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COUNTRY ANALYSIS BRIEFS

Norway

Last Updated: August 2006

Background

Norway is a major non-OPEC source of oil. It is a major world supplier of oil and natural gas, especially to the European Union.

Norway is an advanced, highly-developed economy that has greatly benefited from the utilization of its hydrocarbon resources. In 2005, the country had a gross domestic product (GDP) of $295 billion, and a per-capita GDP of $64,000, which is one of the highest in the world. The Norwegian economy grew by 2.5 percent in 2005, and is forecasted to grow by 2.2 percent in 2006. Norway's economy is highly dependent on its offshore oil and natural gas sector, which provides the government with its largest single source of revenue and the largest contribution to GDP. In recent years, high oil prices have made for government budget and current account surpluses, and rising disposable income.

Norway's dependence upon oil and gas revenues present long-term challenges for the country, especially because many industry analysts believe that North Sea oil and gas production has already reached or passed its peak. In particular, the country faces pension liabilities and other welfare obligations. In response to these challenges, the Norwegian government created the Petroleum Fund in 1990, later renamed the Government Pension Fund in 2005. A portion of annual oil and gas revenues flow into the Fund each year, which serves the dual purpose of buffering the short-term variations in oil revenues and providing a mechanism to transfer current wealth to future generations. The Fund, which holds a combination of cash, bonds, and shares, holds only international assets and stood at some $240 billion in March 2006.

The latest nationwide election in October 2005 had important repercussions for Norway's future

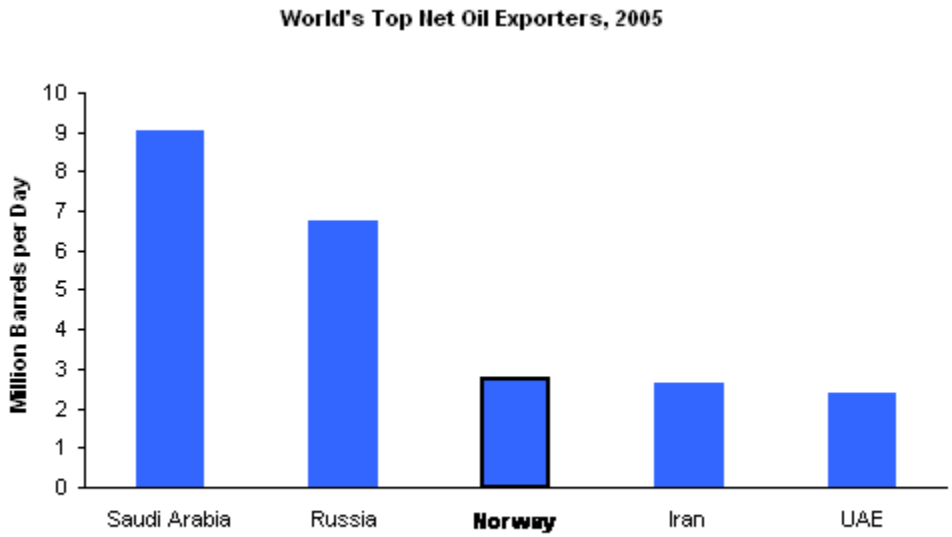
energy policy, because the largest coalition members (Labour and Socialists) disagree on whether or not to pursue exploration activities in the Barents Sea. In March 2006, the government presented its management plan for the Barents Sea. The plan allows new exploration in some areas of the Barents Sea, but it also places a moratorium on other, ecologically-sensitive parts of the region until 2010. In addition, the plan allows existing exploration activities in the Barents Sea to continue. With declining production from existing areas, Norway must explore these frontier regions in order to maintain oil and natural gas production in the long-term.

Oil

Norway is the third-largest net oil exporter in the world.

According to *Oil and Gas Journal* (OGJ), Norway had 7.7 billion barrels of proven oil reserves as of January 2006, the largest in Western Europe. All of Norway's oil reserves are located offshore on the Norwegian Continental Shelf (NCS), which is divided into three sections: the North Sea, the Norwegian Sea and the Barents Sea. The bulk of Norway's oil production occurs in the North Sea, with smaller amounts in the Norwegian Sea. There is no current production and little exploration activity in the Barents Sea, but it is believed that the Barents Sea could contain sizable oil and gas reserves.

Because Norway only consumed 228,000 bbl/d in 2005, the country is able to export the vast majority of its oil production. In 2005, Norway was the third-largest net oil exporter in the world, behind Saudi Arabia and Russia.



