

# **Energy Technology Industry**

## - A Business in Growth





#### Introduction

This report was commissioned to Maj Dang Trong Analyse by Nordic Energy Research and Nordic InnovationCentre. The objective of this report is to give an overview of the Nordic energy technology exports to global markets. The report focuses on key export markets, including the emerging markets in Brazil, Russia, India and China (BRIC) and Eastern Europe (EU 10)<sup>1</sup>. For comparison, Nordic energy technology export to the US is included in the analysis. In addition, the analysis includes estimates of economic and employment effects of the energy technology business in the Nordic countries.

The analysis in this report is one of the first steps in preparing industrial statistics for energy technology and equipment on a Nordic level. The analysis is based on methods and definitions developed by the Danish Energy Authority and the Danish Energy Industries Federation under the Confederation of Danish Industries. In Appendix 1 those methods and definitions are described with references to the Danish survey "Export Statistic Report".

Maj Dang Trong Analyse is responsible for the contents of this report.

Oslo November, 2007

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<sup>&</sup>lt;sup>1</sup> EU 10: Poland, Lithuania, Latvia, Estonia, Czech Republic, Slovakia, Slovenia Hungary, Malta and Cyprus.

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## **Key abbreviations**

BRIC Brazil, Russia, India, China - are considered major emerging growth markets.

EU 10 Poland, Lithuania, Latvia, Estonia, Czech Republic, Slovakia, Slovenia Hungary, Malta,

Cyprus

EU 15 Denmark, Belgium, Finland, France, Greece, Netherlands, Ireland, Italy, Portugal, Spain,

Sweden, Germany, Great Britain, Austria

Nordic

countries: This study includes Sweden, Finland, Denmark and Norway.

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## 1. Summary and key findings

 Export of energy technology from the Nordic countries (Sweden, Finland, Denmark and Norway) is currently worth € 18-19 billion, corresponding to approximately 11 percent of the total value of EU 15 member states' energy technology export.

- In all Nordic Countries, the export of energy technology has increased, particularly during the last 2-3 years.
- Energy technology export in the Nordic countries, as share of total industry export, was 5.3 percent in 2006 (similar to 2005), which is similar to the EU 15 average of 5.3 percent.
- Denmark's energy technology export as share of total export is one of the largest in Europe. In contrast, the Norwegian energy technology export seems unable to compete with the growth in the oil and gas export.
- Total Nordic energy technology export to rapidly growing economies in Brazil, Russia, India, China (BRIC) and Eastern Europe (EU-10) was approximately € 2.8 billion in 2006, corresponding to 15 percent of the total Nordic energy technology export. By comparison energy technology export to the US was 9 percent of total.
- China accounts for 4 percent of the total Nordic technology exports, Russia for 3 percent and Brazil for 1
  percent. Exports to China appear to increase more rapidly than exports to other countries. Furthermore,
  Nordic export of energy technology to Eastern Europe has increased during the past 10 years but with
  significant variations between the years in consideration. Denmark, Norway and Finland seem even to
  have lost export shares in India.
- The US is still the largest export market among the countries included in this survey. The Nordic energy technology export to the US was approximately € 1.8 billion in 2006. By comparison export to the EU 10 member states was € 1.1 billion, China € 0.8 billion, Russia € 0.5 billion, India € 0.3 billion and Brazil € 0.2 billion.
- In general, the figures show a positive trend towards higher Nordic energy technology export to the new growth economies. However, there are considerable differences between the Nordic countries with respect to which of these export markets that are increasing and how sustainable this increase seems to be. For example, development in Denmark differs from the other Nordic countries in a significant increase of energy technology export to the US during the past 2-3 years.
- The energy technology industry in the Nordic countries is in total estimated to have revenues of € 26 billion, corresponding to 6.2 percent of the total revenues of the Nordic countries' industry. The energy technology industry has 107 842 full time employees, corresponding to 6 percent of the total full time employees in the industry of the Nordic countries.
- In Denmark revenues in the energy sector have increased more than the revenues in industry in general, there are greater increases in revenues per full-time employee in the energy sector than in industry in general. This is not the case in the other Nordic countries.

