

GREATER FOCUS ON ORGANIC GROWTH AND RENEWABLE ENERGY

During the past year a number of large M&A transactions were conducted in the European energy market or are in their final stages. Several energy companies launched significantly expanded capital expenditure programmes, not least in renewable energy. Despite lower electricity prices, profitability was maintained through price hedging.

Today thousands of companies are working in the various national and regional energy markets in Europe – everything from local, municipal companies to very large international utilities with operations spanning the entire value chain: generation, distribution, electricity trading and sales. Several utilities also have substantial sales of gas and are actively striving to integrate their electricity and gas operations.

Ever since the local energy markets began being opened up to competition in the 1990s, a sweeping consolidation has taken place across national borders. The development has moved toward fewer, but larger, international players. For example, France's EDF has grown through acquisitions in the UK, Germany, Italy and eastern Europe. Germany's E.ON has acquired companies in the Nordic countries, Spain, Italy, eastern Europe and Russia, among other places. Two "mega-deals" were initiated in 2005 and 2006: Spain's Gas Natural made a bid for the Spanish company Endesa, which was followed by a rival bid from E.ON, and a merger between the French companies Suez and Gaz was approved. Both deals proved to be very difficult to carry out, and it was not until the

second half of 2007 that any results could be seen. Neither Gas Natural nor E.ON succeeded in taking over Endesa. Instead, Endesa was jointly acquired by the Italian company Enel and Spain's Acciona, while E.ON is taking over assets in Endesa and Enel worth EUR 10 billion.

In September 2007 Suez and Gaz de France (GDF) – after intervention from the French president – agreed on the terms of a merger. The new, combined GDF-Suez (which includes the Belgian company Electrabel) will be one of the top three electricity and gas companies in Europe. In the Netherlands, plans to merge Essent and Nuon were broken off. Both companies are now seeking other development paths at the same time that they are under pressure to unbundle their electricity and gas networks. In April, Spain's Iberdrola succeeded in completing its acquisition of Scottish Power in the UK and soon thereafter followed this up by acquiring the US company Energy East.

Two groups of energy companies

Following these deals, six major international players have emerged in Europe: EDF, Enel, E.ON, GDF-Suez, Iberdrola and RWE. Several of these also have substantial operations outside Europe, mainly in North and South America. The opportunities for these companies to continue growing through acquisitions in Europe are limited due to a lack of takeover candidates. However, they are expected to make fill-in acquisitions, such as in Russia and eastern Europe. In addition, a number of asset swaps will most likely be initiated as a result of the EU's demands for asset divestments in order to approve the merger between Suez and GDF.

The second group of European utilities consists of more regionally based companies: British Energy, Centrica, CEZ, Dong, EnBW, Energias de Portugal, Essent, Fortum, Gas Natural, Nuon, Scottish & Southern Energy, Statkraft, Union Fenosa and Verbund. Some of these companies are generally regarded to be takeover candidates, while others are actively striving to grow through mergers and acquisitions. Germany's municipal-owned Stadtwerke are often pointed out as acquisition targets. There are more than 700 such Stadtwerke – a few of which are of a substantial size and with operations in several different areas. For example, in 2007 an invitation for tenders was made for 49% of Stadtwerke Leipzig.

Vattenfall today stands between these two groups – it is

Major structural deals

Acquisitions

Acquiring company	Acquisition target	Amount, EUR bn
Enel and Acciona jointly	Endesa, Spain	43.4 (enterprise value)
Iberdrola, Spain	Scottish Power	17.0
Iberdrola, Spain	Energy East, USA	6.4
Suez and Gaz de France, France	Merger	–
EDP, Portugal	Horizon Wind Energy, USA	USD 2.9
Statoil, Norway	Norsk Hydro, Norway	All-share merger
E.ON	Remaining 44.6% in E.ON Sweden from Statkraft	Asset swap (asset value)
National Grid, UK	KeySpan, USA	6.2
Scottish & Southern Energy	Airtricity, Ireland	1,455 (enterprise value)

Divestments

Seller	Sales object	Amount, EUR bn
RWE	Thames Water, UK (sale to the Kemble Water consortium)	11.9
RWE	American Water (planned IPO 2008)	6–6.5 (estimated enterprise value)

smaller than the companies in the first category with pan-European operations, but has considerably larger market positions than regional companies such as Fortum and Essent.

