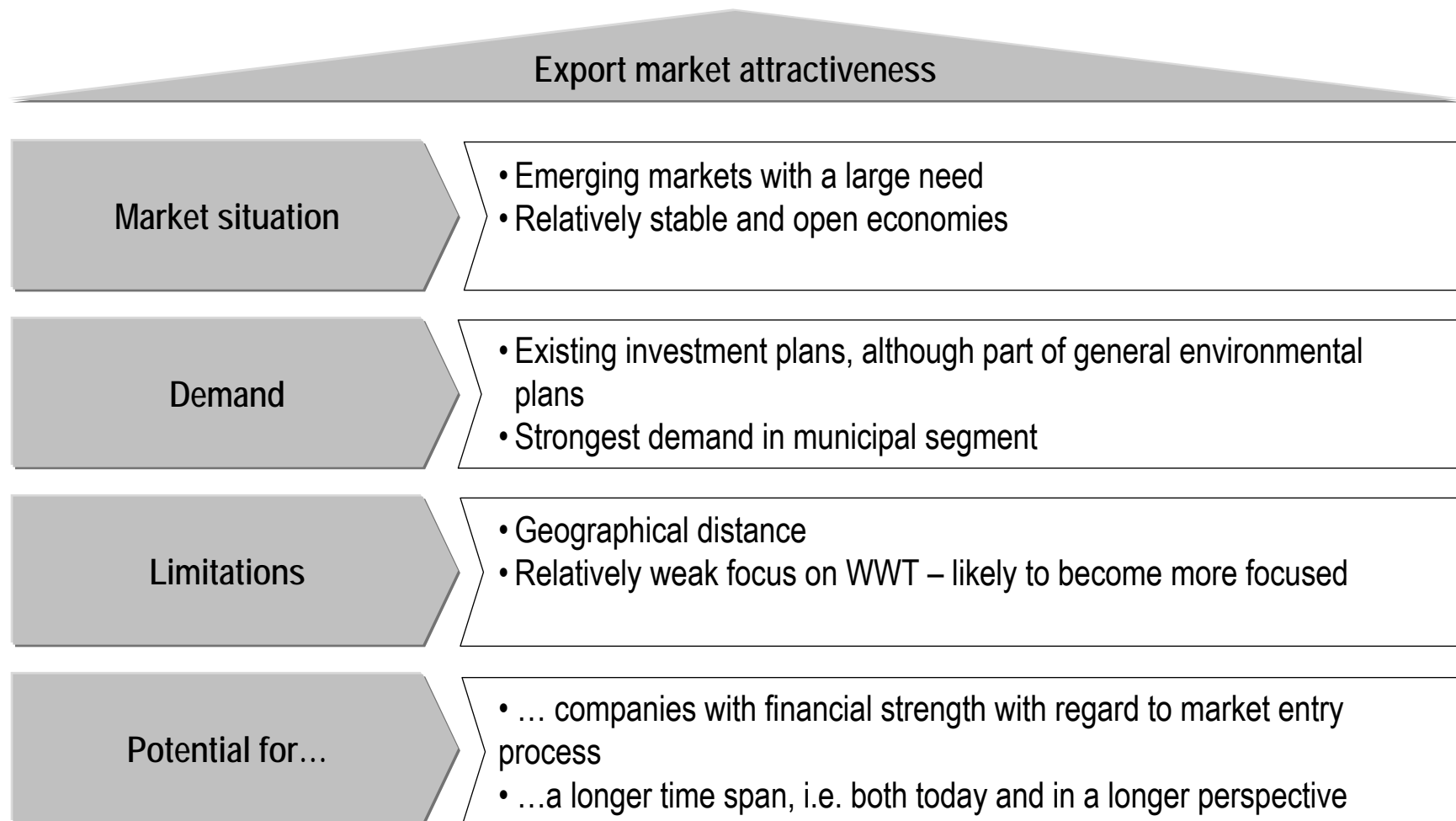
CLUSTER 4 – DENMARK, FINLAND, THE NETHERLANDS, GERMANY - Advanced markets with potential for sub-suppliers



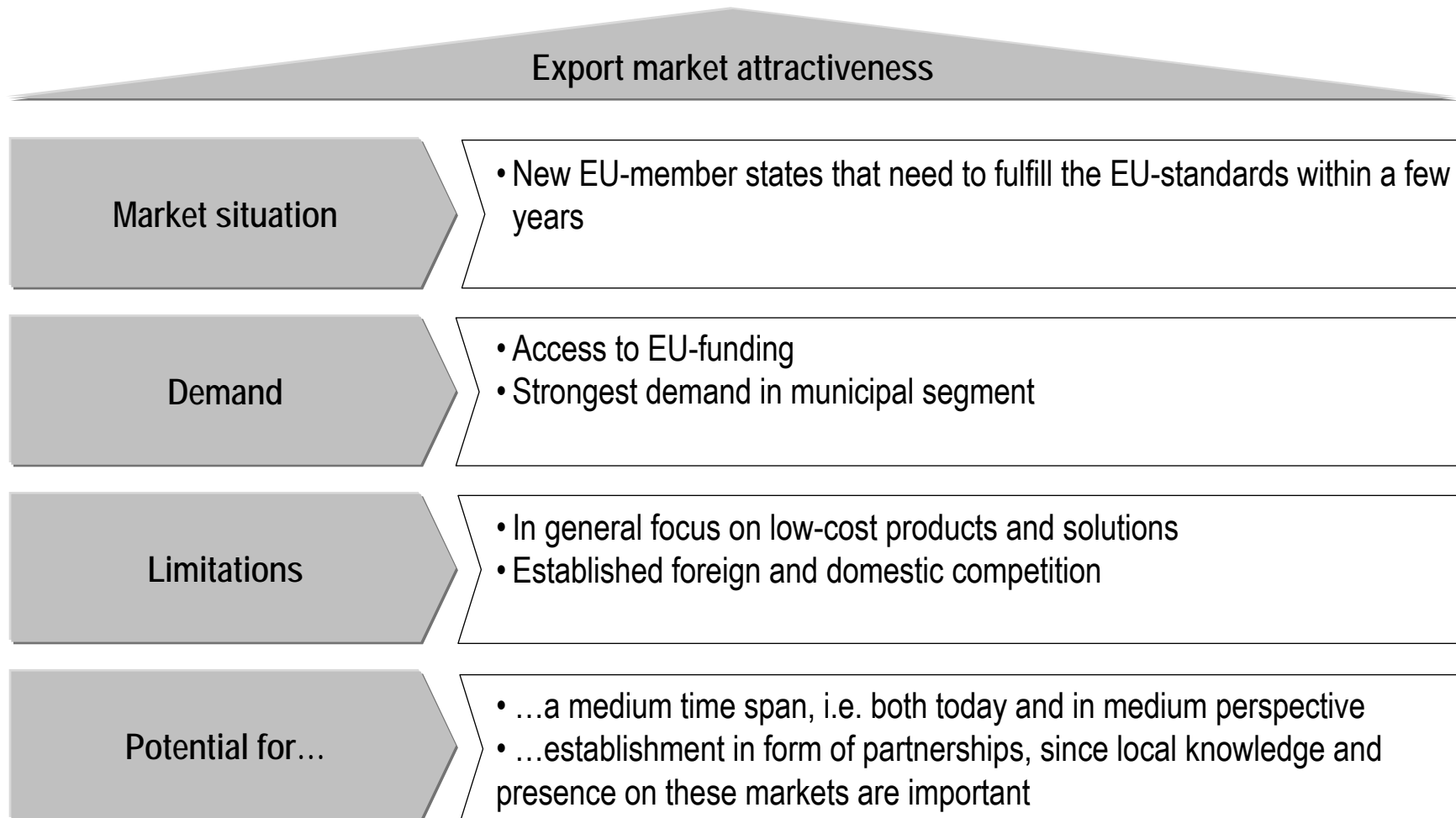


CLUSTER 5 – INDIA, BRAZIL AND TURKEY

- Large and growing opportunities



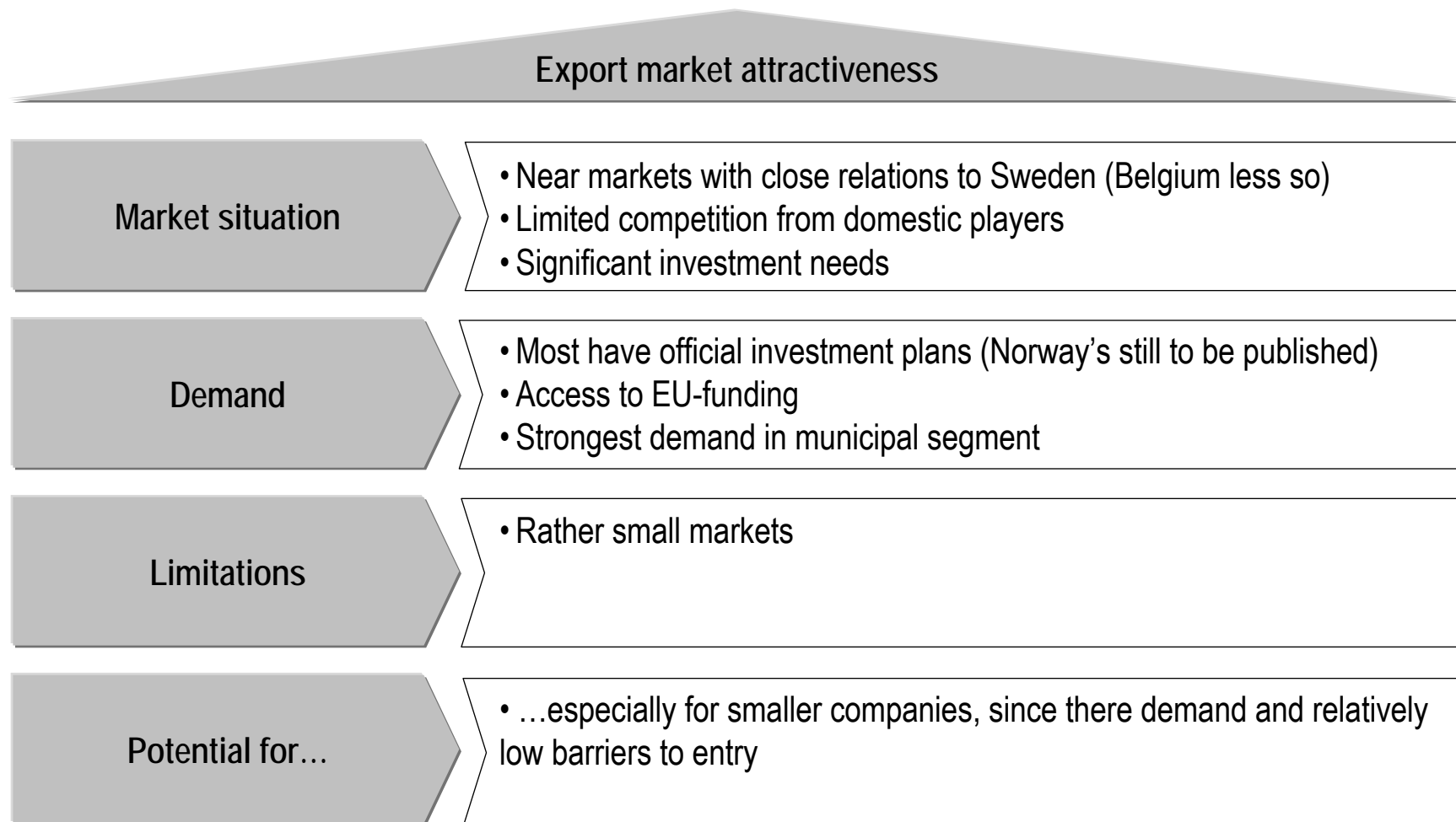
CLUSTER 6 – ROMANIA, POLAND, HUNGARY, CZECH & SLOVAK REPs. - EU-standards create prevailing demand and available funding