Table 1 Nordic technology export to BRIC (%)

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	% of total Nordic	
	Million €	energy technology export
Brazil	208	1.1
Russia	494	2.7
India	250	1.3
China	757	4.1
US	1,760	9.3
EU-10	1,111	6.0

Table 2 Revenues and number of employees in the Nordic countries

	Revenues, million €	Number of employees
Sweden	8,522	39,921
Finland	6,834	27,906
Norway	3,101	12,878
<b>Denmark (2004)</b>	7,733	27,138
Nordic in total	26,191	107,842

## 2. Export of energy technology products

Export of energy technology from the Nordic countries (excl. Iceland) currently is worth  $\in$  18-19 billion, corresponding to approximately 11 percent of the total value of EU 15 member state's energy technology export (2006). In Sweden the energy technology export amounted to approximately  $\in$  6.7 billion, in Denmark  $\in$  6.2 billion, Finland  $\in$  3.6 and in Norway  $\in$  2.2 billion.

In all Nordic Countries, the export of energy technology has increased, particularly during the last 2-3 years. From 2005 to 2006 Finland's export of energy technology increased by 26 percent (up from  $\leqslant$  2.8). Swedish export also increased significantly in 2006 with 18 percent (up from  $\leqslant$  5.7 in 2005). Norway experienced a considerable growth in export of energy technology three years ago. From 2005 -2006, however the export growth rate in Norway was only 3 percent.

The growth rate for the energy technology products in Denmark is significantly larger than for industry in general. Denmark's energy technology export as share of total export is one of the largest in Europe and 50 percent above both the other Nordic Countries and the EU 15 Member States average. Since 1996, the Danish export of energy technology has almost tripled.

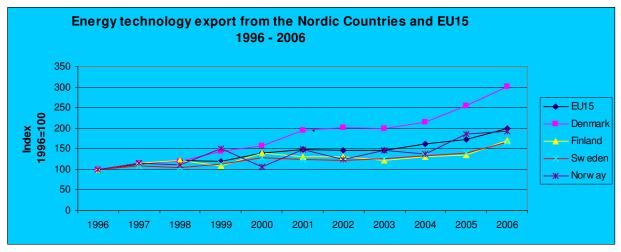


Figure 1 Development of the energy technology export in the Nordic countries and EU15

Source: Eurostat, Danish Energy Industries Federation and Statistics Norway (SSB)

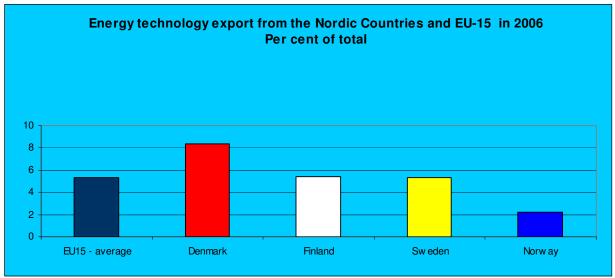
A comparison of the EU 15 Member States energy technology export shows that Danish export of technology and equipment, as a percentage of total exports, is one of the largest in Europe (only exceeded by export from Italy). Since 1996, Danish energy technology export has increased by approximately 200 percent, compared to 87 percent increase in the same period (1996-2006) for the industry as a whole. In contrast, the growth rate for export of Norwegian industry in general is significantly larger than export of energy technology products. Since 1996 total exports has increased by approximately 145 percent. While Norwegian exports of energy technology products has increased by 93 percent. In Finland and Sweden, the growth rate of total exports exceeds the energy technology products (1996-2006). For EU-15, the growth rate in the energy technology industry and industry in general is almost identical – reaching 100 percent- in the same period.

In Norway, the growth rate of energy technology products is unable to compete with the growth in the oil and gas export. This may explain why energy technology export as share of total exports, currently is one of lowest in Europe (2006). A Danish study shows that energy technology exports before 2000 were by far the largest. From 2000-2005, there has been a close race between oil/gas and energy technology and equipment. Danish oil/gas exports is expected to exceed energy equipment exports in 2006 due to increase in energy prices<sup>2</sup>.

External trade of energy technology products in 2006, as share of total exports, is 8.4 percent in Denmark (up from 7.6 percent in 2005), Finland 5.8 percent (up from 5.3 percent in 2005), Sweden 5.7 percent (up from 5.4 percent in 2005) and Norway 2.2 percent (down from 2.5 percent in 2005). In spite of a positive development the past three years Finnish and Swedish energy technology exports as a share of total export is still lower compared to relative high levels in 1996-1998.

Energy technology export in the Nordic countries as share of total was 5.3 percent in 2006, which is similar to the EU 15 average. Considering the Nordic 3 countries (exclusive Norway), the share of energy technology export is 6.5 percent - exceeding the EU15 average.