Source: Internal EIA estimates

Sector Organization

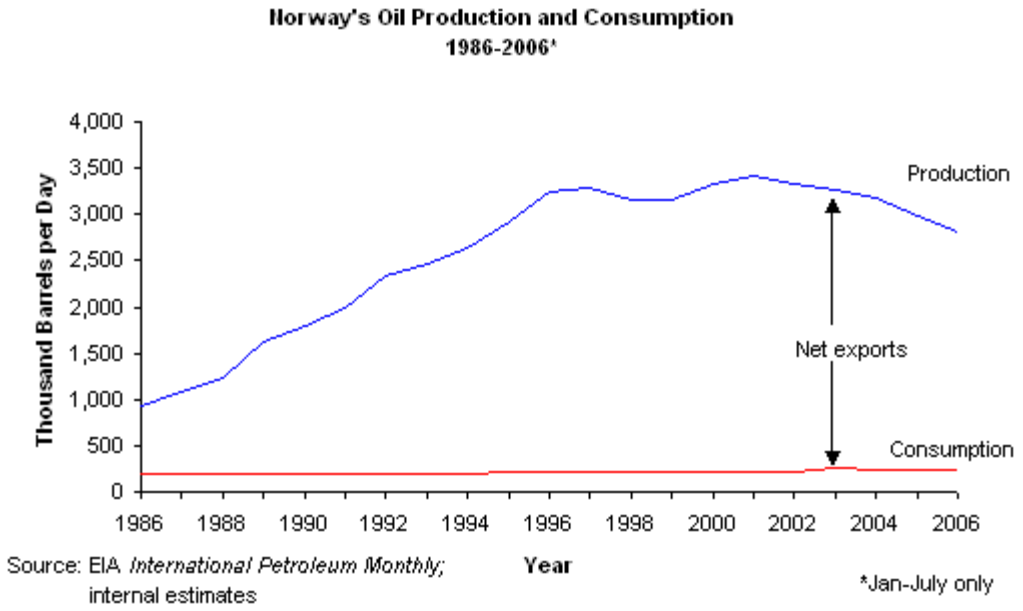
The Norwegian government holds a dominant stake in the oil sector. Statoil, 71 percent-owned by the government, controls over 60 percent of Norway's oil and gas production. The Norwegian government also holds a 44 percent stake in Norsk Hydro, an aluminum and energy company. Along with shares in these production companies, the Norwegian government has direct ownership over part of the country's oil production through the State Direct Financial Interest (SDFI). State-owned Petoro administers these ownership interests, while Statoil is responsible for managing actual production from SDFI assets. International oil majors do have a sizable presence in the NCS, but they must act in partnership with Statoil. The largest private oil producers in Norway are ConocoPhillips, ExxonMobil, and BP.

The NCS region has traditionally been accessible only by international oil majors, due to the harsh weather and operating conditions requiring sizable initial investments. Further, the structure of Norway's petroleum taxes means that smaller, marginal fields often are not profitable. Finally, stringent environmental, safety, and labor regulations further increase operating costs. However, as is the case with the United Kingdom, many oil majors have begun to withdraw from the NCS in order to pursue projects in high-growth regions. Statoil and Norsk Hydro have begun to sell NCS interest in order to pursue projects in Latin America and Africa. BP has also started to pull back from the NCS, selling its interest in the Gyda field in 2003 to Talisman Energy and declining to bid

in Norway's latest licensing round. Other new entrants include UK-based Paladin Resources, Revus Energy, and Petra. Some outside observers have noted that the entrance of smaller firms will benefit Norway's oil sector, as they are interested in developing mature fields and smaller undeveloped oil pools, in which larger companies are no longer interested.

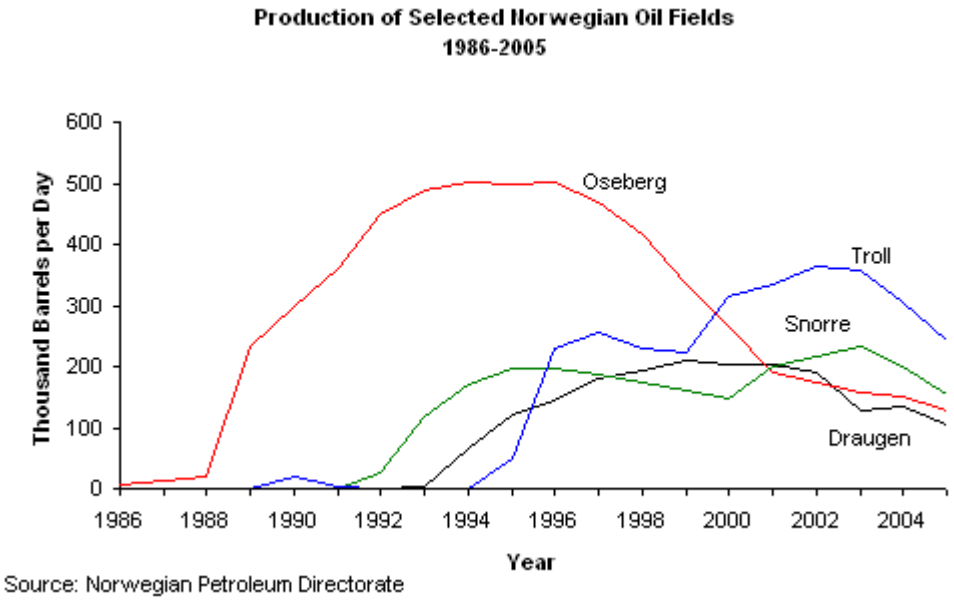
Exploration and Production

Norwegian oil production rose dramatically from 1980 until the mid-1990s, but has since begun to decline (see chart). During the first half of 2006, Norway's oil production averaged 2.8 million bbl/d. As North Sea fields continue to mature, Norwegian oil production will likely remain steady or decline, though there is some hope that new developments in the Barents Sea will offset some of this decline. Currently, the largest oil field in Norway is Ecofisk, operated by ConocoPhillips, which produced 280,000 bbl/d in Jan-May 2006. Other important oil fields include Grane (220,000 bbl/d), Troll (202,000 bbl/d), Heidrun (140,000 bbl/d), and Gullfaks (130,000 bbl/d). Statoil controls the largest share of total oil production, followed by Norsk Hydro. The largest foreign oil producer is ConocoPhillips.



