

E ON AG  
Form 20-F  
March 25, 2004

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As filed with the Securities and Exchange Commission on March 25, 2004.

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549**

**FORM 20-F**

**(Mark One)**

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended: December 31, 2003**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from            to  
Commission file number: 1-14688**

**E.ON AG**

(Exact name of Registrant as specified in its charter)

**E.ON AG**

(Translation of Registrant's name into English)

**Federal Republic of Germany**  
(Jurisdiction of Incorporation or Organization)

**E.ON-Platz 1, D-40479 Düsseldorf, GERMANY**  
(Address of Principal Executive Offices)

**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
American Depositary Shares representing Ordinary Shares with no par value	New York Stock Exchange
Ordinary Shares with no par value	New York Stock Exchange*

**Securities registered or to be registered pursuant to Section 12(g) of the Act:**

**None**

(Title of Class)

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:**

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None

(Title of Class)

**Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.**

As of December 31, 2003, 656,026,401 outstanding Ordinary Shares with no par value.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

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\* Not for trading, but only in connection with the registration of American Depositary Shares.

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As used in this annual report,

E.ON, the Company, the E.ON Group or the Group refers to E.ON AG and its consolidated subsidiaries.

VEBA refers to VEBA AG and its consolidated subsidiaries prior to its merger with VIAG AG and the name change from VEBA AG to E.ON AG. VIAG or the VIAG Group refers to VIAG AG and its consolidated subsidiaries prior to its merger with VEBA.

PreussenElektra refers to PreussenElektra AG and its consolidated subsidiaries and Bayernwerk refers to Bayernwerk AG and its consolidated subsidiaries, which merged to form E.ON's German and continental European energy business in the E.ON Energie division consisting of E.ON Energie AG and its consolidated subsidiaries ( E.ON Energie ).

Ruhrgas refers to Ruhrgas AG and its consolidated subsidiaries, which collectively comprise E.ON's gas business in the Ruhrgas division.

Powergen refers to Powergen Limited and its consolidated subsidiaries and LG&E Energy refers to LG&E Energy LLC and its consolidated subsidiaries, which collectively comprise E.ON's U.K. and U.S. energy business in the Powergen division.

Real Estate refers to Viterra AG and its consolidated subsidiaries ( Viterra ), which collectively comprise E.ON's real estate business in the Viterra division.

Degussa-Hüls refers to Degussa-Hüls AG and its consolidated subsidiaries and SKW Trostberg refers to SKW Trostberg AG and its consolidated subsidiaries, which merged to form E.ON's chemicals business in the Degussa division consisting of Degussa AG and its consolidated subsidiaries ( Degussa ).

VIAG Telecom refers to VIAG Telecom Beteiligungs GmbH and its consolidated subsidiaries, which with E.ON Telecom GmbH and its consolidated subsidiaries collectively comprised E.ON's telecommunications division.

VEBA Oel refers to VEBA Oel AG and its consolidated subsidiaries, which collectively comprised E.ON's oil division.

Distribution/ Logistics refers to Stinnes AG and its consolidated subsidiaries ( Stinnes ), which collectively comprised E.ON's distribution/ logistics division.

Aluminum refers to VAW aluminium AG and its consolidated subsidiaries ( VAW ), which collectively comprised E.ON's aluminum division.

Silicon Wafers refers to MEMC Electronic Materials, Inc. and its consolidated subsidiaries ( MEMC ), which collectively comprised E.ON's silicon wafers division.

Unless otherwise indicated, all amounts in this annual report are expressed in European Union euros ( euros or EUR or € ), United States dollars ( U.S. dollars or dollars or \$ ) or British pounds ( GBP ). Beginning in 1999, the reporting currency is the euro. Amounts formerly stated in German marks ( marks or DM ) have been translated into euro using the fixed rate of DM 1.95583 per 1.00. Amounts stated in dollars, unless otherwise indicated, have been translated from euros at an assumed rate solely for convenience and should not be construed as representations that the euro amounts actually represent such dollar amounts or could be converted into dollars at the rate indicated. Unless otherwise stated, such dollar amounts have been translated from euros at the noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York (the Noon Buying Rate ) on December 31, 2003, which was \$1.2597 per 1.00. Such rate may differ from the actual rates used in the preparation of the consolidated financial statements of E.ON as of December 31, 2003, 2002 and 2001, and for each of the years in the three-year period ended December 31, 2003, included in Item 18 of this annual report (the Consolidated Financial Statements ), which are expressed in euros, and, accordingly, dollar amounts appearing in this annual report may differ from the actual dollar amounts that were translated into euros in the preparation of such financial statements. For information regarding recent rates of exchange, see Item 3. Key Information Exchange Rates.

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Beginning in 2000, E.ON has prepared its financial statements in accordance with generally accepted accounting principles in the United States ( U.S. GAAP ). Formerly, the Company prepared its financial statements in accordance with generally accepted accounting principles in Germany ( German GAAP ) as prescribed by the German Commercial Code (*Handelsgesetzbuch*, the Commercial Code ) and the German Stock Corporation Act (*Aktiengesetz*, the Stock Corporation Act ). In connection with the change to U.S. GAAP, E.ON's financial statements for prior fiscal years have been restated according to U.S. GAAP. Sales and internal operating profit presented in this annual report for each of E.ON's divisions are based on the consolidated accounts of the E.ON Group as shown in Note 31 (Segment Information) of the Notes to Consolidated Financial Statements under the captions External sales and Internal operating profit. Internal operating profit is the measure pursuant to which the Group has evaluated the performance of its segments and allocated resources to them during the period covered by this annual report. Internal operating profit is equivalent to income from continuing operations before income taxes, adjusted to exclude material, non-operating income and expenses that are non-recurring or infrequent in nature. These adjustments primarily include net book gains resulting from large divestitures, as well as restructuring expenses. E.ON uses internal operating profit as its segment reporting measure in accordance with Statement of Financial Accounting Standard ( SFAS ) No. 131, Disclosures about Segments of an Enterprise and Related Information ( SFAS 131 ). However, on a consolidated Group basis internal operating profit is considered a non-GAAP measure that must be reconciled to the most directly comparable GAAP measure. For a reconciliation of Group internal operating profit to net income for each of 2001, 2002 and 2003, see Item 5. Operating and Financial Review and Prospects Results of Operations Business Segment Information.

E.ON has calculated operating data for Group companies appearing in this annual report using actual amounts derived from Group books and records. The Company has obtained market-related data such as the market position of Group companies from publicly available sources such as industry publications. The Company has relied on the accuracy of information from publicly available sources without independent verification, and does not accept any responsibility for the accuracy or completeness of such information.

This annual report contains certain forward-looking statements and information relating to the E.ON Group that are based on beliefs of its management as well as assumptions made by and information currently available to E.ON. When used in this document, the words anticipate, believe, estimate, expect, intend, plan and project and similar expressions, as they relate to the E.ON Group or its management, are intended to identify forward-looking statements. Such statements reflect the current views of E.ON with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors could cause the actual results, performance or achievements of the E.ON Group to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, among others, changes in general economic and business conditions, changes in currency exchange rates and interest rates, introduction of competing products by other companies, lack of acceptance of new products or services by the Group's targeted customers, changes in business strategy, lack of successful completion of planned acquisitions and dispositions and/or the realization of expected benefits and various other factors, both referenced and not referenced in this annual report. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this annual report as anticipated, believed, estimated, expected, intended, planned or projected. E.ON does not intend, and does not assume any obligation, to update these forward-looking statements.

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Not applicable.

**Item 2. Offer Statistics and Expected Timetable.**

Not applicable.

**Item 3. Key Information.****SELECTED FINANCIAL DATA**

The selected financial data presented below in accordance with U.S. GAAP as of and for each of the years in the five-year period ended December 31, 2003 have been excerpted from or are derived from the Consolidated Financial Statements of E.ON as of and for the period ended December 31, 2003, 2002, 2001 and 2000, respectively, and of VEBA as of and for the period ended December 31, 1999.

On June 16, 2000, VEBA completed the acquisition of VIAG. For convenience reasons, June 30, 2000 has been chosen as the merger date. In 2000, the results of operations of VIAG are included in E.ON's financial data from July 1 to December 31.

The selected financial data set forth below should be read in conjunction with, and are qualified in their entirety by reference to, the Consolidated Financial Statements and the Notes to Consolidated Financial Statements.

	Year Ended December 31,					
	2003(1)	2003	2002	2001	2000	1999
	(in millions, except share amounts)					
<b>Statement of Income Data:</b>						
Sales	\$58,405	46,364	36,624	36,886	38,374	25,238
Sales excluding electricity and natural gas taxes(2)	53,589	42,541	35,691	36,192	38,385	24,097
Income/(Loss) from continuing operations before income taxes	6,976	5,538	(759)	2,629	5,095	3,977
Income/(Loss) from continuing operations after income taxes(3)	5,560	4,414	(97)	2,581	3,328	3,044
Income/(Loss) from continuing operations	4,976	3,950	(720)	2,129	2,939	2,918
Income/(Loss) from discontinued operations(4)	1,432	1,137	3,306	(55)	628	73
Net income	5,854	4,647	2,777	2,048	3,570	2,991
Basic earnings/(Loss) per share from continuing operations	7.61	6.04	(1.10)	3.15	4.74	5.80
Basic earnings (Loss) per share from discontinued operations, net(4)	2.19	1.74	5.07	(0.08)	1.01	0.15
Basic earnings per share from net income(5)	8.95	7.11	4.26	3.03	5.75	5.95



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	Year Ended December 31,					
	2003(1)	2003	2002	2001	2000	1999
(in millions, except share amounts)						
<b>Balance Sheet Data:</b>						
Total assets	\$ 140,897	111,850	113,503	101,659	106,215	56,219
Long-term financial liabilities	18,749	14,884	17,576	9,308	7,611	3,630
Stockholders' equity(6)	37,506	29,774	25,653	24,462	28,033	15,813
Number of authorized shares		692,000,000	692,000,000	692,000,000	763,298,875	502,797,780

- (1) Amounts in this column are unaudited and have been translated solely for the convenience of the reader at an exchange rate of \$1.2597 = 1.00, the Noon Buying Rate on December 31, 2003.
- (2) As of April 1, 1999, German law requires the seller of electricity to collect electricity taxes and remit such amounts to tax authorities. German law also requires the seller of natural gas to collect and remit natural gas taxes to tax authorities.
- (3) Before minority interest of 464 million for 2003, as compared with 623 million, 452 million, 389 million and 126 million for 2002, 2001, 2000 and 1999, respectively.
- (4) For more details, see Item 5. Operating and Financial Review and Prospects Acquisitions and Dispositions Discontinued Operations and Note 4 of the Notes to Consolidated Financial Statements.
- (5) Includes earnings per share from the first-time application of new U.S. GAAP standards of (0.67), 0.29 and (0.04) for 2003, 2002 and 2001, respectively.
- (6) After minority interests.

**DIVIDENDS**

The following table sets forth the annual dividends paid per ordinary unit bearer share of E.ON AG (each, an Ordinary Share ) in euros, and the dollar equivalent, for each of the years indicated. Historically, both VEBA AG and VIAG AG declared and paid dividends in marks. For convenience, historical data regarding VEBA AG is translated from marks into euros at the fixed rate of 1.95583. The table does not reflect the related tax credits available to German taxpayers who receive dividend payments. Owners of Ordinary Shares who are United States residents should be aware that they will be subject to German withholding tax on dividends received. See Item 10. Additional Information Taxation.

Year Ended December 31,	Dividends Paid per Ordinary Share with no par value	
	\$(1)	
1999	1.25	1.16
2000	1.35	1.18
2001	1.60	1.49
2002	1.75	1.96
2003(2)	2.00	2.52

- (1) Translated into dollars at the Noon Buying Rate on the dividend payment date, which typically occurred during the second quarter of the following year, except for the 2003 amount, which has been translated at the Noon Buying Rate on December 31, 2003.

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(2) The dividend amount for the year ended December 31, 2003 is the amount proposed by E.ON's Supervisory Board and Board of Management and has not yet been approved by its stockholders. Prior to the payment of

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the dividends, a resolution approving such amount must be passed by E.ON's stockholders at the annual general meeting to be held on April 28, 2004.

See also Item 8. Financial Information Dividend Policy.

**EXCHANGE RATES**

Until December 31, 1998, the mark took part in the European Monetary System ( EMS ) exchange rate mechanism. Within the EMS, exchange rates could fluctuate within permitted margins, fixed by central bank intervention. Against currencies outside the EMS, the mark had, in theory, free floating exchange rates, although central banks sometimes tried to confine short-term exchange rate fluctuations by intervening in foreign exchange markets. As of December 31, 1998, the mark had a fixed value relative to the euro of 1.95583, and therefore was no longer traded on currency markets as an independent currency. As of January 1, 2002, the euro replaced the mark as legal tender in Germany.

Fluctuations in the exchange rate between the euro and the dollar will affect the dollar equivalent of the euro price of the Ordinary Shares traded on the German stock exchanges and, as a result, will affect the price of the Company's American Depositary Receipts ( ADRs ) traded in the United States. Such fluctuations will also affect the dollar amounts received by holders of ADRs on the conversion into dollars of cash dividends paid in euros on the Ordinary Shares represented by the ADRs.

The following table sets forth, for the periods and dates indicated, the average, high, low and/or period-end Noon Buying Rates for euros expressed in \$ per 1.00.

<b>Period</b>	<b>Average(1)</b>	<b>High</b>	<b>Low</b>	<b>Period-End</b>
1999	1.0588			1.0070
2000	0.9207			0.9388
2001	0.8909			0.8901
2002	0.9495			1.0485
2003	1.1411			1.2597
September		1.1650	1.0845	
October		1.1833	1.1596	
November		1.1995	1.1417	
December		1.2597	1.1956	
2004				
January		1.2853	1.2389	
February		1.2848	1.2426	

(1) The average of the Noon Buying Rates for the relevant period, calculated using the average of the Noon Buying Rates on the last business day of each month during the period.

On March 22, 2004, the Noon Buying Rate was \$1.2368 per 1.00.

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On May 1, 1998, the German Control and Transparency in Business Act (*Gesetz zur Kontrolle und Transparenz im Unternehmensbereich, or KonTraG*), came into effect. The provisions of *KonTraG* include the requirement that the board of management of a German stock corporation establish a risk management system to identify material risks to the corporation at an early stage. As part of their audit, the auditors of a stock corporation whose shares are listed on an official market assess whether the system meets the requirements of *KonTraG*. The audit requirement has been applicable to all fiscal years beginning after December 31, 1998, although the former VEBA underwent this audit voluntarily already in fiscal year 1998.

Even prior to the requirements introduced by *KonTraG*, the Company believes it had an effective risk management system which integrates risk management in its Group-wide business procedures. The system includes controlling processes, Group-wide guidelines, data processing systems and regular reports to the Board of Management and Supervisory Board. In 1998, a Group-wide project was launched to analyze, aggregate and document existing risks and control systems at the Group level. The reliability of the risk management system is reviewed regularly by the internal audit and controlling departments of the Company's business divisions and of the parent company as well as by the Company's independent auditors, based on requirements set forth in the Stock Corporation Act. The documentation and evaluation of the Company's risk management system is updated annually throughout the Group in the following steps:

Standardized documentation of risks and control systems;

Evaluation of risks according to the degree of severity and the probability of occurrence, and assessment of the effectiveness of existing control systems; and

Analysis of the results and structured disclosure in a risk report.

The following discussion groups risks according to the categories of external, operational and financial risks, as used by the Company in its risk management system.

**External**

The Company faces the general risks of economic downturns experienced by all businesses, although certain of its operations, such as its minority interest in Degussa's chemicals operations, are more exposed to economic cycles than its core energy business. The Company's worldwide operations were affected by generally sluggish economic conditions in 2003. The following are specific external risks the Company faces:

***The Company's core energy operations face strong competition, which could depress margins.***

Since 1998, liberalization of the electricity markets in the EU has greatly altered competition in the German electricity market, which was formerly characterized by numerous strong competitors. Following liberalization, significant consolidation has taken place in the German market, resulting in four major interregional utilities: E.ON, RWE AG, Vattenfall Europe AG ( Vattenfall Europe ) and EnBW Energie Baden-Württemberg ( EnBW ). In addition, the market for electricity trading has become more liquid and competitive, with a total trading volume of approximately 391 terrawatt hours ( TWh ) at the German Power Exchange (EEX) spot and futures market in 2003, more than twice the volume of 2002. Liberalization of the German electricity market also caused prices to decrease beginning in 1998, with significant declines in some market segments. Although retail prices have nearly recovered to 1998 levels, and prices for sales to distributors and industrial customers have also improved, electricity companies now face new or increased costs that have effectively reduced their margins. Among these new or increased costs are electricity taxes, duties and additional costs attributable to compliance with new legislation, as well as higher costs incurred in procuring balancing power to cover fluctuations in the availability of electricity from renewable resources such as wind. For additional information, see Item 4. Information on the Company Business Overview E.ON Energie Regulatory Environment. Although the Company continues to implement cost-management measures at its electricity operations in Germany, it may not be able to fully regain its formerly high profit margins in this sector. Further, although the Company intends to compete vigorously in the changed German electricity market, it cannot be certain that it will be able to



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develop its business as successfully as its competitors. For information about new regulatory changes that will affect the German electricity market, see the discussion on changes in laws and regulations below.

In 2002, the German Federal Cartel Office instituted proceedings challenging the transmission fees of 10 regional and municipal electricity suppliers in Germany, including four companies of the E.ON Group – TEAG Thüringer Energie AG ( TEAG ), E.DIS AG ( E.DIS ), EAM Energie AG (formerly Energie-Aktiengesellschaft Mitteldeutschland) ( EAM ) and Avacon AG ( Avacon ). On February 19, 2003, the Federal Cartel Office issued a decision requiring a 10 percent reduction in TEAG’s network transmission fees. The decision rejected the basic principles of the tariff calculation guidelines that are used by all of the E.ON Group companies involved in the proceedings. TEAG appealed the decision in the State Superior Court in Düsseldorf and received a temporary injunction preventing the immediate reduction of its tariffs. On February 11, 2004, TEAG won its appeal, with the court ruling that TEAG’s calculation methods follow a set of recognized rules under the electricity industry’s association agreement (*Verbändevereinbarung II+*) and represent a recognized business method. The decision is now final and binding and constitutes a precedent for any similar future proceedings and the ongoing political debate about a new regulatory regime in Germany. The German Federal Cartel Office has also instituted proceedings challenging the prices charged by E.ON Sales & Trading GmbH ( EST ) and other wholesale energy companies for balancing energy. As a first step, the Federal Cartel Office has begun an inquiry in order to assess whether or not these prices constitute market abuse. If the Company is unable to reach a satisfactory resolution of this proceeding, it may have a material adverse impact on E.ON Energie’s transmission rate structure.

Outside Germany, the electricity markets in which the Company operates are subject to strong competition, particularly in the United Kingdom and the unregulated markets in the United States. Through Powergen, the Company has significant U.K. operations in electricity generation, distribution and supply, on both the wholesale and retail levels. Increased competition from new market entrants and existing market participants could adversely affect the Company’s U.K. market share in both the retail and wholesale sectors. In the United States, LG&E Energy, the Company’s primary U.S. subsidiary, is exposed to wholesale price and fuel cost risks with respect to its non-utility operations, whose rates are not set by governmental regulators, and which represent a minority of LG&E Energy’s business. A significant deterioration in the market environment for Powergen’s U.K. and U.S. operations triggered an impairment analysis in the third quarter of 2002 that resulted in an impairment charge of 2.4 billion, thus reducing the amount of goodwill associated with the Powergen acquisition to 6.5 billion. For additional details on this charge, see Item 5. Operating and Financial Review and Prospects – Results of Operations. The Company cannot guarantee it will be able to compete successfully in the United Kingdom, the United States or other electricity markets where it is already present or in new electricity markets the Company may enter. Ruhrgas also faces risks associated with increased competition in the gas sector; see Item 4. Information on the Company – Business Overview – Ruhrgas – Competitive Environment.

***Changes in laws and regulations which affect the Company’s operations could materially and adversely affect the Company’s financial condition and results of operations.***

In each of its operations, the Company must comply with a number of laws and government regulations. For more information on laws and regulations in some of the industries in which the Company operates, see the description of the businesses contained in Item 4. Information on the Company – Business Overview. From time to time, changes or new laws and regulations may be introduced which may negatively affect the Company’s business, financial condition and results of operations.

For example, the EU has adopted new electricity and gas directives which will require changes to the electricity and gas industries of some EU member states, including Germany. One of the requirements is that an independent regulatory authority be established in each member state to oversee access to the electricity and gas transmission networks. According to the directives, this regulatory body should have the authority to set or approve transmission network access tariffs or, alternatively, the methodologies used for calculating them, as well as the power to control compliance with the tariffs or methodologies once they are set. The establishment of an independent regulatory authority will therefore change the current system of negotiated third party network access in the electricity and gas industries in Germany. In addition, in August 2003 the Federal Ministry of Economics and Labor published a so-called monitoring report analyzing competition in the German electricity

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and gas markets, especially the system of negotiated third party access. The monitoring report recommends reform of the network access model for gas transmission networks, and specifically describes an alternate network access model for gas which the Company believes could be less profitable than the current model. The Company expects the German government to propose changes to the current gas transmission network access model in its legislation implementing the EU's electricity and gas directives. Although an initial draft has been published, the Company cannot yet predict any consequences of this legislation as the relevant issues will also be subject to several new regulations not yet published. The Company cannot be certain that the establishment of a regulator and changes to the current system of transmission network access, as well as other changes introduced as part of the new legislation, will not have a negative effect on its electricity and gas businesses in Germany, including on the transmission fees E.ON Energie and Ruhrgas may charge for transmission network access or on the competitive environment in the electricity and gas markets in Germany. For more information, see Item 4. Information on the Company Business Overview E.ON Energie Regulatory Environment and Ruhrgas Regulatory Environment.

The EU has also adopted a directive requiring member states to establish a greenhouse gas emissions allowance trading system. The German, Dutch and U.K. governments have each made proposals for implementing the directive which would initially allocate permits to emit a specified amount of carbon dioxide to affected power stations and other industrial installations free of charge. Each of E.ON Energie, Ruhrgas and Powergen will need to acquire a sufficient number of permits to operate its affected facilities, although the number of facilities requiring permits and the exact allocation of permits has not yet been determined in any country. Other EU member states in which E.ON has operations, such as Sweden, have not yet made public their proposals on how to implement the trading system. For these reasons, the Company cannot currently predict the impact of the greenhouse gas emissions allowance trading system on its operations, but expects that should it need to purchase emissions permits, either initially or in the secondary market, the costs could be significant. For information, see Item 4. Information on the Company Business Overview E.ON Energie Regulatory Environment, Ruhrgas Regulatory Environment and Powergen Regulatory Environment.

In Germany, the Company's nuclear power plants are among its cheapest source of power, and, along with hydroelectric and lignite-based power plants, are used primarily to cover the Company's base load power requirements. In June 2001, E.ON, together with the other German operators of nuclear power stations, reached an agreement with the German federal government to phase out the generation of nuclear power in Germany; this agreement was reflected in an amendment of Germany's nuclear energy law in April 2002. For more information about the planned phase-out of nuclear power stations in Germany, see Item 4. Information on the Company Business Overview E.ON Energie. The amended law provides that the delivery of spent nuclear fuel rods for reprocessing will be allowed until July 2005, during which time plant operators are to build storage facilities on the premises of their nuclear plants. The construction costs of these storage facilities are expected to be significant, and the Company may incur greater than anticipated costs in ending its nuclear energy operations.

Regulatory changes can also affect the prices the Company may charge customers. For example,

As described above, the industry regulatory authority to be introduced in Germany will have the power to set or approve electricity and gas grid tariffs, which could lead to lower fees for E.ON's electricity and gas transportation businesses in Germany;

Regulators in the United Kingdom have established a price control framework for electricity distribution customers that is in effect through March 31, 2005. The framework to be applied as of April 2005 is currently under review and could change; and

In the United States, the rates for LG&E Energy's retail electric and gas customers in Kentucky, its principal area of operations, are set by state regulators and remain in effect until such time that an adjustment is sought and approved. LG&E Energy's affected utilities have filed general rate case applications seeking increases in regulated tariffs, with any new rates approved expected to become effective as of July 1, 2004.

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For additional information on these developments, see the respective business descriptions in Item 4. Information on the Company Business Overview. For all of its operations, adverse changes in price controls or rate structures could have an adverse effect on the Company's operating results.

The description of the Company's operations in Item 4. Information on the Company Business Overview also contains information regarding other recent or proposed changes in law or regulations which could negatively affect the Company's operations. The Company is unable to predict the effect of future developments in laws and regulations on its operations and future earnings.