Other players include the Russian gas supplier Gazprom, which is seeking to expand forward in the value chain by acquiring companies that have many gas customers. A relatively new phenomenon is the recent appearance of private equity investors on the scene as bidders, although the credit crunch in 2007 has curtailed their opportunities to finance such deals.

Greater focus on renewable energy

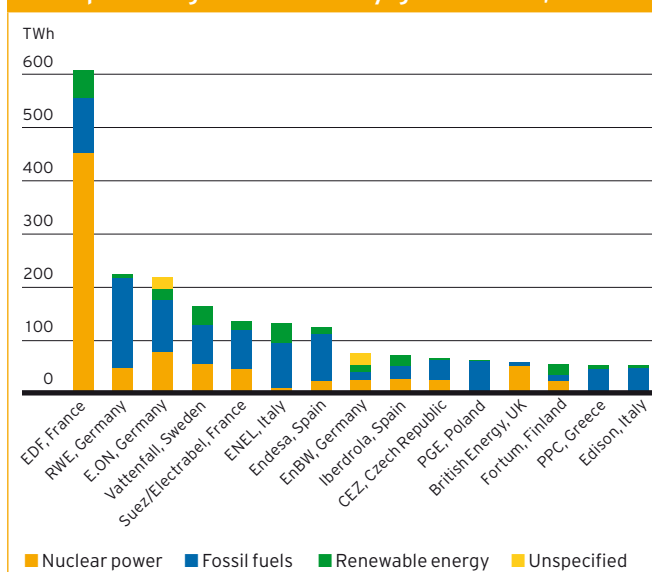
Most western European energy companies have launched extensive investment programmes, ranging in everything from construction of entirely new power stations to upgrading and renewal of existing plants, to expansion and strengthening of their electricity networks. According to a report published by the rating agency Moody's in October 2007, the following investment plans have been announced by some of the larger companies:

- E.ON – EUR 60 billion, 2007–2010 (including the Endesa assets)
- EDF – EUR 26 billion, 2006–2008 (of which EUR 8 billion earmarked for acquisitions)
- RWE – EUR 25 billion, 2007–2011
- Enel – EUR 20 billion, 2007–2011
- Suez – EUR 20 billion, 2007–2010
- Vattenfall – EUR 15 billion, 2007–2011 (For the period 2008–2012, Vattenfall's investment programme amounts to slightly more than EUR 18 billion)

Investments in renewable energy – primarily wind power – are increasing dramatically. Several companies have set ambitious targets for reducing their CO₂ emissions. Apart from leading to greater investments in new, climate-neutral facilities, this is also driving acquisition deals. For example, Iberdrola's acquisition of Scottish Power and Energy East was motivated partly by the company's ambition to strengthen its position in renewable energy. In addition, Scottish & Southern Energy recently acquired the Irish wind power company Airtricity.

A number of companies have concentrated their investments in renewable energy in special subsidiaries or separate business areas, such as E.ON Renewables, Iberdrola Renewables and RWE Innogy. Investments in nuclear power are also expected to increase. New nuclear power plants are currently being built in Finland and France, and in Sweden investments are being made to upgrade and extend the lifetime of existing facilities. New nuclear power plants are being discussed in the UK and the Baltic countries. However, the bulk of investments are being made in fossil-based energy (coal and gas). With the new CCS (carbon capture and storage) technology, production can take place with virtually no CO₂ emissions, and several companies are planning major investments in this area. However, the commercial operation of such facilities requires a sufficiently high price for CO₂ emission allowances and an effective trading system.

Europe's largest electricity generators, 2006



Strong operating profits in 2007

Most of the energy utilities posted strong financial results in 2007 – in many cases exceeding operating profit and cash flows a year earlier. Several utilities have consciously chosen to restructure their balance sheets, increase debt leverage and lower their credit rating targets as a result of debt financed acquisitions, larger dividend payouts and higher capital expenditures. According to Moody's, over a ten-year period, ratings for the major companies have been reduced from the Aa2 level to A2. Only a handful of companies feel comfortable with a rating under single A, which means at least A3 from Moody's and A– from Standard & Poor's.

