Goldman Sachs

E.ON (EONG.DE)
RWE (RWEG.DE)
German Utilities: Power

New coverage

August 21, 2002

EONG.DE: Market Outperformer

RWEG.DE: Not Rated

Price EONG.DE: EUR54

Price RWEG.DE: EUR38.81

FTSE Europe: 264

Germany

Transformation to pure plays. RWE and E.ON are in transition from diversified industrials to focused energy and utility companies. In our view, RWE (NR) needs to create value from integration; E.ON (MO) needs to execute its strategy. Our positive rating on E.ON assumes the proposed acquisition of Ruhrgas goes ahead.

E.ON needs to execute: We believe Ruhrgas is key

E.ON needs to deliver its expansion strategy and prove it can create value in the process. We believe the proposed acquisition of Ruhrgas is key to this strategy's success; however, the future of the transaction is uncertain as legal challenges persist. Based on our analysis, we believe management would be able to create value from the deal. If it falls through, we believe this would have a negative impact on E.ON's strategy, our valuation, expected earnings growth and implied acquisition risk.

RWE's challenge is to create value from integration

RWE needs to create value and growth from the integration of its disparate utility and energy assets, in our view. We are skeptical that integrating Thames Water, Innogy and Transgas would create material synergies. We are also concerned that prospects for organic growth are limited. A new management team (due in 2Q2003) creates uncertainty over the group's strategy and focus on shareholder value. Our sum-of-the-parts analysis for RWE (Not Rated) indicates an EV value of EUR59 bn representing a per share value of EUR50.

On our estimates, E.ON (MO) offers attractive potential upside

We rate E.ON as a Market Outperformer as we expect the 29% potential upside based on our sum-of-the-parts analysis to be realised as E.ON demonstrates its ability to create value while delivering its strategic objectives. Central to our view is the proposed acquisition of Ruhrgas; we expect clarity on its approval before the German general elections on September 22. Our forecasts assume that the acquisition is approved. Our fair value EV for E.ON is EUR64 bn, representing EUR70 per share.

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Goldman Sachs
Global Equity Research

Stock data (EONG.DE)	
52-week range	EUR61.70-47.20
Yield	3.7%

Stock data (RWEG.DE)	
52-week range	EUR48.15-31.50
Yield	2.9%

Price performance	1M	3M	12M
Absolute (EONG.DE)	2%	-5%	-11%
Rel to FTSE Europe	-3%	13%	10%
Absolute (RWEG.DE)	10%	-6%	-19%
Rel to FTSE Europe	5%	12%	3%

Capitalization (EONG.DE)	
Market cap	EUR37,368 mn
Latest net debt/(cash)	EUR(6,958) mn
Free float	92%
Shares outstanding	692 mn

Capitalization (RWEG.DE)	
Market cap	EUR21,798 mn
Latest net debt/(cash)	EUR(2,413) mn
Free float	50%
Common shares outstanding	531 mn

Forecasts/valuation	12/2002E	12/2003E
EBITDA (EONG.DE)	EUR7,785 mn	EUR8,224 mn
EV/EBITDA (EONG.DE)	6.9x	6.5x
	12/2002E	**12/2003E**
EBITDA (RWEG.DE)	EUR7,253 mn	EUR7,879 mn
EV/EBITDA (RWEG.DE)	7.2x	6.7x

Table of contents

Expected news flow/events

Date	Event
September 5, 2002	German Ministry of Economics to hold a new hearing on E.ON's proposed acquisition of Ruhrgas
September 22, 2002	German general election
November 13, 2002	RWE 3Q2002 results
November 14, 2002	E.ON 3Q2002 results
March 6, 2003	E.ON FY2002 results
May 15, 2003	E.ON 1Q2003 results

Source: Company data, Goldman Sachs Research.

The prices in this report are based on the market close of August 19, 2002.

Overview: Transformation to pure plays

RWE and E.ON are in a transition phase from diversified industrial groups to focused energy and utility plays. E.ON is targeting integrated electricity and gas businesses in Europe and the US, whereas RWE is developing into an international utilities group, active in electricity, gas, water and waste management. This transformation has been fuelled by years of strong cash flow and well-timed asset disposals.

In this report, we analyse the potential implications of this transformation on valuation, strategy, earnings visibility and growth, and the risk profiles for E.ON and RWE.

E.ON (MO) needs to execute: Ruhrgas is the key, in our view

We believe E.ON needs to execute its expansion strategy and prove it can create value in the process. In our view, the acquisition of Ruhrgas is key to delivering E.ON's strategic objectives. Based on purchase price and prospects for growth, we would expect E.ON's new management to create value from the Ruhrgas acquisition. In this report, we assume that the pending acquisition is approved, however, we also analyse the negative implications of the deal being blocked.

We have less clarity on E.ON's US expansion plans, where we believe it may be more difficult to create value through acquisition. Assuming E.ON does not overpay, only synergistic acquisitions in LG&E's area of operation, the US mid-west, would offer satisfactory risk/return profiles for shareholders in our view.

RWE (NR) needs to create value from integration

We believe RWE's challenge is to create value and growth from the integration of fundamentally disparate utility and energy assets. Although we expect the process to be swift, we are skeptical that integrating Thames Water, Innogy, Transgas and eventually AWW (assuming the acquisition is completed) will provide for material operational synergies. We are also concerned that the prospects for organic growth from the acquired businesses are limited due to the mature markets in which some of them operate (especially relative to other water/utility groups). Beyond these challenges, a new management team creates uncertainty over the group's strategy and focus on shareholder value going forward.

We believe E.ON offers attractive potential upside

We believe the current equity valuation of E.ON is attractive. Based on our sum-of-the-parts valuations, we believe E.ON currently offers 29% potential upside to our fair value estimate of EUR70 per share (please note that this is not a price target). Our valuations incorporate a conservative approach: we have written down acquisitions where we believe RWE and E.ON have overpaid; we have also significantly written down exposure to financial markets. We do not believe the current 23% discount is justified and expect it to reduce as E.ON demonstrates its ability to create value while delivering its strategic objectives. Our forecasts assume that E.ON receives approval for Ruhrgas. We expect clarity on the transaction's approval before the German elections on September 22. It is on this basis that we rate E.ON as a Market Outperformer.