***Rising fuel prices could materially and adversely affect the Company's results of operations and financial condition.***

A significant portion of the expenses of the Company's E.ON Energie and Powergen divisions are made up of fuel costs, which are heavily influenced by prices in the world market for oil, natural gas, fuel oil and coal. Similarly, the majority of Ruhrgas' expenses are for purchases of natural gas under long-term take or pay contracts that link the gas prices to that of oil and other competing fuels. The prices for such commodities have historically fluctuated and there is no guarantee that prices will remain within projected levels. The price of oil in particular could rise in 2004 as a result of geopolitical factors, including, but not limited to, any worsening of the current situation in Iraq, increased instability in other parts of the Middle East and/or a further deterioration of the economic and political situation in Venezuela. E.ON Energie and Powergen do maintain some flexibility to shift power production among different types of fuel, and the Company is also partially hedged against rising fuel prices. However, increases in fuel costs could have an adverse effect on the Company's operating results or financial condition if it is not able (or not permitted by regulatory authorities) to shift production to lower-cost fuel or to adjust its rates to offset such increases in fuel prices on a timely or complete basis. For more information about Ruhrgas' take or pay contracts, see the discussion on Ruhrgas' long-term gas supply contracts below. The Company could also incur losses if its hedging strategies are not effective. For more information about the Company's hedging policies and the instruments used, see Financial, Item 5. Operating and Financial Review and Prospects Exchange Rate Exposure and Currency Risk Management and Item 11. Quantitative and Qualitative Disclosures about Market Risk.

***The Company's revenues and results of operations fluctuate by season and according to the weather, and management expects these fluctuations to continue.***

The demand for power and natural gas is seasonal, with the Company's operations generally experiencing higher demand during the cold weather months of October through March and lower demand during the warm weather months of April through September. The exception to this is the Company's U.S. power business, where hot weather results in an increased demand for electricity to run air conditioning units. As a result of these seasonal patterns, the Company's revenues and results of operations are higher in the first and fourth quarters and lower in the second and third quarters, with the U.S. power business having its highest revenues in the third quarter and a secondary peak in the first and fourth quarters. Revenues and results of operations for all of the Company's energy operations would be negatively affected by periods of unseasonably warm weather during the autumn and winter months. The Company's European energy operations could also be negatively affected by a summer with higher than average temperatures, such as occurred in 2003. In Europe, higher temperatures during the summer of 2003 not only resulted in decreased energy supply from hydroelectric power plants but also forced some of the Company's German power plants to reduce or shut down operations due to over-heated water needed for cooling the plants. Management expects seasonal and weather-related fluctuations in revenues and results of operations to continue.

**Operational**

The Company's E.ON Energie, Ruhrgas, Powergen and Degussa divisions operate technologically complex production facilities and transmission systems. Operational failures or extended production downtimes could negatively impact the Company's financial condition and results of operations. The Company's businesses are also subject to risks in the ordinary course of business such as the loss of personnel or customers, and losses due

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to bad debts. The Company believes it has appropriate risk control measures in effect to counteract and address these types of risks. The following are additional operational risks the Company faces:

***Ruhrgas long-term gas contracts expose it to volume and price risks.***

As is typical in the gas industry, Ruhrgas enters into long-term gas supply contracts with natural gas producers to secure the supply of almost all the gas Ruhrgas purchases for resale. These contracts, which generally have terms of around 20 to 25 years, require Ruhrgas to purchase minimum amounts of natural gas over the period of the contract or to pay for such amounts even if Ruhrgas does not take the gas, a standard industry practice known as "take or pay". The minimum amounts are generally about 80 percent of the firm contracted quantities. Ruhrgas also enters into long-term gas sales contracts with its customers, although these contracts are shorter than the gas supply contracts (for distributors and municipal utilities, which constitute the majority of Ruhrgas's customers, the contracts generally have longer terms, while contracts for industrial customers usually have terms between one and five years). In addition, the majority of these gas sales contracts do not include fixed take or pay provisions. Since Ruhrgas's gas supply contracts have longer terms than its gas sales contracts, and commit Ruhrgas to paying for a minimum amount of gas over a long period, Ruhrgas is exposed to the risk that it will have an excess supply of natural gas in the long term should it have fewer committed purchasers for its gas in the future and be unable to otherwise sell its gas on favorable terms. Such a shortfall could result if a significant number of Ruhrgas's customers (or their end customers) shifted from natural gas to other forms of energy or if Ruhrgas's customers began to acquire gas from other sources. The ministerial approval E.ON obtained for the acquisition of Ruhrgas required Ruhrgas to divest its stakes in two gas distributors, as well as granting these distributors the right to terminate their gas sales contracts with Ruhrgas. The ministerial approval also gave a number of Ruhrgas's customers the right to reduce the amounts of natural gas purchased from Ruhrgas to 80 percent of the contractually agreed amount over the period of the applicable gas sales contract. To date, a number of customers have decided not to exercise this option, while others have done so. If the affected gas distributors choose to begin termination of their gas sales contracts in 2004, or a significant number of other affected customers choose to reduce the amounts of gas purchased from Ruhrgas in 2004, the take or pay provisions of some of Ruhrgas's gas supply contracts may become applicable, which would negatively affect its results of operations. In addition, due to increasing competition linked to the liberalization of the gas market and the entry of new competitors, Ruhrgas may not be able to renew some of its existing gas sales contracts as they expire, or to gain new contracts. This may also have the effect of leaving Ruhrgas with an excess supply of natural gas.

In the course of a proceeding not involving Ruhrgas, the German Federal Cartel Office issued an opinion stating that it believed that long-term sales contracts requiring municipal utilities or other purchasers to buy all of their gas from a single source were contrary to German and European competition law, and that even contracts providing for only 50 to 80 percent of a purchaser's requirements must be limited in time (as a rule for four years). The Federal Cartel Office has instituted a proceeding challenging the validity of Ruhrgas's existing long-term sales contracts. Ruhrgas believes the Federal Cartel Office has failed to take into account that long-term supply contracts needed to ensure secure gas supplies will only be viable if importers can assume that they can sell their gas volumes on a long-term basis. However, no assurance can be given as to the outcome of this proceeding. Were any such challenge to result in Ruhrgas's being required to change the terms of its existing sales contracts, Ruhrgas's exposure to the risks described above would be heightened.

As is standard in the industry, the price Ruhrgas pays for gas under its long-term gas supply contracts is calculated on the basis of complex formulas incorporating variables based on current market prices for fuel oil, gas oil, coal and/or other competing fuels, with prices being automatically re-calculated periodically, usually quarterly, by reference to market prices of the relevant fuels during a prior period. Price terms in Ruhrgas's gas sales contracts are generally pegged to the price of competing fuels and provide for automatic quarterly price adjustments based on fluctuations in underlying fuel prices, again by reference to market prices during a prior period. Since Ruhrgas's supply and sales contracts are generally indexed to different types of oil and related fuels, in different proportions and are adjusted according to different formulas, Ruhrgas's margins for natural gas may be significantly affected in the short term by variations in the price of oil or other fuels. Although Ruhrgas seeks to manage this risk by matching the general terms of its portfolio of sales contracts with those of its supply contracts, there can be no assurance that it will always be successful in doing so, particularly in the short term.

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For more information on Ruhrgas gas supply and sales contracts, see Item 4. Information on the Company Business Overview Ruhrgas.

***If the Company's plans to make selective acquisitions and enhance its core energy business are unsuccessful, the Company's future earnings and share price could be materially and adversely affected.***

The Company's business strategy involves selective acquisitions in its core business area of energy. This strategy depends in part on the Company's ability to successfully identify and acquire companies that enhance its business on acceptable terms. In order to obtain the necessary approvals for acquisitions, the Company may be required to divest other parts of its business, or to make concessions or undertakings which materially affect its operations. For example, the Company's efforts to obtain control of Ruhrgas through a series of purchases from the holders of Ruhrgas interests were initially blocked by the German Federal Cartel Office and then by a series of plaintiffs who succeeded in convincing the State Superior Court in Düsseldorf to issue a temporary injunction preventing the Company from completing the transaction. In order to receive the ministerial approval of the German Economics Ministry that overruled the initial decision of the Federal Cartel Office, the Company was required to make significant concessions, including committing to divest certain operations, to have Ruhrgas sell a significant quantity of natural gas at auction at below-market prices and to offer certain customers the option of reducing the volume of gas they had contracted for. In addition, in settling the claims of the plaintiffs who had received the temporary injunction, the Company has agreed to divest certain of its operations, to provide certain of the plaintiffs with energy supply contracts and network access, to make certain infrastructure improvements and provide marketing support, as well as making financial payments. For more information, see Item 4. Information on the Company History and Development of the Company Ruhrgas Acquisition. Each of these matters delayed completion of the Ruhrgas transaction and had the effect of increasing the cost of the transaction to the Company.

In addition, there can be no assurances that the Company will be able to achieve the benefits it expects from any acquisition or investment. For example, the Company may fail to retain key employees, may be unable to successfully integrate new businesses with its existing businesses, may incorrectly judge expected cost savings, operating profits or future market trends and regulatory changes, or may spend more on the acquisition, integration and operations of new businesses than anticipated. Especially large acquisitions, such as those of Powergen (including LG&E Energy) in 2002, or more recently, the U.K. retail operations and other assets of TXU Europe Group plc (TXU Group), which were purchased by Powergen in October 2002, the Midlands Electricity plc (Midlands Electricity) distribution business, which was purchased by Powergen in January 2004, or Ruhrgas, the purchase of which was completed in March 2003, present particularly difficult challenges. For information on the integration of the TXU Group and Midlands Electricity businesses, see Item 4. Information on the Company Business Overview Powergen and for information on the integration of Ruhrgas, see Item 4. Information on the Company History and Development of the Company Ruhrgas Acquisition. Acquisitions of businesses in new areas such as natural gas require the Company to become familiar with new markets and competitors and expose the Company to commercial and other risks, as well as additional regulatory regimes relating to the acquired businesses that may be stricter than the ones the Company is currently subject to. Because of the risks and uncertainty associated with acquisitions, any acquired businesses or investments may not achieve the profitability expected by the Company.

***The U.S. Public Utility Holding Company Act imposes significant restrictions on the Company's business.***

In order to acquire Powergen, the Company was required to register as a holding company under the U.S. Public Utility Holding Company Act of 1935 (PUHCA). Although the Company's non-U.S. businesses are generally (but not entirely) free from regulation under this statute, the Company and its U.S. businesses are subject to extensive regulation under PUHCA. The PUHCA regulations require prior U.S. Securities and Exchange Commission (SEC) approval for a wide range of capital raising, merger and acquisitions, intercompany transactions and non-utility activities and could interfere with the Company's timely implementation of business plans and its financial flexibility.

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*The Company cannot be certain it will be able to make required divestments on acceptable terms or within required time periods, which could interfere with its declared business strategy and/or adversely affect its business.*

The Company has agreed to sell all of its non-energy-related businesses except its telecommunications interests in connection with its acquisition of Powergen, and has agreed to divest additional businesses in connection with its acquisition of Ruhrgas. Although the Company has successfully completed most of the required divestments, the Company cannot be sure that it will be able to complete the remaining required divestments at the most favorable terms, or within the required divestment periods. In connection with certain of its divestitures, the Company has provided standard indemnities to the buyers which expose it to possible losses in certain circumstances. The Company may also be subject to sanctions if it is unable to divest businesses it has undertaken to sell within the required periods. The Company's business strategy, financial condition and share price may suffer if it is unable to complete its planned dispositions successfully.

*The Company could be subject to environmental liability associated with its operations that could materially and adversely affect its business.*

In case of environmental damages caused by an electric power generation facility, the owner of the facility is subject under German law to liability provisions that guarantee comprehensive compensation to all injured parties. In addition, there has been some relaxation in the evidence required under the German Environmental Liability Law (*Umwelthaftungsgesetz*) to establish and quantify environmental claims. Under German law, the Company may still be subject to future environmental claims with respect to alleged historical environmental damage arising from certain of its discontinued and disposed of operations, including the VEBA Oel oil business, the VAW aluminum operations, the Stinnes and Klöckner & Co AG ( Klöckner ) distribution and logistics businesses and the VEBA Electronics business. The Company may also be subject to environmental claims with respect to Degussa's operations. If claims were to be asserted against the Company in relation to environmental damages and plaintiffs were successful in proving their claims, such claims could result in material losses to the Company.

In case of a nuclear accident in Germany, the owner of the reactor, the factory or the nuclear materials storage facility is subject to liability provisions that guarantee comprehensive compensation to all injured parties. Under German nuclear power regulations, the owner is strictly liable, and the geographical scope of its liability is not limited to Germany. E.ON's Swedish nuclear power stations also expose the Company to liability under applicable Swedish law. The Company does not operate nuclear power plants outside of Germany, Sweden and Switzerland, including in the United Kingdom or the United States. The Company takes extensive safety and risk management measures in the operation of its nuclear power operations, and has mandatory insurance with respect to its nuclear operations as described in Item 4. Information on the Company Business Overview E.ON Energie. However, any claims against the Company arising in the case of a nuclear power accident could exceed the coverage of such insurance, and cause material losses to the Company.

The Company expects that it will incur costs associated with future environmental compliance, especially compliance with clean air laws. For example, the U.S. Environmental Protection Agency has introduced new regulations regarding the reduction of nitrogen oxide ( NO<sub>x</sub> ) emissions from electricity generating units. These regulations require LG&E Energy to make significant additional capital expenditures in NO<sub>x</sub> control equipment, which are currently estimated to total approximately \$539 million through mid-2004, of which approximately \$452 million has been incurred through 2003, although LG&E Energy expects to recover a significant portion of these costs over time from customers of its regulated utility businesses. In the United Kingdom, legislation to implement the EU Large Combustion Plants Directive is currently being discussed. The legislation is expected to require Powergen to make decisions on whether to invest in enhanced pollution control devices, reduce operating time at certain of its plants or consider closing certain plants in the future. Similarly, the German government is planning to amend an ordinance of the German Federal Pollution Control Act (*Bundesimmissionsschutzgesetz*, or BImSchG ) to introduce lower emission limits for air pollutants such as carbon monoxide and NO<sub>x</sub>. This amendment may require both E.ON Energie and Ruhrgas to make investments in pollution control devices. Currently, none of Powergen, E.ON Energie or Ruhrgas can predict the extent to which their operations will be affected by the new or amended legislation. These and other revisions to existing environmental laws and

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regulations and the adoption of new environmental laws and regulations may result in significant increases in costs for the Company. Those costs, if they cannot be recovered from customers, may adversely affect the Company's operating results or financial condition. For information on the implementation of a greenhouse gas emissions allowance trading system in Germany and the United Kingdom, see the discussion on changes in laws and regulations above. For more information on environmental matters, see the respective business descriptions in Item 4. Information on the Company's Business Overview.

Although environmental laws and regulations have an increasing impact on the Company's activities in almost all the countries in which it operates, it is impossible to predict accurately the effect of future developments in such laws and regulations on the Company's future earnings and operations. Some risk of environmental costs and liabilities is inherent in particular operations and products of the Company, as it is with other companies engaged in similar businesses, and there can be no assurance that material costs and liabilities will not be incurred.

*If power outages involving the Company's electricity operations occur, the Company's business and results of operations could be negatively affected.*

Each of Italy, Denmark, Sweden, London and large parts of the United States and Canada experienced major power outages during 2003. The reasons for these blackouts vary, although with the exception of London they involved a locally or regionally inadequate balance between power production and consumption, with single failures triggering a cascade-like shutdown of lines and power plants following overload or voltage problems. This type of problem has increased in recent years following the liberalization of EU electricity markets, partly due to an emphasis on unrestricted cross-border physically-settled electricity trading that has resulted in a substantially higher load on the international network, which was originally conceived mainly for purposes of mutual assistance and operations optimization. There are transmission bottlenecks at many locations in Europe, and due to the high load fewer safety reserves in the network. In Germany, where power plants are located in closer proximity to population centers than in many other countries, the risk of blackouts is lower due to shorter transmission paths and a strongly meshed network. In addition, the spread of a power failure is less likely in Germany due to the organization of the German power grid into four balancing zones. Nevertheless, the Company's German or international electricity operations could experience unanticipated operating problems leading to a power failure. For example, in the case of the blackout which occurred in Denmark and southern Sweden on September 23, 2003, one of the causes was an unexpected power failure at the Oskarshamn power plant (which is 54.5 percent owned by the Company's majority-owned subsidiary Sydkraft AB (Sydkraft)), that occurred as the plant was being reconnected to the grid following regularly scheduled maintenance. Although this power failure did not have a material impact on Sydkraft's operations or financial results, the Company can give no assurances that power failures involving its operations will not occur in the future, or that any such power failure would not have a negative effect on the Company's business and results of operations.

**Financial**

*The Company is exposed to financial risks that could have a material effect on its financial condition.*

During the normal course of its business, the Company is exposed to the risk of energy price volatility, as well as interest rate, commodity price, currency and counterparty risks. These risks are partially hedged on a Group-wide (or division-wide) basis, but the Company may incur losses if any of the variety of instruments and strategies it uses to hedge exposures are not effective. For more information about these risks and the Company's hedging policies and instruments, see Item 5. Operating and Financial Review and Prospects Exchange Rate Exposure and Currency Risk Management and Item 11. Quantitative and Qualitative Disclosures about Market Risk. For more information about Ruhrgas take or pay contracts, see the discussion on Ruhrgas long-term gas contracts above.

The Company is also exposed to other financial risks. For example, it holds certain stock investments which may expose it to the risk of stock market declines. For information on the write downs with regard to E.ON's investment in Bayerische Hypo- und Vereinsbank AG (HypoVereinsbank) in 2002, see Item 5. Operating and Financial Review and Prospects Results of Operations. Financial markets have performed poorly in recent years, and markets may decline again or experience volatility. In addition, a significant portion of the Company

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and Powergen's outstanding debt bears interest at floating rates; the Company's interest expense will therefore increase if the relevant base rates rise.

The Company also faces risks arising from its energy trading operations. Revenues and earnings from electricity trading at E.ON Energie increased in 2003. In general, the Company seeks to hedge risks associated with volatile energy-related prices by entering into fixed-price bilateral contracts, futures and options contracts traded on commodities exchanges, and swaps and options traded in over-the-counter financial markets. To the extent the Company is unable to hedge these risks, or enters into hedging contracts that fail to address its exposure or incorrectly anticipate market movements, it may suffer losses, some of which could be material. In addition to the risks associated with adverse price movements, credit risk is also a factor in the energy marketing, trading and treasury activities, where loss may result from the non-performance of contractual obligations by a counterparty. The Company maintains credit policies and control procedures with respect to counterparties to protect it against losses associated with such types of credit risk, although there can be no assurance that these policies and procedures will fully protect the Company. In addition, LG&E Energy is exposed to potential losses under several fixed-price energy marketing contracts that its former merchant energy trading operations entered into in 1996 and early 1997, some of which run through 2007. Although the Company has used what it believes to be appropriate estimates for future energy prices, among other factors, in establishing a provision to cover anticipated losses on these contracts, no assurance can be given that higher than anticipated future prices or demand, among other factors, may not result in additional losses. For more information about the Company's energy trading operations, its hedging policies and the instruments used, see Item 4. Information on the Company Business Overview E.ON Energie Trading, Powergen Energy Trading and Ruhrgas Trading, Item 5. and Financial Review and Prospects Results of Operations Year Ended December 31, 2003 Compared with Year Ended December 31, 2002 E.ON Energie and Exchange Rate Exposure and Currency Risk Management and Item 11. Quantitative and Qualitative Disclosures about Market Risk.

**Item 4. Information on the Company.**

**HISTORY AND DEVELOPMENT OF THE COMPANY**

E.ON AG is a stock corporation organized under the laws of the Federal Republic of Germany. It is entered in the Commercial Register (*Handelsregister*) of the local court of Düsseldorf, Germany, under HRB 22315. E.ON's registered office is located at E.ON-Platz 1, D-40479 Düsseldorf, Germany, telephone +49-211-45 79-0. For U.S. federal securities law purposes, E.ON's agent in the United States is J.P. Morgan Chase & Co. of New York, 60 Wall Street (36th floor), New York, NY 10260.

The State of Prussia established VEBA in 1929 when it consolidated state-owned coal mining and energy interests (hence the original name VEBA, Vereinigte Elektrizitäts- und Bergwerks-Aktiengesellschaft). Ownership of VEBA was transferred from the dissolved Prussian state to the Federal Republic of Germany. VEBA was partially privatized in 1965, leaving the German government with a 40.2 percent share. After several subsequent offerings, privatization was completed in 1987 when the German government offered its remaining 25.5 percent share to the public. During and since the privatization process, VEBA AG evolved into a management holding company, providing strategic leadership and resource allocation for the entire Group.

**VEBA-VIAG MERGER**

On June 16, 2000, VEBA AG merged with VIAG AG, one of the largest industrial groups in Germany. VEBA AG was subsequently renamed E.ON AG. The merger of VEBA and VIAG to form E.ON has created the third largest industrial group in Germany, based on market capitalization at year-end 2003, with sales of 46.4 billion in 2003.

In order to effectuate the merger, VEBA and VIAG submitted an application to the Merger Task Force of the European Commission on December 14, 1999. The EU Commission examined the planned merger and, with its notification of June 13, 2000, declared it to be compatible with the common market. The EU Commission's approval required VEBA and VIAG to commit to make certain divestments in their combined electricity and



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chemical operations, and to give undertakings to 1) waive transfer charges for cross-zone deliveries of electricity within Germany, 2) purchase a certain minimum amount of electricity from Vattenfall Europe (formerly VEAG Vereinigte Energiewerke Aktiengesellschaft ( VEAG )), a utility primarily active in the eastern part of Germany, at market rates during the period ending on December 31, 2007, and 3) provide additional interconnector capacity on the border between Germany and Denmark.

The merger of VEBA and VIAG was legally implemented by merging VIAG AG into VEBA AG, with VEBA AG continuing as the surviving entity. The newly-merged company then received the new name E.ON AG. On June 16, 2000, the merger was entered into the Commercial Register in Düsseldorf. Upon registration with the Commercial Register in Düsseldorf, the merger was completed and became effective for purposes of U.S. GAAP as of July 1, 2000. VIAG AG was dissolved and its assets and liabilities were transferred to VEBA AG. Simultaneously, each VIAG shareholder, with the exception of VEBA AG, received two shares of the new company in exchange for each five VIAG shares held. Pursuant to this exchange ratio, the former VIAG shareholders (with the exception of VEBA AG) therefore held 33.1 percent of the company immediately after the merger, while the former VEBA shareholders held 66.9 percent. For information about certain claims brought by former VIAG shareholders regarding the share exchange ratio used in the VEBA-VIAG merger, see Item 8. Financial Information Legal Proceedings.

## **GROUP STRATEGY**

### ***On.top***

E.ON's on.top project is a comprehensive strategic review launched in 2003. The principal elements of the project, which has involved executives from all of the Group's major operating companies, are an analysis of E.ON's competitive position, the re-definition of its corporate strategy and the design of a revised organizational structure to reflect E.ON's strategic goals.

The primary result of the on.top process was E.ON's commitment to an integrated business model with a clear focus on power and gas. In order to help implement that model and achieve the strategic objectives outlined below, the core energy business has been re-organized into five new market units, each of which is focused on a market in which management believes E.ON has a strong competitive position. These market units are:

Central Europe, to be led by E.ON Energie;

Pan-European Gas, to be led by Ruhrgas;

U.K., to be led by Powergen UK plc;

Nordic, to be led by E.ON Nordic; and

U.S. Midwest, to be led by LG&E Energy.

The activities of the regional market units will include the generation, transmission, distribution and sale of energy to customers in the target markets. While focusing on electricity, these activities will also include sales of natural gas to retail customers. The Pan-European Gas unit will contain Ruhrgas' current activities, including the purchase, transportation and sale of gas to wholesale and industrial customers and gas exploration and production, as well as Thüga, a holding company that primarily owns minority interests in a large number of German municipal and regional energy distribution companies. The lead companies of each market unit will report directly to E.ON AG.

In addition, the role of the corporate center at E.ON AG has been enhanced and more closely aligned to the Group's focus on energy. The corporate center's new responsibilities include the design and implementation of strategies and policies with the goal of optimizing the Group's results across the energy markets in which it is active, the pursuit of operational excellence at each of the market units through the transfer of best practice, as well as a stronger role in regulatory affairs that affect several market units at the same time. Human resources management and career development for 200 top executives currently working throughout the Group and identified through the on.top process has also been centralized at the corporate center, as has a project for establishing a Group-wide E.ON identity.