Figure 2 Energy technology export from the different Nordic countries and EU-15 Member States 2005-2006, percent of total export



Source: Eurostat, Danish Energy Industries Federation and SSB

<sup>2</sup> Export Statistics, Danish Energy Authorities, 2006 (http://www.ens.dk/sw49827.asp)

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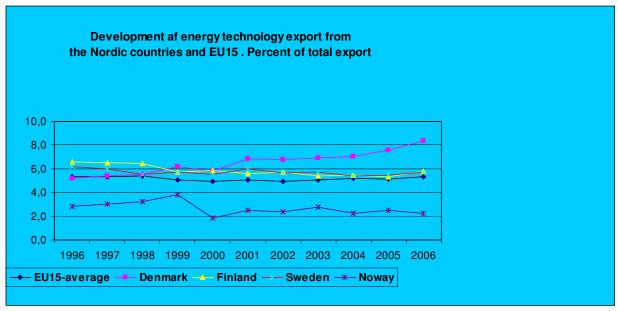
Energy technology export from the Nordic 3, Nordic 4 and EU15 in 2006

7,0
6,0
4,0
3,0
2,0
1,0
0,0
EU15 - average
Nordic 4
Nordic 3 (Excl. Norway)

Figure 3 Energy technology export from the Nordic regions and EU-15 Member States in 2006 percent of total export

Source: Eurostat, Danish Energy Industries Federation and SSB

Figure 4 Development of the energy technology export from the Nordic Countries and EU-15 Member States 1996-2006, percent of total export



Source: Eurostat, Danish Energy Industries Federation and SSB

Swedish export of energy technology products and total export Index 1996=100 — Energy technology and equipment **Export of products in total** 

Figure 5 Development of Swedish export of energy technology products and total export

Source: Eurostat, SCB's Industry statistics

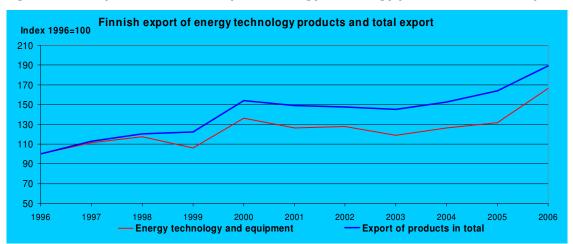
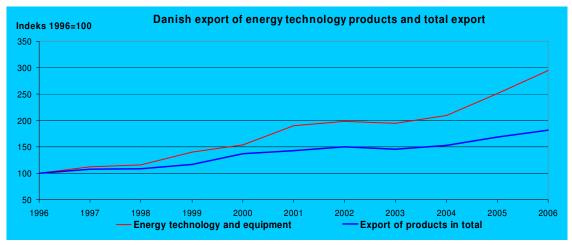


Figure 6 Development of Finnish export of energy technology products and total export

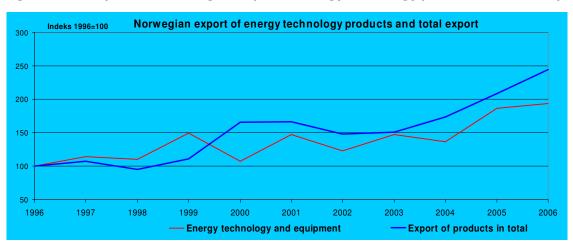
Source: Eurostat, StatFin's Industry Statistics

Figure 7 Development of Danish export of energy technology products and total export



Source: Eurostat, Danish Energy Industries Federation

Figure 8 Development of Norwegian export of energy technology products and total export



Source: SSB's industry Statistics, mdt analyse (2007)

## 3. Nordic export markets for energy technology

In total, Nordic export of energy technology to rapidly growing economies, i.e. Brazil, Russia, India, China (BRIC) and Eastern Europe (EU-10) was approximately 2.8 billion euro in 2006 The Nordic energy technology export to BRIC and EU-10 increased by 14.3 percent from 2005 to 2006.

Export to the BRIC and EU 10 countries correspond to 15 percent of the total Nordic energy technology export. By comparison, energy technology export to the US was 9 percent of the total.

China accounts for 4 percent of total Nordic energy technology exports, Russia 3 percent and Brazil 1.1 percent. Export to China appears to increase more rapidly than to the other countries, such as Brazil and Russia. Nordic export of energy technology to Eastern Europe has increased during the past 10 years but with significant variations between the years in consideration. For example, the export of energy technology to the EU 10 member states was relatively high in 1999 compared to 2006. Apart from Sweden, all Nordic countries seem to have lost export markets in India.