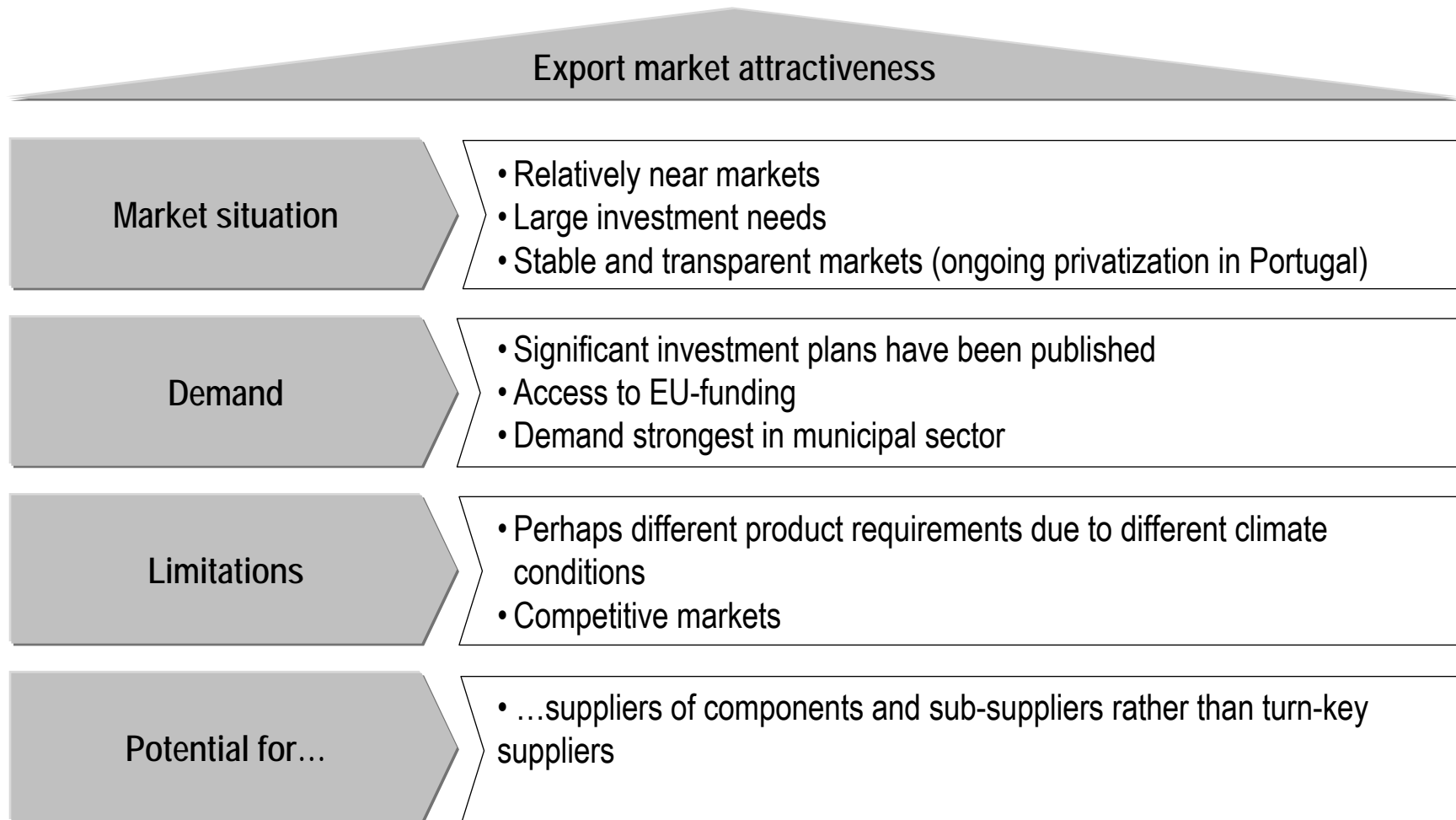
CLUSTER 7 – BELGIUM, NORWAY, ESTONIA, LATVIA, LITHUANIA

- Near and small markets with close relations to Sweden



CLUSTER 8 – SPAIN AND PORTUGAL

- Markets that are currently at an investment peak





OF 30 ANALYSED MARKETS 14 WERE PRIORITIZED FOR FURTHER ACTIVITIES

Input – 30 markets*

| Americas | S. Europe, N. Africa | W. Europe, Australia/ N. Zealand | Central & Eastern Europe | Asia |
|----------|----------------------|----------------------------------|--------------------------|---------|
| ▪ Brazil | • France | • Australia • UK | • Romania • Latvia | • China |
| ▪ Canada | • Portugal | • Belgium • Norway | • Russia • Lithuania | • India |
| ▪ Chile | • Spain | • Denmark | • South Africa • Poland | |
| ▪ USA | • Turkey | • Finland | • Slovakia • Hungary | |
| | | • Germany | • Ukraine • Croatia | |
| | | • Netherlands | • Czech Rep. | |
| | | | • Estonia | |

Output – 14 markets*

| Americas | S. Europe, N. Africa | W. Europe, Australia/ N. Zealand | Central & Eastern Europe | Asia |
|----------|----------------------|----------------------------------|--------------------------|---------|
| ▪ Brazil | • Portugal | • Australia | • Czech Rep. • Lithuania | • India |
| | • Spain | • Norway | • Romania • Poland | |
| | • Turkey | • UK | • Slovakia • Hungary | |

*Classification according to Swedish Trade Council's regional structure

CONTENT


- Introduction
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- Appendix



HOW DO SWEDISH COMPANIES BECOME SUCCESSFUL INTERNATIONALLY?

Success factors

- Focus on export markets where demand matches company expertise
- Get a good understanding of market specificities when developing strategy
- Implement a long term strategy for export markets, and follow it

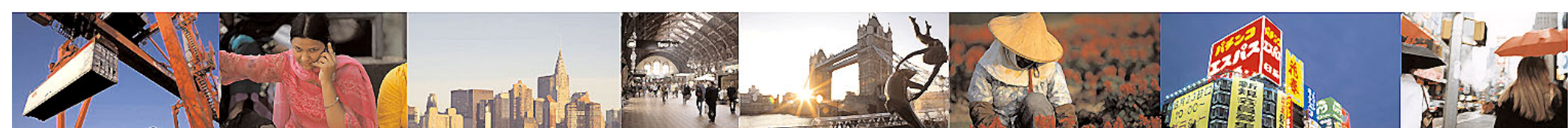


STC can support in all of these steps



STC SERVICES FOR SWEDISH WASTE MANAGEMENT COMPANIES

- Regional export Advisors (Personal export advising)
- Business opportunity project: market check + visiting program + action plan
- Export office
- Business support office services
- Delegation trip – matchmaking
- Monitoring – business intelligence
- Market analysis
- Market selection analysis
- Fairs
 - Swedish-pavilions
 - Nordic pavilions
- Establishment strategies
 - Incorporation
 - Acquisition
 - Sales strategies
 - Customer/partner search
 - Competitor analysis
- And more

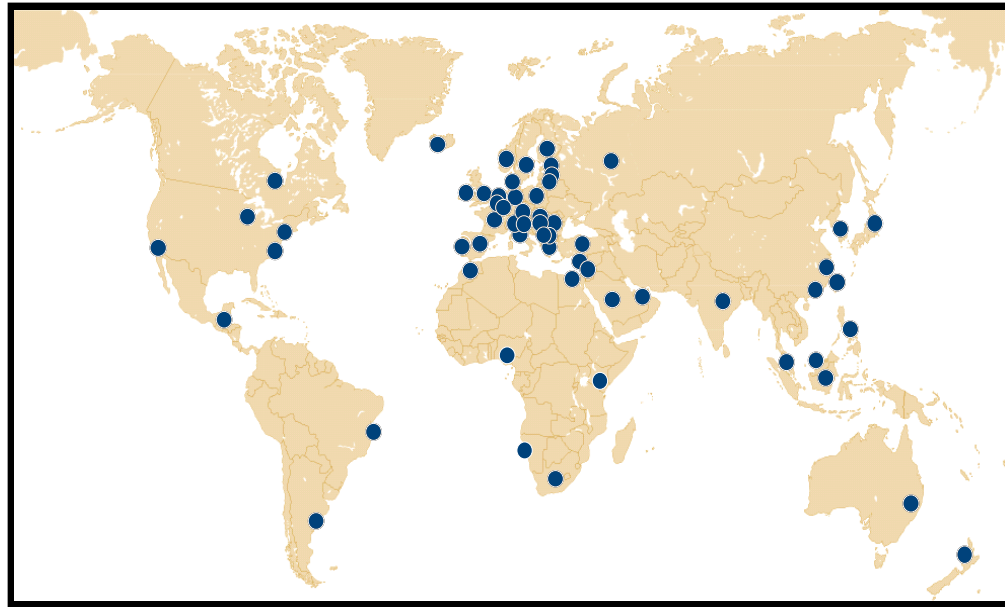


CONTENT

- Introduction
- Export market analysis
- Market prioritization
- Next steps
- Appendix
 - Country profiles (in alphabetical order)
 - Analysis of trade figures

LOCAL MARKET CHECKS CARRIED OUT BY STC OFFICES ON RESPECTIVE MARKET

- For more information about each market, do not hesitate to contact our local offices
 - Contact details can be found on respective slide



AUSTRALIA

- The wastewater issue is highly debated in Australia

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|----------------------------------|----------------------------|
| Population: | 21 m | in industry | 0,45 km ³ /year |
| GDP/capita: | \$ 23 372 | municipal Ø | 0,07 km ³ /year |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 2 bn | total import | \$ 86 m (+25%)* |
| Swedish export, avg. growth 5 years: | 22 % | import from Sweden | \$ 1,1 m (+14%)* |



Waste water facts

- Each state has its own laws that regulate the waste water treatment
- The demand for water treatment products is regarded as very high since the persistent drought in 2002, which causes a serious situation in Australia
- 85 % of the wastewater in Australia is comprised by the agriculture industry
- 70 % of the market stems from imports, especially German companies are quite strong
- There is currently an ongoing outsourcing trend on the market (build-own-operate)
- Currently, the main issue within this sector is energy efficiency

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25 th floor, 44 Market Street
Sydney NSW 2000, Australia
Tel. +61 2 92621077
www.swedishtrade.se/australien
Contact person:
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*average growth during 2001-2003 and 2005-2006
Sources: www.abs.gov.au, National Water Commission, Australian water association, Kayak 4 Earth

AUSTRALIA

- 70% of equipment in Australia is imported

Business opportunities

- Expenditures of € 4,6 bn per year on waste water
- There is great demand for import of waste water equipment
- The expected growth rate is 5 % per year
- The sewerage systems in most of Australia's major cities are old and in many cases overloaded
- There are problems with water leakage and pipeline failure
- Currently, bio-filtration systems are highly demanded

Challenges

- Certification is required for companies selling equipment for waste water treatment according to the Australian law
- Competition is rapidly increasing
- Some import tariffs

Conclusion

- The demand for waste water equipment and services is very high
- Anything which can improve the development of Australian wastewater treatment is of high interest
- The market will continue to grow by at least 5 % per year
- The competition is increasing

BELGIUM

- Huge differences between Flanders and Wallonia

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|------------------|
| Population: | 10 m | in industry | n.a. |
| GDP/capita: | \$ 24 541 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 2 % | Water cleaning equipment: | |
| Swedish export: | \$ 6,8 bn | total import | \$ 62,7 m (+13%) |
| Swedish export, avg. growth 5 years: | 14 % | import from Sweden | \$ 0,4 m (-5%) |



| Waste water facts | |
|---|--|
| <ul style="list-style-type: none"> • Belgium should have complied to EU standards by 2005. • Decisions are taken in the public sector • There are major differences between Northern Flanders and Southern Wallonia. | |
| <u>Flanders</u> | |
| <ul style="list-style-type: none"> • Aquafin is the company responsible for wastewater facilities in Flanders • 870 pumping stations, 205 wastewater treatment plants and 3 928 km of wastewater collectors • In 2006 the overall investment amounted to € 3,4 bn and more than 2 550 projects | |
| <u>Wallonia</u> | |
| <ul style="list-style-type: none"> • SPGE is in charge of sewage treatment in Wallonia • 186 wastewater treatment plants each serving a population equivalent of more than 2000 inhabitants, 1 672 km of collectors and 561 wastewater pumping stations, as well as some 17 000 km of sewers • The investments by SPGE are nearly € 2,5 bn over the period 2000-2010 | |

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BELGIUM

- Strong demand in Wallonia, but competition is already present

Business opportunities

- Strong demand for wastewater facilities, especially in Wallonia
- Large investments/loans from EIB and others
- Significant opportunities in the municipalities
- Possibilities both for new investments and optimizing existing systems
- Demand for activated sludge (in Wallonia)
- Mostly domestic companies (SME:s) on the Flemish market

Challenges

- Competition from domestic production, as well as from some international competitors (Dutch and French companies, such as Degremont)
- Low public awareness of water quality

Conclusion

- Future investments in the waste water sector is about € 650 m in Wallonia for the period 2009-2010 and € 150 000 annually in Flanders
- Wastewater treatment facilities is a major issue in Belgium since the regions do not yet comply with the requirements of EU regulations on wastewater treatment. The country should make up for lost time in this field by 2015
- Swedish companies could benefit on the growing market potential and the fact that there are not enough suppliers to lower the prices

BRAZIL

- Large number of opportunities for high quality products and services

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|--------------------------|
| Population: | 189 m | in industry | 32 km ³ /year |
| GDP/capita: | \$ 4 055 | by households | 5 km ³ /year |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,9 bn | total import | \$ 15 m (+4%) |
| Swedish export, avg. growth 5 years: | 7 % | import from Sweden | \$ 0,2 m (+67%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • Brazil implemented a new law on waste water treatment in 2006 • A new legislation is expected to regularize the sector • With the new law, a Federal Sanitation Policy is to be established. In order to receive federal funding, states and municipalities are pressured to follow this policy • There are approximately 150 waste water projects in Brazil to be completed before 2011. About 50 % of the projects have been initiated • Approximately 30 % of Brazil's population lives without any sanitation conditions • North and Northeast regions need heavy investments to bring better sanitation conditions to their population • Only 35 % of the collected sewage is treated and rivers are badly affected by this pollution • Decisions are made in the public sector, on a regional or municipal level |

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BRAZIL

- Heavy investments are made into waste water treatment

Business opportunities

- Investments of approximately € 15,4 bn are planned until 2010
- North and Northeast regions need heavy investments to bring better sanitation conditions to their inhabitants
- There is a strong increase in demand for solutions and products within high technology, mostly driven by the Oil & Gas and Ethanol sectors
- Growing demand for tubes, pumps, microfiltration solutions, membrane filters and measuring tools

Challenges

- To effectively implement the conditions established for the new legislation
- To increase the participation from the private sector
- To improve the management of service suppliers creating efficient mechanisms of corporate governance
- To speed up the rhythm of the essential services for basic sanitation to cover the entire population
- To extend the investments for the sector
- To increase the control of the received money so that it will be used according to the initial purpose

Conclusion

- Total yearly investments are estimated to reach around € 5,1 bn
- According to a leading company in the water treatment sector, the market has grown at an annual rate of 2-3 % over the last five years and is expected to grow by 4-5 % per year during the next five years
- Conditions for Brazil's water and sanitation sector have never been so favorable for companies considering investments, acquisitions or pursuing equipment sales and service opportunities
- Large demand for technologies and equipment to deal with water supply and treatment - mainly in the private industry, but state and municipal projects are also to take off

CANADA

- Strong awareness resulted from a contamination crisis

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|-----------------|
| Population: | 33 m | in industry | n.a. |
| GDP/capita: | \$ 25 562 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 1,5 bn | total import | \$ 158 m (+16%) |
| Swedish export, avg. growth 5 years: | 13 % | import from Sweden | \$ 1,5 m (+36%) |



Waste water facts

- In 2007 *The National Waste Water Effluent Strategy* was developed to enact a 30 year plan which will result in provincial and municipal investments worth billions. It is to be voted on in 2008
- Strong awareness since May 2000 when the town of Walkerton, Ontario had their water supply contaminated with a string of E.Coli. The situation resulted in the loss of human lives as well as costly repairs to the towns water treatment facilities
- In 2003, there were ca 700 SMEs specializing in this domain with combined sales surpassing €1,4 bn
- The companies mentioned above accounted for 21 % of all Canadian environmental exports in 2003
- The average age of waste treatment facilities was 18,3 years in 2003, which represented 63 % of their estimated service life of 29 years
- In the next 2 – 4 years, 10-20 major projects will begin in the western Canadian province of British Columbia. It is expected that the projects will cost more than € 3 bn
- Decisions on investments to be made are taken by the municipalities