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Beginning in 2004, E.ON's financial reporting will mirror the new structure, with each of the five market units constituting a separate segment for financial reporting purposes. Viterra and Degussa will continue to be presented outside of the core energy business, and the results of the enhanced corporate center (including other activities and consolidation effects) will be reported as a separate segment. At the same time, with effect from January 2004, management has decided to use adjusted EBIT, rather than internal operating profit, as the primary measure by which it evaluates the performance of each segment in accordance with SFAS 131. E.ON defines this measure as adjusted net income (before intra-Group eliminations when presented on a segment basis) before interest income and taxes. Adjustments particularly include book gains and book losses from disposals as well as restructuring expenses. In addition, interest income is adjusted using economic criteria. In particular, the interest portion of additions to provisions for pensions and nuclear waste management is allocated to interest income. Management believes that this measure is the most useful segment performance measure because it better depicts the performance of individual operating units independent of changes in interest income and taxes.

As part of the implementation of the new structure, E.ON completed or is expected to complete intra-Group transfers of shareholdings in a number of its companies in December 2003 and in 2004, respectively. These transactions include:

The transfer by E.ON Energie to Ruhrgas of its:

- 67.7 percent interest in Thüga;
- 40.0 percent interest in the Austrian gas exploration company RAG Beteiligungs-Aktiengesellschaft (to be completed in 2004);
- 18.8 percent interest in the Latvian gas supplier Latvijas Gaze;
- 14.3 percent interest in the Lithuanian gas distributor Lietuvos Dujos; and its gas trading business D-Gas B.V. ( D-Gas ) (to be completed in 2004).

The transfer by Ruhrgas to E.ON Energie of its downstream gas activities in the Czech Republic and Hungary, including its:

- 4.45 percent interest in the Czech gas distribution company Jihomoravská plynárenská a.s. (JMP);
- 24.0 percent interest in the Czech gas distribution company Prazská plynárenská Holding a.s. (PPH);
- 0.05 percent interest in the Czech gas distribution company Prazská plynárenská a.s. (PP);
- 14.3 percent interest in the Czech gas distribution company Stredoceska plynárenská a.s. (STP);
- 49.8 percent interest in the Hungarian gas distribution company Déldunántuli Gázszolgáltató Részvénytársaság (DDGÁZ); and its 16.3 percent interest in the Hungarian gas distribution company Fővárosi Gázművek Részvénytársaság (FöGAZ) through the transfer of RGE Hungaria, which is wholly owned by Ruhrgas (to be completed in 2004).

The transfer by E.ON Energie to E.ON AG of its 100 percent interest in E.ON Scandinavia (which has since been re-named E.ON Nordic), including its:

- 55.2 percent interest in Sydkraft, including Sydkraft's interest in Granninge AB ( Granninge ) and its interest in the Baltic Cable; and a 65.6 percent interest in E.ON Finland.

None of these transfers had or is expected to have any impact on E.ON's financial results on a consolidated basis.

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The on.top project also included the definition of mid-term performance targets for the Group. Management's principal goal in guiding strategic and investment decisions over the next two years will be to realize a significant improvement in E.ON's return on capital while growing earnings.

### ***Strategy***

E.ON has created a portfolio of focused energy businesses with a strong presence in the value chains for both electricity and gas. E.ON's corporate strategy is to maximize the value of this portfolio of businesses through:

Creating value from the convergence of European energy markets (*e.g.*, as the United Kingdom becomes a net importer of gas and can take advantage of greater pipeline capacity connecting it to continental Europe, E.ON will be able to supply its retail gas business in the United Kingdom from its Pan-European gas supply business).

Creating value from the convergence of the electricity and gas value chains (*e.g.*, offering retail electricity and gas customers energy from a single source), thus providing E.ON with opportunities to realize economies of scale in servicing costs while increasing customer loyalty, thus reducing the customer churn rate.

Enhancing operational performance through identifying and transferring best practice for common activities throughout the Group's different market units (*e.g.*, effective programs for enhancing E.ON's electricity generation, distribution and retailing businesses).

Improving the Group's competitive position in target markets through pursuing selective investments which contribute to these objectives or provide stand alone value creation opportunities, as described below.

E.ON has set a number of specific objectives for implementing its corporate strategy within each of its target markets, namely:

Central Europe Fortifying strong market positions in power and downstream gas through:

consolidation of distribution activities and capitalizing on opportunities from power-gas convergence;

re-investment in power generation to maintain a strong position; and

hedging exposure to price risks through vertical integration of generation and distribution operations.

Pan-European Gas Strengthening and diversifying Ruhrgas' current position through:

selective equity investments in gas production in the North Sea;

participation in the privatization of midstream companies in Central Europe, as well as downstream and midstream companies in Italy; and

participating in infrastructure projects in the Nordic region and the United Kingdom.

U.K. Enhancing profitability of the U.K. businesses through:

investing in gas storage assets to hedge against potentially volatile gas price movements as the United Kingdom starts to become a net importer of gas;

investing in flexible generation assets and low carbon intensive generating technologies, such as Combined Cycle Gas Turbine (CCGT), to maintain a low cost hedge for changes in retail electricity demand; and

investing in the generation of power from renewable resources to capture value from the British government's renewable obligation mandate.

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Nordic Strengthening E.ON's position in a consolidating market through:

expanding presence in power generation;

enhancing scale through synergistic acquisitions in distribution and district heating; and

continued participation in gas supply and infrastructure developments.

U.S. Midwest Focusing on optimizing LG&E Energy's current operations in Kentucky.

As it focuses on energy, E.ON will seek to maximize the value of its remaining non-core businesses by divesting them at an appropriate time and allocating the proceeds to strategic investments.

The transformation of the Company into a focused energy business has entailed significant divestment and acquisition activities in recent years. For more detailed information on the principal activities in implementing the transformation, see Powergen Acquisition, Ruhrgas Acquisition, Business Overview E.ON Energie and Business Overview Powergen.

## **POWERGEN ACQUISITION**

On April 9, 2001, E.ON made a pre-conditional offer of 765 pence (€ 12.19) per share to the shareholders of the London- and Coventry-based British utility Powergen. The pre-conditions of the offer included making certain government and regulatory filings and obtaining the approval of regulatory authorities in a number of jurisdictions, including approvals from the European Commission, the Office of Gas and Electricity Markets in the United Kingdom and, due to Powergen's U.S. businesses, a number of U.S. regulatory authorities, including approvals from the state utility regulators in Kentucky, Tennessee and Virginia, the U.S. Federal Energy Regulatory Commission and the SEC, which administers PUHCA. In connection with its SEC application, E.ON agreed, among other things, to divest VEBA Oel, Degussa, Viterra, Stinnes and VAW over a period of three to five years, and to register with the SEC as a holding company under PUHCA following the consummation of the transaction. VEBA Oel, Stinnes and VAW have already been sold. E.ON has begun to divest Degussa through a two-step process with RAG Aktiengesellschaft (RAG), which will result in RAG holding a majority of Degussa by May 31, 2004. For more information, see Ruhrgas Acquisition.

As agreed between E.ON and Powergen, upon satisfaction of all conditions E.ON implemented the transaction under an alternative U.K. legal procedure known as a scheme of arrangement instead of a tender offer. The scheme of arrangement provided for the acquisition of all outstanding Powergen shares by virtue of an order of the English courts following approval of the transaction at a meeting of Powergen shareholders on April 19, 2002, convened by order of the court. The scheme of arrangement was approved by 98.3 percent of the Powergen shares held by Powergen shareholders present and voting (either in person or by proxy). On June 12, 2002, E.ON received SEC approval for the acquisition. On July 1, 2002, E.ON completed its acquisition of Powergen, which is now wholly owned by E.ON.

The total purchase price amounted to € 7.6 billion (net of € 0.2 billion cash acquired), and the assumption of € 7.4 billion of debt. Goodwill in the amount of € 8.9 billion resulted from the purchase price allocation. A significant deterioration in the market environment for Powergen's U.K. and U.S. operations triggered an impairment analysis as of the acquisition date that resulted in an impairment charge of € 2.4 billion, thus reducing the amount of goodwill associated with the transaction to € 6.5 billion. For additional details on this charge, see Item 5. Operating and Financial Review and Prospects Results of Operations.

Under PUHCA, E.ON AG, Powergen, LG&E Energy and any other company in the E.ON/Powergen holding structure between E.ON, Powergen and LG&E Energy are classified as holding companies. As holding companies, they are required to be registered with the SEC or to obtain an exemption. E.ON, Powergen and each of the companies between E.ON and LG&E Energy have registered as holding companies under PUHCA and are subject to regulation by the SEC. Following the transfer of LG&E Energy and its direct parent holding company from a subsidiary of Powergen to a direct subsidiary of E.ON AG in March 2003, E.ON applied for the deregistration of Powergen as a holding company under PUHCA; this deregistration process is not yet completed.

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The SEC requires registered holding companies and their subsidiaries to receive SEC approval for many transactions, including:

the issuance of securities;

the acquisition of securities, utility assets and other businesses; and

lending to or guaranteeing obligations of any other company in the registered holding company corporate structure.

As a result of the acquisition, all of E.ON's subsidiaries that own or operate facilities used for generation, transmission or distribution of electricity or the retail distribution of gas outside of the United States are classified under PUHCA as foreign utility companies. Transactions between any E.ON subsidiary that is a foreign utility company and an E.ON subsidiary that is not a foreign utility company are subject to the SEC regulation.

Under PUHCA and the rules promulgated by the SEC thereunder, no registered holding company or subsidiary thereof may pay dividends out of capital or unearned surplus, except pursuant to an order of the SEC. LG&E Energy is generally only allowed to pay dividends out of retained earnings.

For more information on Powergen, see [Business Overview](#) [Powergen](#).

## **RUHRGAS ACQUISITION**

Ruhrgas is one of the leading non-state-owned gas companies in Europe and the largest gas business in Germany in terms of gas sales. Prior to its acquisition by E.ON, Ruhrgas was owned by a number of holding companies, with indirect stakes dispersed among a number of major industrial and energy companies both within and outside Germany.

In 2001, E.ON concluded contracts for the purchase of significant shareholdings in Ruhrgas with BP p.l.c. ( BP ) and Vodafone Group plc ( Vodafone ). The aggregate consideration paid for these stakes was 3.3 billion. E.ON also reached an agreement in principle with RAG to acquire its Ruhrgas stakes. In January and February 2002, the German Federal Cartel Office blocked the consummation of the transactions with the aforementioned parties on the grounds that the proposed purchase would have a negative effect on competition in the German gas and electricity markets. E.ON appealed the decision to the German Economics Ministry, which has the power to overrule the Cartel Office if it determines a transaction would result in an overriding general benefit to the German economy. In March 2002, E.ON agreed to acquire ThyssenKrupp AG's interest in Ruhrgas for total consideration of 0.5 billion.

In May 2002, E.ON reached a definitive agreement with RAG to acquire RAG's more than 18 percent interest in Ruhrgas and to sell E.ON's majority interest in Degussa to RAG. Under the arrangement, RAG would acquire a majority shareholding in Degussa in two steps at a price of 38 per share. In the first step, in June 2002, RAG made a cash tender offer to Degussa's shareholders at a price of 38 per share. The parties' definitive agreement provided that after completion of the tender offer RAG and E.ON would hold equal shareholdings of Degussa and would manage Degussa jointly. In the second step, E.ON is to sell enough shares to RAG at the above price to give RAG a 50.1 percent interest in Degussa by May 31, 2004. RAG partially financed its acquisition of its Degussa stake through a bank loan. The shares tendered by E.ON and a portion of the other shareholders to RAG were transferred as security to the lenders in order to secure the repayment of the loan, and E.ON has undertaken the repurchase of such shares from the lenders, at a price calculated on the basis of the then-current market price, in certain cases of RAG's default under the loan.

On July 3, 2002, E.ON reached agreements to acquire the 40 percent interest in Ruhrgas held indirectly by Esso Deutschland GmbH, Deutsche Shell GmbH, and TUI AG, which would make E.ON the sole owner of Ruhrgas. The aggregate purchase price for these stakes was 4.1 billion.

On July 5, 2002, E.ON was granted the ministerial approval it had requested for the acquisition of a majority shareholding in Ruhrgas. The ministerial approval was linked with stringent requirements designed to promote competition in the gas sector. Ruhrgas was required to auction 75 billion kilowatt hours ( kWh ) of natural gas to its competitors and to legally unbundle its transmission system from its other operations. In addition, E.ON and

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Ruhrgas were required to divest several shareholdings. These included E.ON Energie's stakes in Gelsenwasser AG ( Gelsenwasser ), EWE Aktiengesellschaft ( EWE ), Bayerngas GmbH ( Bayerngas ) and swb AG ( swb ), and minority stakes held by each of E.ON Energie and Ruhrgas in VNG AG ( VNG ). On the same day, E.ON completed the acquisition of 38.5 percent of Ruhrgas from BP, Vodafone and ThyssenKrupp AG.

A number of companies with alleged interests in the German energy industry filed complaints against the ministerial approval with the State Superior Court (*Oberlandesgericht*) in Düsseldorf and petitioned the court to issue a temporary injunction blocking the transaction. The court subsequently issued a series of orders in July, August and September 2002 that temporarily enjoined the Company's acquisition of a majority stake in Ruhrgas. In addition, the court prohibited the Company from exercising its shareholders' rights with respect to the Ruhrgas stake it had acquired from BP, Vodafone and ThyssenKrupp AG until the takeover was approved. E.ON continued to maintain that the reasons given by the court in the summary proceedings leading to these orders did not justify its decision.

Following the issuance of the temporary injunction, on September 18, 2002, Germany's Federal Minister of Economics confirmed the essential aspects of the July 5 ministerial approval for E.ON's acquisition of Ruhrgas. However, the ministry linked its decision to a tightening of the requirements. Ruhrgas was also required to sell its stakes in Bayerngas and swb, and all of the companies required to be disposed of were granted special rights to terminate their existing purchase agreements with E.ON and Ruhrgas on a staggered basis. In addition, customers purchasing more than 50 percent of their gas requirements from Ruhrgas were granted the right, as of October 2003, to reduce the volume of gas purchased from Ruhrgas to 80 percent of the contracted amount. Finally, Ruhrgas was required to auction 200 billion kWh of natural gas to its competitors, with the minimum bid in such auctions being lower than the average border-crossing price. The approval also provides that the ministry has the right to take further action (including imposing a possible veto) in the event of any sale by E.ON of a controlling interest in Ruhrgas or a change in control over E.ON. On this basis, the ministry asked the State Superior Court to lift its temporary injunction.

On December 17, 2002, the State Superior Court decided not to lift the temporary injunction, and formal proceedings (*Hauptverfahren*) regarding the injunction started in January 2003. On January 31, 2003, E.ON reached settlement agreements with all plaintiffs who had contested the validity of the ministerial approval. The settlement agreements with each of the nine plaintiffs differ in certain respects, though they can be divided into two groups. Those with EnBW and Fortum Oil and Gas Oy ( Fortum ) primarily entail the exchange of shareholdings in certain of the companies' respective domestic and northern European affiliates upon agreed conditions. In addition, E.ON has agreed to acquire a stake in Concord Power Verwaltungsgesellschaft GmbH ( Concord Power ) under an agreement with EnBW and the Saalfeld Group, the current owners of Concord Power. Concord Power plans to build a new Combined Cycle Gas Turbine Power Station in Lubmin on the Baltic Sea. The agreements with the remaining plaintiffs—Ampere AG, ares Energie AG, GGEW Gruppen- Gas-und Elektrizitätswerk Bergstraße AG, Stadtwerke Aachen Aktiengesellschaft, Stadtwerke Rosenheim GmbH & Co. KG and Trianel European Energy Trading GmbH—generally include commitments by E.ON to enter into gas and/or electricity supply contracts, make certain infrastructure improvements (particularly with regard to gas distribution), and provide specified access to the gas and electricity supply grids. Certain of these agreements also provide for the sale by E.ON of shareholdings or distribution assets and the related customer base or require E.ON to provide marketing support. These agreements also require E.ON to make other financial payments to the plaintiffs. In addition, Ruhrgas has reconfirmed to all the parties its commitment to open and fair competition in the gas market.

In March 2003, E.ON acquired the remaining shares of Ruhrgas. The total cost of the transaction to E.ON, including settlement costs and excluding dividends received on Ruhrgas shares owned by E.ON prior to its consolidation, amounted to 10.2 billion. Beginning as of February 1, 2003, E.ON fully consolidated Ruhrgas.

Upon termination of the court proceedings, the Company completed the first step of the RAG/Degussa transaction, *i.e.*, the Company acquired RAG's Ruhrgas stake for total consideration of 2.0 billion, and E.ON tendered 37.2 million of its shares in Degussa to RAG at the price of 38 per share, receiving total proceeds of 1.4 billion. Following this transaction and the completion of the tender offer to the other Degussa shareholders, RAG and E.ON each hold a 46.5 percent interest in Degussa, with the remainder being held by the public.

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In connection with E.ON's acquisition of Ruhrgas, E.ON committed to divest several shareholdings. E.ON Energie and Ruhrgas have disposed of the following shareholdings, which comprise all of the shareholdings required to be divested by the ministerial approval:

In September 2003, E.ON Energie sold its 80.5 percent interest in Gelsenwasser to a joint venture company owned by the municipal utilities of the cities of Dortmund and Bochum. Gelsenwasser has been accounted for as a discontinued operation in the Consolidated Financial Statements.

In October 2003, E.ON Energie transferred its 5.26 percent stake in VNG to Ruhrgas, which already owned an interest in this Leipzig-based gas distributor. In December 2003, Ruhrgas agreed to sell 32.1 percent of VNG to EWE, and offered its remaining 10.0 percent stake in VNG to eleven municipalities in eastern Germany. These sales were subject to the fulfillment of a number of conditions and were completed in January 2004.

In November 2003, E.ON Energie and Ruhrgas sold their respective 22.0 percent stakes in Bayerngas to the municipal utilities of the cities of Munich, Augsburg, Regensburg and Ingolstadt, and to the city of Landshut.

In November 2003, E.ON Energie sold its 100 percent interest in E.ON-Energiebeteiligungs-Gesellschaft mbH to EWE. E.ON Energiebeteiligungs-Gesellschaft mbH held E.ON's 32.36 percent interest in swb, comprising all of the shares previously held by E.ON Energie and Ruhrgas.

In January 2004, E.ON Energie sold its 27.4 percent stake in EWE to EWE's majority shareholders Energieverband Elbe-Weser Beteiligungsholding GmbH and Weser-Ems Energiebeteiligungen GmbH.

For more information about these transactions, see Item 5. Operating and Financial Review and Prospects—Acquisitions and Dispositions E.ON Energie/Ruhrgas/Powergen, Discontinued Operations and Note 4 of the Notes to Consolidated Financial Statements.

Ruhrgas has also fulfilled the requirement of the ministerial approval to offer those customers which purchase more than 50 percent of their gas requirements from Ruhrgas the option of reducing the volume of gas purchased from Ruhrgas to 80 percent of the contracted amount for the remaining term of the applicable contract. In addition, Ruhrgas has offered Bayerngas and swb the right to a staged termination of their contracts over a three-year period beginning in July 2004. For additional information, see Business Overview—Ruhrgas.

On July 30, 2003, Ruhrgas offered 33 billion kWh of natural gas at auction from its procurement portfolio in the first of six auctions intended to fulfill the requirements of the ministerial approval. 15 billion kWh of this gas was sold. The prices Ruhrgas obtained were in line with the minimum price set for this auction by the German Federal Ministry for Economics and Labor. Ruhrgas is required to hold the remaining gas auctions in annual steps.

In addition, on January 1, 2004, in fulfillment of the ministerial requirement that Ruhrgas legally unbundle its transmission business, Ruhrgas transferred this business to a new subsidiary, Ruhrgas Transport AG & Co KG (Ruhrgas Transport). For more information on Ruhrgas Transport, see Business Overview—Ruhrgas—Transmission System.

Finally, as part of the settlement agreement E.ON entered into with the Finnish utility Fortum, E.ON and Fortum swapped certain shareholdings in February and March 2003. Fortum acquired E.ON Energie's equity interests in the Norwegian utilities Hafslund, Østfold and Frederikstad and in the Russian utility AO Lenenergo. In return, E.ON Energie bought the Swedish distribution company Fortum Nät Småland AB (Småland) and E.ON AG bought the German power plant Fortum Kraftwerk Burghausen GmbH (Burghausen), ownership of which was transferred to E.ON Energie, and the Irish peat-fired power plant Edenderry Power Limited (Edenderry), ownership of which was transferred to Powergen.

In connection with its acquisition of Ruhrgas, E.ON seeks to achieve the following potential synergies in its market units:

In the Pan-European Gas market unit, E.ON intends to leverage its increased gas operations to improve its negotiating position with producers of natural gas, to take advantage of pan-European gas arbitrage

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opportunities and to improve its gas operations infrastructure. For information about E.ON's planned capital investment in Ruhrgas, see Item 5. Operating and Financial Review and Prospects – Liquidity and Capital Resources.

In the Central Europe market unit, E.ON expects to benefit from joint market management with regional energy companies, the integration of continental European gas trading activities and the sharing of technical expertise among the power and gas businesses. In order to integrate the Company's continental European gas trading activities E.ON Energie will transfer its gas trading operations to Ruhrgas in 2004.

In the U.K. market unit, E.ON intends to use the Ruhrgas division to enhance Powergen's gas supply and gas storage options as well as support its trading activities.

In the Nordic market unit, E.ON also intends to use the Ruhrgas division to enhance Sydkraft's gas supply options and expects to be able to use a joint approach for future gas infrastructure development.

In addition, E.ON has identified a number of areas in which it expects to achieve cost savings through the integration of Ruhrgas with other E.ON Group companies. Major areas of cost savings include the reduction of procurement costs through process optimization and joint purchasing power, the integration of gas trading activities in central Europe and savings in overhead costs.

For more information on Ruhrgas, see Business Overview – Ruhrgas. For more information on the impact of this transaction, see Item 5. Operating and Financial Review and Prospects – Liquidity and Capital Resources. In addition, in connection with E.ON's on.top project, E.ON Energie transferred or will transfer a number of shareholdings to Ruhrgas or to E.ON AG, and Ruhrgas transferred or will transfer a number of shareholdings to E.ON Energie. These transfers, which generally took place in December 2003 or will take place in 2004, are described in more detail in Group Strategy – On.top.

## **OTHER SIGNIFICANT EVENTS**

On January 17, 2003, E.ON agreed to sell its 15.9 percent shareholding in Bouygues Telecom S.A. ( Bouygues Telecom ), the French wireless communications company, to Bouygues S.A. ( Bouygues Group ). Bouygues Group agreed to purchase the shares in two steps. In the first step, the Bouygues Group acquired a 5.8 percent stake in Bouygues Telecom from E.ON in March 2003. In the second step, the Bouygues Group exercised a fixed price call option on E.ON's remaining 10.1 percent interest in December 2003.

In June 2003, Viterra disposed of Viterra Energy Services AG ( Viterra Energy Services ), to CVC Capital Partners. Under U.S. GAAP, Viterra Energy Services was accounted for as discontinued operations until its disposal.

In June 2003, the shareholders' meeting of E.ON Bayern AG ( E.ON Bayern ) passed a resolution authorizing the majority shareholder E.ON Energie to use a squeeze out procedure to acquire all E.ON Bayern stock held by minority shareholders. The registration of the share transfers in the commercial register has not yet occurred. As of December 31, 2003, E.ON Energie held a 98.9 percent interest in E.ON Bayern.

In September 2003, E.ON Energie through a series of transactions acquired majority stakes in the Czech regional electricity utilities Jihomoravská energetika a.s. ( JME ) and Jihoceská energetika a.s. ( JCE ). The acquisition process also involved the sale of E.ON Energie's minority stakes in the regional power distributors Západočeská energetika a.s. ( ZCE ) and Východočeská energetika a.s. ( VCE ) to the Czech state-owned company CEZ. As of December 31, 2003, E.ON Energie held 85.7 percent of JME and 84.7 percent of JCE.

Beginning in November 2003, following its receipt of the approval of the relevant cartel authorities, E.ON Energie's majority-owned subsidiary Sydkraft increased its stake in the Swedish energy utility Gräninge from 36.3 percent to 79.0 percent as of December 31, 2003. In January 2004, following completion of a mandatory tender offer, E.ON's indirect stake in Gräninge further increased to 97.5 percent.

On November 28, 2003, in an extraordinary shareholders' meeting, Thüga's general assembly passed a resolution authorizing the majority shareholder E.ON AG to use a squeeze out procedure to acquire all Thüga stock held by minority shareholders. The registration of the share transfers in the commercial register has not yet



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occurred. At the end of the year, E.ON Energie transferred 67.7 percent of Thüga to Ruhrgas (which already owned a 10.0 percent interest) and now holds 18.9 percent of Thüga.