The US is still the largest single export market among the countries included in this survey. Nordic energy technology to the US was approximately € 1.8 billion in 2006. By comparison export to the EU-10 Member States was € 1.1 billion, China € 0.8 billion, Russia € 0.5 billion, India € 0.3 billion and Brazil € 0.2 billion.

In general, the figures show a positive trend towards higher Nordic energy technology export to the new growth economies. However, there are considerable differences between the Nordic countries with respect to which of these export markets that are increasing and how sustainable this increase seems to be.

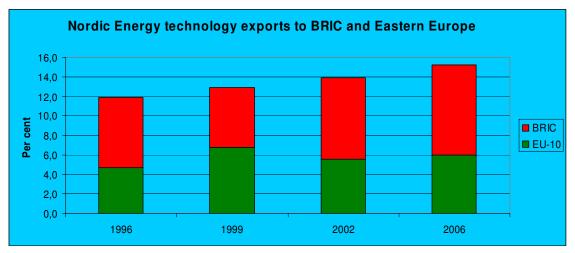


Figure 9 Nordic energy technology exports to BRIC and Eastern Europe

Source: Eurostat, Danish Energy Industries Federation and SSB

Table 3 Nordic technology export to BRIC (%)

	Million €	% total Nordic energy technology export
Brazil	208	1.1
Russia	494	2.7
India	250	1.3
China	757	4.1
US	1760	9.3
EU-10	1111	6.0

#### Sweden

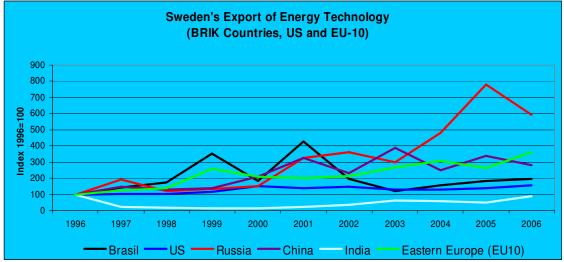
The Swedish export to the BRIC and EU 10, as share of total energy technology export, was 16 percent in 2006. Since 1996 the energy technology exports to these countries has more than doubled.

In 2006, export of energy technology to BRIC and EU 10 amounted to € 1,071 million. The exports to Eastern Europe increased by 37 percent to € 507 million (from € 371 in 2005). Swedish energy technology export to Russia and China fell considerably from 2005 and 2006 reducing exports to the BRIC countries by 6.5 percent to € 565 million (from € 602 million in 2005). Growth in exports to India and Brazil in the same period compensates for a part of the negative development.

Sweden's export of energy technologies to US has been rather stable at 7-9 percent of total energy technology export the past ten years. In 2006, the export made up for € 488 million, corresponding to approximately 7 percent of Sweden's total energy technology export.

**Sweden's Export of Energy Technology** 

Figure 10 Sweden's Export of energy technology 1996-2006 (Index 1996=100)



Source: Eurostat, Danish Energy Industries Federation and SSB

#### **Finland**

The BRIC and EU 10 countries together make up for 27 percent of Finland's energy technology export in 2006. Since 1996 export to these regions has more than doubled to € 941 million in 2006 of which the BRIC countries accounts the largest share (€ 654 million). In spite of a reduction in export of energy technology

to Russia and China they still dominate the BRIC export market. In 2006 export of energy technology to Eastern Europe made up for € 287 million (up from € 231 the year before).

Finnish exports of energy technology to Brazil increased significantly to € 102 million (up from € 21 million in 2005), corresponding to 3 percent of Finland's total energy technology export. India counts for € 65 million, corresponding to 1.8 percent of Finland's energy technology exports (2006).

Measured in monetary units export to the US has been relatively stable during the last ten years. However, market share, as percentage of total energy technology exports, has decreased to 6 percent from 11 percent in 1996.

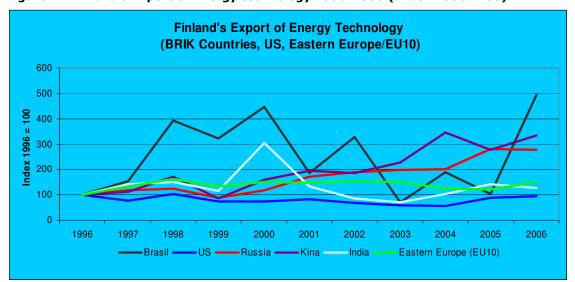


Figure 11 Finland's Export of Energy technology 1996-2006 (Index 1996=100)

Source: Eurostat, Danish Energy Industries Federation

#### **Denmark**

Denmark has increased its energy technology export to most of the large markets. Among the BRIC countries the only reduced energy technology export is to India (down from  $\leqslant$  85 million in 2005 to  $\leqslant$  63 million in 2006). In total the BRIC countries counts for  $\leqslant$  303 million, corresponding to 5 percent of total Danish energy technology export.