Devil's advocate view: E.ON's acquisition of Ruhrgas is blocked

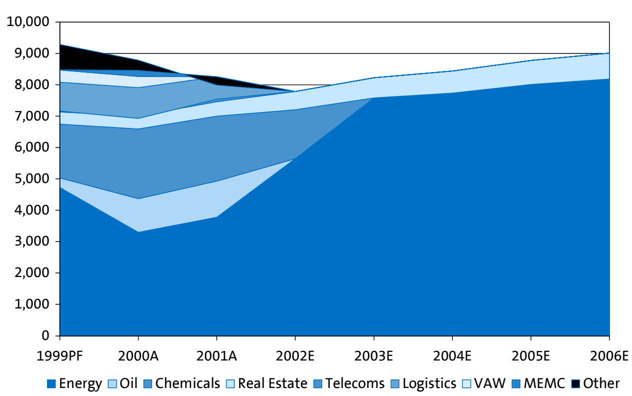
Although E.ON has a strong market position in Germany and the UK, if the company is unable to provide for the next leg of its strategy, it is likely have difficulty in creating significant additional synergistic value and growth from its current asset portfolio. As we see Ruhrgas as key to E.ON's strategy, if the deal were to fall through, we believe this would have a negative impact on E.ON's strategy, our valuation, expected earnings growth and implied acquisition risk. Our sum-of-the parts valuation without Ruhrgas equals EUR67 bn on an EV basis, EUR3 less than with Ruhrgas on a per share basis.

Sector overview: German electricity business is core

The German electricity business continues to represent the largest contribution to E.ON's and RWE's EBITDA (E.ON 41% in 2002E, RWE 42% in 2002E). We expect margin pressure in the electricity business from the gradual reduction in network tariffs to be more than offset by cost control and a slight increase in wholesale power prices. As the scope for cost control in their existing German business becomes more limited, we expect E.ON and RWE to continue to look to tap further cost-control potential via acquisitions of smaller electricity and gas utilities in Germany.

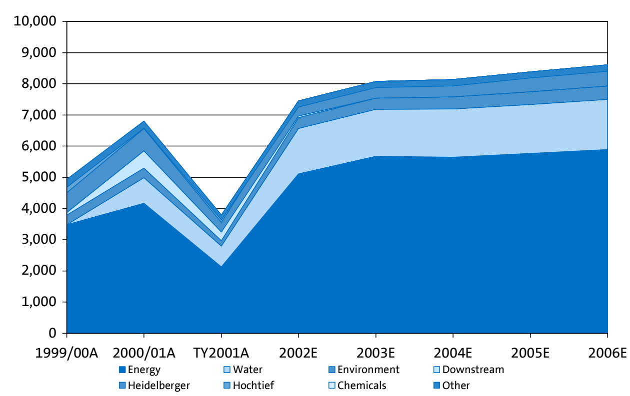
Financials: Metamorphosis to pure plays expected to alter earnings profiles

Exhibit 1: E.ON – EBITDA breakdown by division
(EUR mn)



Source: Company data, Goldman Sachs Research estimates.

Exhibit 2: RWE – EBITDA breakdown by division
(EUR mn)



Note: TY2001: July to December 2001.

Source: Company data, Goldman Sachs Research estimates.

The transformation to pure plays would change the earnings profiles of E.ON and RWE very significantly. As earnings shifts were historically driven by cyclical results in the non-core assets, the disposal of these assets should provide a much higher level of earnings, plus cash flow visibility and stability. We expect earnings development within E.ON and RWE to be driven by a focus on core businesses and growth primarily from acquisitions. Due to non-core asset disposals and core business acquisitions, we estimate RWE will derive over 95% and E.ON 91% of EBITDA from their core businesses in 2004.

Valuation: Estimated EV for E.ON is EUR64 bn; EUR59 bn for RWE

As the transformation process has lead to a more uniform business mix within E.ON and RWE, the diversity of activities and exposure to different business cycles has reduced. It is on this basis that we would argue for a much lower discount to E.ON's sum-of-the-parts valuation, which historically has been as high as 30% due to the conglomerate nature of E.ON's businesses. We believe the current equity valuation of E.ON is attractive.

Our approach to valuing E.ON and RWE

A DCF analysis combined with an analysis of earnings multiples are the building blocks of our sum-of-the-parts valuation approach. We continue to believe that sum-of-the-parts is the most appropriate and transparent approach as it provides for the unique characteristics of businesses in different geographical locations and at different links of the value chain.

We believe the current equity valuation of E.ON is attractive. We see fair value for E.ON at EUR70 per share. We take a conservative approach to our valuation: we write down acquisitions where we believe RWE and E.ON have overpaid; we significantly write down exposure to financial markets; and we treat 100% of provisions as debt.

E.ON: We estimate an equity value of EUR48 bn

Our analysis for E.ON (see Exhibit 3) indicates an equity value for the group of EUR48 bn, or EUR70 per share. This valuation represents E.ON after the proposed acquisition of Ruhrgas and the linked disposal of Degussa. The net debt figure is based on our 2003 forecasts to correspond with 2003E EBITDA. We also include a sum-of-the-parts valuation for E.ON in the event that the Ruhrgas acquisition is not approved, (see pages 21-22).

Exhibit 3: E.ON – our sum-of-the-parts analysis indicates value per share of EUR70
(EUR mn)

Business segment	EBITDA 2003E	Corresponding EV	Implied multiple	Valuation assumptions
Energy	4,763	35,516	7.5x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Powergen	1,839	12,563	6.8x	Fair value of 500p per share
Ruhrgas	976	11,289	11.6x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Total core businesses	**7,577**	**59,368**	**7.8x**	
Viterra (Real Estate)	646	4,621	7.2x	VEBA/VIAG independent merger valuation
Total group EV	**8,224**	**63,989**	**7.8x**	
Net debt		-3,947		2003E net debt
Participations		11,725		P/BV multiple of E.ON 1.3X
Minorities		-6,136		P/BV multiple of E.ON 1.3X
Pension and nuclear provisions		-17,753		2003E book value
Total adjustments		**-16,111**		
Total equity value		**47,878**		
Implied price per share (EUR)		**70**		
Current price per share (EUR)		54.0		
Potential upside to implied price per share		29%		
Discount (premium)		23%		

Source: Goldman Sachs Research estimates.