Industry analysts consider the NCS a mature oil producing region. Most of the country's flagship oil fields have peaked, with production remaining flat or declining slightly. For example, the Oseberg complex produced 503,000 bbl/d in 1993, but only 120,000 bbl/d during the first half of 2006. Companies are still discovering oil in the NCS, but none of the recent finds have been significant. In 2003, the Norwegian Ministry of Petroleum and Energy (MPE) reported that oil companies made eleven new discoveries, potentially holding 189 to 566 million barrels of oil, far less than what the country produced for the year. There are about 60 oil and natural gas discoveries that are still undeveloped, representing about 4.4 billion barrels of liquids and 16 trillion cubic feet (Tcf) of natural gas. Drilling activity in 2005 was down from the previous year, after also falling in 2004.

There is a great emphasis on increasing production from existing projects, including the incorporation of smaller satellite fields. This allows companies to take advantage of existing infrastructure and utilize processing capacity that has been freed-up by declining production at main fields. Statoil, for example, brought the Urd field online in November 2005, a project that incorporated two satellite fields (Svale and Staer) of its existing Norne project. In June 2006, Statoil announced that it had made oil discoveries in the Valemon and Morvin exploratory areas, which are, respectively, satellites of the company's existing Kvitebjorn and Kristin platforms. In February 2006, the Norwegian Parliament approved plans by Statoil to develop the Tyrihans field, containing an estimated 180 million barrels of recoverable reserves. Statoil will develop Tyrihans by using existing facilities at the Kirstin platform. The company is also developing satellite wells at the Asgard field.



Source: Norwegian Petroleum Directorate

Exploration in Barents Sea

A potential source of new oil production is the Barents Sea, which could contain large quantities of oil reserves. There have already been some large oil finds in the area, including Eni's Goliath, which contains an estimated 250 million barrels of recoverable reserves. However, between 1996-2006, there were no new exploration licenses granted for the Barents Sea, though drilling did continue on previously-granted ones. In March 2006, the newly-elected Norwegian government released a plan that would allow the granting of new exploration licenses in some parts the area. However, the plan enacted strict environmental criteria for exploration in the area and forbid exploration in the Lofoten islands until at least 2010.

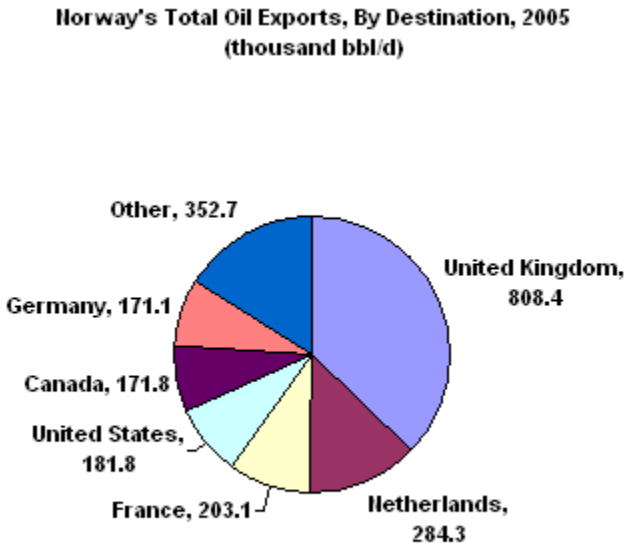
Areas in the Barents Sea were the focus of Norway's 19th licensing round, held in the second half of 2005. The round, which included 34 blocks in the Barents Sea and 30 blocks in the Norwegian Sea, attracted bids from 24 companies. In March 2006, the Norwegian government announced that it had awarded 17 companies the right to participate in production licenses, with seven companies having the right of operatorship. One of the most successful companies in the licensing round was BG Group, which won eight new production licenses and five operatorships.

International Cooperation

Because Norway shares the North Sea region with the United Kingdom, the two must coordinate efforts when dealing with reserves that straddle the division of each countries' respective zone. In April 2005, the two countries signed a bilateral treaty detailing the handling of such resources. The treaty was the first step toward a general framework for inter-boundary oil projects, as previous projects have been governed by separate treaties and negotiations. Talisman Energy planned to bring the Enoch and Blane fields onstream in late 2006, which straddle the border between the UK and Norway.

Oil Exports

According to Statistics Norway, the country exported 2.2 million bbl/d of crude oil and petroleum products in 2005. The largest single recipient of Norway's exports in 2005 was the United Kingdom, which imported 808,000 bbl/d from Norway, or 36 percent of Norway's total exports. Other significant destinations included the Netherlands, France, and the United States.



Source: Statistics Norway

Pipelines

There is an extensive network of subsea oil pipelines linking offshore platforms with onshore terminals. The 765,000-bbl/d Oseberg Transport System (OTS) connects the Oseberg field with the Stura receiving terminal. Operated by Norsk Hydro, OTS also carries crude oil from fields in the vicinity of Oseberg, which connect to the OTS through auxiliary lines. Norsk Hydro also operates the 265,000-bbl/d Grane pipeline, linking its Grane field to Stura. Statoil operates the twin Troll I/II pipeline system; the 265,000-bbl/d Troll I connects the Troll B platform to the receiving terminal at Mongstad, while the 300,000-bbl/d Troll II connects the Troll C platform to Mongstad. There are numerous, smaller pipelines that connect North Sea fields to either the OTS or Troll I/II systems, with the remaining offshore production brought ashore via shuttle tanker.

International Oil Pipelines

ConocoPhillipps operates the 900,000-bbl/d Norpipe, which connects Norwegian oil fields in the Ekofisk system to the oil terminal and refinery at Teesside, England.

Downstream Activities

According to OGJ, Norway had 310,000 bbl/d of crude oil refining capacity in 2006. The country has two major refining facilities: the 110,000-bbl/d Slagen plant, operated by ExxonMobil, and the 200,000-bbl/d Mongstad, operated by Statoil. Norway produces more petroleum products than it consumes, with surpluses exported to Europe. In particular, Norway is an important supplier of gasoline and diesel fuel to the EU, as the production of these fuels at the Mongstad plant complies with stringent EU environmental rules. Statoil dominates the retail products market in Norway, and the company has also expanded aggressively into other European markets.