On January 16, 2004, Powergen acquired Midlands Electricity, a British electricity distributor, from Aquila Energy Inc. ( Aquila ) and FirstEnergy Corp. ( FirstEnergy ).

For details of these transactions, see the respective division descriptions in Business Overview and the descriptions in Business Overview Discontinued Operations , Item 5. Operating and Financial Review and Prospects Acquisitions and Dispositions and Liquidity and Capital Resources.

## **CAPITAL EXPENDITURES**

E.ON s aggregate capital expenditures for property, plant and equipment were 2.6 billion in 2003 (2002: 3.1 billion, 2001: 2.5 billion). For a detailed description of these capital expenditures, as well as E.ON s expected capital expenditures for the period beginning in 2004, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

## **BUSINESS OVERVIEW**

### **INTRODUCTION**

E.ON is the third-largest industrial group in Germany, measured on the basis of market capitalization at year-end 2003. In 2003, the Group was organized into five separate business divisions: E.ON Energie, Ruhrgas, Powergen, Viterra and Degussa.

**E.ON Energie:** E.ON Energie is one of the largest non-state-owned European power companies in terms of electricity sales, with revenues of 22.6 billion (which included 1.3 billion of electricity taxes that were remitted to the tax authorities) in 2003. E.ON Energie s core business consists of the ownership and operation of power generation facilities and the transmission, distribution and sale of electric power, gas and heat in Germany and continental Europe. The E.ON Energie division owns interests in and operates power stations with a total installed capacity of approximately 51,300 megawatts ( MW ), of which E.ON Energie s attributable share is approximately 34,900 MW (not including mothballed, shutdown and reduced power plants). Through its own operations, as well as through distribution companies, in most of which it owns a majority interest, E.ON Energie also distributes electricity, heat and gas to regional and municipal utilities, commercial and industrial customers and residential customers, which together account for more than one-third of the electricity consumption by end users in Germany. E.ON Energie s minority interests in utilities are generally accounted for under the equity method. As a result, a portion of electricity-related earnings are recorded as income from equity interests and are not reflected in E.ON s consolidated revenues. Management views these associated companies as an integral part of the operations of E.ON Energie. In 2003, the E.ON Energie division contributed 48.7 percent of E.ON s revenues and recorded internal operating profit of 3.1 billion.

**Ruhrgas:** Ruhrgas is one of the leading non-state-owned gas companies in Europe and the largest gas business in Germany in terms of gas sales, with 553.3 billion kWh of gas sold in the period from February through December 2003. Ruhrgas principal business is the supply, transmission, storage and sale of natural gas. Ruhrgas imports gas from Russia, Norway, the Netherlands, the United Kingdom and Denmark, and also purchases gas from domestic sources. Ruhrgas sells this gas to regional and supraregional distributors, municipal utilities and industrial customers in Germany and increasingly also exports gas to customers in other European countries. Ruhrgas is active in gas transmission within Germany via a network of approximately 11,000 kilometers ( km ) of gas pipelines, and operates a number of underground gas storage facilities and gas compressor stations, also in Germany. In addition, Ruhrgas holds several stakes in German and other European gas transportation and distribution companies, as well as a small shareholding in OAO Gazprom ( Gazprom ), Russia s main natural gas exploration, production, transportation and marketing company. For the period from February through December 2003, Ruhrgas recorded revenues of 12.1 billion (which included 2.5 billion in natural gas taxes that were remitted to the tax authorities) and internal operating profit of 1.1 billion. The Ruhrgas division contributed 26.1 percent of E.ON s revenues in 2003.

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**Powergen:** Powergen is an integrated energy company with its principal operations now focused in the United Kingdom. In March 2003, E.ON transferred LG&E Energy (Powergen's principal U.S. operating subsidiary) and its direct parent holding company from a subsidiary of Powergen to E.ON US Holding GmbH, a direct subsidiary of E.ON AG. Throughout 2003, however, Powergen continued to have primary operating responsibility for LG&E Energy and its related utility and non-utility operations, which comprised Powergen's U.S. business. In 2003, the Powergen division recorded revenues of \$9.9 billion or 21.3 percent of E.ON's revenues, and internal operating profit of \$0.6 billion. Powergen and its associated companies are actively involved in the ownership and operation of power generation facilities, as well as the distribution and supply of electric power and gas. Powergen and LG&E Energy own interests in and operate power stations with a total installed capacity of approximately 21,084 MW, of which their attributable share is approximately 19,434 MW (not including mothballed and shutdown power plants). On January 16, 2004, Powergen completed the acquisition of the distribution business of Midlands Electricity, together with an electrical contracting operation, an electricity and gas metering business and minority interests in three power stations. The acquisition has approximately doubled the number of customer connections served by Powergen's U.K. distribution business, bringing it to 4.8 million.

**Viterra:** Viterra, E.ON's real estate group, is engaged in two businesses: residential real estate and real estate development. Viterra is one of Germany's largest private owners of residential property, with a property portfolio at year-end 2003 of approximately 152,000 housing units, including approximately 27,000 housing units legally owned by MIRA Grundstücksgesellschaft und Co. KG (MIRA). Viterra also held approximately 80 commercial units at year-end. In 2003, E.ON's Viterra division had revenues of \$1.1 billion and internal operating profit of \$0.3 billion, and contributed 2.3 percent of E.ON's revenues.

**Degussa:** Following the first step of the RAG/Degussa transaction described in "History and Development of the Company - Ruhrgas Acquisition", E.ON holds a 46.5 percent interest in Degussa, one of the major specialty chemical companies in the world. As of February 2003, E.ON operates Degussa under joint control with RAG, which also holds a 46.5 percent interest, and accounts for Degussa using the equity method. For this reason, the sales figure recorded for Degussa comprises only the company's January 2003 revenues. For all periods from February 1, 2003, E.ON records 46.5 percent of Degussa's after-tax earnings in its internal operating profit. For the one-month period ended January 31, 2003, Degussa had revenues of \$994 million. For the full fiscal year, Degussa contributed internal operating profit of \$157 million. In a second step of the RAG/Degussa transaction, E.ON is to sell enough shares of Degussa to RAG by May 31, 2004 to give RAG a 50.1 percent interest.

Until the end of 2001, E.ON reported its telecommunications activities as a separate segment. Following the sale of its remaining minority interest in the French mobile telecommunications network operator Bouygues Telecom in 2003, E.ON's only remaining telecommunications interest is a 50.1 percent stake in the Austrian mobile telecommunications network operator ONE GmbH (ONE), formerly Connect Austria Gesellschaft für Telekommunikation GmbH (Connect Austria). E.ON considers its former telecommunications division to be of minor significance. Accordingly, as of January 2002, E.ON is reporting the results of these activities under Other/consolidation in its segment reporting. Effective January 1, 2002, ONE is accounted for at equity in E.ON's Consolidated Financial Statements, as was Bouygues Telecom until divestment of the first tranche of the shares to the Bouygues Group in March 2003.

For information on E.ON's discontinued operations, including its former oil, distribution/logistics, aluminum and silicon wafers divisions, as well as certain activities of the E.ON Energie, Powergen, Viterra and Degussa divisions, see "Discontinued Operations."

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The following table sets forth the revenues of E.ON by division for 2003, 2002 and 2001:

	2003		2002		2001	
	( in millions)	%	( in millions)	%	( in millions)	%
E.ON Energie(1)(2)	22,579	48.7	19,142	52.3	15,840	42.9
Ruhrgas(3)	12,085	26.1				
Powergen(2)(4)	9,894	21.3	4,422	12.1		
Other/consolidation(2)(5)	(273)	(0.6)	81	0.2	3,841	10.4
<i>Core Energy Business</i>	<i>44,285</i>	<i>95.5</i>	<i>23,645</i>	<i>64.6</i>	<i>19,681</i>	<i>53.3</i>
Viterra(2)	1,085	2.3	1,214	3.3	868	2.4
Degussa(2)(6)	994	2.2	11,765	32.1	16,337	44.3
<i>Other Activities</i>	<i>2,079</i>	<i>4.5</i>	<i>12,979</i>	<i>35.4</i>	<i>17,205</i>	<i>46.7</i>
<b>Total Revenues(7)</b>	<b>46,364</b>	<b>100.0</b>	<b>36,624</b>	<b>100.0</b>	<b>36,886</b>	<b>100.0</b>

- (1) Includes electricity taxes of 1,308 million in 2003, 933 million in 2002 and 694 million in 2001. Sales and cost of sales from trading activities in 2001 have been presented as a net amount in sales to conform with the required presentation of trading activities in 2002 and 2003.
- (2) Excludes the sales of certain activities now accounted for as discontinued operations. For more details, see Item 5. Operating and Financial Review and Prospects Acquisitions and Dispositions Discontinued Operations and Note 4 of the Notes to Consolidated Financial Statements.
- (3) Includes the results of Ruhrgas from the date of consolidation on February 1, 2003. Sales for the period include natural gas taxes of 2,525 million.
- (4) Includes the results of Powergen from the date of consolidation on July 1, 2002.
- (5) Includes primarily the parent company and effects from consolidation, as well as the results of the former telecommunications division, as explained above. In 2001, also includes the sales ( 3,279 million) for Klöckner for the period until its disposal in October of that year. For further information on Klöckner's disposal, see Item 5. Operating and Financial Review and Prospects Acquisitions and Dispositions.
- (6) In 2003, includes results of Degussa for the month of January only, prior to its deconsolidation. For more details, see Degussa Overview , Item 5. Operating and Financial Review and Prospects Overview and Note 4 of the Notes to Consolidated Financial Statements.
- (7) Excludes intercompany sales.

Most of E.ON's operations are in Germany. German operations produced 64.3 percent of E.ON's revenues (measured by location of operation) in 2003 (2002: 62.3 percent; 2001: 62.5 percent). E.ON also has a significant presence outside Germany representing 35.7 percent of revenues by location of operation for 2003 (2002: 37.7 percent; 2001: 37.5 percent). In 2003, approximately 61.0 percent (2002: 55.2 percent; 2001: 48.1 percent) of E.ON's revenues were derived from customers in Germany and 39.0 percent (2002: 44.8 percent; 2001: 51.9 percent) from customers outside Germany. For more details about the segmentation of E.ON's revenues by location of operation and customers for the years 2003, 2002 and 2001, see Note 31 of the Notes to Consolidated Financial Statements. At December 31, 2003, E.ON had 66,549 employees, approximately 55.7 percent of whom were employed in Germany. For more information about employees, see Item 6. Directors, Senior Management and Employees Employees.

E.ON believes that as of December 31, 2003, it had close to 478,000 shareholders worldwide. E.ON's shares, all of which are Ordinary Shares, are listed on all seven German stock exchanges, as well as on the Swiss electronic stock exchange. They are also actively traded over the

counter in London. E.ON's American Depositary Shares ( ADSs ), each of which represents one Ordinary Share, are listed on the New York Stock Exchange ( NYSE ).

**Table of Contents****E.ON ENERGIE***Overview*

Following the VEBA-VIAG merger, the merger of PreussenElektra and Bayernwerk formed the new E.ON Energie on July 14, 2000. E.ON Energie, which is wholly owned by E.ON, is one of the largest European power companies in terms of electricity sales. E.ON Energie had revenues of 22.6 billion (which included 1.3 billion of electricity taxes that were remitted to the tax authorities), 17.5 billion of which in Germany, and internal operating profit of 3.1 billion in 2003. In 2003, E.ON Energie, together with Ruhrgas, was responsible for all of E.ON's energy activities in Germany and continental Europe and was one of the four interregional electric utilities in Germany that are interconnected in the western European power grid.

In connection with E.ON's acquisition of Ruhrgas, E.ON Energie was required to divest certain shareholdings. For more information about the required divestments, see History and Development of the Company Ruhrgas Acquisition.

In addition, in connection with E.ON's on.top project, E.ON Energie has transferred or will transfer a number of shareholdings to Ruhrgas or to E.ON AG, and Ruhrgas has transferred or will transfer a number of shareholdings to E.ON Energie. These transfers are described in more detail in History and Development of the Company Group Strategy On.top.

In order to further focus its energy business in Germany and in continental Europe, E.ON Energie entered into the following transactions in 2003 and the beginning of 2004:

In June 2003, E.ON Bayern's general assembly passed a resolution authorizing the principal shareholder E.ON Energie to use a squeeze out procedure to acquire E.ON Bayern stock held by minority shareholders. The registration of the share transfers in the commercial register has not yet occurred. As of December 31, 2003, E.ON Energie held a 98.9 percent interest in E.ON Bayern.

In September 2003, E.ON Energie through a series of transactions acquired majority stakes in the Czech regional electricity utilities JME and JCE. The acquisition process also involved the sale of E.ON Energie's minority stakes in the regional power distributors ZCE and VCE to the Czech state-owned company CEZ. As of December 31, 2003, E.ON Energie held a 85.7 percent stake in JME and a 84.7 percent stake in JCE.

Beginning in November 2003, following its receipt of the required approvals from the relevant cartel authorities, E.ON Energie's majority-owned subsidiary Sydkraft increased its stake in the Swedish utility Granninge from 36.3 percent to 79.0 percent. Swedish law required E.ON to make a public tender for all outstanding Granninge shares following the acquisition of a majority stake. At the close of this mandatory offer in January 2004, E.ON's indirect stake in Granninge had increased to 97.5 percent and Granninge was delisted. In 2003, Granninge sold approximately 7 TWh of electricity to 240,000 customers and generated approximately 4 TWh of power.

In 2003, E.ON Energie through its regional distributors and through Thüga (of which an interest of 67.7 percent was transferred to Ruhrgas at the end of the year) purchased minority shareholdings in a number of smaller energy companies. Although most of these investments have been rather small in terms of the amounts paid, management believes that the investments by the regional distributors have a significant strategic value in enhancing E.ON Energie's competitive position in the relevant markets.

In January 2004, E.ON Energie sold its 4.99 percent shareholding in the Spanish utility Union Fenosa S.A. on the market.

In order to further streamline its German distribution business, E.ON Energie continued in 2003 to merge individual distribution companies in which it holds a majority interest into larger entities. In August 2003, E.ON Energie merged its subsidiaries Elektrizitätswerk Wesertal GmbH ( EWW ), Elektrizitätswerk Minden-Ravensberg ( EMR ) and PESAG Aktiengesellschaft into the single larger regional distribution company E.ON Westfalen Weser AG, in which E.ON Energie held a 62.8 percent stake as of December 31, 2003. The three merged companies sold approximately 9 TWh of electricity and 4 TWh of gas in 2003. Also in August 2003,

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E.ON Energie merged the northern German electricity and gas distribution company Schleswig AG ( Schleswig ) and the regional gas distributors Hein Gas Hamburger Gaswerke GmbH ( Hein Gas ) and Hanse Gas GmbH into the new company E.ON Hanse AG ( E.ON Hanse ), in which E.ON Energie held a 73.8 percent interest as of December 31, 2003. In 2003, the merged companies sold about 9 TWh of electricity and 46 TWh of gas. Each of the mergers was retroactively effective as of January 1, 2003. E.ON Energie expects the mergers to generate cost savings and to improve operational efficiency.

**Operations**

Electricity generated at power stations is delivered to customers through an integrated transmission and distribution system. The principal segments of the electricity industry in the countries in which E.ON Energie operates are:

Generation:	the production of electricity at power stations;
Transmission:	the bulk transfer of electricity across an interregional power grid, which consists mainly of overhead transmission lines, substations and some underground cables (at this level there is a market for bulk trading of electricity, through which sales and purchases of electricity are made between generators, regional distributors, and other suppliers of electricity);
Distribution and Sale:	the transfer and sale of electricity from the interregional power grid and its delivery, across local distribution systems, to customers; and
Trading:	the buying and selling of electricity and related products for purposes of portfolio optimization, arbitrage and risk management.

E.ON Energie and its associated companies are actively involved in all segments of the electricity industry. The core business consists of the ownership and operation of power generation facilities and the transmission, distribution and sale of electricity and, to a lesser extent, gas and heat, to interregional, regional and municipal utilities, traders, industrial and commercial customers and standard-rate customers (residential customers and small businesses).

The following table sets forth the sources of E.ON Energie's electric power in kWh in 2003 and 2002:

Sources of Power	2003 million kWh	2002 million kWh	% Change
Own production	162,688	155,736	+4.5
Purchased power	117,656	106,188	+10.8
<i>from power stations in which E.ON Energie has     an interest of 50 percent or less</i>	17,954	14,725	+21.9
<i>from other suppliers</i>	99,702	91,463	+9.0
Total power procured*	280,344	261,924	+7.0
Power used for operating purposes, network losses and pump storage	(10,947)	(11,360)	-3.6
<b>Total</b>	<b>269,397</b>	<b>250,564</b>	<b>+7.5</b>

\* Excluding physically-settled electricity trading activities at EST, Sydkraft and E.ON Finland. EST's physically-settled electricity trading activities amounted to 138,981 million kWh and 162,543 million kWh in 2003 and 2002, respectively.

In 2003, E.ON Energie procured a total of 280.3 billion kWh of electricity, including 10.9 billion kWh used for operating purposes, network losses and pumped storage. E.ON Energie purchased a total of 18.0 billion kWh of power from power stations in which it has an interest of 50 percent or less. In addition, E.ON Energie purchased 99.7 billion kWh of electricity from other utilities, 6.6 billion kWh of which were from Scandinavian utilities and 21.4 billion kWh of which were from Vattenfall Europe, the eastern German interregional utility, for

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redistribution by eastern German regional distributors. In addition, E.ON Energie purchased power from local generators in Hungary totaling 15.9 billion kWh.

Following the abolition of separate geographic operating areas for utilities under the Energy Law (as defined in Regulatory Environment ) in 1998, E.ON Energie began to supply power nationwide and to broaden its activities in neighboring countries. E.ON Energie is thus significantly expanding beyond its traditional home markets, which include parts or all of the German states of Schleswig-Holstein, Lower Saxony, Hesse, North Rhine-Westphalia, Mecklenburg-Western Pomerania, Brandenburg, Saxony-Anhalt, Thuringia and Bavaria. E.ON Energie supplied about one-third of the electricity consumed by end users in Germany in 2003. Electricity accounted for 74.0 percent of E.ON Energie's 2003 sales (2002: 73.4 percent), gas revenues represented 17.4 percent (2002: 16.8 percent), district heating 3.6 percent (2002: 3.6 percent) and other activities 5.0 percent (2002: 6.2 percent).

The following table sets forth data on the sales of E.ON Energie's electric power in 2003 and 2002:

Sale of Power* to	Total 2003 million kWh	Total 2002 million kWh	% Change in Total
Non-consolidated interregional, regional and municipal utilities	128,058	139,547	-8.2
Industrial and commercial customers	93,650	70,605	+32.6
Standard-rate customers	47,689	40,412	+18.0
Total	269,397	250,564	+7.5

\* Excluding physically-settled electricity trading activities at EST, Sydkraft and E.ON Finland. EST's physically-settled electricity trading activities amounted to 138,981 million kWh and 162,543 million kWh in 2003 and 2002, respectively.

The increase in the total sale of power reflects the inclusion of newly consolidated companies. For further information, see Item 5. Operating and Financial Review and Prospects Results of Operations. E.ON Energie's total gas sales volume amounted to 132.3 billion kWh in 2003, an 18.1 percent increase from 112.0 billion kWh in 2002.

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E.ON Energie's company structure reflects the different characteristics of electricity and gas utilities, and in addition, reflects the individual segments of its electricity business: generation, transmission, distribution and sale and trading. The following chart shows the major subsidiaries of the E.ON Energie group as of December 30, 2003, their respective fields of operation and the percentage of each held by E.ON Energie as of that date.

**E.ON ENERGIE GROUP**

**Holding Company**

E.ON Energie AG

---

Leading entity for the management and coordination of the group activities.  
Centralized strategic, controlling and service functions.

**Conventional Power Plants**

E.ON Kraftwerke GmbH (100%)

---

Power generation by conventional power plants.  
Waste incineration.  
Renewables.  
District heating.

**Nuclear Power Plants**

E.ON Kernkraft GmbH (100%)

---

Power generation by nuclear power plants.

**Hydroelectric Power Plants**

E.ON Wasserkraft GmbH (100%)

---

Power generation by hydroelectric power plants.

**Transmission**

E.ON Netz GmbH (100%)

---

Operation of high voltage grids (110 kilovolt-380 kilovolt).  
System control, including provision of regulating and balancing power.

**Distribution, Sale and Trading of Electricity, Gas and Heat**

E.ON Sales & Trading GmbH (100%)

---

Supply of electricity, gas, heat and energy services to large customers as well as to regional and municipal distributors.  
Centralized wholesale functions.  
Optimization of energy procurement costs.  
Physical energy trading and trading of energy-based financial instruments and related risk management.  
Optimization of the value of the power plants' assets in the market place.  
Seven regional distributors across Germany (shareholding percentages range from 56.5 to 98.9 percent).

---



Distribution and sale of electricity, gas, heat and water to retail customers.

Energy consulting.

Ruhr Energie GmbH (100%)

---

Customer service and electricity and heat supply to utilities and industrial customers in the Ruhr region.

**Municipal and Regional Shareholdings**

Thüga AG (86.6%)(1)

---

Minority shareholdings in municipal and regional distributors (mainly distributors of electricity, gas and water) to which Thüga provides operational and managerial advice.

Own distribution and supply activities (electricity and gas).

Majority shareholding in gas distribution companies in Italy.

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**Major International Shareholdings**

Sydkraft AB (55.2%)(2)

---

Generation, distribution, marketing, trading and sale of electricity, gas and heat, mainly in Sweden and Finland, including Granninge.  
E.ON Finland Oyj (formerly Espoon Sähkö Oyj)  
(65.6%)(2)

---

Generation, distribution, marketing, trading and sale of electricity and heat in Finland.  
E.ON Benelux Generation N.V. (100%)

---

Power generation by conventional power plants.  
District heating.  
E.ON Hungária Rt. (100%)

---

Generation, distribution, marketing and sale of electricity and gas in Hungary through its group companies.  
E.ON Czech Holding AG (100%)

---

Distribution, marketing and sale of electricity and gas in the Czech Republic through its group companies.  
Západoslovenská energetika a.s. (49%)

---

Distribution, marketing and sale of electricity in Slovakia.  
**Services/ Others**

E.ON Engineering GmbH (100%)

---

Group internal and external consulting and planning services in the energy sector.  
Marketing of expertise in the area of conventional, renewable, cogeneration and nuclear power generation and pipeline business.  
E.ON Energy Projects GmbH (100%)

---

Project development for renewables and combined heat and power generation.  
is:energy GmbH (74.8%)

---

IT services.

- (1) On December 31, 2003, 67.7 percent of Thüga was transferred to Ruhrgas.
- (2) On December 31, 2003, Sydkraft and E.ON Finland were transferred to E.ON AG.  
For details, see [History and Development of the Company](#) [Group Strategy](#) [On.top](#).

**German Operations**

**Power Generation**

*General.* E.ON Energie owns interests in and operates electric power generation facilities in Germany with a total installed capacity of approximately 33,000 MW, its attributable share of which is approximately 25,100 MW (not including mothballed, shutdown or reduced power plants). The power generation business division is subdivided into three units according to fuels used: E.ON Kraftwerke GmbH ( E.ON Kraftwerke ) owns and operates the power stations using fossil fuel energy sources, as well as waste incineration plants and renewable generation facilities, E.ON Kernkraft GmbH ( E.ON Kernkraft ) owns and operates the nuclear power stations and E.ON Wasserkraft GmbH ( E.ON Wasserkraft ) owns and operates the hydroelectric power plants.

Based on the consolidation principles under U.S. GAAP, E.ON Energie reports 100 percent of revenues and expenses from majority-owned power plants in its consolidated accounts without any deduction for minority interests. Conversely, 50 percent and minority-owned power plants are accounted for by the equity method. Power generation capacity in jointly owned plants is generally reported based on E.ON's ownership percentage.

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The following table sets forth E.ON Energie's major electric power generation facilities (including cogeneration plants) in Germany, the total capacity and the capacity attributable to E.ON Energie for each facility as of December 31, 2003, and their start-up dates.