RWE: We estimate an equity value of EUR28 bn

Our analysis for RWE (see Exhibit 4) indicates an equity value for the group of EUR28 bn, or EUR50 per share. The net debt figure is based on our 2003 forecasts to correspond with 2003E EBITDA.

Exhibit 4: RWE sum-of-the-parts valuation
(EUR mn)

Business segment	EBITDA 2003E	Corresponding EV	Implied multiple	Valuation assumptions
Power + Trading	863	6,801	7.9x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Rheinbraun	929	6,530	7.0x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Net (grid)	711	5,688	8.0x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Plus (supply)	980	7,645	7.8x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Other (Harpen + Tessag)	214	1,495	7.0x	7x EV/EBITDA 03E multiple
German electricity Total	**3,696**	**28,160**	**7.6x**	
Innogy	788	6,834	8.7x	EV based on fair value for IOG: 183p per share
Total electricity	**4,484**	**34,994**	**7.8x**	
RWE Gas	356	2,825	7.9x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
RWE Upstream	464	1,710	3.7x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Transgas + GDCs	370	2,624	7.1x	36% discount to acquisition price
Total gas	**1,190**	**7,159**	**6.0x**	
Water	1,505	11,289	7.5x	7.5x EV/EBITDA 03E multiple
Waste	366	2,567	7.0x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Total core businesses	**7,545**	**56,008**	**7.4x**	
Heidelberger Druck	534	4,256	8.0x	Market cap + net debt at 31/12/2001
Holding costs	-200	-1,480	7.4x	
Total group EV	**7,879**	**58,784**	**7.5x**	
Net debt		-4,266		2003E net debt
Hochtief (62%)		815		Market capitalisation
Participations		9,664		P/BV multiple of RWE 2.5X
Minorities		-7,663		P/BV multiple of RWE 2.5X
Pensions, nuclear and mining provisions		-29,252		2003E book value
Total adjustments		-30,701		
Total equity value		**28,083**		
Implied price per common share (EUR)		**50**		
Current market cap		21,798		
Current price per common share (EUR)		38.8		

Source: Goldman Sachs Research estimates.

Valuation assumptions: We take a conservative view

For full details of our valuation assumptions, please refer to pages 49-50.

- We have written down acquisitions where we believe RWE and E.ON have overpaid
- We have written down exposure to financial markets

Value adjustments for newly acquired businesses

Our analysis of the value of newly acquired businesses indicates that E.ON and RWE have overpaid for assets in the past. The following exhibit shows the difference between the acquisition price paid and our current estimates of their value. We have factored in our estimates in our sum-of-the-parts analysis.

Exhibit 5: Newly acquired businesses – we believe E.ON and RWE may have overpaid
(EUR mn)

E.ON's newly acquired businesses	Price paid	GS estimate
Total Powergen + Ruhrgas	**25,689**	**23,852**

RWE newly acquired businesses		
Thames Water	11,200	9,573
American Water Works	7,700	NA
Transgas	4,050	2,624
Innogy	8,510	6,834
Total	31,460	NA
Total, excl. AWW	**23,760**	**19,031**

Source: Company data, Goldman Sachs Research estimates.

E.ON has indicated that there is the risk of an impairment adjustment for its Powergen investment, given the deteriorating market environment for Powergen's businesses since E.ON made the takeover offer. Based on our value estimate for Powergen of EUR12.6 bn (see 'E.ON (MO): Execution is key'), this impairment adjustment could be up to EUR2.7 bn.

Value adjustment for exposure to financial markets

As both E.ON and RWE have significant assets held as short-term securities, we analyse the potential exposure to the financial markets' recent downward trend.

We estimate that E.ON had approximately EUR8 bn of value from financial equity investments on its books at the end of FY2001. The company has said the current market value of these assets is not more than 10% lower than the book value as of the end of FY2001. To be conservative, we reduce the value of these assets in our valuation by 10%.

RWE currently holds EUR11 bn in short-term securities. These assets are split between triple A long dated bonds (c.80%) and equity (c.20%). At its 1H results, RWE announced that its c.EUR2.4 bn of equity holding had lost 28% in value on average to June 30, 2002. We have made the appropriate adjustments to the balance sheet.

Business focus and earnings growth

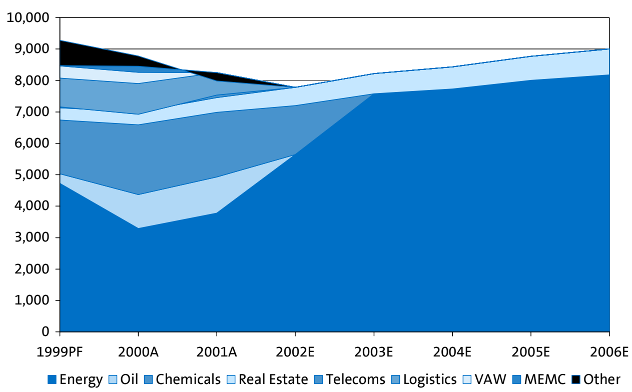
The transformation to pure-plays would change the earnings profile of E.ON and RWE very significantly. As annual earnings shifts were historically driven by cyclical results in the non-core assets, the disposal of these assets should provide a much higher level of earnings, and cash flow visibility and stability. We expect earnings development within E.ON and RWE to be driven by a focus on core businesses and growth primarily from acquisitions. Due to non-core asset disposals, we estimate RWE will derive over 95% and E.ON 91% of EBITDA from core businesses in 2004, compared with 47% for E.ON in 2001 and 82% for RWE in the same year.

Earnings trends: We forecast two major trends in EBITDA for both E.ON and RWE

- **Core businesses to represent the majority of the groups' EBITDA over the next two years** (47% of E.ON's EBITDA and 82% of RWE's EBITDA in 2001; 91% of E.ON's EBITDA and 95% of RWE's EBITDA in 2004E).