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CANADA

- Large investment plans, but strong domestic actors

Business opportunities

- A number of new waste water treatment projects will begin in 2 – 5 years as the Canadian Council of Ministers of the Environment has designed a Municipal Waste Water strategy
- There is a growing acceptance of public-private partnerships as private companies are seen as being more efficient and timely in their research and work
- In the City of Victoria, British Columbia there will be 3 new sewage treatment plants built in the next 5 years. There will be investments in capacity upgrades as well as upgrading to the latest technologies
- Quality is highly valued

Challenges

- There is a large domestic industry
- Canadian waste water companies are internationally recognized for their knowledge of disinfection technologies, physical and chemical treatment, biosolids management, biological treatment systems, specialized gates/pumps/valves and energy recovery systems
- Municipal decision makers may take extended periods of time when choosing companies to work with
- Focus lies on value for money, i.e. initial and maintenance costs should not be too high

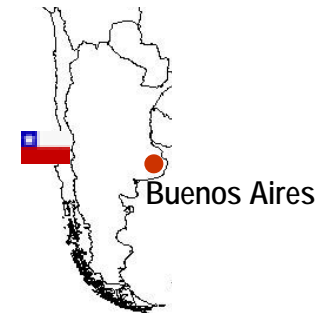
Conclusion

- There is vast awareness - past disastrous events have caused the public and politicians to place public safety as a high priority
- On average the waste treatment facilities in Canada are old and will need upgrading in the coming 5-10 year period
- Over a 30 year time frame, Canada is expected to invest billions of dollars for upgrading and building new plants
- Upgrading sewage treatment plants will consist of upgrading from primary to secondary and from secondary to advanced treatment technologies
- Swedish companies would mostly benefit from entering at the planning and design stages, rather than the construction and implementation. There is a window of opportunity due to increased awareness and programs in the next 1-10 years

CHILE

- A developed and growing market for waste water treatment technology

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|------------------|
| Population: | 16 m | in industry | n.a. |
| GDP/capita: | \$ 5 846 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,3 bn | total import | \$ 31,8 m (+16%) |
| Swedish export, avg. growth 5 years: | 13 % | import from Sweden | \$ 0,2 m (+8%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • Chile privatized its water industry in the 1990's. The government has minor shares in some companies, but acts as any private shareholder • Investment decisions are thus taken by the private sector, although the plans have to be approved by the public authority SISS • The deadlines for fulfilling the laws within the industry have expired, but in March 2008 it is expected that a new law regulating the rural sector will be ratified • Chile is easy to do business in and import duties are low for products from European countries • Strict legislation regarding WWT has created an attractive and developed market for WWT technology • High share of residential WWT (more than 80 %), expected to reach 100 % by 2010. Industrial companies are compelled to do pre-treatment for the WW before sending it to the residential sewer system |

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CHILE

- Attractive business opportunities for technology suppliers

Business opportunities

- Demand in municipalities and increasingly in rural areas
- Strong industrial demand is found in mining, pulp and paper, food and salmon farming industry
- Urban residential WWT facilities require new equipment to modernize the plants, particularly regarding mud treatment
- Turn-key solutions and high quality technologies present attractive business opportunities

Challenges

- Strong competition of international players, mainly from France, Germany and Spain
- Largest investments in residential WWT facilities have already been made
- Small industrial companies look for economic WWT solutions. For them, cost is an important factor

Conclusion

- Investments in the waste water sector expected to be approximately € 600 m up to 2012 . These investments will be carried out by industrial companies and by private sanitation companies, in both cases with private funding
- Large business opportunities for Swedish companies within WWT technology supply, and also for consultancy companies. Opportunities arise both in the municipality segment and the industrial segment
- Strict legislation and industrial companies' awareness of the importance of WWT generate business opportunities to supply technology for several industries that require high quality technology

CHINA

- Clean water is becoming an increasingly pressing issue

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|-----------------|
| Population: | 1 312 m | in industry | n.a. |
| GDP/capita: | \$ 1 595 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 10 % | Water cleaning equipment: | |
| Swedish export: | \$ 2,8 bn | total import | \$ 150 m (+6%) |
| Swedish export, avg. growth 5 years: | 48 % | import from Sweden | \$ 5,5 m (+27%) |



Waste water facts

- Water treatment is budgeted for in the current 5-year plan running since 2005
- Water pollution is vast in China, with an estimated 60 000 people dying per year as a direct consequence. At the same time, China's water supply is decreasing, meaning that it is increasingly urgent that waste water discharge is treated properly and at higher rate than today
- Clean water is also becoming a pressing issue for the industry (e.g. food and pharmaceuticals) with the current trend of declining water quality
- Enforcement mechanisms for the laws are not strong enough
- Decisions on investment plans are made by the local governments. However, these often prioritize undisturbed economic production over environmental concerns

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CHINA

- Huge market, but tough domestic and foreign competition

Business opportunities

- € 44 bn are invested in waste water in the current 5-year plan
- The industry segment is likely to provide the largest demand for waste water treatment solutions due to better controls
- Strong demand lies for instance within biological denitrification and phosphorus removal technologies, membrane separation, high concentration organic WWT technologies and equipment

Challenges

- Local suppliers are preferred and also protected by local governments
- China is attracting attention from all over the world, and competition from other foreign players is fierce
- Purchase price rather than life-cycle price is a main consideration for the Chinese customers. There is not a high premium on high-technology and reliability
- Margins are thin for facility operators, but the French operators have managed to gain strong foothold
- Funding is rather restricted

Conclusion

- China is a huge country and a big market for waste water treatment technologies and solutions
- Water supply and water pollution is a big concern for the central government. It is estimated that € 140 bn will be invested in the water sector in the coming 15-20 years (also including hydro projects etc.)
- Swedish companies can benefit from tougher requirements and increasing control of industrial waste water discharge and higher demand for waste water treatment equipment. However considerable stamina is needed when entering the market

CROATIA

- Large market potential with EU-accession as a main driver

| Country facts | | Waste water usage (2006): | |
|--------------------------------------|-----------|---------------------------|-----------------------------|
| Population: | 4 m | in the industry | 0,032 km ³ /year |
| GDP/capita: | \$ 5 461 | in municipalities | 0,132 km ³ /year |
| Average GDP growth over 5 years: | 5 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,2 bn | total import | \$ 20,8 m (+26%) |
| Swedish export, avg. growth 5 years: | 16 % | import from Sweden | \$ 0,09 m (+25%) |



Waste water facts

- The Croatian government will publish a national plan on waste water treatment until 2020 in 2008
- 34 % of the waste water is discharged without treatment, while 90 % of the existing plants use mechanical treatment
- Annual investments in construction is currently about € 75 m, expected increase in investments over the next 3 years is € 355 m
- In order to comply with the EU-standards, investments amounting to € 3 bn would be required

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CROATIA

- Price sensitivity and large expected growth due to EU accession

Business opportunities

- The foreseeable investment plan will allocate € 1,6 bn to waste water treatment issues
- Opportunities are available both in the industrial and in the municipal segment
- Numerous sources of financing available: EU-funds (most of the financing is to come), loans, private investments
- Low domestic competition
- Large availability of ongoing and planned projects
- Increasing public awareness about water quality

Challenges

- Time-frame for the national plan is not set by the Croatian Parliament and needs to be approved by the EC
- Financial constraints, large needs for upgrading while limited resources
- Some competition from foremost Austrian and German companies as well as low cost alternatives from Italy
- Difficult to reach through to public administrations who are the decision makers in the municipal segment

Conclusion

- Total estimated investment to the waste water sector until 2025 is about € 1,6 bn, within the scope of the National Strategy for Water Management. The estimated overall growth in investments in the next 3 years is more than 400 %
- The estimated need of investment for Croatian compliance with the EU Water Framework Directive by the EC is € 3 bn
- Large expected increase in demand but limited resources in the market - price sensitivity is expected to arise in large projects
- Swedish companies could benefit from the growing market potential but local market knowledge is an advantage

CZECH REPUBLIC

- Large investments in waste water treatment

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|------------------------------------|
| Population: | 10 m | in industry | 1,04 km ³ /year (-1.7%) |
| GDP/capita: | \$ 7 040 | in municipalities | 0,90 km ³ /year (+2.8%) |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,9 bn | total import | \$ 18,7 m (+6%) |
| Swedish export, avg. growth 5 years: | 16 % | import from Sweden | \$ 0,2 m (+10%) |



Waste water facts

- Mainly EU legislation drives environmental improvements in the Czech Republic
- All agglomeration of 2000 or more inhabitants have to have sufficient WWT until 2010 (national standards are more strict than those set up in the 271/91/EC) – many of the existing waste water treatment plants and sewerage systems have to be reconstructed or built
- Approx. 80 % of treated waste waters is treated in municipalities, where hence demand is the strongest
- Municipalities have the overall implementation responsibility and therefore also make overall investment decisions

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CZECH REPUBLIC

- Big opportunities on a relatively competitive market

Business opportunities

- Investment budget of € 2,1 bn up until 2015
- The market of municipal WWT will rapidly grow
- High demand for sludge management (especially energetic utilization of sludge)
- Trenchless technologies are preferred for reconstruction
- Special waste water treatment technologies are demanded (removal of compounds in industrial WWT)
- Expanding building sector (CAGR 9,43 % for last 5 years)

Challenges

- Relatively high competition
- Czech companies are on a comparatively high technological level

Conclusion

- Large investment plans until 2015
- Relatively high competition, however real possibilities to successfully penetrate the market exist (some Swedish companies are already present)
- Swedish companies could benefit from the growing market potential

DENMARK

- A well developed, mature and stable market

| Country facts | | Waste water usage: | |
|--------------------------------------|------------|----------------------------------|-----------------|
| Population: | 5 m | in industry | n.a. |
| GDP/capita: | \$ 32 548 | by households | n.a. |
| Average GDP growth over 5 years: | 2 % | Water cleaning equipment: | |
| Swedish export: | \$ 10,6 bn | total import | \$ 19,9 m (+6%) |
| Swedish export, avg. growth 5 years: | 18 % | import from Sweden | \$ 3,3 m (-3%) |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • Denmark already fulfills the EU-standards • There are 1 078 waste water treatment plants in Denmark, the majority are municipally owned • There is an ongoing consolidation trend among waste water treatment plants in Denmark hence the number of waste water treatment plants in Denmark are decreasing • Investment decision are taken by the municipalities (although sometimes they have outsourced it to private companies) • Basically all plants have mechanical, biological and chemical treatment, some even have microfiltration or UV-treatment as a fourth phase • Current investments concern the upgrading and maintenance of existing plants and are rather stable • Denmark is investing in innovation and export programs |

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DENMARK

- Probably tough entry, yet large and similar market to Sweden

Business opportunities

- Stable investments in form of maintenance
- Stable building sector investments, ca € 28 bn p.a.
- Clear and respected market guidelines – Denmark is one of the top EU country in implementing EU directives
- World-leading and respected suppliers within waste water treatment
- Possibility for Swedish companies to act as suppliers

Challenges

- Low investment plans in new plants – saturated market with established companies living on after-sales
- Danish companies have good know-how and the market belongs to the most advanced ones

Conclusion

- Decreasing yearly investments in plants, estimated to lie around € 33 m p.a.
- The market is rather saturated
- Competitive threat from Danish companies offering high quality products
- However, there are possibilities for Swedish companies to act as suppliers
- To enter the Danish market, it is necessary to build up a close cooperation with the world-leading suppliers in Denmark

ESTONIA

- Despite certain improvements, water management is still a top-priority

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|------------------|
| Population: | 1 m | in industry | n.a. |
| GDP/capita: | \$ 6 945 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 9 % | Water cleaning equipment: | |
| Swedish export: | \$ 1,2 bn | total import | \$ 4 m (+16%) |
| Swedish export, avg. growth 5 years: | 22 % | import from Sweden | \$ 0,08 m (-19%) |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • Estonia has an investment plan to comply with EU-standards by 2013 • The investment will to a large extent cover medium and minor waste-water plants, the issue being adding a biological treatment phase • Until then, certain exemptions have been permitted • Regarding waste-water treatment, major cities such, as Tallinn, have benefited the most so far • Majority of financing will come from EU-funding but also from local sources, such as the government • Municipalities are the main decision makers regarding new investment projects • Focus lies both in initial investment, maintenance cost and on quality |

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ESTONIA

- Major opportunities are found in the municipal sector

Business opportunities

- € 820 m will be invested 2007-2013
- Major business opportunities are foremost seen within the municipal sector. Extensive investments will be done into medium and smaller waste water treatment plants
- The demand is particularly high for services related to drinking water purification, distribution systems and waste water collection
- Quality is one of the focus areas
- Medium level of competition on a market which is relatively close and easy to penetrate

Challenges

- Price still matters - investment and maintenance cost are seen as critical key-factors in the decision process for new solutions
- Decisions are often taken on a local and/ or municipal level increases the importance of a local network, knowledge and languages skills
- In comparison to local actors, the lack of these critical factors might turn to serious disadvantage for external actors

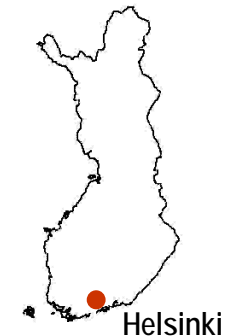
Conclusion

- The EU-standards are the main market driver and offer substantial investment opportunities
- Estonian municipalities and companies are still somewhat price sensitive. However, quality is increasingly important
- Local presence and knowledge is important in order to succeed

FINLAND

- High awareness as a result of a contamination crisis

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|--------------------------------|
| Population: | 5 m | in industry | 24335 tons of suspended solids |
| GDP/capita: | \$ 27 081 | in municipalities | 0,5 km ³ /year |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 9,3 bn | total import | \$ 14,8 m (+5%) |
| Swedish export, avg. growth 5 years: | 17 % | import from Sweden | \$ 1,7 m (+1%) |