**E.ON ENERGIE GERMAN ELECTRIC POWER STATIONS**

Power Plants	Total Capacity Net MW	Capacity Attributable to E.ON Energie		Start-up Date
		% (1)	MW	
<b>Nuclear</b>				
Brokdorf	1,370	80.0	1,096	1986
Brunsbüttel	771	33.3	257	1976
Emsland	1,329	12.5	166	1988
Grafenrheinfeld	1,275	100.0	1,275	1981
Grohnde	1,360	83.3	1,133	1984
Gundremmingen B	1,284	25.0	321	1984
Gundremmingen C	1,288	25.0	322	1984
Isar 1	878	100.0	878	1977
Isar 2	1,400	75.0	1,050	1988
Krümmel	1,260	50.0	630	1983
Unterweser	1,345	100.0	1,345	1978
<b>Total</b>	<b>13,560</b>		<b>8,473</b>	
<b>Lignite</b>				
Buschhaus	350	100.0	350	1985
Kassel	33	50.0	17	1988
Lippendorf S	891	50.0	446	1999
Schkopau	900	55.6	500	1995
<b>Total</b>	<b>2,174</b>		<b>1,313</b>	
<b>Hard Coal</b>				
Bexbach 1	714	33.3	238	1983
Buer (CHP)	70	100.0	70	1985
Datteln 1	95	100.0	95	1964
Datteln 2	95	100.0	95	1964
Datteln 3	113	100.0	113	1969
Farge	325	100.0	325	1969
GKW Weser/ Veltheim 2	93	74.0	69	1965
GKW Weser/ Veltheim 3	320	74.0	237	1970
Heyden	865	100.0	865	1987
Kiel	323	50.0	162	1970
Knepper C	345	100.0	345	1971
Mehrum C	690	50.0	345	1979
Rostock	508	50.4	256	1994
Scholven B	345	100.0	345	1968
Scholven C	345	100.0	345	1969
Scholven D	345	100.0	345	1970
Scholven E	345	100.0	345	1971

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Power Plants	Total Capacity Net MW	Capacity Attributable to E.ON Energie		Start-up Date
		%(1)	MW	
<b>Hard Coal (Continued)</b>				
Scholven F	676	100.0	676	1979
Shamrock	132	100.0	132	1957
Staudinger 3	293	100.0	293	1970
Staudinger 5	510	100.0	510	1992
Wilhelmshaven	747	100.0	747	1976
Zolling	449	100.0	449	1986
Other (<20 MW installed capacity)	14	100.0	14	1983
Total	8,757		7,416	
<b>Natural Gas</b>				
Burghausen	120	100.0	120	2001
Emden GT	52	100.0	52	1972
Franken I/1	383	100.0	383	1973
Franken I/2	440	100.0	440	1976
GKW Weser/ Veltheim 4 GT	400	74.0	296	1975
GT Ummeln	60	74.0	44	1973
Huntorf	290	100.0	290	1977
Irsching 3	415	100.0	415	1974
Jena-Süd	199	73.0	145	1996
Kirchmöser	178	100.0	178	1994
Robert Frank 4	487	100.0	487	1973
Staudinger 4	622	100.0	622	1977
Other (<20 MW installed capacity)	22	n/a	15	n/a
Total	3,668		3,487	
<b>Fuel Oil</b>				
Audorf	87	100.0	87	1973
Hausham GT 1	25	100.0	25	1982
Hausham GT 2	25	100.0	25	1982
Hausham GT 3	25	100.0	25	1982
Hausham GT 4	25	100.0	25	1982
Ingolstadt 3	386	100.0	386	1973
Ingolstadt 4	386	100.0	386	1974
Itzehoe	87	100.0	87	1972
Wilhelmshaven	56	100.0	56	1973
Zolling GT 1	25	100.0	25	1976
Zolling GT 2	25	100.0	25	1976
Total	1,152		1,152	
<b>Hydroelectric</b>				
Aufkirchen	27	100.0	27	1924
Bittenbrunn	20	100.0	20	1969
Bergheim	24	100.0	24	1970
Braunau-Simbach	100	50.0	50	1953

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Power Plants	Total Capacity Net MW	Capacity Attributable to E.ON Energie		Start-up Date
		% (1)	MW	
<b>Hydroelectric (Continued)</b>				
Eggfing	81	100.0	81	1944
Eitting	26	100.0	26	1925
Ering	73	100.0	73	1942
Erzhausen	220	100.0	220	1964
Feldkirchen	38	100.0	38	1970
Gars	25	100.0	25	1938
Geisling	25	100.0	25	1985
Happurg	160	100.0	160	1958
Hemfurth	20	100.0	20	1915
Jochenstein	132	50.0	66	1955
Kachlet	54	100.0	54	1927
Langenprozelten	164	100.0	164	1975
Neuötting	26	100.0	26	1951
Nußdorf	48	76.5	37	1982
Oberaudorf-Ebbs	60	50.0	30	1992
Passau-Ingling	86	50.0	43	1965
Pfrombach	22	100.0	22	1929
Reisach	105	100.0	105	1955
Rosenheim	35	100.0	35	1960
Roßhaupten	46	100.0	46	1954
Schärding-Neuhaus	96	50.0	48	1961
Stammham	23	100.0	23	1955
Straubing	22	100.0	22	1994
Tanzmühle	28	100.0	28	1959
Teufelsbruck	25	100.0	25	1938
Töging	85	100.0	85	1924
Vohburg	23	100.0	23	1992
Walchensee	124	100.0	124	1924
Waldeck 1	120	100.0	120	1931
Waldeck 2	440	100.0	440	1975
Wasserburg	24	100.0	24	1938
Other run-of-river, pump storage and storage	775	n/a	729	n/a
<b>Total</b>	<b>3,402</b>		<b>3,108</b>	
<b>Others</b>	<b>203</b>		<b>181</b>	
<b>E.ON Energie Total Germany</b>	<b>32,916</b>		<b>25,130</b>	
<b>Mothballed/ Shutdown/Reduced</b>				
Arzberg 5	104	100.0	104	1966
Arzberg 6	252	100.0	252	1974
Arzberg 7	121	100.0	121	1979
Aschaffenburg 21	150	100.0	150	1963
Aschaffenburg 31	143	100.0	143	1971

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Power Plants	Total Capacity Net MW	Capacity Attributable to E.ON Energie		Start-up Date
		%(1)	MW	
<b>Mothballed/ Shutdown/Reduced (Continued)</b>				
Emden 4	433	100.0	433	1972
Franken II/1	206	100.0	206	1966
Franken II/2	206	100.0	206	1967
Irsching 1	151	100.0	151	1969
Irsching 2	312	100.0	312	1972
Offleben	280	100.0	280	1988
Pleinting 1	292	100.0	292	1968
Pleinting 2	402	100.0	402	1976
Rauxel 2	164	100.0	164	1967
Schwandorf D	292	100.0	292	1972
Stade	640	66.7	417	1972
Staudinger 1 (2)	249	100.0	249	1965
Staudinger 2	249	100.0	249	1965
Westerholt 1 (3)	138	100.0	138	1959
Westerholt 2 (3)	138	100.0	138	1961
<b>Total</b>	<b>4,922</b>		<b>4,699</b>	
<b>Shutdown</b>				
Scholven G (4)	672	50.0	336	1974
Scholven H (4)	672	50.0	336	1975
Schwandorf B (5)	99	100.0	99	1959
Schwandorf C (5)	99	100.0	99	1961
<b>Total</b>	<b>1,542</b>		<b>870</b>	

(1) Percentage of total capacity attributable to E.ON Energie.

(2) Operates in winter, shutdown in summer.

(3) Dismantling in process and finished, respectively.

(4) Not included in October 2000 shutdown program discussed below.

(5) Closed down before the shutdown program discussed below; already dismantled.

(CHP) Combined Heat and Power Generation.

In addition, E.ON Energie's international businesses had a total installed capacity of approximately 18,400 MW as of December 30, 2003, of which approximately 9,800 MW was E.ON Energie's attributable share. For detailed information about E.ON Energie's international power generation facilities, see International Shareholdings.

In response to intense competition in Germany over wholesale prices, E.ON Energie has been forced to assess all of its production facilities very carefully with respect to actual and, in the medium term, expected profitability. In October 2000, as a result of this analysis, E.ON Energie decided to shut down or permanently suspend operations at certain power plants with a total installed capacity of approximately 4,900 MW by the end of 2003. This decision primarily affected older and smaller units. The shutdowns of the nuclear power plant Stade and the lignite power plant Arzberg 5 in November and December 2003, respectively, completed the shutdown program.

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E.ON Energie's German plants generate electricity with nuclear power, bituminous coal (commonly referred to as hard coal), lignite, gas, fuel oil and water. The existing nuclear and hydroelectric power plants are E.ON



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Energie's cheapest source of power and, together with lignite-based power plants, are used mainly to cover the base load. Hard coal is utilized mainly for middle load, while the other energy sources are used primarily for peak load.

*Nuclear Power.* E.ON Energie operates its German nuclear power plants through the holding company E.ON Kernkraft. These nuclear power plants are required to meet applicable German safety standards, which are among the most stringent standards in the world (see Environmental Matters ). For the reprocessing of their nuclear waste, E.ON Energie's nuclear power plants have contracts with Cogema in France and BNFL in the United Kingdom. German law allows the delivery of spent nuclear fuel rods for reprocessing until June 30, 2005. Under German law, the Federal Republic of Germany is responsible for the final storage of all domestic nuclear waste at the expense of the generator.

Operators of nuclear power plants are required under German law to establish sufficient financial provisions for future obligations that arise from the use of nuclear power. The three required provisions are for: (1) management of spent nuclear fuel rods, (2) disposal of contaminated operating waste and (3) the eventual decommissioning of nuclear plants. At year-end 2003, E.ON Energie had a total of approximately 13.4 billion provided for these purposes in respect of nuclear power plants included in the consolidated accounts, consisting of 4.9 billion for management of spent nuclear fuel rods, 0.4 billion for disposal of operational waste and 8.1 billion for decommissioning costs. These provisions are stated net of advance payments of 0.9 billion. In determining its pro rata share of these provisions, provisions attributed to minority interests included in E.ON Energie's consolidated accounts have been deducted and provisions for nuclear plants in which E.ON Energie has a minority interest are added. At year-end 2003, on such a pro rata basis, E.ON Energie's provisions for these purposes totaled 13.9 billion, as compared to 12.9 billion at year-end 2002. The increase reflects the impact of the first-time application of SFAS No. 143, Accounting for Asset Retirement Obligations ( SFAS 143 ), which requires that asset retirement obligations be recorded at their fair value. For additional details on these and other provisions, see Item 5. Operating and Financial Review and Prospects Results of Operations and Note 23 of the Notes to Consolidated Financial Statements.

In May 1995, PreussenElektra decided to shut down its nuclear power plant at Würgassen for economic reasons and, in October 1995, it applied for and received permission from the German authorities to decommission and dismantle the Würgassen plant in accordance with German nuclear energy legislation. E.ON Energie expects the decommissioning of Würgassen, which began in October 1995, to last until approximately 2015. In 2000, as a result of the investigation of all of its power plants described above, E.ON Energie also decided to shut down the nuclear power plant Stade. In July 2001, E.ON Kernkraft filed an application with the Lower Saxonian Ministry of Environment to decommission and dismantle Stade. E.ON Energie expects to receive the approval for decommissioning/ dismantling by the end of 2004. Stade was shut down in November 2003, and E.ON Energie expects its decommissioning to last approximately 10 to 12 years. E.ON Energie has provided 2.1 billion for the decommissioning of Würgassen and Stade, including the management of spent nuclear fuel rods and the dismantling of the plants.

After the German Social Democratic Party and the German Green Party (*Bündnis 90/Die Grünen*) (together, the Coalition ) were elected to lead the German federal government in 1998, the Coalition agreed to phase out the generation of nuclear energy in Germany. The Coalition also agreed to hold consensus-forming discussions with operators of nuclear power plants in order to find a solution to various issues in the area of nuclear energy agreeable to all parties. The discussions began in January 1999 and resulted in an agreement on nuclear power in June 2001 and in an amendment of the German Nuclear Power Regulations Act (*Atomgesetz*, or AtG ), which was passed by the German parliament in December 2001 and took effect in April 2002.

Among other things, the amendment provides as follows:

**Termination of Fuel Reprocessing:** The transport of spent fuel elements for reprocessing will be allowed until June 30, 2005 at the latest. Following this deadline, the operators must store spent fuel in interim facilities on the premises of the nuclear plants. Such storage requires the approval and construction of interim storage facilities. E.ON believes this transition period from reprocessing to on-site storage will allow it to satisfy its obligations under its reprocessing contracts with Cogema and BNFL.

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**Nuclear Phase-out:** The operators of the nuclear plants have agreed to a specified number of operating kWh for each nuclear plant. This number has been calculated on the basis of 32 years of plant operation using a high load factor. The operators may trade allotted kWh among themselves. This means that if one nuclear plant closes before it has produced the allotted amount of kWh, the remaining kWh may be transferred to another nuclear power plant.

As part of the agreement, the German federal government has agreed not to institute any future changes in German tax law which discriminate against nuclear power operations in comparison with other forms of power generation.

The Company considers its provisions with respect to nuclear power operations to be adequate with respect to the costs of implementing the agreement. E.ON Energie has no plans to construct any new nuclear power plants in Germany.

In March 1999, the German parliament passed the Tax Relief Act 1999/2000/2002 (*Steuerentlastungsgesetz 1999/2000/2002*, the Tax Relief Act ). The Tax Relief Act contains new rules for the tax treatment of nuclear provisions. Furthermore, the German tax authorities have adopted a more stringent interpretation of the previous law with respect to the years before 1999. The changes to the tax status of the provisions include the following:

The accrual period for decommissioning costs has been extended from 19 to 25 years. This requires E.ON Energie to release a portion of the provisions it had previously established for tax purposes based on the shorter accrual period.

Certain parts of the provisions concerning MOX fuel elements, which are fuel elements containing plutonium produced in the reprocessing process, have to be reversed. The costs must be capitalized as incurred instead.

Those portions of the provisions that have been established in past years relating to the financing and operational costs for final storage of nuclear waste have been disallowed. The costs of these items now will be tax-deductible when they are actually expensed.

In accordance with the new general rule for long-term provisions, all types of provisions for nuclear power must now be discounted. The Tax Relief Act sets the discount rate at 5.5 percent. This also applies to provisions that have previously been established, which must be released to the extent they do not reflect this discounting.

The Tax Relief Act provides that the tax payments resulting from the reversal of provisions necessitated by the extension of the accrual period, the disallowance of portions of the provisions related to costs of final storage of waste and the discounting of the provisions are spread over a period of ten years beginning in 1999.

In 2002, the Company concluded its general discussions with the tax authorities regarding the treatment of the years prior to 1999, and the tax calculations for these years have been agreed in principle. Part of the resulting tax has already been paid and the Company has established a provision to cover the remaining amounts. The years from 1999 are still under review.

None of the changes to the tax treatment of nuclear provisions described above cause any changes to the financial statements the Company prepares for other purposes. Due to the recognition of a related deferred tax asset generated by temporary differences between the balance sheet prepared for financial reporting purposes and the balance sheet for tax purposes, the changes in the tax status of the provisions for nuclear waste disposal had no material adverse effect on the Company's consolidated net income in 1999. However, the Tax Reduction Act (*Steuersenkungsgesetz*), which was enacted in October 2000, included a lowering of the corporate income tax from 40 percent to 25 percent, which has resulted in a reduction of the deferred tax asset relating to the provisions. The increase of the corporate tax rate to 26.5 percent for the year 2003 only under the Flood Victims Solidarity Act (*Flutopfersolidaritätsgesetz*) had no significant impact on deferred taxes. For a general description of the Tax Reduction Act and the Flood Victims Solidarity Act, see Operating Environment Economic Background Germany.

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E.ON Kernkraft purchases fuel elements for nuclear power plants from independent domestic and international suppliers. E.ON Energie considers the supply of uranium and fuel elements on the world market to be adequate.

*Hard Coal.* In 2003, approximately 40 percent of the hard coal used by E.ON Energie's German operations was mined in Germany. Traditionally, hard coal is mined in Germany under much more difficult conditions than in other countries. Therefore, German coal production costs are substantially above world market levels, and E.ON Energie strongly believes they will continue to remain high. Although electricity producers were in the past required to purchase German coal, they are now free to purchase coal from any source. To encourage the purchase of German coal, the German federal government has been paying direct subsidies to German producers enabling them to offer domestic coal at world market prices, although it is now in the process of reducing such subsidies. Due to high production costs and the reduction in subsidies, the volume of German coal production has shown a relatively steady decline in the past and is expected to continue to decline further. However, E.ON Energie expects that adequate supplies of imported coal for its operations will be available on the world coal market at acceptable prices. Hard coal is generally available from multiple sources, though prices are determined on international commodities markets and are therefore subject to fluctuations.

*Lignite.* German lignite, also known as brown coal, has approximately one-third of the heating value of hard coal. E.ON Energie participates in lignite-based energy generation in western Germany through Braunschweigische Kohlen-Bergwerke AG and in eastern Germany through Kraftwerk Schkopau GbR and a portion of one unit of Kraftwerk Lippendorf. Lignite is a readily available domestic fuel source that E.ON obtains from its own reserves or under long term contracts with German producers. The price of lignite is not generally volatile and is generally determined by reference to published indices in Germany. However, the price can fluctuate based on the underlying price of hard coal in global commodities markets.

*Gas and Oil.* In Germany, the price of natural gas is linked to the price of oil and other competing fuels. This mechanism has been enforced in order to reduce the influence of, and dependence on, gas-producing countries. Only about 18 percent of gas demand in Germany is satisfied by German deposits, while about 82 percent is satisfied through imports from foreign producers, primarily from Russia, Norway and the Netherlands. Fuel oil power plants are only used for peak load operations. E.ON Energie purchases its fuel oil from traders or directly from a number of oil companies. As with natural gas, the price of fuel oil depends on the price of crude oil.

*Water.* This domestic source of energy is primarily available in southern Germany due to the presence of mountains and rivers. The variable costs of production are extremely low in the case of run-of-river plants and consequently, these plants are used to cover base load requirements. Storage and pump storage facilities are used to meet peak demand and for back-up power purposes.

Demand for power tends to be seasonal, rising in the winter months and typically resulting in additional electricity sales by E.ON Energie in the first and fourth quarters. E.ON Energie believes it has adequate sources of power to meet foreseeable increases in demand, whether seasonal or otherwise. In order to benefit from economies of scale associated with large stations, E.ON Energie has built large capacity power station units in conjunction with other utilities where it does not require all of the electricity produced by such plants. In these cases, the purchase price of electricity is determined by the production cost plus a negotiated fee.

Although E.ON's power plants are maintained on a regular basis, there is a certain risk of failure for power plants of every fuel type (for example, the breakdown of a generator in the non-nuclear part of the Unterweser power plant in 2002 resulted in the plant being out of service for six months ending in February 2003 and a broken spray duct lid in the nuclear power plant Brunsbüttel resulted in the plant being out of service in February and March 2003). In addition, the summer heat wave in Europe in 2003 reduced the availability of electric generating facilities dependent on using river water for cooling purposes. Depending on the associated generation capacity, the length of the outage and the cost of the required repair measures, the economic damage due to such failure can vary significantly. In order to meet contractual commitments, electricity which cannot be generated at these plants has to be bought from other generators or has to be generated from more expensive plants. Thus, power plant outages can affect the division's internal operating profit.

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*Transmission*

The German power transmission grid of E.ON Energie is located in the German states of Schleswig-Holstein, Lower Saxony, Mecklenburg-Western Pomerania, Brandenburg, North Rhine-Westphalia, Saxony-Anhalt, Hesse, Thuringia and Bavaria, and reaches from the Scandinavian border to the Alps. The grid is interconnected with the western European power grid with links to the Netherlands, Austria, Denmark and Eastern Europe. With a system length of over 42,000 km and a coverage area of nearly 200,000 km<sup>2</sup>, the grid covers more than one-third of the surface area of Germany. The high-voltage network allows long-distance power transport at low transmission losses. The system is operated from two main system control centers, one in Lehrte near Hanover and one in Karlsfeld near Munich. In addition, there are more than twenty smaller regional control and service units at decentralized locations within the grid area. The system is mainly, but not completely (depending on regional locations), operated by E.ON Netz GmbH.

Access to E.ON Energie's power transmission grid is open to all potential users. The Company believes its usage fees and conditions comply with existing German regulations governing grid access. For further information, see Regulatory Environment Electricity Grid Access.

The Baltic Cable links the grid of E.ON Energie to Scandinavia and is one of the longest (250 km) direct current submarine cables in the world, currently transmitting approximately 372 MW to 456 MW of its maximum designed capacity of 600 MW. Sydkraft currently owns one-third of the cable, with the remaining two-thirds owned by the Norwegian utility Statkraft SF ( Statkraft ).

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*Electricity.* The German utilities historically established defined supply areas which were coextensive with their distribution grids. See Operations. The following map shows E.ON Energie's current supply area in Germany through its majority shareholdings in regional electricity distribution companies:

E.ON Energie supplied about one-third of the electricity consumed by end users in Germany in 2003. Its customers are interregional, regional and municipal utilities, traders, industrial and commercial customers and, through regional distributors, standard-rate customers predominantly in those parts of Germany highlighted on the above map. In compliance with the EU Commission's conditions upon approving the VEBA-VIAG merger, E.ON Energie's majority-owned regional distributors E.DIS and TEAG in eastern Germany purchase power from E.ON Energie's competitor Vattenfall Europe. E.ON Energie's majority-owned distributor Avacon likewise purchases its power primarily from Vattenfall Europe for those of its customers situated in the eastern German state of Saxony-Anhalt. In 2003, E.ON Energie sold 163.0 billion kWh of electricity in western Germany and 29.0 billion kWh in eastern Germany compared with 162.1 billion kWh and 27.2 billion kWh in 2002, respectively.

The following table sets forth the sale of E.ON Energie's electric power (excluding that used in physically settling its trading activities) in Germany in 2003 and 2002:

Sale of Power to	Germany 2003 million kWh	Germany 2002 million kWh	% Change in Total(1)
Non-consolidated interregional, regional and municipal utilities	106,803	106,901	-0.1
Industrial and commercial customers	53,196	53,548	-0.7
Standard-rate customers	32,016	28,857	+10.9
Total	192,015	189,306	+1.4

(1) The increase is primarily attributable to the first-time full year inclusion of results from certain companies, such as EMR and EWW.

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In order to offer optimized services to major customers and to equalize supply and demand at all times with respect to the costs of procurement, E.ON Energie has integrated the main parts of its trading and sales operations into EST. EST focuses on the national and international wholesale business for regional utilities, large municipal utilities and major industrial customers, and is also responsible for E.ON Energie's trading operations in central Europe. The regional distribution companies manage the main part of E.ON Energie's retail business, which is the supply of power to municipal utilities, industrial and commercial customers, as well as residential customers. The functions of the regional sales centers in Dresden, Düsseldorf and Stuttgart, which had organized the supply of electricity to customers in areas that were not covered by E.ON Energie's regional distribution companies, have been allocated to the regional distribution companies as of January 1, 2004. The following chart sets forth the principal supply structure of E.ON Energie's electricity sales.

The supply contracts under which E.ON Energie's regional distributors (all are majority-owned) regularly order their required load for upcoming years have historically had relatively long terms. Typical supply contracts now last for one to two years. Potential alternative sources of electricity include the purchase of electricity from other utilities and auto-generation by municipalities, regional distributors or industrial customers. The regional distributors' contracts with municipal utilities contain varying terms and conditions. Long-term concession contracts permit municipal utilities and regional distributors to supply electricity to residential customers within a municipality.

*Gas.* Most of the distribution subsidiaries of E.ON Energie supply natural gas to households, small businesses and industrial customers in many parts of Germany. In addition, during 2003 E.ON Energie held a 86.6 percent interest in Thüga. At the end of the year, E.ON Energie transferred 67.7 percent of Thüga to Ruhrgas, leaving it with a 18.9 percent interest. For details, see History and Development of the Company Group Strategy On.top. Thüga has primarily minority shareholdings in approximately 100 regional and municipal electricity and gas utilities all over Germany. As an active minority shareholder, it offers operational competence as well as other services and advice to the companies in which it owns minority equity interests. E.ON Energie's gas sales volume in Germany in 2003 amounted to 113.8 billion kWh compared with 102.6 billion kWh in 2002.

*Heat.* E.ON Energie is one of the leading suppliers of district heating in Germany. It operates its own district heating networks for six cities in the Ruhr area and supplies four additional networks owned by other companies. E.ON Energie's regional distributors are also involved in district heat and steam delivery. E.ON Energie's total district heat deliveries increased 16.1 percent in 2003 to 22.4 billion kWh, of which 9.9 billion

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kWh were supplied in Germany. The remaining supply amount is mainly supplied through E.ON Benelux Generation N.V. ( E.ON Benelux ) and Sydkraft.

*Water.* Following the sale of its interest in Gelsenwasser, E.ON's remaining water business is conducted through certain of its distribution companies, particularly E.ON Hanse and Avacon, in which E.ON Energie has shareholdings of 73.8 percent and 56.5 percent, respectively.