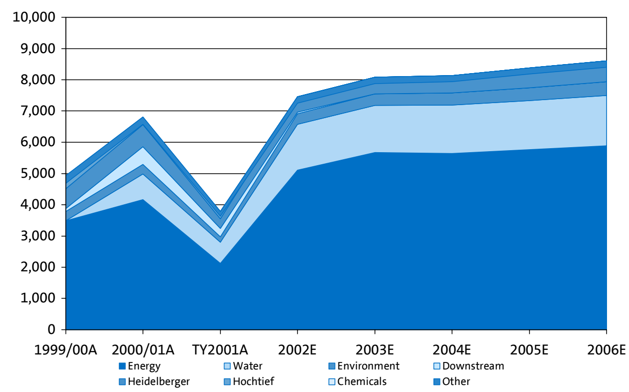
- **Only moderate EBITDA growth as the disposal of assets is replaced by the acquisition of assets in core business areas.** Our group EBITDA CAGR forecasts for 2001A-2006E are 2% for E.ON and 5% for RWE.

Exhibit 6: E.ON – EBITDA breakdown by division
(EUR mn)



Source: Company data, Goldman Sachs Research estimates.

Exhibit 7: RWE – EBITDA breakdown by division
(EUR mn)



TY 2001: July to December 2001.

Source: Company data, Goldman Sachs Research estimates.

Divisional trends at the operating level: Indicate more focused business portfolios

Exhibits 6 and 7 demonstrate the likely trend of E.ON's and RWE's earnings streams originating from a more focused portfolio of businesses.

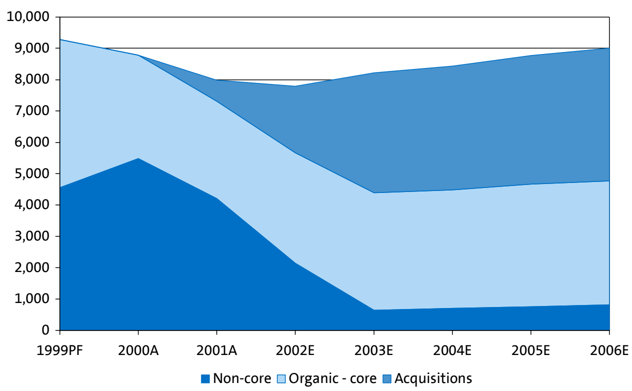
- We forecast E.ON's Energy division's EBITDA to grow by a CAGR of 17% over 2001A-2006E, driven primarily by the proposed acquisition of Ruhrgas and the acquisition of Powergen.

- We expect RWE's Electricity and Gas division EBITDA to grow by a 7% CAGR over the same period, driven primarily by the acquisitions of Innogy and Transgas. We also forecast a 14% CAGR for RWE's Water division, prior to the integration of the proposed acquisition of American Water Works.

We expect earnings growth through acquisitions

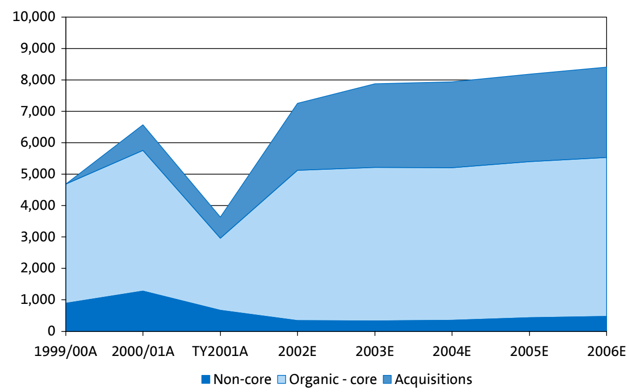
Our group EBITDA CAGR forecasts for 2001A-2006E are 2% for E.ON and 5% for RWE. As highlighted in Exhibits 8 and 9, we expect the majority of this growth to be derived from newly acquired EBITDA replacing disposed EBITDA. RWE has spent EUR24 bn in EV terms on major acquisitions over the past three years; E.ON has spent EUR26 bn in EV terms, including Ruhrgas.

Exhibit 8: E.ON – source of EBITDA: organic core/non-core and acquisitions
(EUR mn)



Source: Company data, Goldman Sachs Research estimates.

Exhibit 9: RWE – source of EBITDA: organic core/non-core and acquisitions
(EUR mn)



Note: TY2001: July to December 2001.

Source: Company data, Goldman Sachs Research estimates.

In the medium term, 2003E-2006E, we forecast average EBITDA growth of 3.1% and 2.2% per year for E.ON and RWE respectively. As our forecasts do not include further acquisitions over this period, this growth is purely organic. We expect organic growth to be created via synergies, cost control, gas demand and water activities.

Exhibit 10: Our E.ON and RWE EBITDA forecasts
(EUR mn)

E.ON EBITDA by division	1999PF	2000A	2001A	2002E	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E
Energy	**4,723**	**3,295**	**3,781**	**5,643**	**7,577**	**7,730**	**8,006**	**8,180**	**8,358**	**8,540**	**8,690**	**8,844**
Oil	312	1,073	1,149	0	0	0	0	0	0	0	0	0
Chemicals	1,712	2,226	2,064	1,555	0	0	0	0	0	0	0	0
Real Estate	386	416	460	588	646	704	761	822	871	906	933	952
Telecoms	32	-82	82	0	0	0	0	0	0	0	0	0
Logistics	913	982	713	0	0	0	0	0	0	0	0	0
VAW	385	351	0	0	0	0	0	0	0	0	0	0
MEMC	11	197	0	0	0	0	0	0	0	0	0	0
Other	807	319	-261	0	0	0	0	0	0	0	0	0
Total	**9,281**	**8,777**	**7,988**	**7,785**	**8,224**	**8,434**	**8,767**	**9,001**	**9,229**	**9,446**	**9,623**	**9,796**

E.ON: EBITDA	1999PF	2000A	2001A	2002E	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E
Non-core	4,558	5,482	4,207	2,143	646	704	761	822	871	906	933	952
Organic - core	**4,723**	**3,295**	**3,103**	**3,523**	**3,744**	**3,775**	**3,911**	**3,951**	**3,992**	**4,034**	**4,077**	**4,121**
Acquisitions	0	0	678	2,120	3,833	3,955	4,095	4,229	4,366	4,506	4,614	4,723