Waste water facts

- Currently, there are no major investments, but rather maintenance of plants going on
- There were 561 municipal waste water treatment facilities in Finland in 1999
- The pulp and paper industry generates half of all suspended solids filtered from industrial waste water
- Today, the most widely used technologies are biological and chemical, but the use of microfiltration will increase
- For the time being however, the main issue is avoiding errors in the plants, as such an incident lead to a crisis in 2003
- There is currently also an outsourcing trend, as this has recently been allowed by the law
- Decisions are made within municipalities

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FINLAND

- Certain opportunities on a rather similar market to Sweden

Business opportunities

- Key industries: municipal, pulp and paper
- Demand: provision of third party services, filtration of nitrogen and phosphorus, risk management
- Re-opening of mines due to high ore prices has increased demand for specific equipment
- Recent contamination crisis has resulted in greater public awareness and nationwide investigations of similar facilities

Challenges

- Competition from domestic companies
- Lack of planned large scale investments into new facilities in the municipal sector
- Shortage of qualified labor

Conclusion

- Annual investments into municipal waste water treatment amount to roughly € 30 m
- A large pulp and paper industry requires a wide variety of product ranges within waste water treatment
- Finland is at the forefront of water-related research and an early adopter of several industrial applications in the field

FRANCE

- EU standards to be fulfilled at the latest in 2012

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|---------------------------|
| Population: | 61 m | in industry | 4 km ³ /year |
| GDP/capita: | \$ 23 899 | in municipalities | 4,5 km ³ /year |
| Average GDP growth over 5 years: | 2 % | Water cleaning equipment: | |
| Swedish export: | \$ 7,3 bn | total import | \$ 139 m (+9%) |
| Swedish export, avg. growth 5 years: | 14 % | import from Sweden | \$ 1,8 m (-1%) |



Waste water facts

- France is obliged to fulfill the EU standards by 2009 – at 2012 at the latest
- For this purpose, € 8 bn will be invested, however, it remains unclear how this will be financed
- There are 150 local collectivities in France (groupings of municipalities and its surroundings) that have not yet fulfilled the standards from the European Commission
- Penalty exertion has increased since 2008, thus a bigger growth within all local collectivities is expected
- Financing for new investments in water treatment facilities in general comes from the Water Agency (Agence d'Eau). There are six Water Agencies in France, together covering all of France
- Demand comes foremost from the industry

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FRANCE

- Important investments are planned for coming years

Business opportunities

- Large investments to be made in new treatment facilities, upgrading current stations and improving the distribution in order to fulfil the EU directives
- Technical aspects and know-how are the first concern when it comes to equipment for water treatment
- Due to the French companies' world leading positions, there is an opportunity for acting as suppliers

Challenges

- Competitive market with high concentration: four big companies represent 80 % of the market in terms of construction of treatment facilities
- Financing for the investments within water treatment comes mostly from the end customers, who are less willing to pay a higher fee than today, i.e. some uncertainty of how to finance the required investments

Conclusion

- The French Institution of Environment estimates the annual need of investments in the water network and treatment facilities to be € 2,5 bn per year until 2015
- The French goal to fulfil the EU standards has been set to the latest in 2012, thus many investment projects will start in 2008-2009
- However, there is tough competition and high concentration on the market with French companies being world leading
- Thus, the opportunity might rather lie in becoming a supplier to the French companies

GERMANY

- A well developed, mature and stable market

| Country facts | | Waste water usage: | |
|--------------------------------------|------------|----------------------------------|--------------------------|
| Population: | 83 m | in industry | 32 km ³ /year |
| GDP/capita 2006: | \$ 24 592 | by households | 5 km ³ /year |
| Average GDP growth over 5 years: | 1 % | Water cleaning equipment: | |
| Swedish export 2006: | \$ 14,6 bn | total import | \$ 138 m (+15%) |
| Swedish export, avg. growth 5 years: | 13 % | import from Sweden | \$ 4,3 m (+18%) |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • Germany already fulfills the EU standards for waste water treatment and hence there are no major investments planned, but rather maintenance projects going on • There are ongoing discussions about introducing laws on treatment of bathing water (i.e. lakes) and on treatment of chemical, notably pharmaceutical pollutants • There are 10 000 waste water treatment plants in Germany • The "Länder" are responsible for monitoring the laws and the investment decisions are made on a municipal level (through public tender) • Private companies play a significant role in the planning and construction phase of the plants • Basically all plants have mechanical, biological and chemical treatment, some even have microfiltration of UV-treatment as a fourth phase • The main topic on the market is currently microfiltration treatment |

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GERMANY

- Probably tough entry, yet large and similar market to Sweden

Business opportunities

- Stable maintenance investments of ca. € 1,5 bn per year
- Stable building sector investments, ca € 200 bn p.a.
- Growing demand for microfiltration solutions
- The growing number of biogas plants (+100 % from 2000 to 2005) also implies a greater demand for water treatment
- The world leading positions of the German companies might offer opportunities for suppliers

Challenges

- No major investment plans in new plants – saturated market focusing on maintenance
- German companies have good know-how and the market belong to the most advanced ones
- German component producers offer very good value (quality) for money
- French competitors have a strong foothold

Conclusion

- The market is quite saturated and Germany is rather a net exporter of waste water treatment technology
- Competitive threat from German companies offering good value for money
- However, it is still a large market with similar needs as the Swedish one
- Potential upcoming stricter laws would create greater demand
- Hence , there is a tough entry process, yet a market of large size and with a good fit with the Swedish competence
- Potential for suppliers to the German companies

HUNGARY

- Significant investment needs until 2015

| Country facts | | Waste water usage (2005): | |
|--------------------------------------|-----------|----------------------------------|---------------------------|
| Population: | 10 m | in industry | 0,2 km ³ /year |
| GDP/capita: | \$ 6 126 | in municipalities | 0,1 km ³ /year |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,6 bn | total import | \$ 13,2 m (-4%) |
| Swedish export, avg. growth 5 years: | 16 % | import from Sweden | \$ 0,03 m (-46%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • Hungary should comply with the EU standards by 2015 • In order to fulfill the EU-standards, € 3 bn would need to be invested until 2015 • Since 2004, there is a national plan that is revised every two years • 59,2 % of Hungarian households were connected to the public sewage system in 2004 and 88,1 % should be connected by 2015 • Demand is strongest in the municipal sector • The most widely used technology today is biological treatment • Decisions are taken within the municipalities, although in cooperation with private companies |

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Sources: National Plan for the Sewage Disposal and Waste Water Treatment of Hungarian Settlements, 2004, Ministry of Environment and Water



HUNGARY

- Growing number of projects, yet competition is already present

Business opportunities

- For 2007-2013, € 2,6 bn will be invested in waste water
- There will be a large number of projects within the next 10 years
- Segments with opportunities include: municipal segment, pharmaceutical industry, dairy and meat industry, fine chemical industry, biofuel industry
- Demand for: sewage disposal technology, cleaning equipment (activated sludge, filtered bed technology)

Challenges

- Competition from domestic companies, who offer competence within design and construction at low prices
- Competition from international companies who have advantages of scale economy and are already well-established

Conclusion

- Waste water related issues have high priority in Hungary at the moment: there are still a large number of Hungarian settlements where sewage disposal and waste water treatment need to be solved
- A lot of waste water related projects can be expected in the next 10 years
- Swedish companies could benefit from the growing market potential mainly in the municipal sector but also in some industrial areas
- The challenge for Swedish companies is the already established competition

INDIA

- Market growth of 15-20%

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|----------------------|
| Population: | 1 110 m | in industry | 197 bn liters/year |
| GDP/capita: | \$ 634 | in municipalities | 2 190 bn liters/year |
| Average GDP growth over 5 years: | 7 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,5 bn | total import | \$ 103 m (+81%) |
| Swedish export, avg. growth 5 years: | 17 % | import from Sweden | \$ 0,1 m (-10%) |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • There is a national plan since 2006 running to 2012 • The total wastewater investment in 2007 stood at € 2 bn and expected to get doubled to € 4 bn by 2008 • The overall wastewater treatment market is estimated to be growing at 15-20 % per annum • Municipal is estimated to have 250 wastewater treatment plants whereas industrial sector has about 88 plants • On average, India produces 29 000 million liters of wastewater every day, but there is only 6 000 million liters of management capacity; signifying huge untapped market • USA is the major supplier of wastewater treatment equipments taking a market share of 40 % • Decisions are mostly taken in the public sector on a regional level • The main issue now is to build new plants and to upgrade the existing ones to biological treatment |

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INDIA

- Significant opportunities, yet low willingness to pay

Business opportunities

- Investment plans of € 26 bn until 2012
- Segments with opportunities for Swedish companies: Major ones are municipalities, textile, bulk drugs and many others
- Equipments used in desalination, filtration, clarification, oil-water separation are widely in demand in India
- Booming construction industry stood at € 33,5 bn growing at 8.3 % in 2005

Challenges

- Competition from low cost domestic suppliers (dominated by 6-7 large companies)
- Strong roots of US supplies
- Hard to reach key decision makers in the municipal departments
- Low willingness to pay for environmental issues by private players
- Not rigid enough law enforcement mechanisms
- Limited funding bodies (but increasing)

Conclusion

- Wastewater treatment market is expected to be doubled to € 4 bn in 2008
- The Indian government sees waste water as one of the priority areas
- The market is dominated by few major players, most of which are international companies
- Forming partnerships or joint-ventures are the most common entry strategy for international companies in India

LATVIA

- Significant investment plans, despite the small market size

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|-----------------------------|
| Population: | 2 m | in industry | n.a. |
| GDP/capita: | \$ 5 683 | in municipalities | 0,059 km ³ /year |
| average GDP growth over 5 years: | 8 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,6 bn | total import | \$ 5,3 m (-2%) |
| Swedish export, avg. growth 5 years: | 25 % | import from Sweden | \$ 0,3 m (-5%) |



Waste water facts:

- Latvia has to comply with the EU standards by 2018
- It has access to EU-funding for the required investments
- The greatest demand is found in the municipal sector
- Waste water treatment plants in Latvia:
 - mechanical treatment plants (ensure primary purification) - 159
 - biological treatment plants (ensure secondary purification) – 721
- Decisions are mostly taken within the public sector on a national level

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LATVIA

- Attractive opportunities, but administrative difficulties

Business opportunities

- Until 2015, € 445 m will be invested in waste water
- Increased demand due to economic growth
- Foremost opportunities within the municipal sector

Challenges

- Big local players in the market with a wide contact network and experience in the local field of environmental sector
- Low public awareness of environmental problems in Latvia
- Hard to get through to the public administration i.e. decision makers
- Presence in the local market is important
- Language – all documentation should be in Latvian

Conclusion

- Swedish companies could benefit on the growing market potential. Latvia's growth is among the highest of the 25 EU countries. The growing private consumption is driven by wage growth (increase of 15,7 % after inflation 2006) and low interest rates
- Swedish companies have longer experience in the field of waste water treatment compared to the local players resulting in lower energy consumption by plants, higher capacity of plants and better purification results of out-flow water after treatment plants

LITHUANIA

- 75% of the waste water plants fulfill the EU standards

| Country facts | | Waste water usage: | |
|-------------------------------------|-----------|----------------------------------|----------------|
| Population: | 3 m | in industry | n.a. |
| GDP/capita: | \$ 5 247 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 2 % | Water cleaning equipment: | |
| Swedish export: | \$ 7,1 bn | total import | \$ 5,4 m (+4%) |
| Swedish export, avg growth 5 years: | 13 % | import from Sweden | \$ 0,8 m (-3%) |



Waste water facts

- Development Strategy For Water Management (Water Supply And Waste Water Treatment) was implemented in 2005 and runs until 2015
- 77 % of waste water is cleaned using mechanical or biological treatment – about 20 % is not treated
- EU - funding is applicable for waste water sector
- Demand is strongest in the municipal sector
- Decisions are taken in the public sector, mostly on a national level

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LITHUANIA

- There is a large need to upgrade the current waste water plants

Business opportunities

- Investment plan of about € 200 m for 2007-2013
- Segments with opportunities for Swedish companies: municipalities, industry of agriculture, infrastructure of run-off waste water, waste water networks and silt treatment
- There is a high demand for all types of waste water treatment products.
- The growth of building sector is expected to be about 10 % in the next 3 years
- Focus lies on cost-efficient modernization

Challenges

- Competition from low cost countries and from domestic production
- Low willingness to pay for environmental issues

Conclusion

- Government and EU funding entities foresee waste water as a priority area in the field of environmental protection
- Approximately 600 waste water treatment systems are deteriorated in smaller cities and villages. Thus, there is high potential for upgrading old technologies
- However, there is significant competition from low-cost actors

THE NETHERLANDS

- Waste water treatment is a high priority

| Country facts | | Waste water usage: | | |
|-------------------------------------|-----------|---------------------------|-----------|--------|
| Population: | 16 m | in industry | n.a. | |
| GDP/capita: | \$ 25 333 | in municipalities | n.a. | |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | | |
| Swedish export: | \$13,5 bn | total import | \$ 62,6 m | (+17%) |
| Swedish export, avg growth 5 years: | 16 % | import from Sweden | \$ 5,4 m | (+9%) |



Waste water facts

- There are 400 wastewater treatment plants in the Netherlands (mainly public) handled by 26 local water boards
- All plants have secondary treatment
- Demand foremost comes from the public sector
- The Netherlands are obliged to fulfill EU-standards for wastewater treatment before 2015 and the Netherlands are well prepared for the fulfillment of these standards
- Over the next 4 years € 80 m are designated for investment in water technology in order to stimulate innovation – the main issue is increasing the exports
- The key strengths of the national market include: ability to cooperate between public and private sector, technological innovation and embedding water management in other developments
- The weakness of the Dutch water technology sector is the lack of skilled personnel

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THE NETHERLANDS

- EU-standards create potential, but competition is already strong

Business opportunities

- High awareness and priority of water issues
- Opportunities both in municipalities and in industry
- Demand exists for: energy saving and recycling techniques, as well as for skilled personnel
- The building sector is expanding again after a recession in the years 2003, 2004