Until September 2003, E.ON Energie's principal water activities were centered in the German stock exchange-listed company Gelsenwasser. As a requirement of the ministerial approval in connection with the Ruhrgas acquisition, E.ON Energie had to dispose of Gelsenwasser. In September 2003, E.ON Energie sold its 80.5 percent interest in Gelsenwasser. Until then, Gelsenwasser was accounted for as a discontinued operation in the Consolidated Financial Statements. For more details on discontinued operations, see Item 5. Operating and Financial Review and Prospects Acquisitions and Dispositions Discontinued Operations and Note 4 of the Notes to Consolidated Financial Statements.

*Consulting and Support Services.* E.ON Engineering GmbH offers internal and external consulting, planning and construction services in the energy sector in fields such as chemical analytics and electrical, mechanical and civil engineering, with a focus on conventional and renewable power generation, cogeneration, use of biomass, development of energy strategies and CO<sub>2</sub>-emissions reduction. Building on their shareholdings in municipal and regional utilities, E.ON Energie and the regional distributors also establish partnerships and cooperative relationships with local authorities. E.ON Energie and the regional distributors operate their own electricity and gas supply systems, and provide the local authorities with consulting, technical and managerial support to promote the efficient use of electricity and gas. In addition, E.ON Energy Projects GmbH, a wholly-owned subsidiary of E.ON Energie, is engaged in the project development business, *i.e.* renewable generation and customized energy solutions for industrial customers.

*Customers.* Through its subsidiaries and companies in which it has shareholdings, E.ON Energie serves approximately twelve million electricity customers (households) in Germany. E.ON Energie's German operations also supply approximately five million customers (households) with gas and more than four million individuals with water.

**Trading**

In October 2000, E.ON Energie merged the two formerly separate trading floors of PreussenElektra and Bayernwerk into a single facility in Munich, combining the know-how and the resources of both companies at one location. In 2002, E.ON Energie integrated the main parts of the trading and sales operations into EST. An international team of traders buys and sells electricity on the spot and futures markets. E.ON Energie's trading operations offer customized products that are traded on a bilateral basis, as well as trading in standard exchange-traded instruments. EST's trading focuses on Germany, but also includes the rest of continental Europe, including the European Energy Exchange in Leipzig, the Amsterdam Power Exchange in the Netherlands, Pownext in France and Energy Exchange Austria in Austria. Until December 31, 2003, E.ON Energie's trading activities in Scandinavia at the Scandinavian electricity exchange NordPool were conducted through Sydkraft and E.ON Finland. E.ON Energie also owns 100 percent of D-Gas, which has an experienced British team of gas traders. As part of E.ON's on.top project, E.ON Energie transferred Sydkraft and E.ON Finland to E.ON AG at year-end 2003 and plans to transfer D-Gas to Ruhrgas during 2004. For details, see History and Development of the Company Group Strategy On.top.

E.ON Energie believes that its trading activities provide it with valuable market insight and have strengthened its competitive position in the European electricity market. E.ON Energie's trading activities are focused on asset-backed trading in order to optimize the value of its generation portfolio, though E.ON Energie also engages in a limited amount of proprietary trading within its established risk limits.

E.ON Energie's trading business has incorporated a complete and systematic risk management system in compliance with legal and regulatory requirements of the German Federal Supervisory Office for Banking, including the minimum requirements for trading activities of credit institutions. An important aspect of the system is that the trading activities are monitored by a board independent from the trading operations. For more

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detailed information on E.ON Energie's management of the risks related to its trading activities, see Item 11. Quantitative and Qualitative Disclosures about Market Risk - Commodity Price Risk Management.

The volume of EST's energy trading activities decreased significantly in 2003, reflecting E.ON Energie's concentration of its trading activities in the Central European markets for which it is responsible in E.ON's new market unit structure. However, the impact on EST's revenues of significantly higher prices on wholesale trading markets more than offset the impact of volume reductions. See Item 5. Operating and Financial Review and Prospects - Results of Operations - Year Ended December 31, 2003 Compared with Year Ended December 31, 2002 E.ON Energie. The following table sets forth the total volume of EST's traded electric power in 2003 and 2002. For information on the trading volumes of Sydkraft and E.ON Finland, see the description under The Nordic Countries below.

Trading of Power	2003 million kWh	2002 million kWh	% Change in Total
Power sold(1)	208,939	386,203	-45.9
Power purchased(1)	202,680	374,836	-45.9
Total	411,619	761,039	-45.9

(1) Any negative balance of power purchased as compared to power sold is satisfied by the delivery of electricity generated by E.ON Energie.

**International Shareholdings**

E.ON Energie participates in a number of European energy markets with shareholdings and cooperation agreements in more than a dozen countries. In those regions in which E.ON Energie has already built up a portfolio of activities, national holding companies such as E.ON Hungaria and E.ON Benelux coordinate E.ON Energie's activities. Until December 31, 2003, E.ON Energie's international shareholdings included the international activities of the German company Thüga, which holds a number of majority shareholdings in Italian gas distribution companies, as well as E.ON Scandinavia, the holding company for E.ON's interests in Scandinavia and Finland. At the end of December 2003 or in 2004, as part of the on.top project, E.ON Energie transferred or will transfer these and certain other international shareholdings to Ruhrgas or to E.ON AG, and Ruhrgas transferred or will transfer certain international shareholdings to E.ON Energie. For more information, see History and Development of the Company - Group Strategy - On.top.

*The Nordic Countries.* In 2003, E.ON Energie was the largest shareholder in Sydkraft, the second-largest Swedish utility (on the basis of electricity sales and production capacity), with a 55.2 percent equity and a 56.6 percent voting interest. As of December 31, 2003, as a result of E.ON's on.top project, E.ON AG holds Sydkraft directly through E.ON Scandinavia. In October 2001, E.ON Energie concluded a put option agreement which allows the remaining major minority shareholder Statkraft to sell any or all of its shares in Sydkraft to E.ON Energie at any time through December 15, 2007 (the termination date having been extended by two years in 2003). Sydkraft is active in the generation, transmission, distribution and sale of electricity, and in the heat and gas business. In 2003, it had a total installed generation capacity of 7,737 MW (including Grånge), and generated 24,338 million kWh of electricity. Sydkraft generated about 57 percent of its electric power at nuclear power plants and about 37 percent at hydroelectric plants in 2003. The remaining six percent was generated using gas turbines, hard coal and oil. For detailed information on Sydkraft's power plants, see the table below.

In Sweden, nuclear waste is transported to intermediate storage under the responsibility of Svensk Kärnbränslehantering AB, a company owned by the domestic producers of nuclear power and controlled by various state institutions. In 1997, a law concerning the phase out of nuclear power was passed pursuant to which the government can decide to revoke a license to conduct nuclear operations, but must compensate the owner of the nuclear plants that are phased out. Sydkraft has one nuclear reactor, Barsebäck 1, which has been closed under this law and for which Sydkraft received compensation. The Swedish parliament has also decided that the other reactor at Barsebäck, Barsebäck 2, in which Sydkraft has a 25.8 percent stake, should be phased out, but the initial closure date of 2002 was postponed by the Swedish parliament due to certain conditions that could not be



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fulfilled, principally that the power production of Barsebäck 2 be replaced by other means of production that do not increase emissions, and no new closure date has yet been set. Apart from these two reactors, Sydkraft has no other nuclear power plants that have been targeted for early phase-out by the Swedish government. Management believes that public opinion in Sweden has become more favorable towards nuclear power since the original phase-out decision, and that it is unclear if and to what extent Sydkraft will need to shut down other nuclear power plants. Beginning in 2002, the Swedish parliament started negotiations with all owners of nuclear power plants in Sweden which remain ongoing.

In November 2003, Sydkraft increased its stake in the Swedish utility Gräninge to a majority. As of year-end 2003, Sydkraft held 79.0 percent of Gräninge. E.ON's indirect stake in Gräninge increased to 97.5 percent in January 2004. See also [Overview and History and Development of the Company](#) [Other Significant Events](#). Gräninge has been fully consolidated within Sydkraft since November 2003.

Sydkraft also supplies heat and gas and conducts electricity trading activities. In 2003, Sydkraft had sales of 2.2 billion, which included the sales of Gräninge for the two-month period beginning November 2003. Electricity contributed approximately 66 percent, heat 15 percent, gas 8 percent and other 11 percent of 2003 sales. Sydkraft traded a total of approximately 80.3 TWh of electricity in 2003 (including both purchases and sales).

Electricity prices in Sweden remained essentially stable in 2003, following a sharp increase in the fourth quarter of 2002.

In September 2003, a blackout in parts of Sweden and Denmark was caused by a combination of a fault in the transmission grid and a failure at the power plant Oskarshamn (which is 54.5 percent owned by Sydkraft) that occurred when the plant was being returned to service following routine maintenance. The power plant restarted in November 2003 following a comprehensive investigation and analysis. Sydkraft does not expect any serious consequences to arise from the shutdown.

In 2002, E.ON Energie entered the Finnish energy market by acquiring a 34.0 percent interest in the Finnish energy supplier Espoon Sähkö from the city of Espoo. During 2002, E.ON Energie increased its share to 65.6 percent by acquiring 31.6 percent of the outstanding shares through a public tender offer and additional share purchases. In September 2003, Espoon Sähkö was renamed E.ON Finland. E.ON Finland traded a total of approximately 35.6 TWh of electricity in 2003.

For information on the disposition of E.ON Energie's former shareholdings in Norway, see [History and Development of the Company](#) [Ruhrgas Acquisition](#).

*Central and Eastern Europe.* E.ON Energie has significant shareholdings in Hungary, the Czech Republic and Slovakia. In Hungary, its shareholdings in regional distributors include equity interests of 92.4 percent in Dél-dunántúli Áramszolgáltató Rt. ( DÉDÁSZ ), 97.6 percent in Észak-dunántúli Áramszolgáltató Rt. ( ÉDÁSZ ) and 92.4 percent in Tiszántúli Áramszolgáltató Rt. ( TITÁSZ ). Management believes that E.ON Energie has a market share of approximately 45 percent in the Hungarian electricity distribution market. In January 2003, E.ON Hungária founded E.ON Energiakereskedő Kft., an electricity sales company, to serve the newly liberalized Hungarian electricity market. E.ON Energie also holds a 100.0 percent stake in the generator Debreceni Kombinált Ciklusú Erőmű Kft. ( DKCE ) and a 31.2 percent stake in the gas distribution and supply company Közepdunántúli Gázszolgáltató Rt. ( KÖGÁZ ), as well as a 49.8 percent stake in the gas distributor DDGÁZ.

In the Czech Republic, E.ON Energie controls significant participations in the energy sector. As of December 31, 2003, E.ON Energie had strengthened this position by increasing its stakes in the electricity distributors JME and JCE to 85.7 percent and 84.7 percent, respectively. The acquisition process also involved the transfer of E.ON Energie's minority stakes in the Czech regional power distribution companies ZCE (35.1 percent) and VCE (41.7 percent) to the Czech state-owned company CEZ. In addition, E.ON Energie and CEZ concluded an option agreement which allows E.ON Energie to sell and CEZ to buy E.ON Energie's minority stakes in the Czech regional electricity distribution companies Severomoravska energetika a.s. (30.3 percent) and Severoceska energetika a.s. (5.9 percent) beginning in 2004. On a combined basis, JME and JCE provided 1.4 million customers with around 12 TWh of electricity in 2003. In the gas sector, E.ON Energie

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owns minority shareholdings in the distributors Jihomoravská plynárenská a.s. ( JMP ), Jihoceska plynárenska a.s. ( JCP ), Západočeská plynárenska a.s. ( ZCP ), Prazska plynárenská a.s. ( PP ) and Stredočeská plynárenská a.s. ( STP ). In 2002, E.ON Energie entered the Slovakian energy market by acquiring a 49.0 percent interest in the Slovakian electricity supplier Západoslovenská energetika a.s. ( ZSE ).

In the Baltic region, following the re-organization of the Lithuanian energy industry, E.ON Energie now owns a 20.3 percent interest in Rytu Skirstomieji Tinklai ( RST ), the eastern Lithuanian electricity distribution company, and a 14.6 percent interest in Vakarų Skirstomieji Tinklai ( VST ), the western electricity distribution company. E.ON Energie has agreed with the Lithuanian government that it will sell its stakes in both these distributors to the new majority shareholders following the completion of the ongoing privatization process. E.ON Energie also owned a 14.3 percent stake in Lietuvos Dujos, a Lithuanian gas company, and an 18.8 percent interest in Latvijas Gaze, the only gas supplier in Latvia. In connection with E.ON s on.top project, E.ON Energie transferred these minority interests to Ruhrgas. In return, Ruhrgas transferred minority interests in a number of Czech and Hungarian gas distribution companies to E.ON Energie. For information about these shareholdings, see History and Development of the Company Group Strategy On.top.

*The Netherlands.* E.ON Energie s acquisition of the Dutch power producer E.ON Benelux, formerly known as Electriciteitsbedrijf Zuid-Holland N.V., in January 2000 was a significant step into the important electricity market in the Netherlands. E.ON Benelux operates hard coal and natural gas power plants for the supply of electricity and heat to bulk customers and utilities in the Netherlands. In 2003, it had a total installed generation capacity of approximately 1,780 MW, and generated 11.0 billion kWh of electricity.

*Alpine Region.* E.ON Energie owns a 20.0 percent equity interest in BKW, a Swiss utility that owns important hydropower assets as well as a single nuclear power station and interests in other nuclear power stations.

For information about transfers in connection with E.ON s on.top project, see History and Development of the Company Group Strategy On.top.

The following table sets forth E.ON Energie s major international electric power generation facilities (including cogeneration plants), the total capacity, the stake held by E.ON Energie and the capacity attributable to E.ON Energie for each facility as of December 30, 2003 (prior to the transfer of Sydkraft and E.ON Finland to E.ON AG), and their start-up dates.

**E.ON ENERGIE INTERNATIONAL ELECTRIC POWER STATIONS**

Power Plants	Total Capacity Net MW	E.ON Energie s Share		Start-up Date
		%	Attributable Capacity MW	
<b>Nuclear</b>				
Barsebäck 2 (S)	600	25.8	155	1977
Forsmark 1 (S)	961	9.3	89	1980
Forsmark 2 (S)	954	9.3	89	1981
Forsmark 3 (S)	1,155	10.8	125	1985
Oskarshamn I (S)(2)	467	54.5	255	1972
Oskarshamn II (S)(2)	602	54.5	328	1974
Oskarshamn III (S)(2)	1,160	54.5	632	1985
Ringhals 1 (S)	835	25.8	215	1976
Ringhals 2 (S)	872	25.8	225	1975
Ringhals 3 (S)	920	25.8	237	1981
Ringhals 4 (S)	915	25.8	236	1983
<b>Total</b>	<b>9,441</b>		<b>2,586</b>	

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Power Plants	Total Capacity Net MW	E.ON Energie s Share		Start-up Date
		%	Attributable Capacity MW	
<b>Hard Coal</b>				
Maasvlakte 1 (NL)(3)	520	100.0	520	1988
Maasvlakte 2 (NL)(3)	520	100.0	520	1987
Suomenoja (FIN)	80	100.0	80	1977
<b>Total</b>	<b>1,120</b>		<b>1,120</b>	
<b>Natural Gas</b>				
Debrecen, DKCE (H)(1)	95	100.0	95	2000
Galileistraat (NL)	209	100.0	209	1988
Heleneholm G11, G12 (S)(CHP)	130	100.0	130	1966 + 1970
Leiden (NL)	81	100.0	81	1986
RoCa 3 (NL)(3)	220	100.0	220	1996
Suomenoja GT (FIN)	50	100.0	50	1989
The Hague (NL)	78	100.0	78	1982
Other (<50 MW installed capacity)	146	n/a	103	n/a
<b>Total</b>	<b>1,009</b>		<b>966</b>	
<b>Fuel Oil</b>				
Abyverket G1, G2, G3 (S)(CHP)	151	100.0	151	1962-1974
Alholmens Kraft 2 (S)	240	14.9	36	2002
Barsebäck GT (S)	84	100.0	84	1974
Bravalla (S)	240	65.0	156	1972
Halmstad G11 (S)	78	100.0	78	1973
Halmstad G12 (S)	172	100.0	172	1993
Händelö (Norrköping)(S)(CHP)	100	100.0	100	1983
Kainuun Voima (FIN)	56	50.0	28	1989
Karlshamn G1 (S)	332	70.0	232	1971
Karlshamn G2 (S)	332	70.0	232	1971
Karlshamn G3 (S)	326	70.0	228	1973
Karskär G4 (S)	125	50.0	63	1968
Öresundsverket GT (S)	126	100.0	126	1971
Oskarshamn GT (S)(2)	80	54.5	44	1973
Other (<50 MW installed capacity)	45	n/a	45	n/a
<b>Total</b>	<b>2,487</b>		<b>1,775</b>	
<b>Hydroelectric</b>				
Balforsen (S)	88	100.0	88	1958
Bergeforsen (S)	160	44.0	70	1955
Bjurfors nedre (S)	78	100.0	78	1959
Blasjön (S)	60	50.0	30	1957
Degerforsen (S)	63	100.0	63	1965
Edensforsen (Aseleälven)(S)	67	97.7	65	1956
Edsele (S)	60	100.0	60	1965
Forse (S)	52	100.0	52	1968
Gulsele (Aseleälven)(S)	64	65.0	42	1955
Hällby (Aseleälven)(S)	84	65.0	55	1970
Hammarforsen (S)	79	100.0	79	1928

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Harjavalta (FIN)	76	13.2	10	1945
Harrsele (S)	223	50.6	113	1957
Hjalta (S)	178	100.0	178	1949

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Power Plants	Total Capacity Net MW	E.ON Energie's Share		Start-up Date
		%	Attributable Capacity MW	
<b>Hydroelectric (continued)</b>				
Järnvägsforsen (S)	100	94.9	95	1975
Korselbränna (Fjällsjöälven)(S)	130	100.0	130	1961
Kvistforsen (S)	140	100.0	140	1962
Laseke (S)	140	19.6	27	1956
Moforsen (S)	139	100.0	139	1968
Olden (Langan)(S)	112	100.0	112	1974
Pengfors (S)	56	65.0	36	1954
Ramsele (S)	157	100.0	157	1958
Rätan (S)	60	100.0	60	1968
Selsfors (S)	61	10.6	6	1944
Stensjön (Harkan)(S)	95	50.0	48	1968
Storfinnforsen (S)	112	100.0	112	1953
Trangfors (S)	73	100.0	73	1975
Other (<50 MW installed capacity)	1,281	n/a	1,037	n/a
Total	3,988		3,155	
<b>Wind Power</b>				
Total	196	n/a	53	n/a
<b>Other Power Plants</b>				
Jjoensuu Bio (FIN)	65	100.0	65	1986
Karskär G3 (S)	48	50.0	24	1968
Unicorn (NL)	6	100.0	6	1996
Total	119		95	
<b>Shutdown</b>				
Barsebäck 1 (S)(Nuclear)		25.8		1975
<b>E.ON Energie Total International</b>	<b>18,360</b>		<b>9,750</b>	

(1) For these power plants, the amount of attributable capacity as compared to E.ON Energie's ownership interest is varied by contract.

(2) E.ON Energie is additionally leasing 2.5 percent of the power plant's capacity.

(3) Power station operated by E.ON Benelux under long-term cross-border leasing arrangement.

(FIN) Located in Finland.

(H) Located in Hungary.

(NL) Located in the Netherlands.

(S) Located in Sweden.

(CHP) Combined Heat and Power Generation.

In addition, as of December 30, 2003 E.ON Energie held a number of primarily minority shareholdings in generation assets in Switzerland, the Czech Republic, Thailand and Scandinavia.

Following the transfer of Sydkraft, E.ON Energie does not have interests in companies operating nuclear power plants other than those in Germany and Switzerland.

***Regulatory Environment***

*General.* In order to promote competition in the energy production, transmission and distribution sectors, the EU adopted a directive (Directive 96/92/EC Concerning Common Rules for the Internal Market in Electricity, or the First Electricity Directive ) in December 1996 that was intended to open access to the internal markets of EU member states to power producers from other EU member states. Germany implemented the First Electricity

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Directive by enacting an Energy Law (*Energiewirtschaftsgesetz*, or the Energy Law ) that came into effect on April 29, 1998. The Energy Law modified the old Energy Law, the German legal framework governing utilities that sets forth the general obligations required of electricity and gas suppliers and defines which segments of the industry are subject to regulation. In June 2003, the EU Energy Council amended the First Electricity Directive and adopted a new electricity directive (Directive 2003/54/EC Concerning Common Rules for the Internal Market in Electricity, or the Second Electricity Directive ) that includes new rules for the organization of the EU energy market and replaces the First Electricity Directive. The following paragraphs discuss the First Electricity Directive, the Energy Law and the Second Electricity Directive, as well as other applicable German laws regulating the electricity industry, the German framework for electricity grid access and rate regulation. For information about European and German gas regulation, see Ruhrgas Regulatory Environment. E.ON Energie's operations outside of Germany are subject to national and local regulations in the relevant countries.

*The First Electricity Directive.* The First Electricity Directive established common rules for the internal EU electricity market. Under the First Electricity Directive, the EU electricity market was expected to be opened gradually to competition. Member states could choose to have either a single-buyer system or a system permitting negotiated or regulated third-party access ( NTPA or RTPA ). Member states that elected the NTPA system were required to publish frameworks for network charges. The Directive also required integrated utilities to keep separate accounts for their transmission activities, as well as for other activities not relating to transmission and distribution, in their internal accounting.

*The Energy Law.* Germany's Energy Law of 1998 implemented the First Electricity Directive. The Energy Law abolished exclusive supply contracts, thereby introducing competition in the supply of electricity to all consumers, and provided for non-discriminatory NTPA for all utilities. The German market was opened for all customers in one step, going far beyond the requirements of the First Electricity Directive and also beyond the steps taken by Germany's neighboring countries. Specifically, in assessing a request for energy transmission, the Energy Law requires a transmission company to take into account the extent to which such transmission displaces electricity generated from CHP plants, renewable energy sources and, in eastern Germany, lignite-based power plants, and the extent to which it impedes the commercial operation of such power plants. Furthermore, the Energy Law modified certain cartel law provisions, such as direct applicability of abuse control filings issued by the Federal Cartel Office. This modification also necessitated an amendment of the Law Against Restraints on Competition (*Gesetz gegen Wettbewerbsbeschränkungen*, or *GWB* ).

*Completion of the Internal Electricity Market/The Second Electricity Directive.* On June 26, 2003, the EU Energy Council adopted the Second Electricity Directive, which replaces the First Electricity Directive. The Second Electricity Directive requires full market opening to competition in each member state by July 1, 2004 for commercial customers and by July 1, 2007 for household customers. The Directive also sets forth general rules for the organization of the EU electricity market, such as public service obligations, customer protection measures and provisions for monitoring the security of the EU's electricity supply. The existing framework of negotiated third-party access in Germany is no longer allowed under the Second Electricity Directive. Instead, the Directive requires that at least a methodology for calculating grid tariffs be fixed by law or approved by an independent regulatory body which is required to be established. In addition, the Second Electricity Directive contains provisions requiring the legal unbundling of transmission and distribution system operators as well as mandatory electricity labelling for fuel mix, emissions and waste data.

The following paragraphs provide more detail on the independent regulatory authority, legal unbundling, electricity labelling and certain of the public service requirements:

Each of the Second Electricity Directive and the Second Gas Directive (described in Ruhrgas Regulatory Environment ) requires the establishment of a regulatory body for the energy industry which will be independent of the interests of the electricity and gas industries. This regulatory body will be responsible for ensuring non-discriminatory grid access, monitoring of effective competition and the efficient functioning of the market. It will be responsible for fixing or approving the terms and conditions for connection and access to national transmission networks (or at least the methodologies to calculate such terms), including transmission and distribution tariffs, and for the provision of balancing services. It will also have the authority to require

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transmission and distribution system operators, if necessary, to modify their terms and conditions in order to ensure that they are proportionate and applied in a non-discriminatory manner.

In addition, the Second Electricity Directive requires that each transmission and distribution system operator be independent, at least in terms of legal form, organization and decision-making, from other activities not relating to transmission or distribution ( legal unbundling ). This requirement does not imply or result in the requirement to separate the ownership of assets of the transmission network from the vertically integrated undertaking. The Second Electricity Directive enables member states to postpone the implementation of provisions for legal unbundling of distribution system operations until July 1, 2007 at the latest. Derogations from legal unbundling may also be granted to distribution companies serving less than 100,000 connected customers or small isolated networks. Member states can request an exemption from legal unbundling if they can prove that total and non-discriminatory access to the distribution networks can be achieved by other means.