RWE EBITDA by division	1999/00A	2000/01A	TY2001A	2002E	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E
Electricity	3,094	3,254	1,732	4,068	4,484	4,642	4,737	4,824	4,913	5,003	5,096	5,191
Gas	391	912	395	1,041	1,190	1,000	1,033	1,068	1,103	1,140	1,178	1,217
Energy	**3,485**	**4,166**	**2,127**	**5,109**	**5,674**	**5,642**	**5,770**	**5,891**	**6,016**	**6,143**	**6,274**	**6,408**
Water	**0**	**821**	**670**	**1,461**	**1,505**	**1,550**	**1,565**	**1,612**	**1,661**	**1,711**	**1,762**	**1,815**
Environment	306	309	176	343	366	389	411	430	446	459	468	478
Downstream	84	558	271	55	0	0	0	0	0	0	0	0
Heidelberger	638	711	306	485	534	555	638	670	637	637	764	840
Hochtief	175	165	237	0	0	0	0	0	0	0	0	0
Chemicals	252	77	0	0	0	0	0	0	0	0	0	0
Other	-252	-232	-150	-200	-200	-200	-200	-200	-200	-200	-200	-200
Total	**4,688**	**6,575**	**3,637**	**7,253**	**7,879**	**7,936**	**8,185**	**8,404**	**8,559**	**8,750**	**9,068**	**9,341**

RWE: EBITDA	1999/00A	2000/01A	TY2001A	2002E	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E
Non-core	897	1,279	664	340	334	355	438	470	437	437	564	640
Organic - core	**3,791**	**4,475**	**2,303**	**4,779**	**4,882**	**4,853**	**4,963**	**5,063**	**5,161**	**5,259**	**5,354**	**5,452**
Acquisitions	0	821	670	2,134	2,663	2,729	2,783	2,871	2,961	3,054	3,150	3,249

Note: Truncated year (TY2001). Changed to December year-end

Source: Company data, Goldman Sachs Research estimates.

Leverage and 'firepower': E.ON has more room for manoeuvre in our view

E.ON and RWE are at different stages of their capital redeployment programmes. This is reflected in their EBITDA interest coverage ratios. As shown in Exhibit 11, E.ON's 2003E 8.4x EBITDA interest coverage reflects its low leverage. As indicated by the low interest cover ratios, RWE's balance sheet flexibility is more limited because it has recently made several significant acquisitions.

Exhibit 11: EBITDA interest cover

EBITDA interest cover including provisions as debt								
	1999PF	2000A	2001A	2002E	2003E	2004E	2005E	2006E
E.ON	**8.1x**	**9.9x**	**9.1x**	**11.2x**	**8.4x**	**14.1x**	**19.5x**	**23.6x**
	1999/00A	2000/01A	TY2001A[1]	2002E	2003E	2004E	2005E	2006E
RWE	**5.0x**	**4.1x**	**3.9x**	**2.3x**	**2.9x**	**3.0x**	**3.1x**	**3.2x**
EBITDA interest cover excluding provisions								
	1999PF	2000A	2001A	2002E	2003E	2004E	2005E	2006E
E.ON	**73.1x**	**76.7x**	**68.9x**	**278.1x**	**25.7x**	**175.7x**	**-70.1x**	**-40.9x**
	1999/00A	2000/01A	TY2001A[1]	2002E	2003E	2004E	2005E	2006E
RWE	**-13.5x**	**13.8x**	**16.8x**	**7.8x**	**7.0x**	**8.1x**	**9.0x**	**10.4x**

Note 1): Truncated year. Changed to December year-end.

Source: Company data, Goldman Sachs Research estimates.

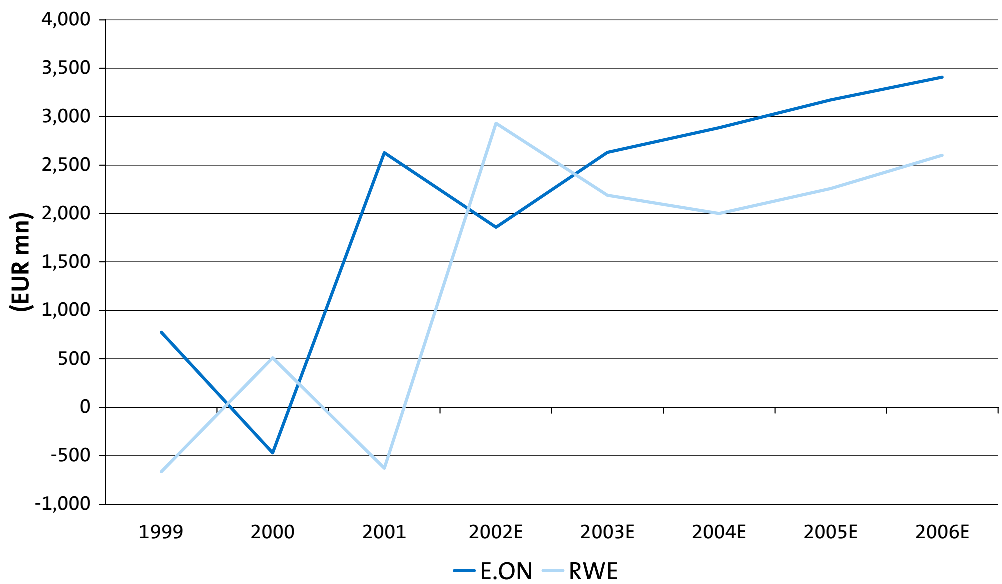
We have looked at two different sets of EBITDA interest cover data. The first treats pension, nuclear and mining provisions as debt and assumes a 6% annual interest charge. The second does not treat provisions as debt and therefore is much less conservative. The second approach is closer to that which the companies use for internal forecasts. As interest charges on provisions are non-cash and as these provisions could not trigger bankruptcy, debt rating agencies also do not treat these provisions as debt. Although debt rating agencies may start to show the EBITDA interest cover calculation including provisions as debt, it is unlikely that debt ratings would be altered on this basis.

Based on our interest cover calculation, if E.ON and RWE were to maintain a 5.5x EBITDA interest cover in 2003E, E.ON would have a further EUR20 bn in terms of 'investment firepower'. Based on the less conservative approach, E.ON could have as much as EUR27 bn and RWE EUR8 bn in remaining investment firepower.