Challenges

- Competition from both domestic and international actors is strong
- There is a high and competitive standard of technological innovation and techniques in water technology
- There is a lack of skilled personnel and workforce

Conclusion

- Wastewater management is a prioritized area in the Netherlands and currently legislation is shifting in order to make the system more efficient. Also the EU-standards of 2015 drives the sector forward.
- The technological competence is high and a joint 4 year € 80 m project between the government and the industry aims to develop Dutch water technology further and export it.
- There is a demand for skilled workers within water technology and water management at the same time as there is strong competition

NORWAY

- Waste water issues high on the political agenda

| Country facts | | Waste water usage: | |
|-------------------------------------|-----------|---------------------------|-----------------------------|
| Population: | 5 million | in industry | 0,078 km ³ /year |
| GDP/capita: | \$ 40 947 | in municipalities | 0,299 km ³ /year |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 3,1 bn | total import | \$ 25,6 m (+20%) |
| Swedish export, avg growth 5 years: | 20 % | import from Sweden | \$ 2,3 m (+3%) |



Waste water facts

- By 2006 Norway had 2782 waste water facilities
 - 50 of these did not have any cleaning of the water at all
 - 50 percent of the waste water facilities could not provide sufficient clean water approved by authorities
- Most plants use biological treatment (ca. 70 %), but some also only have mechanical treatment
- The main issue is currently upgrading the net
- The public pays for the waste water to be cleaned with a fee amounting € 250 per year and household
- Waste water issues are high on the political agenda due to a big waste water scandal in 2007
- Norway has a rigid law controlling industries and municipalities concerning waste water among other pollution matters
- Decisions are made within the public sector at a municipal level

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NORWAY

- Norway's waste water park needs to be renewed

Business opportunities

- Until 2015, investments of € 190 m will be made
- The waste water network is in need of upgrading
- Waste water plants on the Norwegian west coast all need upgrading within the near future
- Waste water plants in the south east of Norway needs upgrading towards biological cleaning
- Norwegian waste water companies are too small to handle large projects by them self
- Quality is prioritized before costs

Challenges

- Scattered agenda - no direct focus
- The consumers pay for the water waste. However, it is hard to convince consumers to pay more, despite investment need
- Difficult to reach through to public administrative bodies who are decision makers
- The new waste water law has forced the industry to take actions and a domestic industry has already established itself

Conclusion

- Many waste water plants needs large upgrading within the nearest future
- Swedish companies could benefit on the growing market awareness of the Norwegian problems with waste water issues
- Norwegian companies need help when it comes to large projects within waste water
- Decentralized decision making implies a need to work broadly to penetrate the market

POLAND

- Investment plans until 2015, mainly driven by EU-funding

| Country facts | | Waste water usage: | | |
|--------------------------------------|-----------|---------------------------|-----------|--------|
| Population: | 38 m | in industry | n.a. | |
| GDP/capita: | \$ 5 521 | in municipalities | n.a. | |
| Average GDP growth over 5 years: | 1 % | Water cleaning equipment: | | |
| Swedish export: | \$ 0,7 bn | total import | \$ 35,9 m | (-2%) |
| Swedish export, avg. growth 5 years: | 14 % | import from Sweden | \$ 0,4 m | (+27%) |



Waste water facts

- Need for cheap and clean drinking water has resulted in the National Program for Waste Water Treatment
- EU funding covers up to 85 % of costs and the time plan spans until 2015
- Municipalities and many industries are revising and updating their treatment systems
- Existing plants in the larger cities have too little capacity
- 50 % of the plants have biological treatment, the other have mechanical or none
- Most important decision makers on the market are technical and environmental consultants, yet the overall decisions are taken in the public sector on a municipal level
- Important to also offer services and knowledge about EU funds applications
- Market for waste water treatment is growing rapidly
- Investment needs of € 7,2 bn until 2013 needed to fulfill the EU-standards

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POLAND

- EU-based financing available, but very strong competition

Business opportunities

- € 14 b will be invested until 2015
- There is demand both in municipalities and in industries (energy, steel and paper)
- Demand for: small water treatment plants and solutions for clean drinking water
- Building sector expanding

Challenges

- German competitors are well established on the market
- Turn key solutions need to be offered
- Presence on the Polish market is required
- Familiar with EU-funding application process and payment procedures (influence on cash-flow)
- Competition from low cost imports/ domestic production
- Low public awareness of water quality and focus on low costs
- Local presence, e.g. in form of a local cooperation, is required

Conclusion

- Waste water treatment has been defined as a priority area and there are large investment plans
- There is considerable competition from other international players
- An entry to the market should be made through local presence
- Market is very dependant on EU-funding

PORTUGAL

- Rapidly developing market with increasing environmental concern

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|----------------------------|
| Population: | 11 m | in industry | 0,1 km ³ /year |
| GDP/capita: | \$ 11 124 | in municipalities | 0,56 km ³ /year |
| Average GDP growth over 5 years: | 6 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,4 bn | total import | \$ 26 m (+13%) |
| Swedish export, avg. growth 5 years: | 26 % | import from Sweden | \$ 0,7 m (+70%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • Portugal has a new and ambitious plan for waste water management for 2000-2013 • Most of these investments are targeted and the sewage networks • There are 1035 WWT-plants in Portugal, out of which the majority have biological treatment • Portugal still have problems fulfilling the EU standards for WWT, 30 % of the waste water still without biological and chemical treatment, 14 % without any treatment • There is an ongoing privatization of the WWT with companies running the WWT in concessions with the municipalities • Nevertheless, demand is still strongest within the municipal sector • Furthermore, decisions are still mostly made in the public sector • The investment need until 2013 amounts to € 3 bn |

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PORTUGAL

- The private sector companies have excellent WWT business

Business opportunities

- Rapid modernization of local economy has led to a demand for sophisticated products and services in environmental technologies
- Strive towards cost sustainable water tariffs which will increase WWT cost for industry and provide an incentive for investments in water resource efficient technology
- Main focus on municipal waste water treatment

Challenges

- The private Concessions are open to collaborate with international private companies
- The major International competitor is General des Eaux Portugal. German, French and Spanish companies are the most visible in this market.
- International companies wishing to enter this market must appoint a reliable local agent/distributor.
- New-to-market companies would find it difficult to start competing directly in large projects

Conclusion

- There is a considerable investment plan until 2013
- The market is stimulated by EU standards funding and heavily subsidized by the government and private sector
- Increase in the amount of private actors in Portuguese WWT means good business opportunities for Swedish companies
- Some competition is however already present on the market

ROMANIA

- 64% of waste water plants function inadequately

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|----------------------------------|------------------|
| Population: | 22 m | in industry: | n.a. |
| GDP/capita: | \$ 2 443 | in municipalities: | n.a. |
| Average GDP growth over 5 years: | 6 % | Water cleaning equipment: | |
| Swedish export: | \$ 2,4 bn | total import | \$ 49,2 m (+30%) |
| Swedish export, avg. growth 5 years: | 23 % | import from Sweden | \$ 7,7 m (+32%) |



Waste water facts

- There are large investment needs in order to fulfill the EU standards
- Only 52 % of Romania's population is connected to water and sewerage services
- The public sewerage service is available to 11,5 m people (53 % of total Romanian population) and covers 90% of total urban population and only 10 % of rural population
- Existing wastewater treatment plants cover only 77 % of the total flow evacuated through public sewerage networks
- 47 urban localities among which important ones, such as Bucharest, Craiova, Braila, Galati, and Tulcea, discharge wastewaters in natural receivers without prior treatment
- Out of 2 609 urban agglomerations with more than 2 000 p.e., only 340 (13 %) have waste water treatment plants
- Hence, demand is the strongest in municipalities
- Decisions are foremost made in the public sector on a municipal level – they allocate the funds

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ROMANIA

- Huge investment needs, but administrative barriers

Business opportunities

- Until 2012, investments of € 4,8 bn will be made
- Industries with opportunities include: energy, chemicals, automotive
- There are very few competitors with limited presence on the market

Challenges

- Tenders take a long time until they finalize
- Technical specifications of the equipment must be well marketed in order for contractors to include it in the projects
- Companies offering competitive prices have an advantage

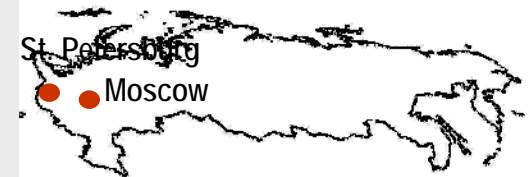
Conclusion

- The government foresees waste water as a priority area and has developed investment plans for the area
- Swedish companies could benefit of the growing market potential driven by the local factors and the European standards
- The most interesting segment is within the urban waste water treatment area
- There is potential for both new investments and upgrading of the existing plants and equipments

RUSSIA

- Large investment needs, but complicated entry procedure

| Country facts | | Waste water usage: | |
|-------------------------------------|-----------|----------------------------------|------------------|
| Population: | 142 m | in industry | n.a. |
| GDP/capita: | \$ 2 621 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 1,3 bn | total import | \$ 194 m (+28%) |
| Swedish export, avg growth 5 years: | 30 % | import from Sweden | \$ 0,05 m (-36%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • The increasing political awareness of environmental issues and clean water has led to the launch of a official plan from 2002 until 2010 • There is a great need of investments and upgrading, but there are large regional differences, e.g. Moscow has UV-filtration, whereas other regions have no treatment at all • Demand foremost comes from the industry • Decision-making on investments is largely made in the public sector |

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RUSSIA

- Interesting opportunities, but high administrative barriers to entry

Business opportunities

- Federal program “Ecology and Natural Resources of Russia” with total budget of € 21 billion (2002-2010)
- Rapid economic growth, increased standard of living and greater environmental awareness
- 15-20 % growth in the construction industry over the next three years
- Interesting regions include Krasnodar, Rostov, Sochi, Novorossiysk
- There are specialized exhibitions, e.g. ECWATECH is the biggest water forum in Eastern Europe

Challenges

- Limited enforcement mechanisms for waste water laws
- Great regional differences, from UV-treatment to no treatment at all
- Limited financial resources
- Need of a Russian certification (European quality certificates need authorization)
- Price competitive domestic industry

Conclusion

- Domestic competition and complicated procedures for product certification constitute barriers to entry
- Despite this, the business opportunities for Swedish water companies seem to be rather good due to high investment needs
- It is very important to identify the right partners, niches and regions before entering

SLOVAKIA

- Huge demand for WWT from municipalities until 2015

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|--------------------------|
| Population: | 5 m | in industry | 127 074 tons/year (+28%) |
| GDP/capita: | \$ 5 126 | in municipalities | 321 27 tons/year (+72%) |
| Average GDP growth over 5 years: | 4 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,3 bn | total import | \$ 7,4 m (+4%) |
| Swedish export, avg. growth 5 years: | 22 % | import from Sweden | \$ 0,008 m (-65%) |



Waste water facts

- There is an investment plan for waste water facilities and management until 2015
- The municipalities are driving the demand on the Slovak market. They have realized the need of waste water treatment, but most of them have limited financial possibilities
- In Slovakia, waste water treatment laws apply both to existing installations and new ones
- In Slovakia, two steps should always be used to clean urban waste water. Many municipalities use both mechanical and biological treatment, but still 20 % of all household water are without any treatment
- Municipalities and waste water treatment companies can apply with their projects to the Ministry of Environment, if the project is larger than 25 million € - the government is the decision making body.
- Today, only 56 % of the inhabitants in Slovakia are connected to sewerage systems. By 2015 this figure should be 100 %

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SLOVAKIA

- Local presence is a must in order to succeed in Slovakia

Business opportunities

- Investment budget of € 5,6 bn to 2015
- Strong demand from municipalities for new investments in waste water treatment facilities
- Many waste water treatment projects can be partly financed through EU funds
- Several industry sectors are in need of new/ upgraded waste water treatment facilities, to comply with EU directives
- Very high growth in the construction industry

Challenges

- There are limited financial resources among the municipalities, and co-financing from EU-funds is only available if the municipality has 2000 inhabitants or more
- Knowledge of the local language, market, and personal connections are vital to succeed
- Local presence, or a partnership with a Slovak partner are more or less crucial if you want to sell on the Slovak market

Conclusion

- There is a strong demand for waste water treatment products in Slovakia. The highest demand can be found among municipalities, but opportunities can also be found in several industry segments, e.g. chemical and food processing, forced to comply with EU directives.
- Slovakia is a small country where knowledge of the local language and personal connections is very important. To be able to compete with domestic companies, local presence or a partnership with a Slovak company are usually a condition for utilizing all existing business opportunities.