Commodity and electricity prices generally have a large impact on earnings, although this impact can vary widely, depending on the company's specific situation. A company's product mix also affects its earnings. Utilities with fixed-cost generation, such as nuclear or hydro power, are not affected by rising fuel prices and therefore achieve higher margins. This applies, for example, to EDF and the Nordic power companies. Nor do higher commodity prices affect companies that own fuel assets, such as companies with own coal mines, including RWE, Endesa and Vattenfall.

A key explanation for the energy utilities' favourable earnings performance is their hedging activities. Despite considerably lower spot prices for electricity in 2007, operating margins have not been hurt. This is because most players had already hedged a large part of the year's production via forward contracts at higher prices. Many companies now disclose in their quarterly reports what percentage of their planned future generation has been hedged. However, only few companies disclose the price levels at which their hedges were taken. (For more information on hedging, see page 72.)

Higher shareholder demands

Despite sharply rising share prices and the major capex

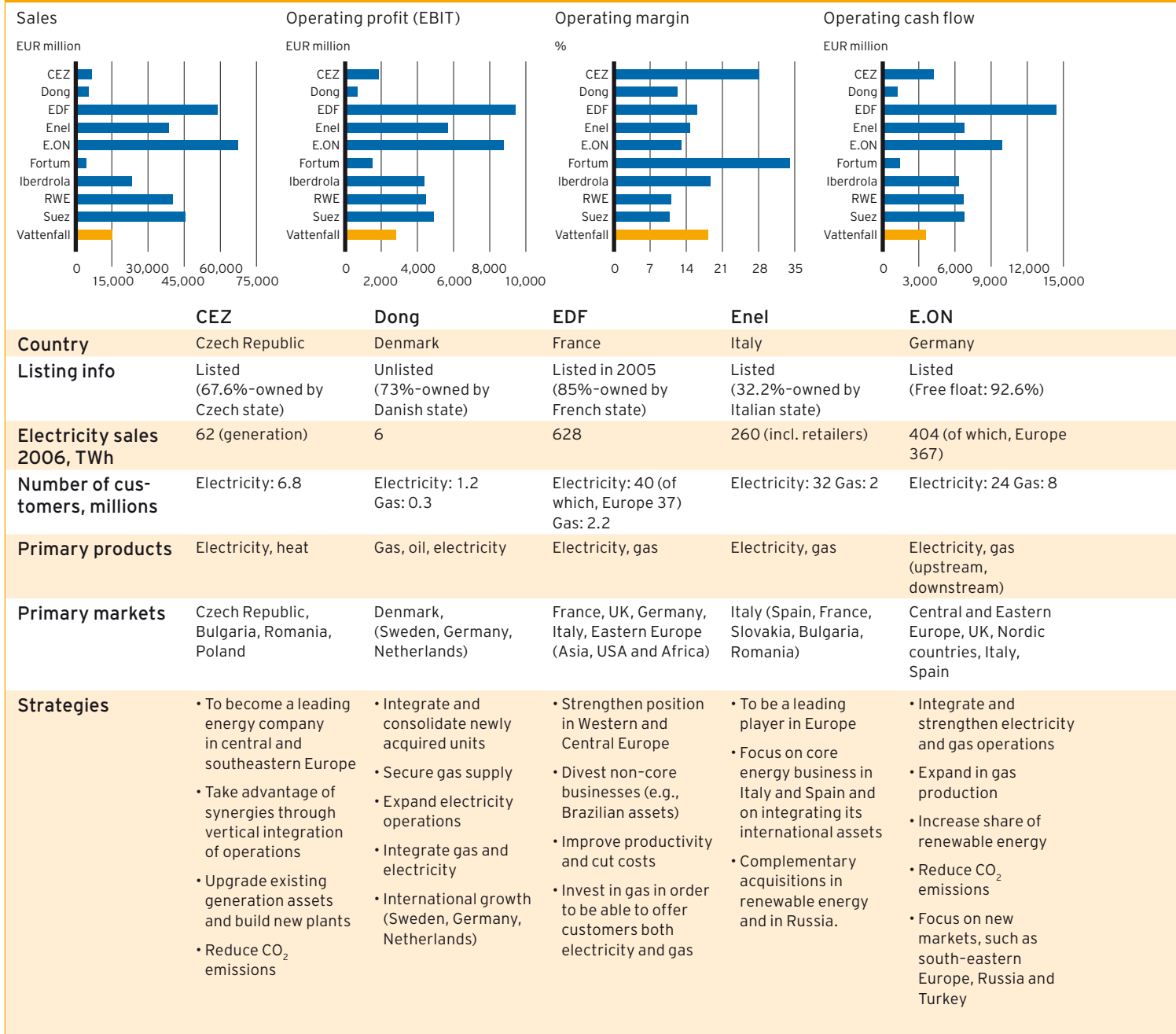
programmes, shareholders continue to put high demands on energy utilities, both in the form of more generous dividends and share buybacks. E.ON, EDF, RWE, Fortum and Vattenfall have all indicated that they will be paying higher dividends. CEZ, E.ON, Fortum, National Grid, RWE,