Newly acquired businesses to provide for strong, stable free cash flow

Due to the integration of newly acquired businesses, we expect E.ON's and RWE's free cash flow to show strong growth over the next five years (see Exhibit 12), compared with the past several years when capital was committed to acquisitions.

Exhibit 12: We expect operating free cash flow to grow significantly



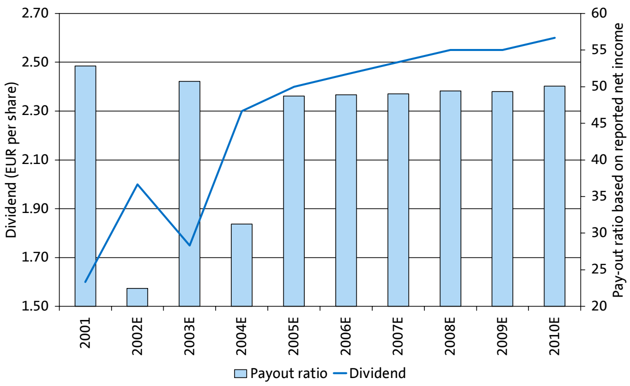
Note: RWE - 1999 corresponds to 1999/00, 2000 to 2000/01 and 2001 to Truncated year 2001.

Source: Company data, Goldman Sachs Research estimates.

Dividends and pay-out ratios: Different perspectives for E.ON vs. RWE

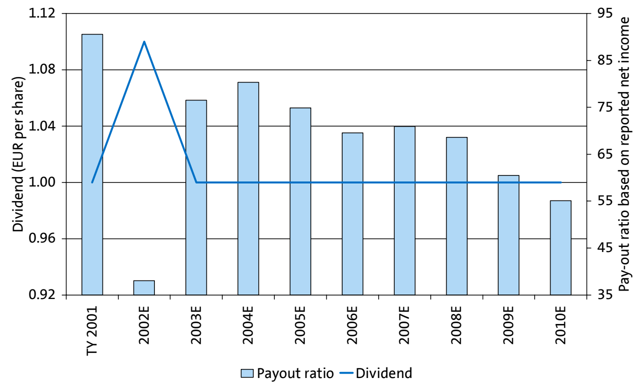
The dividend/pay-out ratio trends of RWE and E.ON are slightly different. As RWE's low operating earnings growth is largely offset by growing financial charges on provisions and higher debt levels, we expect the company to maintain a EUR1 dividend per share from 2003, even though this would result in higher than average pay-out ratios for the next five years. As E.ON provides for slightly stronger growth at the operating level, and as its overall provisions and debt burden is lower, we expect E.ON to continue to increase its dividend from 2003, while maintaining pay-out ratios below 55%. In 2001, E.ON rebased its dividends with a 19% increase from the previous year.

Exhibit 13: E.ON – dividend and payout ratio



Source: Goldman Sachs Research estimates.

Exhibit 14: RWE – dividend and payout ratio



Note: TY2001: July to December 2001.

Source: Goldman Sachs Research estimates.

Company profiles and strategic positioning

Strategic overview

Both RWE and E.ON are in a transition phase from diversified industrial groups to focused energy and utility plays. E.ON is targeting integrated electricity and gas businesses in Europe and the US whereas RWE is developing into an international utilities group, active in electricity, gas, water and waste management.

Exhibit 15: Our strategic analysis – key challenge facing E.ON is execution, key challenge for RWE is integration

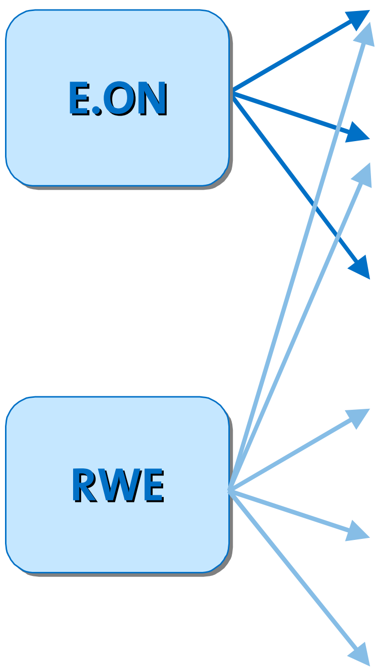
	E.ON	RWE
Strategy	**Core business: Energy** To become leading global integrated energy services provider To concentrate exclusively on core businesses Pursue accretive acquisitions to cement leading positions in Europe and in the US Dispose of non-core assets Establish cost leadership in the industry, through cost-cutting and restructuring	**Core business: Multi-utilities** To pursue a multi-utility strategy based on electricity, gas, water and waste To concentrate exclusively on core businesses Pursue acquisitions in core businesses in Europe and the US that will create value within three years Dispose of non-core assets Focus on returns and value creation
Firepower	**EUR27 bn assuming 5.5x EBITDA cover**	**EUR8 bn assuming 5.5x EBITDA cover**
Current profile	**Germany**	**Germany**
Electricity	15% market share - end customers 41% market share volumes sold 25% of the generation capacity	18% market share - end customers 38% market share volumes sold 33% of the generation capacity
Gas	9% market share - end customers 64% market share volumes sold (incl. Ruhrgas)	10% marketshare - end customers 12% market share volumes sold
Water	14% market share[1]	10% market share
Waste	-	17% market share
	International	**International**
UK electricity and gas	Powergen: 11% market share in electricity volumes, 6% market share in gas volumes, 3 mn end-customer	Innogy: 10% market share in electricity volumes >8% market share in gas volumes, 6.8 mn end-customers
UK Water	-	#1 position in the UK water market
USA	LG&E: 1.2% market share in electricity volumes, 0.2% market share in gas volumes	Pending acquisition of American Water Works to offer large position in the US market
	Other Commitment of disposal by 2006-2007 Degussa (chemicals) - divestment initiated Viterra (Real estate)	**Other** Commitment of disposal by end-2003 Hochtief (construction) Heidelberger Druck (capital goods)
Future profile		
Capital intensity	High	Medium / High
Asset turnover ratio	0.7x	1.0x
Margins profile	7.4%	5.0%
Organic growth profile	3.1%	2.2%
Most significant strategic challenge	**Execution**	**Integration**

Note 1): Primarily Gelsenwasser, including consolidated companies.

Source: Company data, Goldman Sachs Research estimates.