SOUTH AFRICA

- High awareness about waste water treatment issues

| Country facts | | Waste water usage: | | |
|-------------------------------------|-----------|---------------------------|-----------|--------|
| Population: | 47 m | in industry | n.a. | |
| GDP/capita: | \$ 3 562 | in municipalities | n.a. | |
| Average GDP growth over 5 years: | 5 % | Water cleaning equipment: | | |
| Swedish export: | \$ 0,8 bn | total import | \$ 28 m | (+9%) |
| Swedish export, avg growth 5 years: | 26 % | import from Sweden | \$ 0,03 m | (-10%) |



Waste water facts

- High level of awareness of water treatment issues, a priority both for government and industry though enforcement of policies is low
- Waste water treatment is a rather advanced field in South Africa
- Industry, e.g Mining and Power generation required by law to treat waste water
- Industry and Government alliances to re-use treated water from Private industry
- Decisions are made in the public sector on a municipal level

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SOUTH AFRICA

- Significant opportunities in mining, but a competitive market

Business opportunities

- Total investments until 2015 of about € 1 bn expected
- Opportunities for Swedish companies exist in municipalities and in the mining industry
- Demand exists for mechanical equipment such as screens, aerators, pumps, belt presses, disinfection equipment, measuring equipment and programmable process control equipment
- Economic growth implies an expanding building sector
- Aim is for 3,5 m houses to have proper sanitation by 2010
- Current equipment needs replacement

Challenges

- Competition from established local industry-leaders in the market
- Certain competition from international players

Conclusion

- There is a high level of awareness that has lead to initiatives to improve the situation
- Swedish companies could benefit of the growing market potential
- There is significant potential in the mining industry
- It is a rather competitive market with local companies active on the market

SPAIN

- Growing market with high political awareness

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|----------------------------------|-----------------|
| Population: | 44 m | today | n.a |
| GDP/capita: | \$ 16 177 | future (2019) | n.a. |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 4,6 bn | total import | \$ 133 m (+19%) |
| Swedish export, avg. growth 5 years: | 19 % | import from Sweden | \$ 2,3 m (+37%) |



Waste water facts

- Politics in the water sector are re-orientating to a great extent at the moment, due to the recently introduced waste water treatment law conforming with EU Directives
- Recycled water has to go through an authorized cleaning process controlled by the regional authority
- There is a plan for water management investment with a time line of 2007-2015. Investment areas are 1) Production and maintenance of water, 2) water recycling and de-contamination, 3) Environmental work and prevention of inundation
- As a result, demand is expected to increase significantly in 2-4 years
- Priority areas of investment are foremost municipalities and agriculture
- Decisions are made within public administrations on a national or regional level
- The financial input will to a large extent depend upon grants and loans from the Government
- Today, 75 % of the plants use biological treatment, 20 % mechanical

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SPAIN

- Huge investment plans, but administrative barriers to entry

Business opportunities

- Until 2015, € 19 bn will be invested in waste water
- Regions of foremost interest are Andalucía, Catalonia, Valencia, Murcia
- Expanding building sector - water treatment plants for small nucleus are foremost needed
- Swedish companies have long experience in waste water treatment

Challenges

- Competition from domestic and international companies
- Low public awareness of water quality
- Focus on low cost
- Difficult to reach through to public administrations who are decision makers

Conclusion

- Government foresee the water industry as priority area, and EU helps in funding this sector from 20-30 % of the total investment spending
- Swedish companies could benefit on the growing market potential. According to the Ministry of Environment the waste water sector will increase with 300 % between 2008-2015
- The introduction of the recycled water treatment law requires large investment in both municipality and industry sector

TURKEY

- Increasing awareness regarding waste water treatment

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|-----------------|
| Population: | 73 m | in industry | n.a. |
| GDP/capita: | \$ 3 582 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 5 % | Water cleaning equipment: | |
| Swedish export: | \$ 1,3 bn | total import | \$ 58 m (+18%) |
| Swedish export, avg. growth 5 years: | 26 % | import from Sweden | \$ 1,1 m (+31%) |



Waste water facts

- Increasing awareness as well as the negotiations on a EU membership has resulted in a national plan
- The objective is to fulfill the EU standards
- The new environmental law was adopted in April 2006 and is foremost concerned with municipalities
- Prime Ministry State Planning Organization, Iller Bank and Municipalities are the main decision makers in purchasing in municipal waste water treatment
- Projects are mainly financed by EU funds and bank loans
- The World Water Forum 2009 will take place in Turkey

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TURKEY

- Increasing opportunities as a result of adaptation to the EU

Business opportunities

- The budget for waste water investments from 2007-2023 amounts to € 34 bn
- Industries with opportunities include: textile and leather, chemical, hazardous and medical industries
- Demand for: filtration systems, biological treatment and advanced treatment technologies as well as
- Building sector is expanding the total spending was 15 Billion Euros in 2006 and 15 % growth is expected in the next 3 years

Challenges

- For small and middle size WWT projects German companies with their funds to finance projects and for big projects Japanese companies also with their funds are strong in the internationally funded WWT projects
- In large, German, French and Italian companies dominate the imports
- Domestic companies offer products at low prices
- Low enforcement mechanisms for environment laws

Conclusion

- There are large investments planned, creating opportunities both within municipalities and in industries
- Swedish companies could benefit from the growing market potential through forming a partnership with a domestic company and approaching the financially sound companies or municipalities
- European companies are already active in the country and there is an increasing demand for application of advanced technologies

UNITED KINGDOM

- High concentration of large British and multinational companies

| Country facts | | Waste water usage: | |
|--------------------------------------|------------|---------------------------|-----------------|
| Population: | 60 m | in industry | n.a. |
| GDP/capita: | \$ 27 582 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 3 % | Water cleaning equipment: | |
| Swedish export: | \$ 10,7 bn | total import | \$ 153 m (+9%) |
| Swedish export, avg. growth 5 years: | 10 % | import from Sweden | \$ 6,1 m (+32%) |



| Waste water facts |
|---|
| <ul style="list-style-type: none"> • A new strategy on waste water management will be announced in 2008 • Major investments are required to maintain the water industry in England and Wales, especially with regard to the underground assets • The industry is served by two types of companies: those providing water supply and sewerage services (WSCs) and those providing water-only services (WOCs). The WSCs are large companies and accounted for 91,6 % of total industry turnover in England and Wales in 2005/2006. • Decisions are made in the private sector |

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UNITED KINGDOM

- Large building schemes and the Olympics 2012 drive the demand

Business opportunities

- Major investments are required to maintain the water industry in England and Wales, the annual figure for each of the next 5 years being over € 4,5 bn
- More than 85 % of the population is connected to urban waste water treatment, and the water grid system needs urgent improvements
- Significant growth in construction due to large building schemes and the Olympic Games

Challenges

- Large UK companies are dominating players on the domestic market as well on the international market
- Hence, it is rather an exporting market
- It is a traditional sector in the UK with extremely large operators, which means that potential customers already have established relations and a domestic buying pattern

Conclusion

- High public awareness of environmental issues, but not specifically focusing on waste water treatment in media
- There are significant upgrading needs as well as growing opportunities resulting from large construction plans
- However, there are very strong and established domestic companies, which render a potential market entry more difficult

UKRAINE

- Existing need, but perhaps not enough prepared market

| Country facts | | Waste water usage: | |
|--------------------------------------|-----------|---------------------------|----------------------------------|
| Population: | 47 m | in industry | *6,3 km ³ /year (+1%) |
| GDP/capita: | \$ 1 040 | in municipalities | *2,5 km ³ /year (-5%) |
| Average GDP growth over 5 years: | 8 % | Water cleaning equipment: | |
| Swedish export: | \$ 0,6 bn | total import | n.a. |
| Swedish export, avg. growth 5 years: | 37 % | import from Sweden | n.a. |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • The Government has developed a national plan for 2006-2002, called “Potable Water of Ukraine”, focusing on the quality of drinking water • Another plan focusing on water management runs since 2002 and will continue until 2011 • However, there are restrictions on the readily available funds for its implementation • Nevertheless, the municipalities receive subsidies from the state • The lack of funding also implies that not all existing plants can be operated at full capacity • 62 % of the population has access to a centralized sewage system • Projects are distributed by public tender procedures • Decisions regarding waste water projects are foremost taken in the public sector on a national level |

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UKRAINE

- Investment plans until 2020, but restricted funding available

Business opportunities

- There is a current budget of €1 bn for waste water issues
- There is significant demand within municipalities
- Regions of special interest include: 24 oblast centers, Kyiv, Sevastopol and Simferopol cities
- Industrial demand is foremost found in metallurgy, chemical, food processing industry and gas stations
- The construction sector is expanding by 12-14 % annually, causing a need for sewage systems

Challenges

- Limited awareness of waste water issues
- Very low resources for water treatment infrastructure modernization
- Difficulties to reach trough to public administrations who make the decisions
- Existing domestic companies offering products at low prices

Conclusion

- There is significant potential in terms of investment needs and general demand
- In sight of the strong growth in the construction sector, this need is increasing
- However, the resources available for this purpose are rather limited

UNITED STATES OF AMERICA

- The US constitutes a large and growing market

| Country facts | | Waste water usage: | |
|-------------------------------------|------------|----------------------------------|----------------|
| Population: | 299 m | in industry | n.a. |
| GDP/capita: | \$ 38 165 | in municipalities | n.a. |
| Average GDP growth over 5 years: | 2 % | Water cleaning equipment: | |
| Swedish export: | \$ 13,7 bn | total import | \$ 484 m (+8%) |
| Swedish export, avg growth 5 years: | 10 % | import from Sweden | \$ 8,2 m (+5%) |



| Waste water facts |
|--|
| <ul style="list-style-type: none"> • The Environmental Protection Agency (EPA) has the authority to implement water pollution control programs and set waste water standards for municipalities and industry • The U.S. has around 16 000 waste water treatment systems. Many are in poor condition due to a lack of investments • Community drinking water systems owned by the private sector account for over half of all such systems but they serve only about 15 % of U.S. households • Public waste water systems that treat household sewage account for roughly 80 % of the total and serve the vast majority of U.S. households. • Steady growth over the last 20 years and expected continued growth over next years • Decisions regarding waste water investments are made in the public sector on a municipal level |

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UNITED STATES OF AMERICA

- Enormous need of investments in waste water facilities

Business opportunities

- According to estimates made by the Environmental Protection Agency the U.S. must invest around € 268 bn over the next 20 years in order to upgrade or replace outdated existing systems and build new ones
- Major problems include chronic sewage overflows after rain storms and heavy snowmelt and sanitary sewer overflows due to blocked or broken pipes

Challenges

- Federal funding for water and waste water treatment has declined substantially during the last five years
- The need to adapt products to U.S. standards and regulations can result in significant costs for Swedish companies
- There are significant differences between the states
- The U.S. market for waste water treatment technologies is well developed and a number of large domestic and international companies are present on the market

Conclusion

- Strong demand for upgrading existing wastewater plants and need for investments in new facilities in the coming 10-20 years
- Drinking water systems and waste water systems are to a very large extent owned and operated by public utilities in the U.S. and therefore depending on public funding. The bulk of future investments will be decided by the next U.S. administration
- Swedish companies should be prepared to invest a sufficient amount of time and money if they choose to enter the U.S. market in order to find the right partner

CONTENT

- Introduction
- Export market analysis
- Market prioritization
- Next steps
- Appendix:
 - Country profiles
 - Analysis of trade figures



PRESENCE OF SWEDISH WATER AND WASTE WATER TREATMENT COMPANIES ANALYZED BY TRADE FIGURES

Assumption: Trade figures are a good indicator of Swedish companies presence on the market

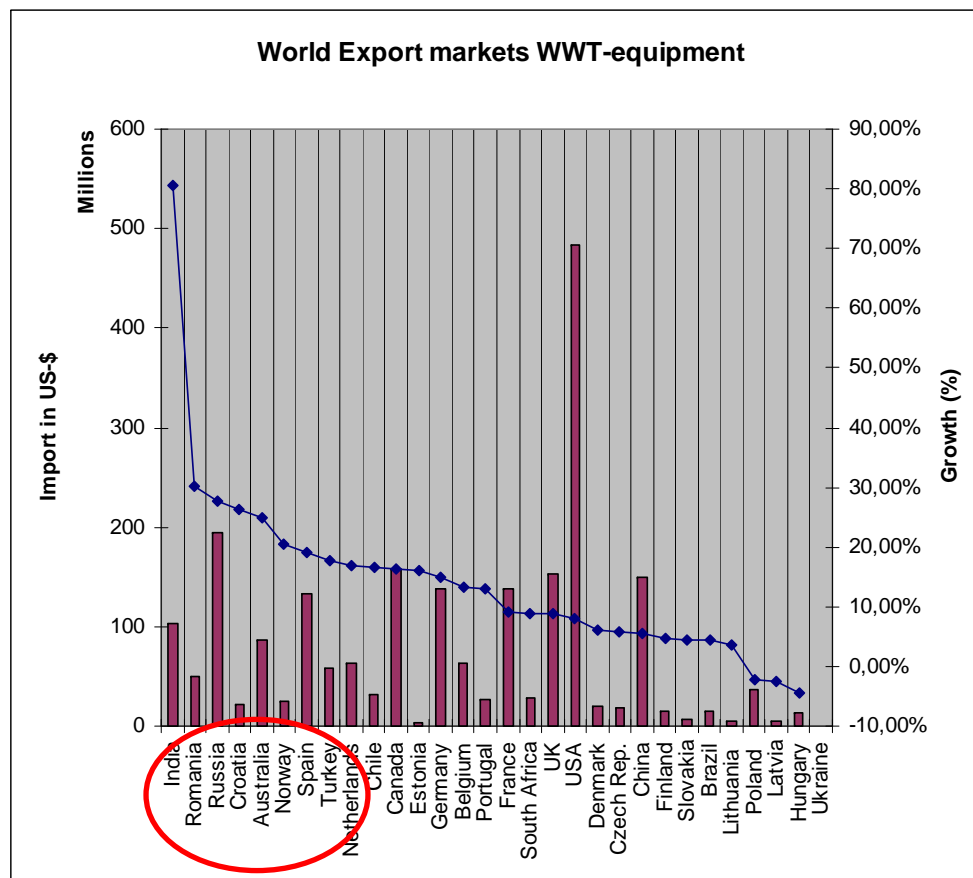
- Limitations:
 - Not taking into account consulting and services and
 - Equipment that has a more universal area of application, (e.g. pumps)

Four listings:

- L1 – The largest and most dynamic importers of waste water treatment equipment
- L2 – The most important markets for export of Swedish wwt-equipment
- L3 – Markets where Sweden has a large share of waste water treatment equipment
- L4 – Markets where Sweden has done especially well in recent years