The Second Electricity Directive requires electricity suppliers to specify in or with bills, as well as in promotional materials for end user customers, the following information:

The contribution of each energy source to the overall fuel mix of the supplier over the preceding year; and

A reference to where information is publicly available on the environmental impact of the supplier's activities, including the amount of CO<sub>2</sub> and radioactive waste produced.

Finally, the Second Electricity Directive requires that household customers and where member states deem it appropriate small companies are required to be provided with universal service, *i.e.*, the right to be supplied with electricity and gas of a specified quality at reasonable prices, which are to be determined on a cost plus basis.

The Second Electricity Directive is required to be implemented by each member state by July 1, 2004.

*Regulation on Cross-Border Electricity Trading.* The Second Electricity Directive is accompanied by a new EU regulation on cross-border electricity trading (Regulation (EC) No 1228/2003 on Conditions for Access to the Network for Cross-Border Exchanges in Electricity, or the Regulation on Cross-Border Electricity Trading ). This regulation requires the establishment of a committee of national experts chaired by the EU Commission. This committee will adopt guidelines on member state compensation for electricity transit flows, on the harmonization of national transmission tariffs and on the allocation of cross-border interconnection capacity as of 2005.

At the EU level, a provisional tariff system for cross-border electricity trading came into effect in March 2002. It was based on the proposals by the European Transmission System Operators Association and will be valid, with slight modifications, until the end of 2004. The system provides a fund mechanism to cover costs resulting from cross-border trades. Until 2003, money for the fund was raised from two sources: a charge on exports and socialized costs charged to all electricity customers. As of January 1, 2004, a modified cross-border tariff system has taken effect. Instead of charging export fees for international electricity flows, transmission system operators must now pay into a fund according to their net physical import and export flows. As before, the distribution of the funds depends on transit volume, so as a large transit country Germany continues to be a net receiver of funds. This transitional tariff system will remain in effect until the guidelines outlined in the EU's Regulation on Cross-Border Electricity Trading are applicable, most likely in 2005.

*Revisions of the Energy Law.* Prior to the adoption of the Second Electricity Directive in 2003, the German government amended the Energy Law in May 2003. This amendment required the Federal Ministry of Economics and Labor to investigate how the system of NTPA influences competition in the energy markets and whether improvements in grid access are necessary, and to report its findings to the German Parliament. The so-called monitoring report (*Report of the Federal Ministry of Economics and Labor to the Lower House of the German Parliament About the Impact of the Association Agreements on the Energy Industry and on Competition*), which is a status report of the Federal Ministry of Economics and Labor to the German Parliament, was published in September 2003. The monitoring report contains a positive assessment of competition in the electricity market, and found it has a well-functioning grid access system accepted by all market participants. The monitoring report criticizes grid access charges as too high, but recommends a balance between price levels and security of energy



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supply, acknowledging the particular responsibility of energy companies for reliable system operations as well as for maintenance and extension of infrastructure. Therefore, according to the monitoring report, industry framework conditions should provide the companies with adequate incentives for investment in a reliable infrastructure.

With respect to the independent regulatory authority required by the Second Electricity Directive, the monitoring report suggests that the main tasks of the regulatory authority should be to ensure effective, non-discriminatory network access for all users and to promote competition in the energy markets, using its powers of intervention only as necessary. The report also specifies that the industry participants that drew up the current NTPA agreements (discussed in Electricity Grid Access below) should cooperate closely with the German government as it seeks to define the new regulatory authority's role and competence in the coming months. Although an initial draft of the amended Energy Law implementing the Second Electricity Directive was published at the end of February 2004, the Company cannot yet predict any consequences of this legislation, as the relevant issues will also be subject to several new regulations not yet published. The government has stated it does not expect to meet the formal Second Electricity Directive implementation deadline of July 1, 2004, but expects to enact a revised Energy Law by January 2005 at the latest.

*Security of Energy Supply.* In December 2003, the European Commission proposed a legislative package on energy infrastructures and security of supply. The proposed legislation has been sent to the European Parliament and the Energy Council for discussion, but adoption is not expected in 2004. The purpose of the proposed legislation is to promote investment in the EU energy sector in order to ensure high quality public services and to introduce measures supporting the security of the EU's energy supply. The legislative package also includes a directive proposal to introduce measures to improve energy demand management and a regulation proposal to harmonize cross-border gas flows. The most important legislative proposals for the electricity industry are:

*Directive proposal on measures to safeguard security of electricity supply and infrastructure investment.* This proposed directive introduces minimum standards for grid operators to provide security of electricity supply as well as rules on ensuring reserve capacity and on approval procedures for investments in cross-border transmission lines.

*Directive proposal on energy end-use efficiency and energy services.* This proposed directive sets an annual reduction target of one percent for energy used in each member state, which would be achieved by boosting energy efficiency measures in the EU.

*The Electricity Feed-in Law and the Renewable Energy Law.* Under the German *Stromeinspeisungsgesetz* (law governing renewable electricity fed into the power grid, or Electricity Feed-In Law), which came into effect simultaneously with the Energy Law in April 1998, all regional utilities with standard rate customers were required to pay for energy produced from renewable resources, including wind-generated electricity, fed into the grid. The price paid by the regional utility to the generator of renewable energy, determined by the average electricity price to the end user nationwide, typically exceeded the regional utilities' procurement costs, thereby forcing regional utilities to pay part of the costs of renewable sources of energy. Regional utilities in whose supply area the feeding plants are located must bear these costs.

As this led to distortions in competition, the German Parliament passed another change in the Electricity Feed-in Law, which came into effect April 1, 2000. Important aspects of the changed law, which is called the Renewable Energy Law, include:

**Fixed tariffs for renewable energies:** Tariffs for renewable energies are fixed. For wind turbines coming online in 2004, the tariff is fixed at 8.8 cent/kWh. This tariff is limited in time, with a general term of five years that may be extended up to 20 years depending upon the actual production volume of the installation. After five years, the tariff is reduced to 5.9 cent/kWh if 150 percent or more of a reference production, which is the potential production of the installed wind turbine operating with a constant wind speed of five meters per second over five years, has been produced. In addition, the fixed

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tariff is reduced by 1.5 percent for new wind turbines every year. For wind turbines coming online in 2005, this means a reduction to 8.7 cent/kWh and 5.8 cent/kWh respectively.

**National burden sharing:** The Renewable Energy Law assumes that the subsidy obligation would be passed on in full to the supplying companies. At the transmission company level, there is an equalization process covering the whole country. Each transmission company first determines how much electricity it takes up under the Renewable Energy Law and how much electricity in total flows through its grid to end users. An equalization will then be effected among all transmission companies so that all transmission companies take on and subsidize proportionally equivalent amounts of renewable electricity under the statute. The transmission company will then pass these quantities of electricity and the corresponding costs on to the suppliers delivering electricity to end users in its region in proportion to their respective sales.

The Renewable Energy Law has abolished regional differences in electricity costs for consumers and the related competitive disadvantages for E.ON Energie. However, the growing production of energy from wind turbines leads to growing costs for balancing power and for grid extensions. These costs are currently not part of the national burden sharing mechanism. They are a growing burden for E.ON Energie, however, since approximately 44 percent of Germany's wind turbines are situated in the grid control area of E.ON Energie AG, an area that meets approximately 30 percent of German electricity demand. The German government is currently in the process of amending the Renewable Energy Law. The proposed amendment would lead to slightly lower tariffs for wind turbines onshore and higher tariffs for small biomass, geothermal and photovoltaic installations, as well as higher tariffs for wind turbines installed offshore. E.ON Energie believes that the tariffs for renewable energies are still too high. However, the proposed amendment of the Renewable Energy Law introduces a burden sharing mechanism for balancing power, which E.ON Energie supports. The burden sharing mechanism would lead to a fairer distribution of the growing costs for balancing power among all German grid operators. As a result, E.ON Energie expects to be able to pass a certain amount of balancing costs on to other grid operators. The amendment is expected to be agreed on in the first half of 2004 and may be enacted in mid-2004.

In addition, in two court rulings dated December 22, 2003, the German Federal Court of Justice found that contractual provisions used by E.ON's competitor RWE to impose taxes and levies upon the customer (so-called *Steuer- und Abgabeklauseln*) also apply to the additional burdens placed on electric power companies by the Renewable Energy Law, despite the fact that those burdens are neither taxes nor levies in a legal sense. Although E.ON was not a party to the proceedings that resulted in these rulings, it believes these rulings could be a legal base for all German electric power companies to pass the costs imposed by the Renewable Energy Law on to their customers.

*Co-Generation Protection Law.* In order to protect existing CHP plants and give incentives to improve them, the German Parliament passed a new Co-Generation Protection Law (*Kraft-Wärme-Kopplung-Gesetz*) on March 1, 2002, which came into effect on April 1, 2002 and replaces the former Co-Generation Protection Law of May 2000. The new law, which expires at the end of 2010, requires local network operators to pay CHP plants the following bonus payments for electricity that is produced in combination with heat and fed into the public grid:

CHP plants that were commissioned before 1990 received 1.53 cent/kWh in 2002 and 2003, and will receive 1.38 cent/kWh in 2004 and 2005 and 0.97 cent/kWh in 2006;

CHP plants that were commissioned after 1990 received 1.53 cent/kWh in 2002 and 2003, and will receive 1.38 cent/kWh in 2004 and 2005, 1.23 cent/kWh in 2006 and 2007, 0.82 cent/kWh in 2008, and 0.56 cent/kWh in 2009;

CHP plants that are modernized received 1.74 cent/kWh in 2002 and 2003, and will receive 1.74 cent/kWh in 2004, 1.69 cent/kWh in 2005 and 2006, 1.64 cent/kWh in 2007 and 2008, and 1.59 cent/kWh in 2009 and 2010; and

Small CHP plants with an installed capacity of less than two MW received 2.56 cent/kWh in 2002 and 2003, and will receive 2.4 cent/kWh in 2004 and 2005, 2.25 cent/kWh in 2006 and 2007, 2.1 cent/kWh in 2008 and 2009, and 1.94 cent/kWh in 2010.

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The local network operators are in turn allowed to pass on the costs of the bonus payments to the grid operators, which may pass on the costs of the bonus system to their customers. A nationwide equalization process among the utilities was implemented in order to ensure the equal distribution of the costs of the bonus system across utilities. In 2004, every consumer will have to pay an additional approximately 0.3 cent/kWh. Industrial customers only have to pay 0.05 ct/kWh for that portion of their electricity consumption exceeding 100,000 kWh per year. For those customers whose electricity costs are higher than 4 percent of their total turnover, this fee for the consumption exceeding 100,000 kWh per year is limited to 0.025 cent/kWh. In 2004, the government together with the utilities will start a monitoring process to evaluate the extent to which CO<sub>2</sub> emissions have been reduced as a result of this law and whether the current bonus payments are adequate.

The European Union has passed a co-generation directive in order to promote the use of co-generation and thereby increase energy efficiency and reduce CO<sub>2</sub> emissions. The directive corresponds largely to the German national CHP legislation and will not require a significant change in current German law.

*Electricity Grid Access.* The First Electricity Directive was implemented in Germany with a framework for negotiated third-party access agreed by all German utilities and certain large industrial customers for access to high-, medium- and low-voltage transmission systems (*Verbändevereinbarung*, amended as *Verbändevereinbarung II* and *Verbändevereinbarung II+*). As of January 1, 2002, *Verbändevereinbarung II+* provided for an amended framework for objective and non-discriminatory grid access by increasing transparency with respect to grid prices in order to make grid access more customer-friendly. In addition, traders were offered more flexibility and the option of booking intra-day capacities. This agreement was valid until December 2003 as part of the current Energy Law. Although the *Verbändevereinbarung II+* is not in force anymore, utilities still act according to its rules and will continue to do so until the revised Energy Law is passed.

*Electricity Rate Regulation.* Prices at which local and regional distributors sell electricity to standard-rate customers are currently regulated by the economics ministries of each of the German states (as provided in the Federal Electricity Tariff Regulation (*Bundestarifordnung Elektrizität*, or BTO Elt )) and are normally reset at least every two years. The rates are set at a level to assure an adequate return on investment on the basis of the costs and earnings of the electricity company. However, these governmentally-set ceiling rates do not represent the actual market situation, with numerous rates which are below the regulated tariffs designed to meet different customers' special needs. The average price charged by utilities for an average standard-rate customer in Germany with an annual consumption of 3,500 kWh was, according to the VDEW, 17.19 cent per kWh in 2003 (all taxes included). The average price quoted by the German Association for Energy Consumption ( VEA ) for industrial customers was 6.6 cent per kWh, which is slightly lower than the average price per kWh charged by E.ON Energie AG (6.8 cent per kWh), as quoted by VEA as of January 1, 2004 (net of tax). As standard-rate customers may choose between different suppliers, rate regulation is generally viewed as no longer necessary, and E.ON Energie believes it may be abandoned. Prices for sales of electricity by E.ON Energie to regional electricity companies, municipal utilities and large industrial customers are not regulated by the BTO Elt; however, they are governed by the GWB, which requires that no patently unreasonable rates are set.

*Greenhouse Gas Emissions Trading.* In order to reach the greenhouse gas emissions reduction targets set by the Kyoto Protocol to the United Nations Framework Convention on Climate Change (the Kyoto Protocol ), the EU adopted a directive on emissions trading (Directive 2003/87/EC Establishing a Scheme for Greenhouse Gas Emission Allowance Trading Within the Community, or the Emissions Trading Directive ) on October 13, 2003. The Emissions Trading Directive establishes a CO<sub>2</sub> emissions allowance trading system for member states which will start in 2005 with a test phase, followed by the first obligatory commitment period under the Kyoto Protocol from 2008 to 2012. The other five identified greenhouse gases, as defined by the Kyoto Protocol, may be included in the scheme from 2008. Since the test phase is not obligatory under the Kyoto Protocol, some exemptions such as opt-outs for certain installations have been included during this phase, but E.ON does not expect these exemptions to be important for the German energy industry. Under the emissions allowance trading system, operators of identified types of industrial installations within the EU (including fossil fuel-fired power plants with a thermal input exceeding 20 MW) will be obliged to acquire an emissions permit that will entitle the installation to emit a specified quantity of CO<sub>2</sub>. Although the national implementation of the Emissions Trading Directive is not expected to be finalized before mid-2004, preliminary drafts of national legislation provide that emissions allowances will be allocated to installations free of charge in Germany until at least 2007,

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and probably until 2012. If an installation exceeds the level of emissions covered by its allowances, it will be obliged to buy additional allowances on the market and to pay a penalty fee. E.ON Energie expects many of its gas, oil and coal-powered generating facilities to be covered by national legislation implementing the Directive. However, given that the required legislation has not yet been finalized and that the Company must also evaluate the trading systems adopted by other member states, E.ON Energie is as yet unable to quantify the potential impact of the Emissions Trading Directive on its operations.

***Competitive Environment***

Since 1998, liberalization of the electricity markets in the EU has greatly altered competition in the German electricity market, which was formerly characterized by numerous strong competitors. Following liberalization, significant consolidation has taken place in the German market, resulting in three mergers of major interregional utilities in recent years: VEBA and VIAG forming E.ON, RWE and VEW forming RWE (both in 2000) and Hamburgische Electricitäts-Werke AG ( HEW )/Bewag Berliner Kraft und Licht Aktiengesellschaft ( BEWAG )/VEAG/Lausitzer Braunkohle Aktiengesellschaft ( LAUBAG ) forming Vattenfall Europe in 2002. In 2003, E.ON, RWE, Vattenfall Europe and the other remaining major interregional utility, EnBW, supplied approximately 65 percent of the total electricity production in Germany.

The interregional utilities own the high-voltage transmission lines in their traditional supply areas and are active in all phases of the electricity business. In addition to the interregional utilities, there are about 900 electric utilities in Germany at the state, regional and municipal level, many of which are partly or wholly owned by state or municipal governments. These utilities may be involved in various combinations of the generation, transmission, distribution and supply and trading functions. The liberalization of the electricity market in Germany has also led to new market structures with new market participants. The market for electricity has become more liquid and more competitive, and currently has the highest number of participants in continental Europe. The volume of electricity trading has greatly increased, reaching a trading volume of 391 TWh at the German Power Exchange's Spot and Futures Market in 2003, more than twice the volume of 2002. In addition, approximately 200 new market participants have entered the German market since 1998, with more than half of them engaged in electricity trading. The German Power Exchange (EEX) has also become a benchmark for electricity prices in central Europe.

Liberalization of the electricity market in Germany caused electricity prices to decrease in 1998, with significant declines in some market segments. These declines were largely due to aggressive price setting by new competitors and suppliers as well as other factors such as significant power plant overcapacity in Germany and Europe and relatively high and increasing price transparency. The rate of price declines began to slow in the second half of 2000, and prices have increased since 2001 but have developed differently in each of the customer segments. In 2003, electricity prices in Germany have continued to recover. Nevertheless, in the retail business, prices paid by customers in 2003 were three to ten percent lower than in the liberalization year 1998, while in the large industrial customers and regional distributors segment, prices remained lower than in 1998 but increased seven percent compared with 2002. A significant factor in this price recovery are new or increased costs faced by electricity companies since the beginning of liberalization. Among these new or increased costs are the electricity tax (introduced in 1998 and subject to annual increases through 2003), duties and additional costs attributable to compliance with new legislation, including the Renewable Energy Law and Co-Generation Protection Law, as well as higher costs incurred in procuring balancing power to cover fluctuations in the availability of electricity from renewable resources such as wind. As most distributors have tried to pass these increases through to their customers, electricity prices have risen more rapidly than the associated margins for generators in recent years. Taxes and duties accounted for approximately 41 percent of German electricity prices for household customers in 2003, compared with about 25 percent before deregulation in 1998. See also Item 5. Operating and Financial Review and Prospects Results of Operations. E.ON Energie expects electricity prices in Germany to further increase in 2004.

German electricity prices for industrial customers are no longer among the highest in Europe. However, high environmental and nuclear safety standards, as well as high investments in new lignite power plants, taxes on electricity, the requirements of the Co-Generation Protection Law and the Renewable Energy Law's requirement that regional utilities purchase electricity generated from renewable resources impose a considerable burden on

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German electricity prices. E.ON Energie still believes that it will be able to compete effectively in the European Union. In addition, E.ON Energie believes that the liberalization of the gas and electricity markets may open new business opportunities. However, E.ON Energie may be unable to compete as effectively as other electricity companies. This could be due to higher electricity production or procurement costs, lack of an effective marketing program, unprofitable, inefficient or loss-making results from trading operations or other factors. Any of these factors could materially and adversely affect E.ON's financial condition and results of operations. See also Item 3. Key Information Risk Factors.

Outside Germany, the energy markets in which the Company operates are also subject to strong competition. The Company cannot guarantee it will be able to compete successfully in electricity markets where it already is present or in new electricity markets the Company may enter.

**Environmental Matters**

*Air Pollution.* All of E.ON Energie's plants are subject to EU and/or national regulations, and are equipped where necessary with pollution removal devices. The most important pollution law applicable to E.ON Energie's German plants is the German Federal Pollution Control Act (*Bundesimmissionsschutzgesetz*, or BImSchG) and its implementing ordinances. One of such ordinances, the Ordinance on Large Combustion Plants (*Verordnung über Großfeuerungsanlagen*, or 13. BImSchV), sets stringent emission limits for power stations for all known air pollutants, such as sulphur dioxide (SO<sub>2</sub>), nitrogen oxides and dust. The emissions of E.ON Energie's power plants are continuously measured and reported. Due to the extensive installation of scrubbers, catalysts and other pollution control devices, E.ON Energie's power plants comply with all current requirements. In order to implement the EU environmental guideline 2001/80/EU, the German government is planning an amendment to 13. BImSchV in 2004 to introduce lower emission limits. E.ON Energie is currently evaluating the effects of the proposed lower emission limits on its power plants, and may determine that it needs to make investments in pollution control devices. E.ON is currently unable to predict whether investments will be necessary, however, since the proposed legislation is still being discussed.

*Nuclear Energy.* Details of E.ON Energie's nuclear power operations in Germany, Sweden (until year-end 2003) and those of its 20 percent minority investee BKW in Switzerland can be found under German Operations Power Generation and International Shareholdings The Nordic Countries above. E.ON Energie does not own or operate any nuclear power facilities in any other country. German safety standards for nuclear power stations are among the most stringent in the world. German nuclear power regulations are found in the AtG and a number of national regulations, guidelines and technical rules. The German regulatory framework regarding nuclear power regulations is also governed by international agreements, including the Euratom Agreement, dated March 23, 1957 (*Euratomvertrag*), the Paris Liability Agreement, dated July 29, 1960 (*Pariser Haftungsübereinkommen*), and the Non-Proliferation Treaty, dated July 1, 1968 (*Nichtverbreitungsvertrag*).

Under the AtG, the import, export, transportation or storage of nuclear materials (*Kernbrennstoff*) requires the approval and supervision of regulatory authorities. The building, operating, owning or materially altering by any entity of any plants or installations that produce, fission or otherwise process or reprocess nuclear materials (Nuclear Plants) also requires approvals of, and is supervised by, regulatory authorities. Approvals can be subject to limitations or conditions, including conditions subsequent, and may also be subsequently revoked if they are not complied with or one of their preconditions has ceased to exist. The regulatory authorities may also give orders to obtain information from, enter and inspect any Nuclear Plants.

According to the AtG, radioactive wastes and dismantled radioactive parts must either be recycled or permanently disposed of by any entity handling or otherwise using nuclear power. The AtG follows the so-called polluter pays principle, which requires such entity to pay for the recycling or permanent disposal of nuclear waste.

In 1998, there was public debate about contamination in connection with radioactive waste transport facilities. In May 1998, the German Ministry for Environment, Nature Conservation and Nuclear Safety ordered all nuclear transport to cease until the reasons for such contamination were clarified and countermeasures were taken. Transport container loading procedures were identified as the cause of contamination and improvements in

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such procedures have been implemented. The ministry therefore issued a new permit for the transport of spent nuclear fuel elements and transport resumed in 2001.

In Sweden, the regulatory framework regarding nuclear power regulations is also governed by the above-mentioned international agreements. In addition, Swedish nuclear power regulations are governed by Swedish law, mainly the Law Concerning Nuclear Activity, the Law Concerning Nuclear Liability and the Law Concerning Financing of Treatment of Nuclear Waste. Under Swedish law, the owner of a nuclear power station is obliged to conduct operations in such a manner that the required safety standards are maintained and is responsible for nuclear waste storage. The owner must also carry out the phase out of nuclear operations, including plant decommissioning. A license is required in order to own a nuclear facility, which is granted by the Swedish government on recommendation by the Swedish Nuclear Authority, which supervises all nuclear facilities in Sweden.

According to the Law Concerning Financing of Treatment of Nuclear Waste, the owner of a nuclear facility in Sweden is under the obligation to pay an amount determined by the Swedish government for each kWh produced in the facility to the Swedish Nuclear Waste Fund. The amounts thus paid, together with any capital gains on the amounts, are to cover the costs for phase out and closure of the facility. In accordance with Swedish law, Sydkraft has also given guarantees to governmental authorities to cover possible additional costs related to the disposal of high-level radioactive waste and nuclear power plant decommissioning. See also Note 25 of the Notes to Consolidated Financial Statements.

*Liability.* In case of environmental damages, the owner of a German facility is subject to liability provisions that guarantee comprehensive compensation to all injured parties. Because of achievements in pollution control, the issue of environmental damage due to air pollutants from electric utilities has not recently been a subject of public debate in Germany. In general, subjects such as acid rain, as well as high concentrations of ground level ozone have been linked to accumulated deposits from many emission sources or, in the case of the ozone, predominantly from traffic emissions. There has been some relaxation in the evidence required under the German Environmental Liability Law (*Umwelthaftungsgesetz*) to establish and quantify environmental claims. If claims were to arise in relation to environmental damages and plaintiffs were successful in overcoming problems of proof and other issues, such claims could result in costs to E.ON Energie that might be material. So far as E.ON Energie is aware, no material environmental claims have been made against it and, under current circumstances, E.ON Energie does not believe that there is a significant risk of material liability in respect of any potential claims.