Targeting different portfolios of activities

Exhibit 16: Target activity



Target activity	Capital intensity	Growth	Visibility Earnings cash flow	Risks
European electricity	High	Low	Med	• Regulation • Competition
European gas	High	Med	Med	• Regulation • Competition
US electricity & gas Regulated	High	Low	Med-High	• Regulation • Competition
Regulated water	High	Low	High	• Regulation
Deregulated water	Low-Med	Med	High	• Operating • Country
Waste management	Low-Med	Low-Med	Med	• Operating • Regulation • Country

Source: Goldman Sachs Research estimates.

As RWE and E.ON are targeting different portfolios of activities, some characteristics are likely to diverge. Overall, we expect:

- E.ON to provide slightly higher growth, whereas RWE should provide greater visibility over the next five years.
- E.ON's business model to be slightly more capital-intensive with higher margins, whereas RWE should generate slightly lower margins reflecting lower capital intensity.
- Both E.ON and RWE expose themselves to regulatory, competitive and commodity risks. Through its water activities, RWE's risk portfolio includes country and operational risks. Through its portfolio, E.ON's risk portfolio includes higher commodity risks from a greater exposure to wholesale electricity and gas markets.

Our analysis of ROIC vs. WACC – the gap closes

We believe that refocusing on their core activities will give RWE and E.ON the opportunity to gradually raise their returns to meet their cost of capital. Our analysis suggests E.ON's ROIC will increase from 5.5% in 2001 to 6.2% by 2006E. We expect RWE's ROIC to increase from 5.7% in 2002 to 6.4% in 2006E. We believe the increase in ROIC for both will be driven by improved margins in the core businesses. Without Heidelberger Druck, RWE's ROIC increases from 6% in 2002E to 6.6% in 2006E (see Exhibit 17).

Exhibit 17: E.ON's and RWE's ROICs – heading towards WACC

Note 1): RWE - 1999 corresponds to 1999/00, 2000 to 2000/01 and 2001 to Truncated year 2001.

Source: Goldman Sachs Research estimates.

Target activities: A brief explanation

European electricity market: Cash flow visibility relatively high

The European electricity market is currently undergoing a process of liberalisation and extensive restructuring. Supply competition has been introduced in all European markets at some level (except for Greece and Ireland) and will continue to penetrate the customer base across Europe, in our view. Utilities have responded with cost control, restructuring strategies and diversification.

Fundamentally, the European electricity business is highly capital intensive and, on a medium-term basis, is likely to provide for only moderate earnings and cash flow growth. In the short term, we believe this growth is likely to be more significant on an underlying basis due to restructuring. As risks are limited to regulatory issues and the introduction of competition, core earnings and cash flow visibility is good in our view.

European gas market: Earnings growth highly geared to investment cycle

The European gas sector is at an earlier stage of liberalisation compared with electricity. However, this process may be significantly accelerated. Supply competition has been introduced to all European markets (except Greece and Ireland), with a minimum market opening of 20%. Current EU proposals may result in supply competition among all industrial and commercial customers from the beginning of 2004. Running alongside this process are efforts to unbundle the value chain.

The transmission and distribution of gas is highly capital intensive, whereas the supply and trading sides of the business are relatively low in capital intensity. The key risk to transmission and distribution is primarily regulation, whereas supply and trading are more exposed to competition and commodity markets. Cash flow and earnings generation are highly geared to the investment cycle as the gas industry is still in a growth phase in some European markets.

Part of the reason for this growth is gas being a relatively more environmentally friendly energy compared with coal for power generation. Recent investment in new gas-fired power stations has been disappointing, as high gas prices have reduced the competitiveness of power generated by gas. With gas prices coming down, and environmental regulations sharpening, we expect growth in natural gas demand to be driven by the increased use of gas in electricity generation.

US electricity & gas utilities market: Liberalisation to create opportunities

The US electricity and gas utilities market is diverse, with specific rules and regulations applicable to each state. Each state is also subject to its own timetables for deregulation, with only a few markets competitive today.

Liberalisation could offer opportunities to improve profitability. Regulated utilities are capital intensive, low growth, and generally have high visibility. Although delayed, the liberalisation of the US market would introduce competition risks to the industry. However, these changes may also provide for restructuring and further consolidation, and therefore opportunities to improve profitability.

E.ON has taken a position in this market through the acquisition of LG&E and has publicly announced its intentions to expand this position. RWE has said that it does not plan to participate in the regulated utility market in the US but plans to focus instead on the non-regulated assets such as merchant power stations.

Regulated water: Typically highly capital intensive, low growth

The regulated water market is a source of relatively stable earnings; main risks arise from regulation. At the operating level, the key to success is the ability to control costs at a faster pace than that implied in the tariffs set by the regulator. Although this business requires significant capital, growth is generally low. Through Thames Water and potentially American Water Works, RWE could become a leading player in regulated water globally.

Unregulated water: Opportunities centre on contracts

Growth prospects for the unregulated water market are solid, in our view. We believe the key factor for international growth is the high potential for the privatisation of water services globally. Local governments are unable to provide for the heavy investments required by increasing environmental concerns and are likely to delegate water management to private operators. This is particularly the case in the USA and in Latin America, which have become a key target of water services providers. In the US especially, industrials are increasingly outsourcing their water purification process. We believe the key to success in these markets is the ability to optimize capital investments.

Investments in this sector are varied. The opportunities are focused on contracts, which have differing levels of capital commitment at the outset. The contracts are generally long term – especially when the initial capital commitment is significant. This provides for visible earnings and cash flow streams. Risks arise from the operational responsibilities assumed in the contracts as well as the country exposure. RWE aims to raise its profile in this segment of water services in the coming years.

Waste management: Highly dependent on economic climate

We separate waste management activities into two main categories:

- **Services to municipalities that focus on the collection and treatment of waste generated by local inhabitants and small businesses.** Based on medium- to long-term contracts, these services offer a stable profile and good earnings visibility. Capital commitments and returns vary depending on the current state of the system.

- **Services to industrials, ranging from simple waste disposal to hazardous waste collection and treatment.** These activities are based on short- to medium-term contracts. Earnings are highly correlated to volumes collected or treated. As a result, these activities are very sensitive to the economic environment.