L1- THE MOST DYNAMIC GROWTH HAS BEEN EXPERIENCED ON EMERGING MARKETS

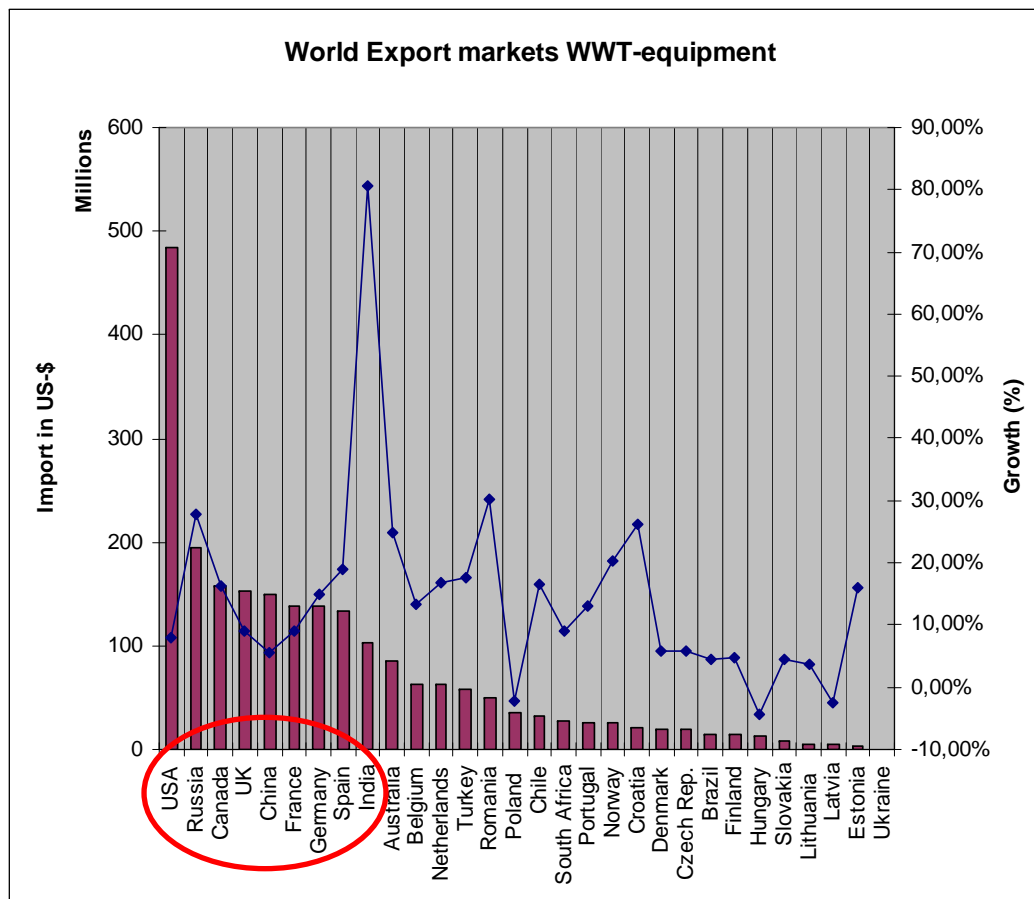
- India, Russia but also Romania and Croatia



| Most dynamic wwt-export markets | |
|---|-----|
| The markets with the highest increase in wwt-imports (CAGR 2001-2006) : | |
| India | 81% |
| Romania | 30% |
| Russia | 28% |
| Croatia | 26% |
| Australia | 25% |
| Norway | 20% |
| Spain | 19% |
| Turkey | 18% |

L1- THE WORLD'S LARGEST EXPORTS MARKET FOR WWT

- large western markets and emerging markets are largest



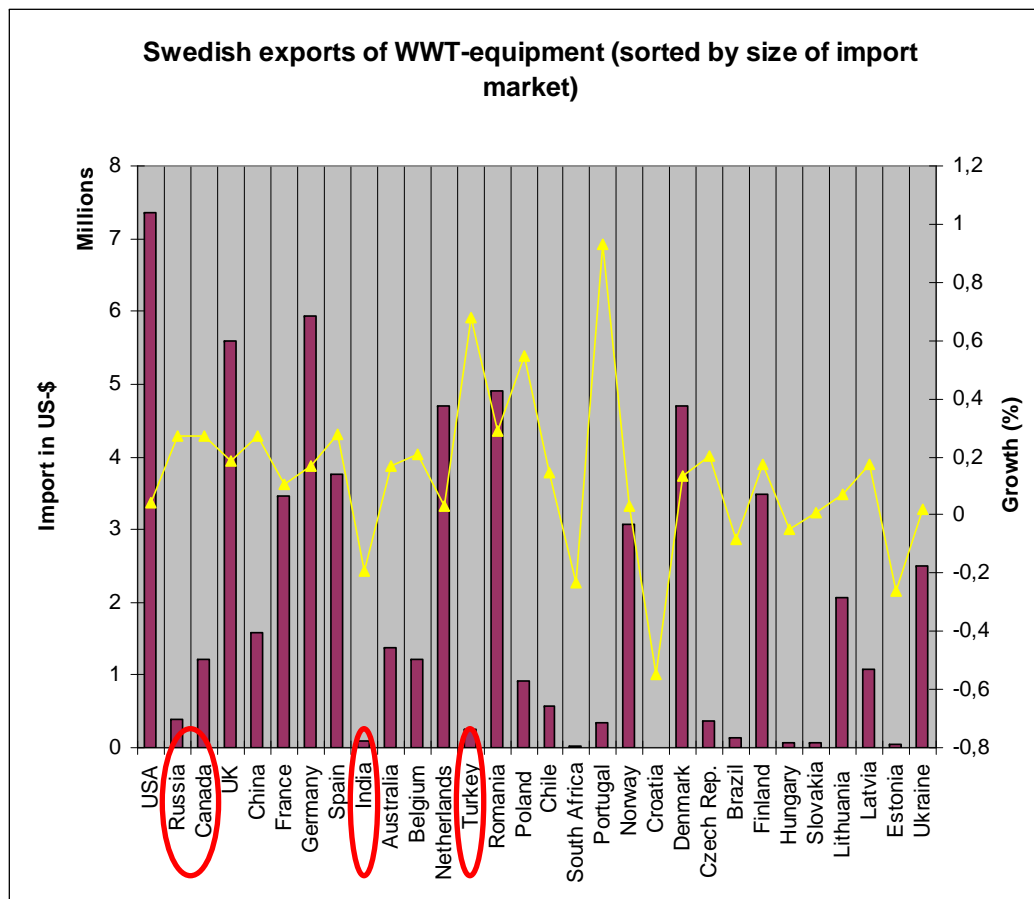
Largest wwt-export markets for Sweden

The markets with the highest wwt-imports (import of wwt equipment 2006 in US-\$):

| | |
|---------|-------------|
| USA | 484 000 216 |
| Russia | 194 117 327 |
| Canada | 157 776 636 |
| UK | 153 180 686 |
| China | 149 797 945 |
| France | 138 730 496 |
| Germany | 137 781 000 |
| Spain | 133 094 942 |
| India | 103 330 529 |

L2- SWEDEN HAS LARGE EXPORT ONLY TO SOME OF THE WORLD'S LARGEST MARKETS ...

- relatively low presence in Russia, Canada, China and India



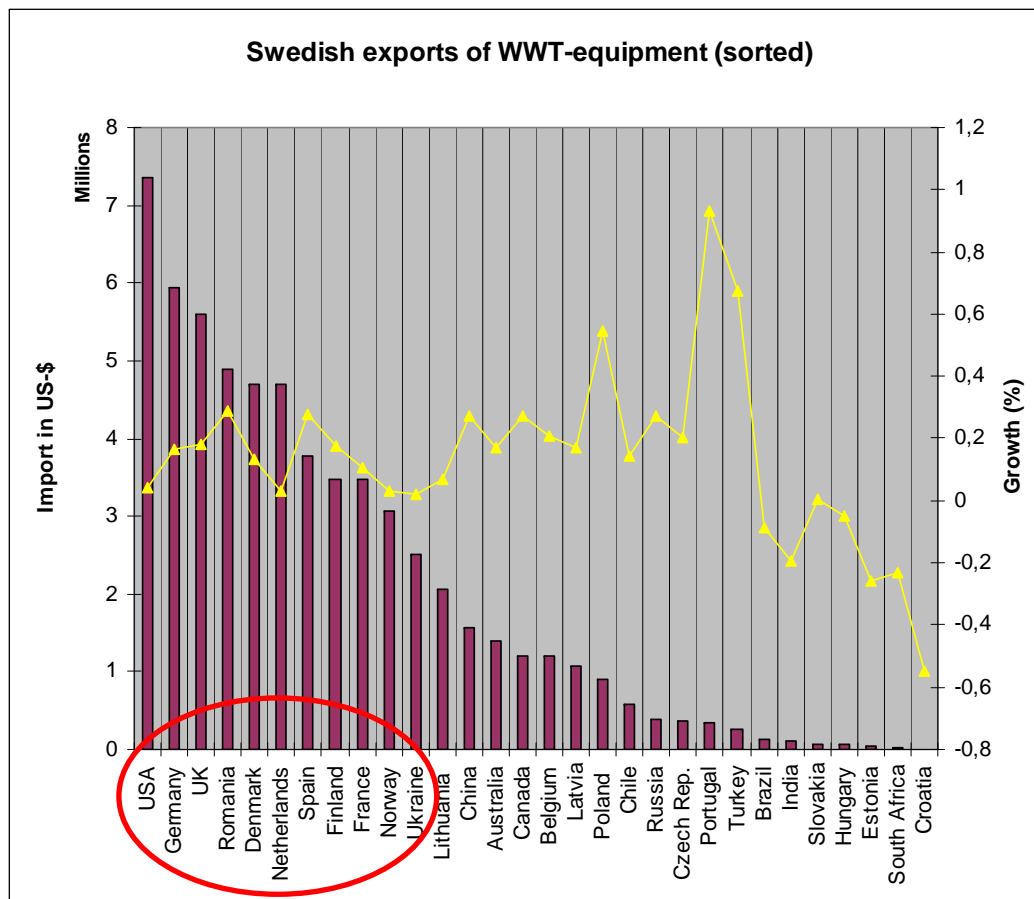
Swedish exports to wwt-markets

Swedish exports to large markets (export of wwt-equipment 2006 in US-\$):

| | |
|---------|-----------|
| USA | 7 366 717 |
| Russia | 382 147 |
| Canada | 1 205 786 |
| UK | 5 590 291 |
| China | 1 573 946 |
| France | 3 464 581 |
| Germany | 5 940 660 |
| Spain | 3 764 568 |
| India | 100 901 |

L2- ... SWEDEN'S MOST IMPORTANT WWT-EXPORT MARKETS ARE USA AND CLOSE EUROPEAN MARKETS

- D, UK, DK and NL; Romania is exceptional



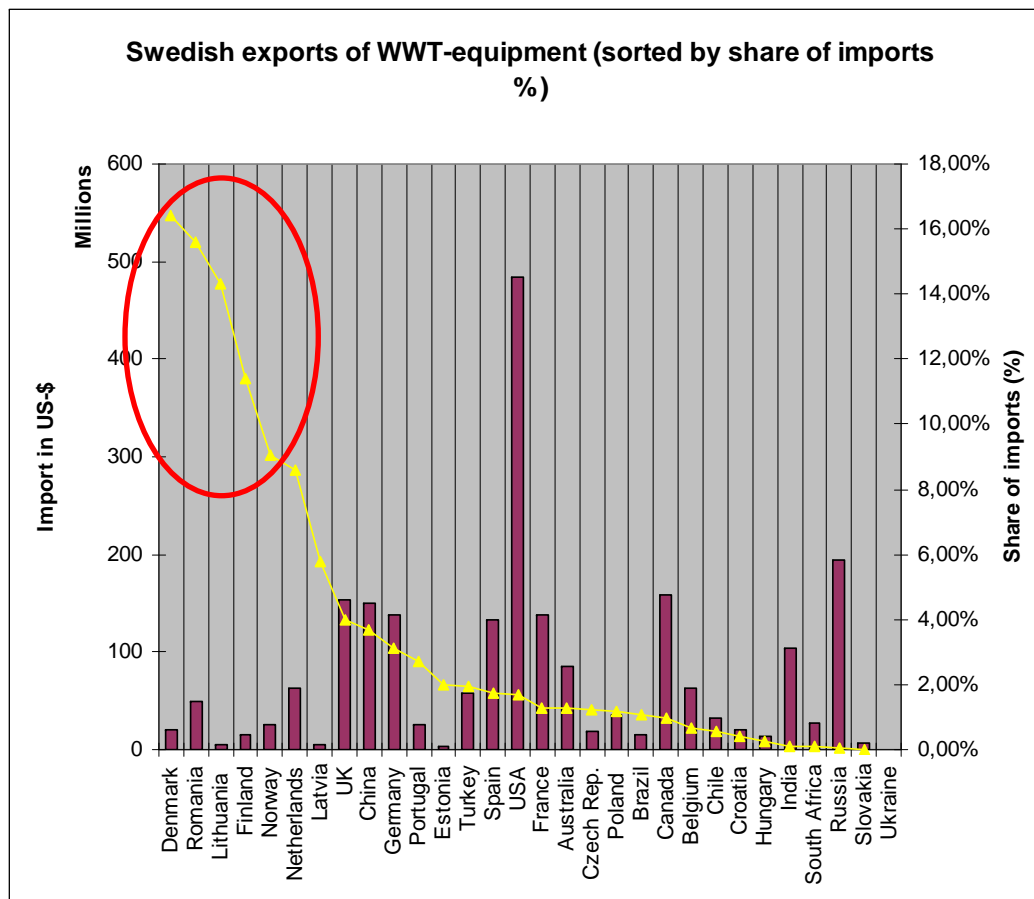
Swedish exports to wwt-markets

Sweden's largest wwt-export markets
(export of wwt-equipment 2006 in US-\$):

| | |
|-------------|-----------|
| USA | 7 366 717 |
| Germany | 5 940 660 |
| UK | 5 590 291 |
| Romania | 4 900 552 |
| Denmark | 4 702 688 |
| Netherlands | 4 702 009 |
| Spain | 3 764 568 |
| Finland | 3 483 322 |
| France | 3 464 581 |
| Norway | 3 075 373 |
| Ukraine | 2 508 399 |