GDF and Suez have all carried out or indicated that they will be conducting substantial share buybacks.

Comparison of selected European utilities

The tables below provide a comparison of selected Euro-

Comparison of selected European energy utilities (Data as per 30 September 2007, unless indicated otherwise)



	CEZ	Dong	EDF	Enel	E.ON
Country	Czech Republic	Denmark	France	Italy	Germany
Listing info	Listed (67.6%-owned by Czech state)	Unlisted (73%-owned by Danish state)	Listed in 2005 (85%-owned by French state)	Listed (32.2%-owned by Italian state)	Listed (Free float: 92.6%)
Electricity sales 2006, TWh	62 (generation)	6	628	260 (incl. retailers)	404 (of which, Europe 367)
Number of customers, millions	Electricity: 6.8	Electricity: 1.2 Gas: 0.3	Electricity: 40 (of which, Europe 37) Gas: 2.2	Electricity: 32 Gas: 2	Electricity: 24 Gas: 8
Primary products	Electricity, heat	Gas, oil, electricity	Electricity, gas	Electricity, gas	Electricity, gas (upstream, downstream)
Primary markets	Czech Republic, Bulgaria, Romania, Poland	Denmark, (Sweden, Germany, Netherlands)	France, UK, Germany, Italy, Eastern Europe (Asia, USA and Africa)	Italy (Spain, France, Slovakia, Bulgaria, Romania)	Central and Eastern Europe, UK, Nordic countries, Italy, Spain
Strategies	<ul style="list-style-type: none"> To become a leading energy company in central and southeastern Europe Take advantage of synergies through vertical integration of operations Upgrade existing generation assets and build new plants Reduce CO₂ emissions 	<ul style="list-style-type: none"> Integrate and consolidate newly acquired units Secure gas supply Expand electricity operations Integrate gas and electricity International growth (Sweden, Germany, Netherlands) 	<ul style="list-style-type: none"> Strengthen position in Western and Central Europe Divest non-core businesses (e.g., Brazilian assets) Improve productivity and cut costs Invest in gas in order to be able to offer customers both electricity and gas 	<ul style="list-style-type: none"> To be a leading player in Europe Focus on core energy business in Italy and Spain and on integrating its international assets Complementary acquisitions in renewable energy and in Russia. 	<ul style="list-style-type: none"> Integrate and strengthen electricity and gas operations Expand in gas production Increase share of renewable energy Reduce CO₂ emissions Focus on new markets, such as south-eastern Europe, Russia and Turkey

Last 12-month values as per 30 September 2007 for all companies except EDF and Suez, which are reported as per 30 June 2007.