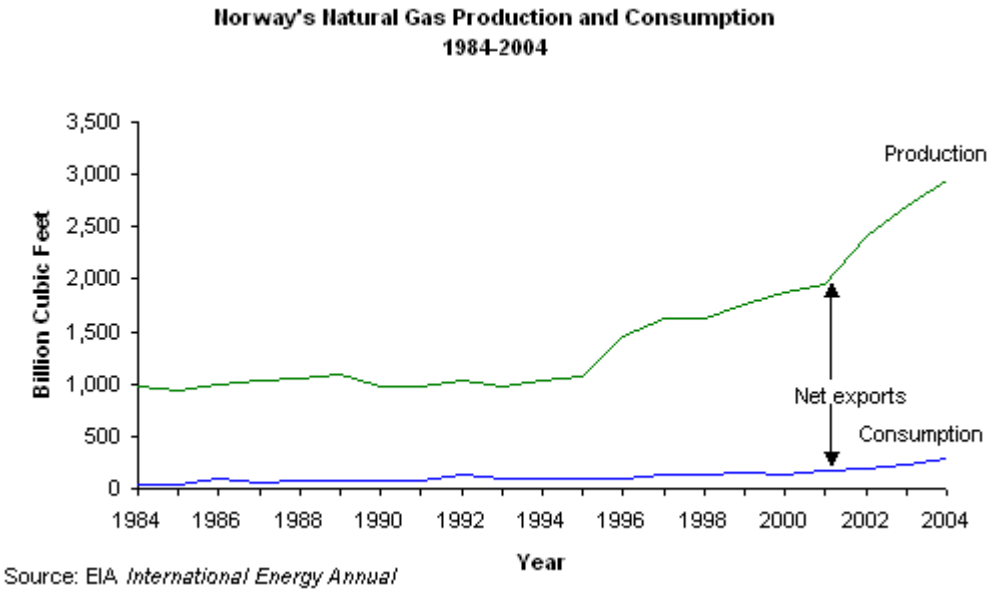
Natural Gas

Norway is the second-largest supplier of natural gas to continental Europe.

According to *OGJ*, Norway had 84.3 trillion cubic feet (Tcf) of proven natural gas reserves as of January 2006. The North Sea holds the majority of these reserves, but there are also significant quantities in the Norwegian and Barents Seas. Norway is the eighth-largest natural gas producer in the world, producing 2.95 Tcf in 2004. However, because of the country's low domestic consumption, which totaled only 290 billion cubic feet (Bcf) in 2004, Norway was the world's third-largest net exporter of natural gas in 2004, behind Russia and Canada.

Sector Organization

As is the case with the oil sector, Statoil and Norsk Hydro dominate natural gas production in Norway. Several international majors, such as ExxonMobil and BP, also have a sizable presence in the NCS gas sector, though they often work in partnership with Statoil or Norsk Hydro.



Source: EIA *International Energy Annual*

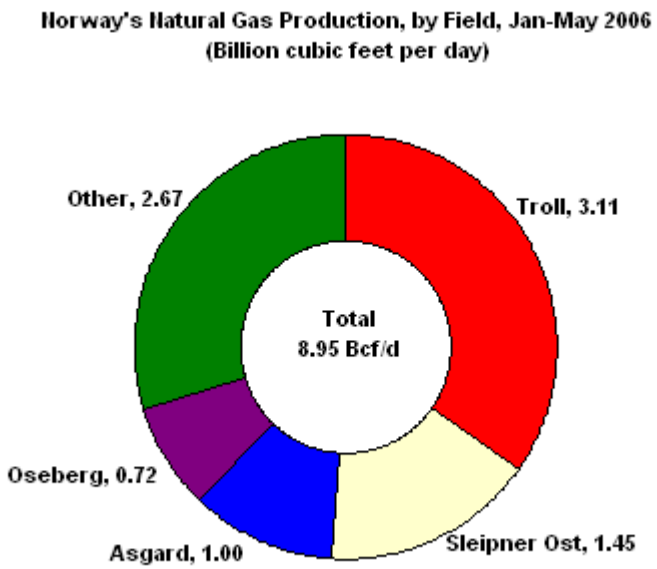
Norway has begun to slowly reform the midstream and downstream gas sectors. In June 2001, the Norwegian government eliminated controls on natural gas prices. Also in 2001, the government created Gassco, a state-owned company responsible for administering the natural gas pipeline network. Previously, Statoil and Norsk Hydro had controlled the network; it is hoped that placing control of the system with an independent company will ensure fair, indiscriminate access for all companies. The company also manages Gassled, the network of pipelines and receiving terminals that exports Norway's natural gas production to the United Kingdom and continental Europe.

Exploration and Production

A small group of fields account for the bulk of Norway's total natural gas production. The single largest field is Troll, which produced 3.11 Bcf per day (Bcf/d) during the first half of 2006 and represents about one-third of Norway's total natural gas production. Other important fields include Sleipner Ost (1.45 Bcf/d), Asgard (1.00 Bcf/d), and Oseberg (0.72 Bcf/d). These four fields compose over 70 percent of Norway's total natural gas production.

Despite the maturation of its major natural gas fields in the North Sea, Norway has been able to sustain annual increases in total natural gas production by incorporating new fields. In October 2004, the Kvitebjorn field came onstream with an expected production level of 710 million cubic feet per day (Mmcf/d). In November 2005, Statoil brought the Halten Bank West project onstream, which includes the Kristin field and four additional satellite fields (Lavrans, Erlend, Morvin, and Ragnfrid).