L3- SWEDEN HAS A CONSIDERABLE SHARE OF IMPORTS TO NORDIC MARKETS

- strong presence in Denmark, Finland, Baltic's and Romania



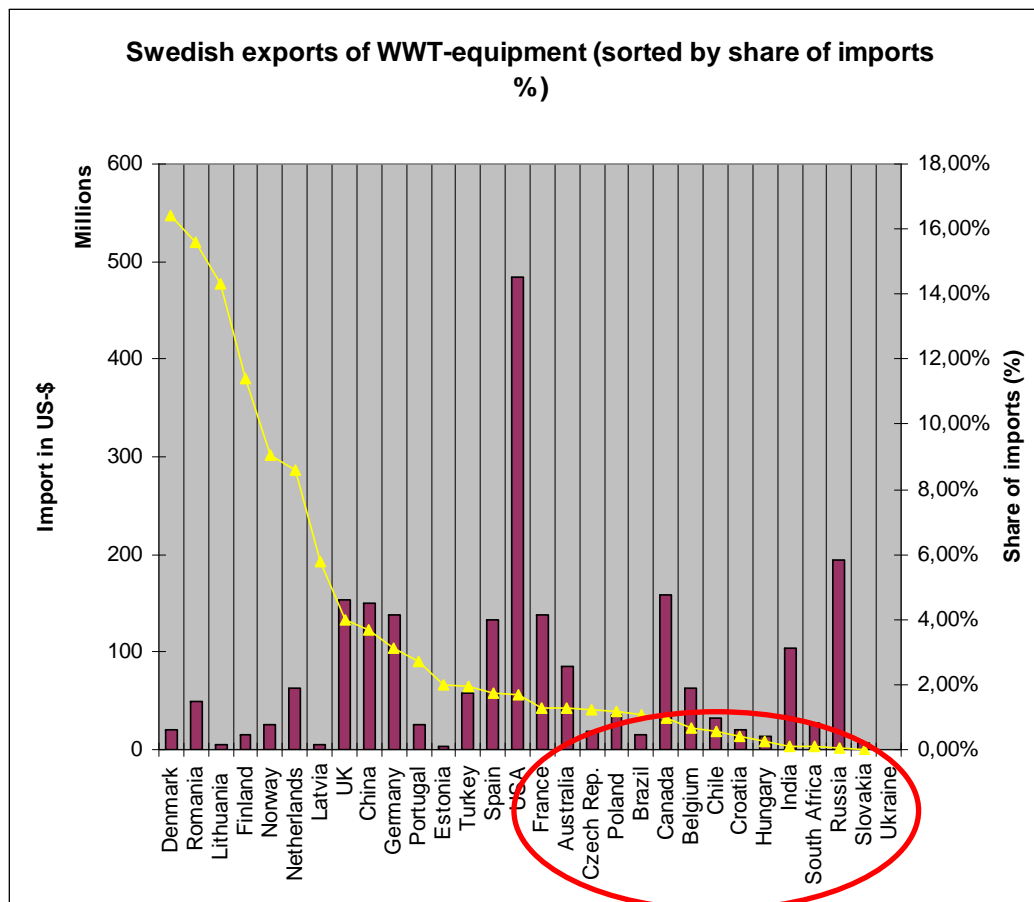
Swedish share of foreign wwt-markets

Sweden's share of wwt-import on markets (export of wwt-equipment 2006 in US-\$):

| | |
|-------------|-----|
| Denmark | 16% |
| Romania | 16% |
| Lithuania | 14% |
| Finland | 11% |
| Norway | 9% |
| Netherlands | 9% |
| Latvia | 6% |
| UK | 4% |
| China | 4% |

L3- ... BUT A LOW SHARE ON EMERGING AND CENTRAL EUROPEAN MARKETS

- weak foothold in Russia, Ukraine, India and Hungary

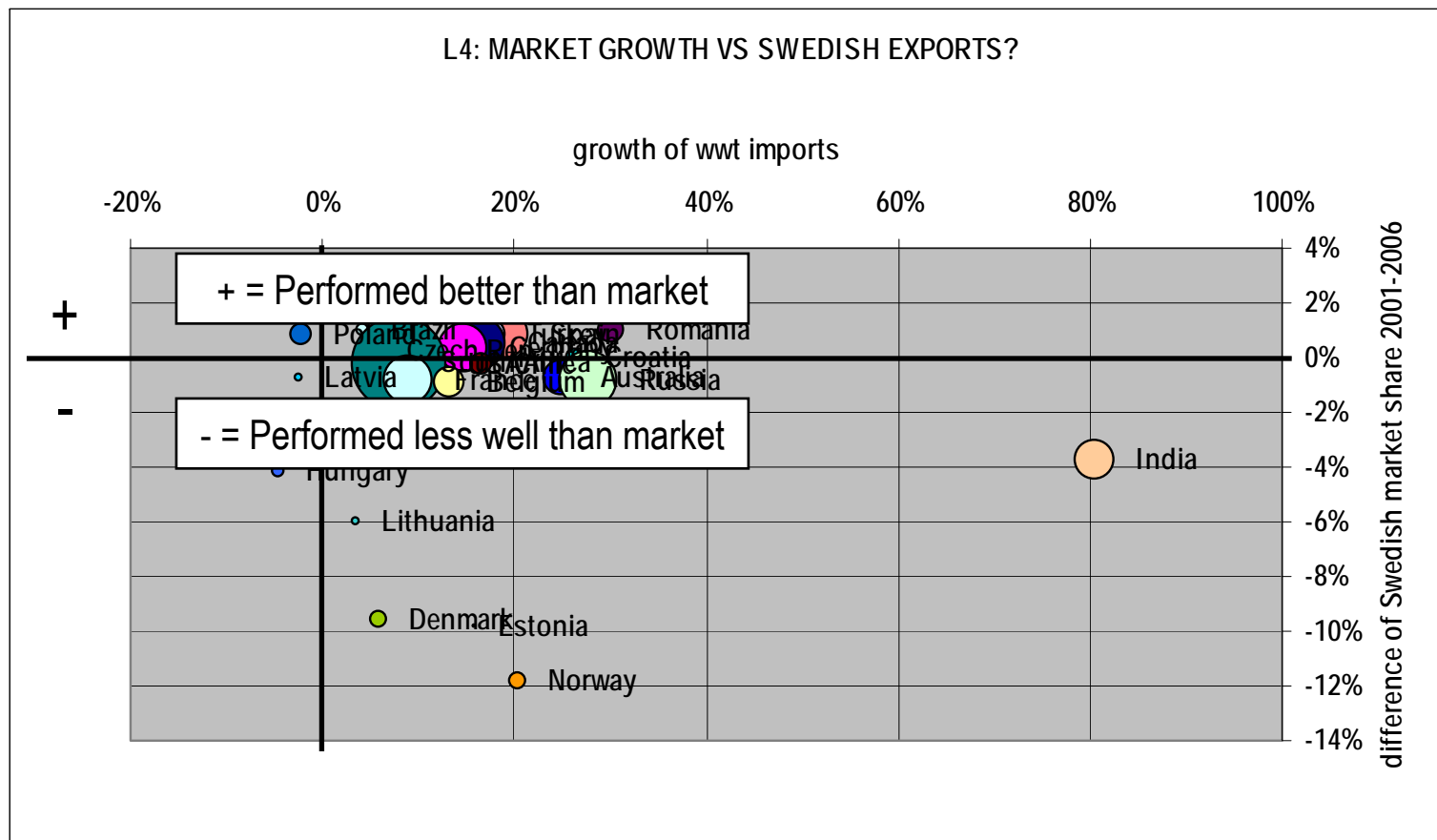


Swedish share of foreign wwt-markets

Sweden's share of wwt-import on markets (export of wwt-equipment 2006 in US-\$):

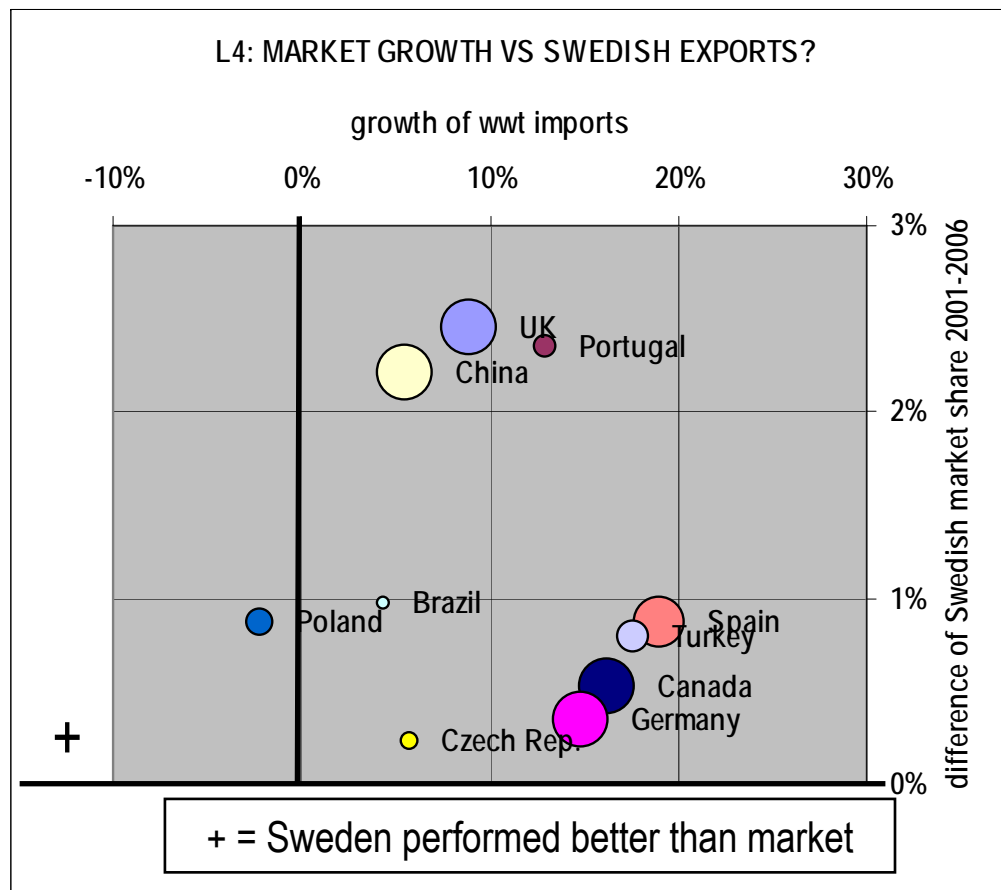
| | |
|--------------|-------|
| Australia | 1,26% |
| Czech Rep. | 1,23% |
| Poland | 1,18% |
| Brazil | 1,08% |
| Canada | 0,98% |
| Belgium | 0,67% |
| Chile | 0,58% |
| Croatia | 0,43% |
| Hungary | 0,26% |
| India | 0,12% |
| South Africa | 0,11% |
| Russia | 0,03% |
| Slovakia | 0,01% |

L4- HOW WELL HAS SWEDEN FARED OVER TIME?



L4- SWEDEN HAS MANAGED TO GROW ITS MARKET SHARE ON SOME EXPANSIVE MARKETS

- also gained share in Poland, a market with decreasing imports (!)



Swedish share has increased

Sweden has done especially well in:

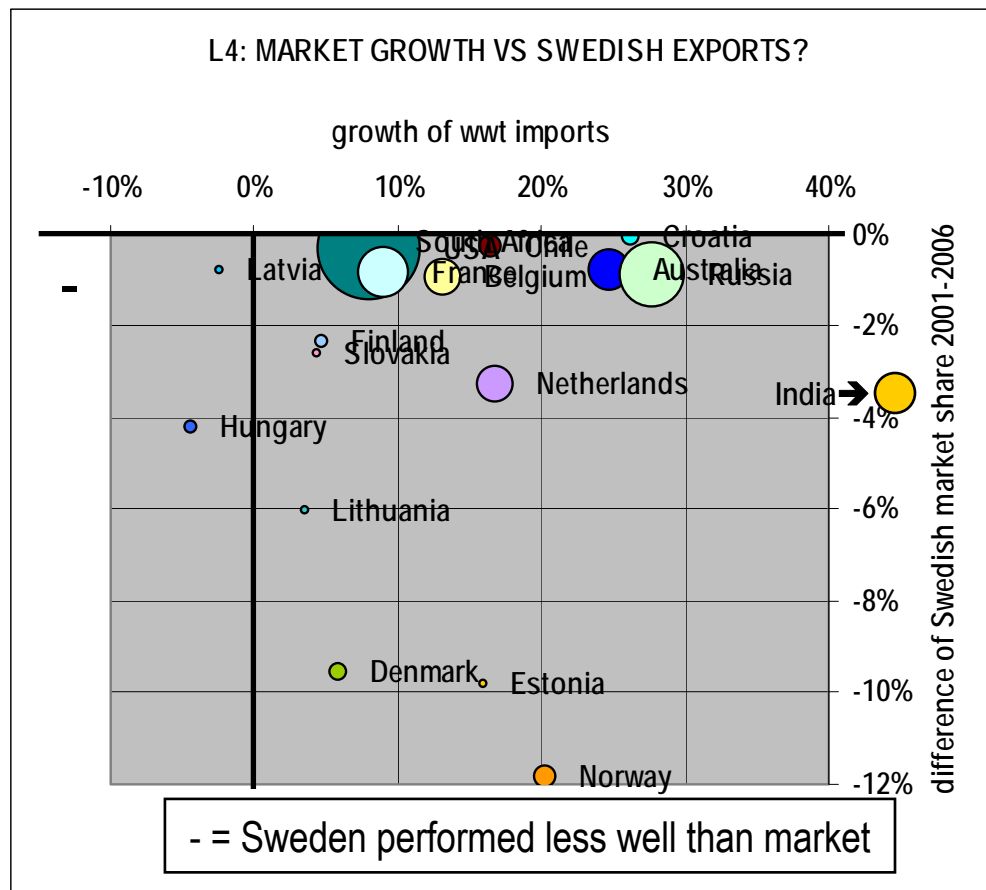
- UK, Portugal, China

Sweden has done better than average in:

- Brazil, Spain, Poland, Turkey, Canada, Germany, Czech Republic

➔ Swedish companies/ products seem to have a competitive edge on these markets

L4- ON THE OTHER HAND SWEDEN LOST MARKET SHARE ON MOST EUROPEAN MARKETS



Swedish share has decreased

Sweden has slightly underperformed in:

- Most markets (Croatia, South Africa, Chile, USA, Australia, Latvia*, France, Russia, Belgium, Finland, Slovakia, Netherlands, India and Hungary)

➔ Growing markets, where Sweden has not managed so well to get a hold

Sweden has significantly lost share in:

- Norway, Estonia, Denmark, Lithuania

➔ An expected development, because Sweden already has significant market share on these markets