In contrast to the development in the other Nordic countries, export from Denmark to the US has increased significantly (up 57% from 2005 to  $\leqslant$  934 million in 2006). Danish energy technology export to the US currently made up for 15 percent of total energy technology export, which is more than twice as much than the US share of the total Finnish and Swedish energy technology export. In 2006, Danish energy technology export to Eastern Europe (EU10) amounts to  $\leqslant$  239 million, corresponding to 4 percent of total.

**Denmark's Export of Energy technology** (BRIK Countries, US and Eastern Europe/EU10) Indeks 1996 = 100 Brasil -US Russia China India Eastern Europe (EU10)

Figure 12 Denmark's Export of Energy technology 1996-2006 (Index 1996=100)

Source: Eurostat, Danish Energy Industries Federation

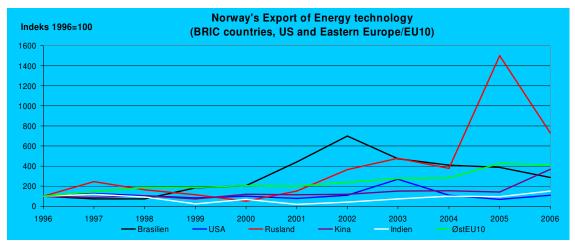
#### Norway

The BRIC and EU10 countries together make up for 10 percent of Norway's energy technology export in 2006. Even this share lower compared to the other Nordic countries exports to these regions have quadrupled to € 260 million since 1996. The BRIC countries count for € 185 million, of which China make up for 70 percent, Russia 14.7 percent, Brazil 8.4 and India 6.8. Export to Russia decreased significantly in 2006 to € 27 million, which is nearly half of the export in 2005.

In 2005 and 2006, Norway's energy technology export to the US was historically low, down to respectively 3 and 5 percent of total from 8-9 percent during large part of the nineties.

Since 1996 energy technology export to Eastern Europe has increased steadily to € 75 million, but in the past year export to Eastern Europe seem to slow down.

Figure 13 Norway's export of energy technology 1996-2006 (Index 1996=100)



Source: SSB, Mdt analyse

## 4. Export of clean energy technology

Various national reports and surveys indicate that export of clean energy technology (i.e. renewable/energy efficiency technology and equipment) in all Nordic countries show a very positive trend, with increasing growth:

- In Sweden, clean energy technology has an export growth of 15 % in 2004, largely wind power, bio energy and solar energy. In 2004 clean energy technology export amounts to € 2.7 billion (SEK 25 billion), of which companies active in renewable energy/energy efficiency technology account for 33 %. If this trend continues, Swedish clean energy technology exports will reach € 4.3 billion (SEK 40 billion) in 2008 (Swedish Industry, November 2006).
- The remarkable increase in Danish energy technology exports is in particular a result of significant growth in exports of wind turbines and wind-turbine technologies. In Denmark no total statistics exist that include the whole range clean energy technologies. In 2006, the wind power industry accounts for approximately 50 % of the export of Danish energy technology.
- Finland is (as Denmark), relative to its size, among the leading manufacturers of sustainable energy technologies. During the 1990s annual export of environmental technologies have quadrupled to over €3 billion with renewable energy technology accounting for a major part Finnish energy technology export today, around 10-20% of the main components for world's wind power plants are manufactured in Finland. Finnish wind power technology has an annual export value of €200 million (Tekes, <a href="www.energy-enviro.fi">www.energy-enviro.fi</a>).
- For Iceland and Norway, no national statistics show the energy technology export/figures with respect to export of renewable energy technologies/energy efficiency technology. In Iceland, geothermal energy is in focus. In Norway solar energy is a rapidly growing industry due to success of one company, REC (Renewable Energy Corporation)

#### Table 4 Two examples of "best case practises"

#### **REC (Renewable Energy Corporation)**

In Norway REC has en unique position in the solar energy industry as the only company with a presence across the entire value chain. REC Silicon and REC Wafer are the world's largest producers of polysilicon and wafers for solar applications. REC Solar produces solar cells and solar modules. REC Group had revenues in 2006 of  $\in$  530 million (4.3 billion NOK) and an operating profit of  $\in$  192 million (1.6 billion NOK). Almost all REC's business activities take place outside Norway (www.recgroup.com).