Over the long term, Norway is counting on non-North Sea projects to provide significant natural gas production. In the Norwegian Sea, Norsk Hydro is currently developing the Ormen Lange field. The project consists of an offshore production facility and a subsea pipeline linking the field to the gas processing terminal in Nyhamma. In addition, the Ormen Lange project includes a pipeline linking Nyhamma to Easington, England (see below). Ormen Lange holds an estimated 14 Tcf of recoverable reserve and will have a full production capacity of 710 Bcf per year. Shell will take over as operator of the project from Norsk Hydro in the production phase, which is scheduled to begin in late 2007. Also in the Norwegian Sea, Shell announced in 2005 that it had made a major discovery in the Onyx prospect, west of the company's existing Draugen field. According to the Norwegian Petroleum Directorate (NPD), the find could contain as much as 2.1 Tcf of recoverable gas reserves. In 2005, Norsk Hydro reported that it made a discovery at its Stetind project in the Norwegian Sea, containing estimated natural gas reserves of 0.5-1.3 Tcf.



Source: Norwegian Petroleum Directorate

Barents Sea Developments

In the Barents Sea, Statoil is developing the Snohvit project, which contains an estimated 5.7 Tcf of proven natural gas reserves. Snohvit will combine production from three gas fields (Snohvit, Albatross, and Askeladd), a pipeline connecting these fields to an onshore receiving terminal near Hammerfest, and a liquefied natural gas (LNG) export terminal (see below). According to Statoil, first production from the Snohvit field should occur in June 2007, with production from the other two fields beginning in over the following 5-10 years.

Norway has worked with Russia to jointly develop the giant Shtokman natural gas field and pursue other oil and gas projects in the area (please see the Russia Country Analysis Brief for more information). One issue that has stalled the development of natural gas reserves in the area has been the lack of a defined maritime boundary between the two countries. The area of dispute between the two countries contains oil and natural gas reserves estimated at 12 billion barrels of oil equivalent.

Pipelines

Gassco owns and operates most of the domestic and export pipelines in Norway, as well as onshore receiving facilities. The domestic pipeline network consists of numerous subsea systems that bring offshore production ashore for further processing. The Asgard Transport System (ATS) links the Asgard and numerous nearby fields in the Norwegian sea to the receiving terminal at Karsto; the 42-inch, 440-mile ATS has a capacity of 706 Bcf/y. The Karsto facility also receives natural gas via the Statpipe system, which brings 320-Bcf/y ashore from the Statfjord area; an outbound extension of the Statpipe carries gas from the Karsto terminal to an interface with the Norpipe near the Ekofisk platform. The 80-Bcf/y Haltenpipe connects the Heudrum field with a gas receiving terminal and methanol plant at Tjeldbergodden. The system connecting the Kollsnes processing facility with the Troll and Kvitebjorn fields has a maximum capacity of 4.2 Bcf/d.

International Gas Pipelines

Norway operates numerous natural gas pipeline connects with the rest of Europe. Some connection run from production facilities directly to receiving terminals in export markets, while others connect Norway's onshore processing facilities to these markets. Many pipelines run through riser platforms in the North Sea, hubs that allow different pipeline systems to interface and provide pressure regulation and quantity metering; the most important such platforms are the Draupner, Sleipner, and Heimdal platforms.

The 520-mile Franpipe carries 530 Bcf/y from the Troll and Sleipner fields to Dunkerque, France. The Zeepipe I carries 460 Bcf/y from the Sleipner system to Zeebruge, Belgium; an expansion of the system, Zeepipe II, connects the Kollsnes terminal to the Sleipner and Draupner riser platforms, where gas can then flow through the Zeepipe I to Belgium. Three pipelines connect

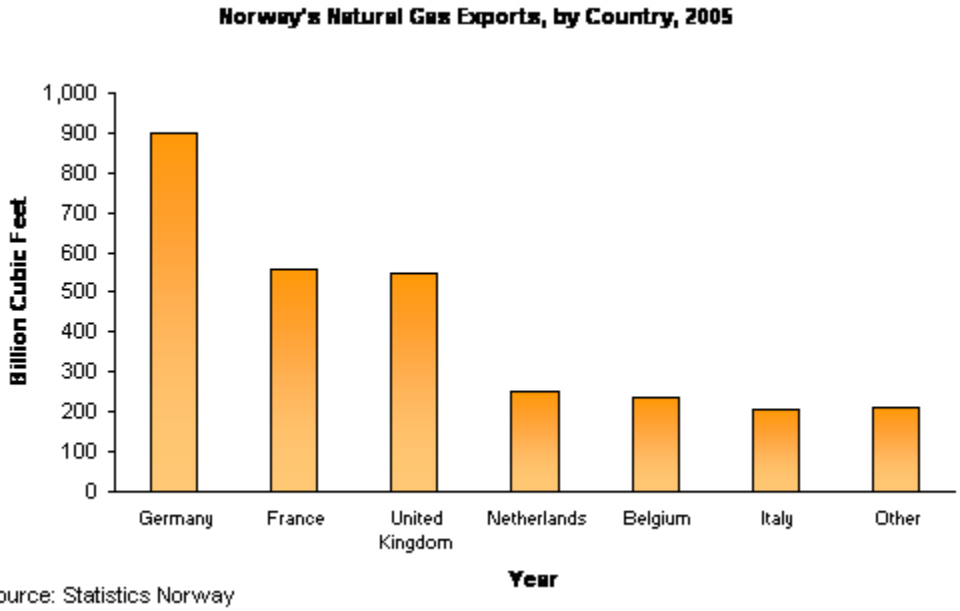
Norwegian natural gas production with Germany: the 290-mile, 640 Bcf/y Europipe I connects the Draupner riser platform to Dornum, Germany, the 410-mile, 850-Bcf/y Europipe II connects the Karsto terminal to Dornum, and the 500-Bcf/y Norpipe connects the Karsto terminal (via the Statpipe) to Emden. Finally, Total operates the Frigg gas pipeline, connecting Norway's Frigg field to the gas receiving terminal at St. Fergus, Scotland.