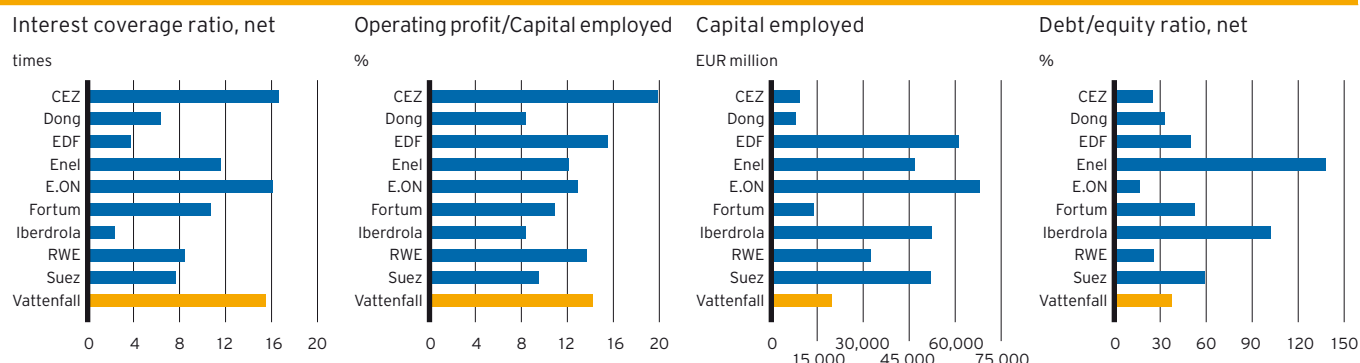
Sources:

Graph values: Barclay's Capital.

Electricity sales, number of customers, primary products, primary markets and strategies: Vattenfall's research, various analysts' reports and companies' annual reports, interim reports and websites.

pean utilities with respect to size, operations, strategies and a number of key ratios. The presentation is not exhaustive, nor are the various companies ranked in any way. Compared with the corresponding comparison in Vattenfall's 2006 Annual Report, the companies have generally shown

a stable trend. However, some of them, such as E.ON and Enel, have increased their debt leverage.



Fortum	Iberdrola	RWE	Suez	Vattenfall
Finland	Spain	Germany	France	Sweden
Listed (50.8%-owned by Finnish state)	Listed (Free float: 82%)	Listed (Free float: 89%)	Listed (Free float 86%)	Unlisted (100%-owned by Swedish state)
62	127 (of which, Europe 98)	232 (excl. trading)	266 (of which, Europe 156)	191 (210 incl. deliveries to minority owners)
Electricity: 1.6 (incl. network customers)	Electricity: 18.4 (of which, Europe 12) Gas: 0.2	Electricity: 20 Gas: 10	Electricity: 5.7 (Europe) Gas: 2.3 (Europe)	Electricity: 5.7 (incl. network customers)
Electricity, heat	Electricity, gas	Electricity, gas (Water operations are being divested)	Electricity, gas, water and waste	Electricity, heat
Nordic countries, Baltic countries, Russia, Poland	Spain, UK, Latin America, USA	Germany, UK, Central and Eastern Europe	France, Benelux, North- and South America	Nordic countries, Germany, Poland
<ul style="list-style-type: none"> To become a leading power and heat company in the Nordic region through profitable growth Expand in Nordic countries, Baltic countries, Poland and Russia 	<ul style="list-style-type: none"> Maintain world-leading position in renewable energy Expand in North America Increase efficiency and capitalise on synergies Increase quality of electricity distribution 	<ul style="list-style-type: none"> Focus on electricity and gas Increase share of renewable energy and reduce CO₂ emissions Increase own gas production Expand in Germany and the UK as well as in south-eastern Europe and Russia 	<ul style="list-style-type: none"> Complete merger with Gaz de France Divest Suez Environment in accordance with EU requirement To focus on and grow its energy business 	<ul style="list-style-type: none"> To be a leading European energy company. Five strategic ambitions: <ul style="list-style-type: none"> Number One for the Customer Number One for the Environment Profitable growth in neighbouring areas through M&As and new production facilities Benchmark for the Industry Employer of Choice

Definitions

Capital employed = Interest-bearing liabilities + equity including minority interests. Operative cash flow = FFO +/- change in working capital.

Free float = The proportion of a company's shares that are freely available for trading.