#### **Vestas**

Vestas in Denmark is the world leader in wind technology and a driving force in the development of the wind power industry. Vestas' core business comprises the development, manufacture, sale, marketing and maintenance of wind power systems that use wind energy to generate electricity. In 2006 the company had a turnover of € 3.9 billion. In 2006 half of Vestas' sale was in Europe. The second largest markets are in the US and Canada (25 percent), India (9.2 percent) and China (8.9 percent).

## 5. Revenues and employment in the energy technology industry

In total energy technology industries in the Nordic Countries have revenues of € 26 billion, corresponding to 6.2 percent of the Nordic countries industry's total revenues. The energy technology industry has 107 842 full time employees, corresponding to 6 percent of the total full time employees in the industry of the Nordic countries.

Because revenues in the Danish energy technology industry have increased more than the revenues in industry in general, there are greater increases in revenues per full-time employee in the energy sector than in industry in general. This seems not the case in the other Nordic countries. The average revenue per full-time employee in the Nordic industry is estimated to € 246 000. By comparison the revenue per full time employee in the Danish energy technology industry is estimated to € 285 000, in Finland to € 245 000, in Norway to €241 000 and in Sweden to € 213 000.

Table 5 Revenues and number of employees in the Nordic countries

	Revenues, million €	Number of employees
Sweden	8,522	39,921
Finland	6,834	27,906
Norway	3,101	12,878
Denmark (2004)	7,733	27,138
Nordic in total	26,191	107,842

#### Sweden

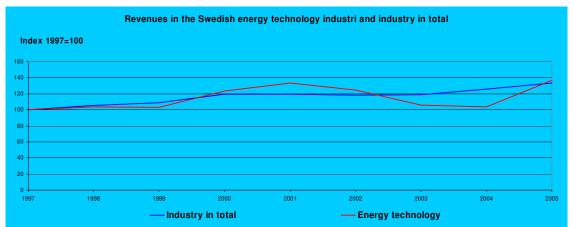
In 2005 revenues in the Swedish energy technology industry was approximately  $\in$  8.5 billion, corresponding to 5.6 percent of total industry revenues ( $\in$  153 billion).

Since 1999, the growth in the energy technology industry was 5 percentage points above the industry average growth.

The energy technology industry had almost 40 000 full-time employees in. The last 3-4 years employment in the Swedish energy technology sector and industry in general has followed a similar pattern – with a little downward trend.

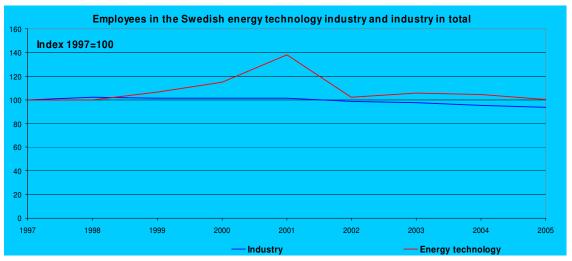
The revenues per full-time employee was  $\le$  213 000 in the energy technology industry, which is lower than for the industry in average ( $\le$  230 000).

Figure 14 Revenues in the Swedish energy technology industry and industry in total, 1997-2005 (index 1997=100)



Estimates based on SCB's industry statistic

Figure 15 Employees in the Swedish energy technology industry and industry in total, 1997-2005 (index 1997=100)



Estimates based on SCB's industry statistic

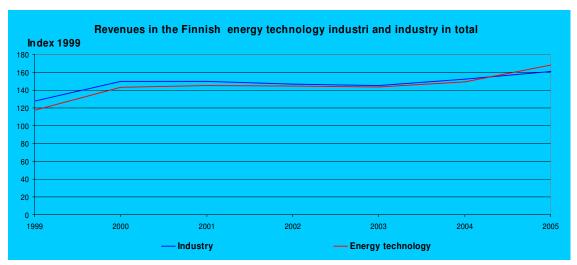
#### **Finland**

In 2005 revenues in the Finnish energy technology industry was approximately  $\in$  6.8 billion, corresponding to 6.1 percent of total industry revenues ( $\in$  112 billion). In the years 1999 to 2005 revenues in energy technology and industry in general has followed similar paths.