In June 2005, Norsk Hydro began construction on the Langeled gas pipeline linking Norway's Ormen Lange natural gas field to Easington, England. The project includes two subsea pipes connecting Ormen Lange to a new receiving terminal at Nyhamna and a 750-mile pipeline linking Nyhamma to Easington via the Sleipner riser platform. Langeled will be the longest subsea pipeline in the world, with an initial capacity of 1.9 Bcf/d and planned maximum capacity of 2.9 Bcf/d. Shell will take over the Langeled pipeline in the operational phase. Construction of the system has begun, with completion of the $10 billion project planned by the end of 2007.

There has been discussion of building a natural gas pipeline from Norway to Sweden. Gassco formed a consortium of Norwegian and Swedish companies to consider the project, which would consist of a 780-MMcf/d system linking the Karsto processing terminal to western Sweden. In late 2006, Gassco planned to issue a tender for a feasibility study of the project. Poland has also expressed an interest in participating in the project, with the intend of building an extension fo the system to Poland. Such a development could help it reduce its dependency on Russian natural gas imports.

Natural Gas Exports

Norway exported 2.9 Tcf of natural gas in 2005, according to Statistics Norway. The country is the second-largest supplier of natural gas to the EU, behind Russia. The largest recipient of Norway's natural gas exports in 2005 was Germany (900 Bcf), followed by France (560 Bcf) and the United Kingdom (550 Bcf). The non-EU destinations of Norway's natural gas exports were Czech Republic (97 Bcf), Poland (17 Bcf), and Switzerland (2 Bcf).



Source: Statistics Norway

Liquefied Natural Gas (LNG)

Norway has a collection of micro-LNG facilities, mostly used by domestic distributors with occasional exports to Sweden. One such plant in Tjeldergodden has a capacity of 11,800 tons per year (t/y), while another in Snurrevardenin has a capacity of 21,600 t/y. In late 2005, UK engineering firm Hamworthyhas received a tender to build a micro-LNG plant at Kollsnes, with a capacity of 82,3000 t/y.

On a much larger scale, Statoil plans to construct an LNG export terminal at Melkoya, near Hammerfest. The Melkoya facility, which will be the first, large-scale LNG export terminal in

Europe, will consist of an anchored barge with pipeline connections to the Snohvit project. Statoil plans to have the the project online by the end of 2006, with an initial capacity of 4.1 million t/y and a potential expansion to 8.2 million t/y. Most of the output from the Melkoya facility has already been contracted to El Paso for delivery to the United States, with smaller amounts going to Iberdrola in Spain.

Coal

Norway has little coal production or consumption.

Norway has a small coal sector, producing only 3.2 million short tons (Mmst) and consuming just 1.5 Mmst in 2004. State-owned Store Norske Spitsbergen Kulkompani controls the sector, which includes two production facilities in the Svalbard Islands (Spitsbergen and Svea Nord). Much of the coal mined fuels a coal-fired power plant there, the only such facility in Norway.

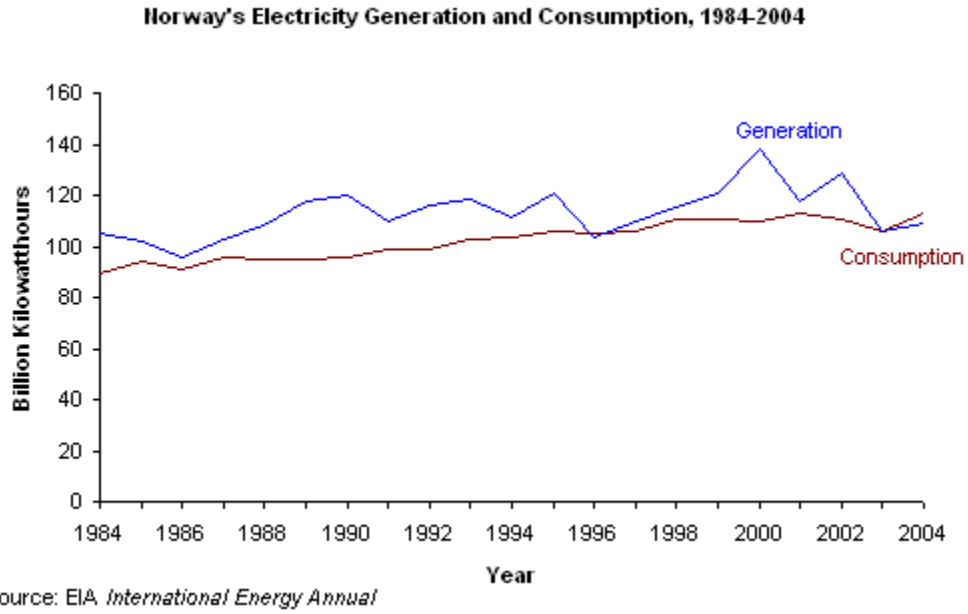
Electricity

Almost all of Norway's electricity supply comes from hydroelectric generation.