In case of a nuclear accident in Germany, the owner of the reactor, the factory or the nuclear materials storage facility (the Proprietor) is subject to liability provisions that guarantee comprehensive compensation to all injured parties. Under German nuclear power regulations, the Proprietor is strictly liable, and the geographical scope of its liability is not limited to Germany or the contractual territory of the Paris Liability Agreement. The Proprietor is in principal subject to unlimited liability. The AtG and the Regulation regarding the Provision for Coverage pursuant to the AtG (*Atomrechtliche Deckungsvorsorge-Verordnung*, or AtDeckV) require every Proprietor to provide liability coverage by either insurance or financial security. The amount of coverage required is reevaluated every five years. In February 2002, the AtG was amended and the required liability coverage was increased from 256 million to 2.5 billion. E.ON Energie has insurance covering the first 256 million of damages. To provide liability coverage for the additional amounts required by the AtG amendment, the German nuclear power plant operators entered into a solidarity agreement to cover the increase, which provides that the costs of liability exceeding the operator's own resources and those of its parent company in the event of a nuclear accident will be covered by a pool, with the nuclear facility operators having a mutual responsibility to cover each other's damages. For details, see Note 25 of the Notes to Consolidated Financial Statements. For this reason, the AtG amendment has resulted in only a slight cost increase for liability coverage.

In Sweden, the owner of a nuclear facility is liable for damages caused by accidents in the nuclear facility and accidents caused by nuclear substances to and from the facility. The liability is limited to an amount equal to 430 million per year, which amount must be insured according to the Law Concerning Nuclear Liability. Sydkraft has the necessary insurance for its nuclear power plants.

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*Nuclear Package/Directives for Nuclear Security, Decommissioning and Disposal.* In January 2003, the European Commission presented the so-called Nuclear Package, a set of draft directives concerning nuclear security and decommissioning and the disposal of nuclear waste.

The draft directive on nuclear disposal sets forth definite deadlines by which member states will be required to install and operate facilities for the permanent storage of nuclear waste. The draft directive on nuclear security and decommissioning calls for general nuclear security standards that would be applicable in all EU member states. The original draft directive included a provision that each member state require its nuclear power producers to create a separate fund that can be drawn on for expenses relating to decommissioning of nuclear power plants and the permanent storage of waste materials. In its most recent proposal, the European Commission no longer insists on externally administered decommissioning funds, which means that the current decommissioning fund regime in Germany already complies with the European Commission's proposal. E.ON therefore hopes that adoption of the proposed draft directive would not require E.ON Energie to increase its existing provisions and would not have an impact on cash flow. However, the definitive text of the directive has not yet been determined and no assurance can be given that the adoption and implementation of the directives would not have an adverse effect on the Company's results of operations and financial condition. The German government has made clear that it will only approve the directives if their final provisions are compatible with its current agreement with the operators of nuclear power plants in Germany and the parties' existing plans for decommissioning and waste disposal.

## **RUHRGAS**

### *Overview*

E.ON completed the acquisition of all of the outstanding shares of Ruhrgas in March 2003 and has fully consolidated Ruhrgas' results since February 2003. Details on E.ON's acquisition of Ruhrgas, including the actions taken by E.ON and Ruhrgas in 2003 and early 2004 to fulfill relevant conditions, the status of integration efforts and progress made on realizing synergies between the two companies are described in

History and Development of the Company - Ruhrgas Acquisition. In terms of sales, Ruhrgas is one of the leading non-state-owned gas companies in Europe and the largest gas company in Germany. For the period from February through December 2003, Ruhrgas recorded revenues of 12.1 billion (which included 2.5 billion in natural gas taxes that were remitted to the German tax authorities) and internal operating profit of 1.1 billion. 11.2 billion of Ruhrgas' revenues for this period were generated in Germany and 0.9 billion was generated abroad.

As part of E.ON's on.top project, Ruhrgas was named the lead company of the new Pan-European Gas market unit and has taken over responsibility for all of E.ON's non-retail gas activities in continental Europe. Accordingly, E.ON Energie has transferred or will transfer certain of its shareholdings in gas distribution and exploration companies to Ruhrgas, while Ruhrgas has transferred or will transfer certain of its downstream gas activities in central Europe to E.ON Energie. E.ON Energie will also transfer its gas trading activities to Ruhrgas in 2004. For more information about E.ON's on.top project and the relevant changes to Ruhrgas' business, see History and Development of the Company Group Strategy - On.top.

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*Operations.* Ruhrgas' principal business is the supply, transmission, storage and sale of natural gas. Through Ruhrgas AG and its subsidiaries, Ruhrgas is engaged in:

Supply:	the purchase of natural gas under long-term contracts with foreign and domestic producers, including the Russian gas company Gazprom, the world's largest gas producer in terms of volume, in which Ruhrgas holds a small shareholding. Ruhrgas has also established U.K. and Norwegian exploration and production subsidiaries in order to increase its involvement in gas exploration and production in these countries. To supplement its supply as well as its sales business, Ruhrgas also engages in short-term gas trading activities and purchases small volumes of coke oven gas;
Transmission System:	the transmission of gas within Germany via a network of approximately 11,000 km of pipelines in which Ruhrgas holds an interest;
Storage:	the storage of gas in a number of large underground natural gas storage facilities; and
Sales:	the sale of gas within Germany to regional and supraregional distributors, municipal utilities and industrial customers, as well as the export of gas to a number of other European countries.

The following table provides information about Ruhrgas' purchases and sales of natural gas and coke oven gas for the full year 2003 and the eleven-month period during which it was consolidated by E.ON. The difference between gas supplies and gas sales in any given period is due to storage and metering differences and occurs routinely.

Purchases(1)	February- December 2003 billion kWh	%	Total 2003 billion kWh	%
Imports	454.1	82.3	515.8	82.4
German sources	97.5	17.7	110.1	17.6
Total	551.6	100.0	625.9	100.0
Sales(2)				
Distributors	349.9	63.2	405.0	63.3
Municipal utilities	139.9	25.3	163.9	25.6
Industrial customers	63.5	11.5	70.6	11.1
Total	553.3	100.0	639.5	100.0

(1) All purchase and supply data presented herein includes relatively minimal amounts of gas that Ruhrgas does not consider part of its primary business, including volumes handled for third parties. These volumes amounted to 10.7 billion kWh and 12.5 billion kWh for the period from February to December 2003 and for the full year, respectively.

(2) Sales figures include both domestic sales and exports.



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In addition to its natural gas supply, transmission system, storage and sales businesses, Ruhrgas subsidiary Ruhrgas Energie Beteiligungs-AG ( RGE ) holds primarily minority shareholdings in a number of gas distributors and energy utilities, while its subsidiary Ruhrgas Industries AG ( Ruhrgas Industries ) manages Ruhrgas industrial businesses, which focus on metering and industrial furnaces. The following chart summarizes the company structure of Ruhrgas and the respective fields of operations of Ruhrgas major subsidiaries, each of which is wholly-owned:

On January 1, 2004, in fulfillment of one of the requirements of the ministerial approval of E.ON's acquisition of Ruhrgas, Ruhrgas transferred its gas transmission business to a new subsidiary, Ruhrgas Transport AG & Co. KG ( Ruhrgas Transport ). See Transmission System Ruhrgas Transport below.

***Supply***

Ruhrgas purchases natural gas from producers in six countries: Russia, Norway, the Netherlands, Germany, the United Kingdom and Denmark. In the eleven months following its acquisition, Ruhrgas purchased a total of 551.6 billion kWh of gas, of which approximately 82 percent was imported and approximately 18 percent was purchased from German producers. Ruhrgas was the largest gas purchaser in Germany in 2003, acquiring more than half of the total volume of gas purchased for the German market. Of the 551.6 billion kWh of gas purchased in the eleven months following its acquisition, Ruhrgas bought approximately 30 percent from Russia and approximately 28 percent from Norway, its two largest suppliers. The following table provides information on the

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amount of gas purchased from each country and its percentage of the total volume of Ruhrgas gas supply in the full year 2003 and the eleven-month period during which it was consolidated by E.ON:

Sources of Gas	February- December 2003 billion kWh	%	Total 2003 billion kWh	%
Germany	97.5	17.7	110.1	17.6
Russia	167.7	30.4	186.6	29.8
Norway	156.5	28.4	174.4	27.9
The Netherlands	89.4	16.2	109.9	17.5
United Kingdom	24.8	4.5	27.3	4.4
Denmark	15.7	2.8	17.6	2.8
Total	551.6	100.0	625.9	100.0

As is typical in the gas industry, these purchases were made under long-term supply contracts that Ruhrgas has with one or more gas producers in each country. Purchases under such contracts provided for nearly all of the gas bought by Ruhrgas in 2003; the remaining amounts were purchased on international spot markets or pursuant to short-term contracts. Ruhrgas' current long-term contracts with fixed terms (so-called "supply" type contracts) have termination dates ranging from 2004 to 2029 (subject in certain cases to automatic extensions unless either party gives notice of termination), while so-called "depletion" type contracts terminate upon the exhaustion of economic production from the relevant gas field. Ruhrgas believes that its existing contracts secure the supply of a total maximum volume of approximately 10 trillion kWh of natural gas over the period to 2029. As is standard in the industry, the price Ruhrgas pays for gas under these contracts is calculated on the basis of complex formulas incorporating variables based upon current market prices for fuel oil, gas oil, coal and/or other competing fuels, with prices being automatically re-calculated periodically, usually monthly or quarterly. The contracts also generally provide for formal revisions and adjustments of the price and other business terms to reflect changes in the market (in many cases expressly including changes in the retail market for natural gas and competing fuels), generally providing that such revisions may only be made once every few years unless the parties agree otherwise. Claims for revision are subject to binding arbitration in the event the parties cannot agree on the necessary adjustments. Certain contracts also provide Ruhrgas with the possibility of buying specified quantities of gas at prices linked to those on international spot markets. The contracts also require Ruhrgas to pay for specified minimum quantities of gas even if it does not take delivery of such quantities, a standard gas industry practice known as "take or pay." Take or pay quantities are generally set at approximately 80 percent of the firm contract quantities. To date, Ruhrgas has been able to avoid the application of these take or pay clauses in nearly all cases. The contracts also include quality and availability provisions (together with related discounts for non-compliance), force majeure provisions and other industry standard terms. Ruhrgas generally takes delivery of the gas it imports at the point at which the relevant pipeline crosses the German border. For additional information on these contractual obligations, see Item 5. Operating and Financial Review and Prospects - Contractual Obligations.

In the medium and long term, rising demand for gas in Europe, combined with falling indigenous production in European countries, particularly in the United Kingdom, will lead to a greater reliance on imports by European gas wholesalers. Accordingly, in the near future, gas producers will have to invest, in some cases quite considerably, in expanding their production capacities. In addition, the natural decline in output from older fields will need to be made up by the development of new fields. Ruhrgas believes that long-term gas purchase contracts will remain crucial to European gas supplies, ensuring a fair balance of risks between producers and importers. Ruhrgas believes the price adjustment provisions in such contracts safeguard sufficient supplies of gas at competitive prices, while the take or pay provisions give producers the necessary long-term security for investing. The economic significance of such contracts has been acknowledged by both the German government and, to an increasing extent, by the EU commission, and Ruhrgas seeks to balance its purchase and sale obligations so as to minimize risk. For information about risks relating to long-term gas supply contracts, see Item 3. Key Information - Risk Factors.

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Ruhrgas supply sources are discussed below on a country-by-country basis.

*Russia.* In the period from February to December 2003, Ruhrgas purchased 167.7 billion kWh of gas, or 30.4 percent of its total gas purchased, from Russia. Russia is the largest supplier of natural gas to Ruhrgas, while Ruhrgas is the second-largest purchaser of gas from Russia. As with most of its gas imports, Ruhrgas takes ownership of its Russian gas when it reaches the German border.

All of Ruhrgas purchases of Russian natural gas are made pursuant to long-term supply contracts with OOO Gazexport, the subsidiary of Gazprom responsible for exports. Ruhrgas holds a 3.5 percent direct interest in Gazprom; an additional stake of 2.9 percent in Gazprom is attributable to Ruhrgas on the basis of contractual arrangements relating to its minority interest in a Russian entity that holds these shares. In 2003, this Russian entity increased its holdings in Gazprom, thus strengthening Ruhrgas position as the largest foreign investor in Gazprom. Ruhrgas considers its shareholding in Gazprom to be an important element supporting its long-term supply relationship with Gazprom, which is the world's largest gas producer, having produced approximately 5.6 trillion kWh of gas in 2003. Ruhrgas expects the importance of Russian gas exports for Europe to increase as the indigenous production of important European supply countries decreases. Gazprom has indicated it will flexibly cover about one third of Ruhrgas gas requirements for the German market until 2030. Ruhrgas and Gazprom may enter into new gas supply contracts in the future which will provide a contractual basis for this arrangement.

Since the summer of 2002, Ruhrgas has been involved in efforts to set up an international consortium for the operation, rehabilitation and further development of the Ukrainian gas transit system. This project is an initiative of the Russian and Ukrainian presidents and the German Chancellor. Currently, approximately 80 percent of the Russian gas deliveries for western Europe and more than 90 percent of the Russian gas purchased by Ruhrgas flow through the Ukrainian pipeline system on the way to their final delivery points. Ruhrgas therefore believes that secure transit through the Ukraine is of paramount importance for supply security in Germany and Europe as a whole.

In addition, Ruhrgas is a member of a consortium that holds a minority interest in Slovenský plynárenský priemysel a.s. ( SPP ), the operator of the gas transmission system in Slovakia through which most Russian gas bound for western Europe is transported.

Ruhrgas is also working with Gazprom on plans to lay a pipeline from Russia through the Baltic Sea to western Europe. The parties expect that the pipeline, if and when built, will increase Russia's gas export capacity to western Europe, diversify delivery routes for Russian gas to western Europe, and create new sales opportunities for Russian gas.

*Norway.* In the period from February to December 2003, Ruhrgas purchased 156.5 billion kWh, or 28.4 percent of its total gas purchased, from Norwegian sources. Ruhrgas takes delivery of its Norwegian supplies at the gas import points near Emden along the German North Sea coast.

In 2001, the Norwegian government abolished Norway's centralized gas marketing system (the so-called GFU) for deliveries in EU member states and introduced a company-based marketing system. Currently, Ruhrgas has supply contracts with a number of major Norwegian and international energy companies that hold concessions for the exploitation of Norwegian gas fields. These contracts are either of the depletion-type or have set terms.

*The Netherlands.* In the period from February to December 2003, Ruhrgas purchased 89.4 billion kWh, or 16.2 percent of its total gas purchased, pursuant to a single long-term supply contract with N.V. Nederlandse Gasunie. This contract provides Ruhrgas with a certain degree of flexibility in managing its supply portfolio. Ruhrgas believes such flexibility is particularly important in this case, as the Dutch gas fields are relatively close to the end consumers of Ruhrgas imports, making it more economically viable for Ruhrgas to react to changes in market demand by varying contract quantities. Ruhrgas takes delivery of Dutch gas at the German border.

*Germany.* In the period from February to December 2003, Ruhrgas purchased 97.5 billion kWh, or 17.7 percent of its total gas purchased, from domestic gas production companies. Ruhrgas has long-term supply contracts for German natural gas with BEB Erdgas und Erdöl GmbH, Mobil Erdgas Erdöl GmbH, Gaz de France Production Exploration Deutschland GmbH (formerly Preussag Energie GmbH) and RWE DEA AG. A number

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of the contracts provide Ruhrgas with significant additional flexibility by providing for the supply of minimum and maximum quantities of gas, rather than a single fixed amount. Ruhrgas also has short-term arrangements with some of its German suppliers, and in the period from February to December 2003 the company purchased 4.8 billion kWh of natural gas under short-term arrangements. Ruhrgas expects the volume of gas it purchases from domestic sources to decline over time, as German gas fields will be depleted.

*United Kingdom.* In the period from February to December 2003, Ruhrgas purchased 24.8 billion kWh, or 4.5 percent of its total gas purchased, from U.K. sources. Ruhrgas purchased 8.0 billion kWh of its U.K. gas from BP Gas Marketing Ltd under a long-term supply contract. Ruhrgas purchased the remainder of its U.K. gas through its subsidiary Ruhrgas UK Exploration and Production Ltd ( Ruhrgas UK ), which has interests in U.K. gas production facilities, and on the spot short-term market. See Exploration and Production below for more information on Ruhrgas UK.

In contrast to its other imported gas, which Ruhrgas takes ownership of at the German border, Ruhrgas takes delivery of its purchased U.K. gas supplies partly at Bacton and partly at Zeebrugge in Belgium. Gas from the U.K. gas fields is transported to Belgium through the undersea gas pipeline run by the project company Interconnector (UK) Limited ( Interconnector ), in which Ruhrgas owns a 10.0 percent interest. In order to transport the gas to Germany, Ruhrgas has long-term transportation contracts for the transmission of the gas through the Belgian pipeline system to the gas import point Raeren near Aachen on the German-Belgian border.

*Denmark.* In the period from February to December 2003, Ruhrgas purchased 15.7 billion kWh, or 2.8 percent of its total gas purchased, from the Danish supplier DONG Naturgas A/S, with which Ruhrgas has a long-term supply contract. Ruhrgas takes delivery of Danish gas at the German border.

*Trading*

In order to supplement its long-term gas supply contracts, Ruhrgas engages in a small amount of short- and medium-term gas trading. These activities are concentrated at the national balancing point in the United Kingdom and at the Zeebrugge hub in Belgium, and are mainly handled via brokers participating in open markets. In the period from February to December 2003, the total volume of purchases and sales was 35.2 billion kWh. Ruhrgas gas trading activities are expected to increase in 2004 following the transfer of D-Gas, the trading unit currently owned by E.ON Energie, to Ruhrgas.

*Exploration and Production*

Ruhrgas participates in the exploration and production segment of the gas industry through shareholdings in gas production companies in the United Kingdom and, as of 2003, Norway. In addition, Ruhrgas opened an office in Moscow in 2003 to support gas exploration and production opportunities it may find in Russia in the future.

*United Kingdom.* In the United Kingdom, Ruhrgas operates through its subsidiary Ruhrgas UK, which holds minority interests in a number of gas production fields and exploration blocks in the British North Sea.

In 2003, Ruhrgas UK produced approximately 2.85 billion kWh (251 million cubic meters (  $\text{m}^3$  )) of gas, primarily from the Elgin/ Franklin project, in which Ruhrgas UK holds a 5.2 percent interest. A test of production at the Scoter gas field, in which Ruhrgas UK holds a 12.0 percent interest, was made in December 2003.

*Norway.* Ruhrgas established a Norwegian exploration and production subsidiary, Ruhrgas Norge AS ( Ruhrgas Norge ), in May 2003. Ruhrgas Norge has purchased a 15.0 percent stake in the Njord oil and gas field in the Norwegian Schelf area of the North Sea. Currently, gas from this field is being re-injected to increase the rate of oil recovery. Ruhrgas Norge obtained 1.6 million barrels of oil as a result of its stake in 2003, of which 1.5 million barrels were sold on the market. The field is currently expected to begin producing gas for sale in 2006 or 2007.

*Liquefied Natural Gas*

Liquefied natural gas ( LNG ), which is liquefied in the producing country, transported by tanker and then converted back into gas at the receiving terminal, is an alternative to gas deliveries by pipeline. Ruhrgas has a



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majority shareholding in the consortium Deutsche Flüssigerdgas Terminal Gesellschaft mbH, which owns property and the necessary permits to build an LNG landing terminal in Wilhelmshaven, Germany. Although LNG is not an attractive option for German purchases under current market conditions, Ruhrgas believes its interest in this company provides it with an option for diversifying into LNG purchases should costs associated with LNG fall. No assurances can be given, however, that such a terminal will be built.

***Transmission System***

Ruhrgas transmission system is comprised of pipelines owned by Ruhrgas, those co-owned directly by Ruhrgas and other gas companies, and those owned by project companies in which Ruhrgas holds an interest. The transmission system is used to transport the gas that Ruhrgas and third party customers receive from suppliers at gas import points on the German border or at other supply points within Germany to customers or to storage facilities for later use. Ruhrgas and its project companies also transport gas for third parties through the transmission system. The following map shows the transmission system as well as the location of compressor stations, gas storage facilities, field stations and gas import points:

**Ruhrgas Gas Transmission System**

As of the end of 2003, Ruhrgas owned gas pipelines totaling 6,449 km and co-owned gas pipelines totaling 1,510 km with other companies, in some of which Ruhrgas holds a stake through its subsidiary RGE. In addition, German project companies in which Ruhrgas holds an interest owned gas pipelines totaling 3,274 km at the end of 2003. These German project companies are entities Ruhrgas has set up with German or European gas companies for a special purpose, such as establishing a pipeline connection between two countries. As shown in the map above, the Ruhrgas transmission system is located primarily in western Germany, the historical center of Ruhrgas operations.

In 2003, Ruhrgas carried out monitoring and maintenance services for almost all of its transmission system. Ruhrgas maintained (including providing local monitoring) for itself or under service contracts a total of 12,809 km of pipelines, which includes 1,265 km of pipelines owned by third parties and 2,025 km of pipelines owned by companies in which Ruhrgas holds a stake through its subsidiary RGE. Transmission system monitoring operations are centered at Ruhrgas dispatching facility in Essen. Among other tasks, the center keeps the transmission system under continual surveillance, handles all reports of disturbances in the system and arranges for the necessary response to any disturbance report. In 2003, Ruhrgas performed this kind of system monitoring for about 11,600 km of pipelines. Management of operations, general maintenance (including local

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monitoring) and trouble shooting are handled by the Ruhrgas field stations and facilities located along the network. Ruhrgas also deploys mobile units from these stations and facilities to carry out maintenance and repair work. For certain sections of Ruhrgas own pipelines, primarily those where no field station or facility is located nearby, maintenance (including local monitoring) is performed by third parties. Ruhrgas dispatching, monitoring and maintenance processes are regularly certified under International Standards Organization ( ISO ) 9001:2000 (quality management), ISO 14001 (environmental management), OHSAS 18001, an Occupational Health and Safety Assessment Series for health and safety management systems (work safety management) and TSM, the Technical Safety Management rules of DVGW (German Association of Gas and Water Engineers). DVGW is a self-regulatory body for the gas and water industries, its technical rules serving as a basis for ensuring safety and reliability of German gas and water supplies.

The following table provides more information on the Ruhrgas transmission system in Germany as of December 31, 2003:

Pipelines	Total km	Maintained by Ruhrgas km
Owned by Ruhrgas	6,449	6,135
Co-owned pipelines	1,510	596
DEUDAN (PC )	110	0
EGL (PC)	67	67
MEGAL (PC)	1,080	1,080
METG (PC)	346	346
NETG (PC)	285	144
NETRA (PC)	341	106
SETG (PC)	79	79
TENP (PC)	966	966
Companies in which Ruhrgas holds a stake through its subsidiary RGE		2,025
Owned by third parties		1,265
<b>Total in Germany</b>	<b>11,233</b>	<b>12,809</b>

(PC) project company

The following table provides more information on the Ruhrgas share in each of the project companies noted above as of December 31, 2003:

Project Company	Ruhrgas Share %
DEUDAN (Deutsch/ Dänische Erdgastransport-Gesellschaft mbH & Co. KG)	25.0
EGL (Etzel Gas-Lager Statoil Deutschland GmbH & Co)	74.8
MEGAL GmbH (Mittel-Europäische-Gasleitungsgesellschaft)	50.0
METG (Mittelrheinische Erdgastransport Gesellschaft mbH)	100.0
NETG (Nordrheinische Erdgastransportleitungsgesellschaft mbH & Co. KG)	50.0
NETRA GmbH (Norddeutsche Erdgas Transversale & Co. KG)	41.7
SETG (Süddeutsche Erdgas Transport Gesellschaft mbH)	100.0
TENP (Trans Europa Naturgas Pipeline GmbH)	51.0

Ruhrgas share of the capacity of any particular pipeline it does not wholly own is determined by contract and is not necessarily related to Ruhrgas interest in the pipeline. Ruhrgas pipeline network is comprised of pipeline sections of varying diameters originally built according to the estimated capacity needed for the relevant





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section of the system. Currently, the transmission system contains 2,023 km of pipelines with a diameter of less than or equal to 300 millimeters, 3,028 km of pipelines with a diameter of more than 300 and less than or equal to 600 millimeters, 2,918 km of pipelines with a diameter of more than 600 and less than or equal to 900 millimeters, and 3,264 km of pipelines with a diameter of more than 900 and less than or equal to 1,200 millimeters. Due to the number and complexity of factors influencing pipeline utilization, such as temperature, the volume of third party transmissions and the availability of compressor units, Ruhrgas does not consider data on the utilization of its pipeline network to be meaningful. Ruhrgas had sufficient pipeline capacity available both in 2003 and in prior years and believes that a shortage of pipeline capacity is not a material risk in the foreseeable future.

In addition to its German transmission system, Interconnector, a U.K. project company in which Ruhrgas has a 10.0 percent interest, owns the Interconnector pipeline, a 235 km undersea gas pipeline from the United Kingdom to Belgium. Ruhrgas also owns a 3.0 percent interest in the