The energy technology industry in Finland had almost 28 000 full-time employees in 2005. The numbers of employees in industry, including the energy technology business does not show significant variations during the period from 1999 to 2005.

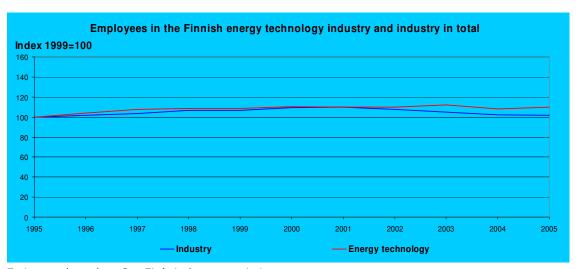
The revenue per full-time employee was  $\le$  245 000 in the energy technology industry in 2005, which is significantly lower than in the industry in general where the revenue was  $\le$  270 000 per full-time employee.

Figure 16 Revenues in the Finnish energy technology industry and industry in total, 1997-2005 (index 1997=100)



Estimates based on StatFin's industry statistics

Figure 17 Employees in the Finnish energy technology industry and industry in total, 1997-2005 (index 1997=100)



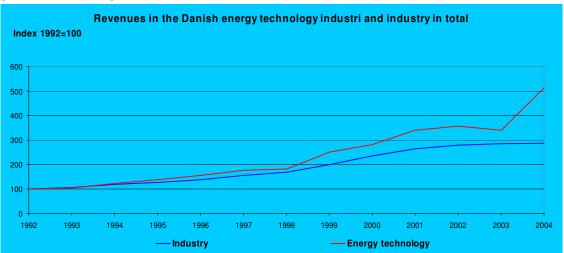
Estimates based on StatFin's industry statistics

#### **Denmark**

In 2004 the revenues in the Danish energy technology industry was approximately €7.7 billion, corresponding to 10.2 percent of total industry revenues (€75.4 billion). Revenues in the energy technology industry have increased significantly more than industry as a whole.

The energy technology sector has had a total growth in revenues of approximately 32 percent annually over the past 10 years. As a whole, industry has seen a 14 percent annual increase in the same period.

Figure 18 Revenues in the Danish energy technology industry and industry in total, 1992-2004 (index 1992=100)



Source: Danish Energy Authorities

Because revenues in the energy technology sector have increased more than revenues in the industry in general, there are greater increases in the revenues per full-time employee in the energy technology industry than in industry in general. The revenue per full-time employee was approximately €285 000 in the energy technology industry in 2004, which is significantly higher than for the industry in average (€207 000).

Employees in the Danish energy technology industry and industry in total indeks 1992=100

250
200
150
1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004
—Industry —Energy technology

Figure 19: Employees in the Danish energy technology industry and industry in total, 1997-2005 (index 1992=100)

Source: Danish Energy Authorities

There were 27 000 full timed employees in the Danish energy technology industry in 2005. Trends in employment in the energy sector and industry in general have followed the same course since 1992.

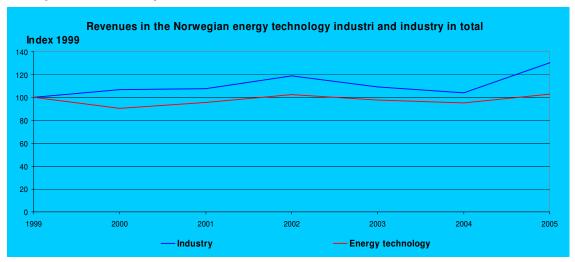
#### Norway

In 2005 revenues in the Norwegian energy technology industry is estimated to approximately  $\le 3.1$  billion, corresponding to 4 percent of total industry revenues. In particularly within the last 2-3 years revenues of industry in general were increasing significantly more than in the energy technology industry where development has been constant since 1999. In 2005 the industry in general increased its revenues 21 percent to  $\le 78$  billion ( $\le 62.3$  billion in 2004).

The energy technology industry is estimated to have almost 13 000 full-time employees in 2005, which counts for 5 percent of total industry employment. The level of employment has decreased gradually in energy technology industry as well as total industry.

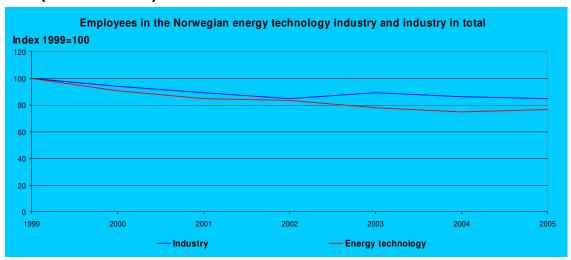
The revenue per full-time employee was € 241 000 in the energy technology industry, which is significantly lower than in the industry in general where the revenue was € 300 000 per full-time employee.