In 2004, Norway generated 108.9 billion kilowatthours (Bkwh) of electricity while consuming 112.8 Bkwh. Almost all of Norway's electricity generation comes from hydroelectric facilities. Norway's peak electricity usage occurs in the winter, as many rely upon electricity for climate control and heating water.

Sector Organization

Norway has fully deregulated its electricity sector, and there is free and open access to the sector. However, state-owned actors still play an important role, as many generating and distribution companies are partially or wholly state-owned. The largest power producer in Norway is Statkraft, which controls about one-third of total generating capacity. Regional companies control most of the rest, though Statkraft has begun to acquire many of these in order to increase its market share. State-owned Statnett owns and operates Norway's national electricity transmission network and international interconnections. Small, local companies control most of the electricity distribution market, with these companies also controlling their respective local electricity grids.



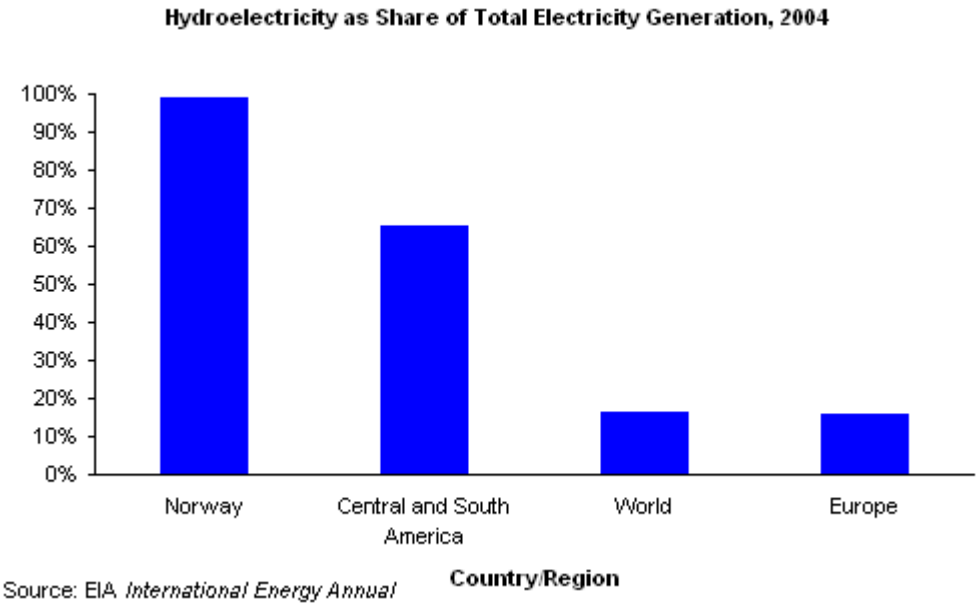
Source: EIA *International Energy Annual*

Norway is also a member of Nordel, the Nordic power exchange. Nordel is an integrated electricity market consisting of Norway, Sweden, Finland, and Denmark, featuring a spot market, financial markets for hedging and risk management, and an information clearinghouse.

Hydroelectricity

As mentioned above, Norway is highly dependent upon hydropower for its electricity needs. In 2004, the country generated 107.7 Bkwh of hydropower, or 99 percent of total electricity generation. Norway's hydroelectric infrastructure consists of many small plants. The largest, Kvilldal, has an installed capacity of 1,240 megawatts (MW), or 4 percent of national installed capacity. Norway's reliance on hydropower does leave the country vulnerable to climatic

fluctuations, which requires imports to meet seasonal shortages, but also opens the possibility of exports during wetter conditions. Norway still has the potential to increase hydro-generated power, through refurbishing existing facilities, as well as constructing new hydropower plants. However, most of Norway's waterways have been developed and any new facilities would likely consist of small developments. In addition, many waterways are protected from further development as a result of environmental concerns.



Source: EIA *International Energy Annual*

Conventional Thermal

As an alternative to hydroelectricity, the Norwegian government has tried to encourage the diversification of the country's power sector by granting permits for the construction of natural gas-fired power plants. Naturkraft, a joint venture of Norsk Hydro and Statkraft, plans to complete construction by the end of 2007 on a 400-MW gas-fired plant near the gas terminal at Karsto. In 2006, Norway's Water Resources and Energy Directore approved plans by Statoil to build an 860-MW gas-fired power plant in Tjelbergodden. Despite these developments, the future of gas-fired generation capacity in Norway is in doubt, due to government regulations concerning carbon dioxide emissions and resistance from environmentalists.

Other Renewables

Norway has also looked towards wind power as a way to supplement hydroelectric capacity. Havgul, a consortium of Norwegian energy companies, has proposed building a 1,795-MW, offshore wind farm in More & Romsdal, western Norway. The project would consist of four wind parks and would be one of the largest such projects in the world. However, Norway's Water Resources & Energy Directorate told the company in April 2005 to cancel one of the planned parks, representing 395 MW of capacity, due to opposition from local municipalities.

International Connections

Norway has transmission lines that connect its power grid to Sweden, Finland, Russia, and Denmark. The Norway-Sweden line is the largest, with a capacity of 2,800 MW. There are plans to connect Norway's grid beyond the immediate Nordic vicinity. In 2004, Statnett and Dutch transmission company TenneT applied for regulatory approval for the 600-MW NorNed line, which could connect Norway with the Netherlands. Statnett has proposed building a connector to the United Kingdom along with UK grid operator NGT, which would be the longest subsea electric cable in the world. However, the Norwegian government cancelled plans for the line in 2003, stating that the plan was not economical.

Profile

Country Overview

Head of Government	Prime Minister Jens Stoltenberg (since October 2005)
Location	Northern Europe, bordering the North Sea and the North Atlantic Ocean, west of Sweden
Independence	7 June 1905 (Norway declared the union with Sweden dissolved); 26 October 1905 (Sweden agreed to the repeal of the union)
Population (2005E)	4,593,041

Economic Overview

Currency/Exchange Rate (DATE(S))	1 Norway Kroner (NOK) = $0.16 USD
Inflation Rate (2005E, 2006F, 2007F)	1.5%, 2.2%, 2.0%
Gross Domestic Product (GDP, 2005E)	$255 billion
Real GDP Growth Rate (2005E, 2006F, 2007F)	2.5%, 2.2%, 2.1%
Unemployment Rate (2005E)	4.6%
External Debt (2005E)	$281 billion
Exports (2005E)	$102.4 billion
Exports - Commodities	petroleum and petroleum products, machinery and equipment, metals, chemicals, ships, fish
Exports - Partners (2004E)	UK 22.4%, Germany 12.9%, Netherlands 9.9%, France 9.6%, US 8.4%, Sweden 6.7%
Imports (2005E)	$54.4 billion
Imports - Commodities	machinery and equipment, chemicals, metals, foodstuffs
Imports - Partners (2004E)	Sweden 15.7%, Germany 13.6%, Denmark 7.3%, UK 6.5%, China 5%, US 4.9%, Netherlands 4.4%, France 4.3%, Finland 4.1%
Current Account Balance (2005E)	$49.1 billion

Energy Overview

Proven Oil Reserves (January 1, 2006E)	7.7 billion barrels
Oil Production (2006E)	2,840.8 thousand barrels per day, of which 83% was crude oil.
Oil Consumption (2005E)	252.8 thousand barrels per day
Crude Oil Distillation Capacity (2006E)	310 thousand barrels per day
Proven Natural Gas Reserves (January 1, 2006E)	84.3 trillion cubic feet
Natural Gas Production (2004E)	2.9 trillion cubic feet
Natural Gas Consumption (2004E)	285.7 billion cubic feet
Recoverable Coal Reserves (2003E)	5.5 million short tons
Coal Production (2004E)	3.2 million short tons
Coal Consumption (2004E)	1.5 million short tons
Electricity Installed Capacity (2004E)	26.6 gigawatts
Electricity Production (2004E)	108.9 billion kilowatt hours
Electricity Consumption (2004E)	112.8 billion kilowatt hours

Total Energy Consumption (2004E)	1.9 quadrillion Btus*, of which Hydroelectricity (60%), Oil (27%), Natural Gas (8%), Coal (2%), Nuclear (0%), Other Renewables (0%)
Total Per Capita Energy Consumption (2003E)	393 million Btus
Energy Intensity (2003E)	10,442 Btu per $2000-PPP**

Environmental Overview

Energy-Related Carbon Dioxide Emissions (2003E)	45 million metric tons, of which Oil (71%), Natural Gas (21%), Coal (8%)
Per-Capita, Energy-Related Carbon Dioxide Emissions (2003E)	9.9 metric tons
Carbon Dioxide Intensity (2003E)	0.3 Metric tons per thousand $2000-PPP**
Environmental Issues	water pollution; acid rain damaging forests and adversely affecting lakes, threatening fish stocks; air pollution from vehicle emissions
Major Environmental Agreements	party to: Air Pollution, Air Pollution-Nitrogen Oxides, Air Pollution-Persistent Organic Pollutants, Air Pollution-Sulfur 85, Air Pollution-Sulfur 94, Air Pollution-Volatile Organic Compounds, Antarctic-Environmental Protocol, Antarctic-Marine Living Resources, Antarctic Seals, Antarctic Treaty, Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands, Whaling signed, but not ratified: none of the selected agreements

Oil and Gas Industry

Organization	State-owned Statoil and Norsk Hydro control large share of production. Private producers are important, mostly working in concert with state-owned companies.
Major Oil/Gas Ports	Stura, Mongstad, Karsto, Tjeldbergodden, Kollsnes
Foreign Company Involvement	Largest companies include ConocoPhillips, ExxonMobil, BP
Major Oil Fields (production, bbl/d)	Ekofisk (280,000), Grane (220,000), Troll (202,000), Heidrun (140,000), Gulfaks (130,000)
Major Natural Gas Fields (production, Bcf/d)	Troll (3.11), Sleipner Ost (1.45), Asgard (1.00), Oseberg (0.72)
Major Pipeline Systems	Oseberg Transport System, Grane, Troll I, Troll II, Asgard Transport System; Statpipe, Haltenpipe, Franpipe, Zeepipe I, Zeepipe II, Europipe I, Europipe II, Norpipe, Frigg
Major Refineries (capacity, bbl/d)	Mongstad (200,000), Slagen (110,000)

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.
**GDP figures from OECD estimates based on purchasing power parity (PPP) exchange rates.

Links

EIA Links
EIA - Country Information on Norway

U.S. Government
CIA World Factbook - Norway
U.S. Embassy in Oslo

Foreign Government Agencies
Norwegian Petroleum Directorate (NPD)
Norwegian Ministry of the Environment
Statistics Norway

Oil and Natural Gas
BP Norway
ConocoPhillips Norway
Gassco
INTSOK
Norsk Hydro
Norsk Shell
Petoro
Statoil
Total E&P Norge

Coal
Store Norske Spitsbergen Kulkompani

Electricity
Industrikraft Midt-Norge (IMN)
Naturkraft
Statkraft
TrønderEnergi
Vest-Oppland Kommunal Kraftselskap (VOKKS)

Sources

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