Figure 20 Revenues in the Norwegian energy technology industry and industry in total, 1999 – 2005 (index 1999=100)



Estimates based on SSB's industry statistics

Figure 21 Employees in the Norwegian energy technology industry and industry in total, 1997-2005 (index 1992=100)



Estimates based on SSB's industry statistics

## Appendix 1: Definitions and methodology

National statistics does not define the "energy technology industry" in making it clearly separated from other industries.

This report's analysis of export, revenues and employment in the Nordic energy technology business use new definitions and methodologies used in a Danish study³, where Danish energy technology export was compared with export from EU 15 member states. Here "energy technology industry" relates to the manufacturing of energy technology and equipment (hardware). This means energy technology and equipment related to mining, extraction of raw energy materials (i.e. recovering of gas and oil, extraction and agglomeration of peat etc.), transmission and distribution (pipelines, power lines etc.), energy production (i.e. heat and power plants, wind power plants, photovoltaic etc.) and end user technologies (i.e. individual oil burners, micro generation etc.).

The statistics does not distinguish between different types of energy technologies, such as, e.g., "conventional" energy technology or "clean" energy technology.

The Danish study has identified 466 energy technology products in Eurostat's reference database containing the external trade statistics database (Comext). This database does not include Norwegian trade statistics, which means that Norwegian statistics to some extent differ from the definitions used in Eurostat. In addition, the analysis includes national statistics on NACE level and PRODCOM-data to estimate total figures for sold production/ turnover and employment. See more about methods and definitions used in the Danish study on <a href="https://www.ens.dk">www.ens.dk</a>. All statistics refer to official sources (the national statistics in Sweden, Finland, Denmark, Norway and Eurostat).

## **Eurostat definitions**

#### Exports:

a) goods which leave the statistical territory of the Member State bound for a non-member country, having gone through:

the customs export procedure (final export, export following inward processing, etc.); or the customs outward-processing procedure (usually goods destined to be processed, transformed or repaired for subsequent re-import).

b) Some movements of goods are included in Eurostat statistics according to specific rules. In particular, ships and aircraft are included in dispatches of a given Member State when ownership is being transferred from a person established in this Member State to a person established in another Member State.

*Turnover* from industrial activities: The part of turnover derived from activities classified to Sections C to F of NACE. Turnover derived from the sale of goods and services which have been subject to a subcontracting relationship are included. Turnover derived from the resale of goods and services purchased for resale in the same condition is excluded.

*NACE* is the acronym (from the French 'Nomenclature statistique des Activites economiques dans la Communaute Europeenne'-Statistical classification of economic activities in the European Community) used to designate various statistical classifications of economic activities developed since 1970 by the European

<sup>&</sup>lt;sup>3</sup> "Export Statistic Report", 2007 - A study made by the Danish Energy Authority and the Danish Energy Industries Federation under the Confederation of Danish Industries. Statistics are based on official sources (statistics Denmark and Eurostat).

Union; it is designed to categorise datarelating to 'statistical units', in this case a unit of activity, for example an individual plant or group of plants constituting an economic entity such as an enterprise. It provides the basis for preparing a large range of statistics (output, inputs to the production process, capital formation and financial transactions) of such units.

*PRODCOM* aims at giving data of the production of industrial products produced by companies of the Member States. It is based on the Council Regulation (EEC) No 3924/91 of 19 December 1991 on the establishment on a Community survey of industrial production. The title comes from the French "PRODuction COMmunautaire", community production.

#### References

#### **Publications**

*Export Statistic Report*, Danish Energy Authority, Danish Energy Industries Federation under the Confederation of Danish Industries, Statistic Denmark, 2007

#### **Databases**

Ramon – Eurostat's Metadata Server http://ec.europa.eu/eurostat/ramon/index.cfm?TargetUrl=DSP\_PUB\_WELC

Finland's database of regional and industrial statistics on manufacturing:

http://pxweb2.stat.fi/database/StatFin/teo/atoi/atoi\_en.asp

Norway's database of regional and industrial statistics on manufacturing

http://statbank.ssb.no/statistikkbanken/

Sweden's database of regional and industrial statistics on manufacturing

http://www.ssd.scb.se/databaser