E.ON (MO): Execution is key

E.ON has undergone a significant restructuring process, transforming itself from a diversified industrial group to a global integrated energy player. This transformation has been fuelled by years of strong free cash flow and well-timed asset disposals. As of the end of 2001, 47% of E.ON's EBITDA was derived from its core businesses. We forecast the contribution of its core businesses to increase to 91% by 2004.

E.ON's restructuring process is well underway

The majority of E.ON's activities are focused on the German electricity and gas market. Outside Germany, E.ON owns the electricity and gas companies Powergen in the UK and LG&E in the US. The group is currently in the process of acquiring 100% of Germany's largest gas company, Ruhrgas. The transaction has run into difficulty due to an appeal to the German courts regarding the German Economics Ministry's decision to approve the transaction after it had been blocked by the German cartel office. Should the deal go through, which we assume in our forecasts and valuation, we expect it to complete in the fourth quarter of 2002. In the medium term, E.ON is targeting the following business split: one-third Germany, one-third rest of Europe, and one-third US.

E.ON is currently in the process of disposing of its remaining non-core assets: the chemicals business, Degussa (E.ON holds a 64.5% stake), and the distribution and logistics business, Stinnes (E.ON holds a 65.4% stake). E.ON also holds 100% of Viterra, its property business and stakes in telecom businesses Connect Austria (50.1%) and Bouygues Telecom (17.5%).

Exhibit 18: E.ON – acquisition process; awaiting court decision on proposed acquisition of Ruhrgas

E.ON				
Acquisition date	**Name of target**	**Acquisition price**	**Sector**	**Closing**
2001-2002	Ruhrgas	EUR10.4 bn	Gas wholesale, transportation and distribution (Germany)	Decision expected in September 2002. Potential closing in November 2002.
01/02/01	Powergen	GBP9.6 bn, EUR15.3 bn	Electricity and gas (UK, USA)	Jul 2002

Source: Goldman Sachs Research.

SWOT analysis: Planned Ruhrgas transaction underpins strategy

E.ON is redefining itself as a leading integrated energy group. As the company has the financial power to make significant acquisitions, the challenge is delivering this growth in a value creative way. We believe E.ON's largest opportunity is Ruhrgas, and its largest threat is Ruhrgas being blocked.

Although E.ON has a strong market position in Germany and the UK, if E.ON is not able to provide for the next leg of its strategy, it will likely have difficulty in creating significant additional synergistic value and growth from its current asset portfolio.

Exhibit 19: E.ON SWOT analysis

Strengths	Weaknesses
• Strong market share in German electricity generation and supply • Solid presence in UK electricity and gas market • Foothold in the US electrical utility market (PUHCA approval complete) • Strong balance sheet with an interest cover of 9x in 2001. • Fully amortized low marginal cost – nuclear and hydro generation	• Uncertain completion on Ruhrgas acquisition decision • Limited international integration experience • Reducing cost control potential in German electricity market • Remaining non-core asset Vittera
Opportunities	**Threats**
• To become the #1 gas company in Germany with the acquisition of Ruhrgas • To secure access to competitive gas supplies through the acquisition of Ruhrgas • To capitalise on its diverse and environmentally friendlier fuel mix • Group restructuring • Additional cost control from consolidation • Need for consolidation in the US utilities market • New management	• Firepower, which we estimate at EUR27 bn 75% of market cap • Competition in European energy markets • Potential change in regulatory environment in Germany • Potential stock overhang: Allianz direct stake of 7.64%

Source: Company data, Goldman Sachs Research estimates.

Most significant strategic issue: Delivering on its gas and electricity plans

We believe the main challenge for E.ON will be delivering and creating value from its electricity-gas strategy. A significant step would be the acquisition of Ruhrgas, which we believe would provide for significant cost control, operational efficiency advantages and critical mass.

Another significant step would be E.ON's next move in the US. E.ON has made it clear that it is looking to build out its US exposure through the acquisition of integrated electricity and gas utilities in the mid-west region, which would provide for potential synergies with LG&E. We believe the key to success will be whether E.ON is able to create value from the acquisition (i.e. not overpay) and also access an able management team.

Management change

We expect the current management and the new CEO to address these strategic challenges. On July 3, 2002, the Executive Committee of the Supervisory Board of E.ON recommended that Wulf Bernotat be appointed as Chairman of the Board of Management. Final approval is due on September 3, 2002. Dr. Bernotat is expected to take over from Mr. Hartmann and Pr. Simson in May 2003.

Dr. Bernotat has been Chairman of Stinnes since 1998 and was a member of the management board of Veba Oel between 1996 and 1998. Prior to this, Dr. Bernotat was with Shell for 20 years. His international exposure led him to work in France, Portugal and in the UK, where he was managing Shell's Eastern European and African operations.

We view the proposed appointment of Dr. Bernotat as positive. He is well known to the capital markets through his role at Stinnes and we regard his time with Stinnes as a success due to the significant restructuring he was able to deliver during his three years with the group. We believe his background in restructuring and gas is well suited for the challenge E.ON faces in delivering its ambitious integrated strategy.

Potential acquisition: Ruhrgas – group profile

Ruhrgas is Germany's leading gas company, controlling the transmission system and 64% of the gas imported into the country. Ruhrgas buys its gas based on long-term contracts from Russia, UK, Norway, Denmark and the Netherlands. Ruhrgas sells its gas based on long-term contracts to gas utilities and sells directly to large industrial customers (the latter represents only about 10% of gas sold by Ruhrgas).

- Ruhrgas AG represents the core German gas transportation and wholesale business of the Ruhrgas group. The AG accounts for more than 90% of the group's turnover, 65% of EBITDA and 29% of the employees.
- Ruhrgas Industries Group is a capital goods company focused on building metering, control equipment and industrial furnaces. In 2001, the Industries group represented only 7% of the group turnover but 60% of the workforce.
- RGE, Ruhrgas Energie Beteiligungs, is the holding company of Ruhrgas' stakes in utilities and energy companies (German local utilities and stakes in foreign entities, including Gazprom).

The planned acquisition of Ruhrgas is key to E.ON's stated strategy to become a leading integrated electricity and gas service provider. It would provide E.ON with access to gas, which would be vital in the medium term due to the constraints on using coal in Germany in the future. We believe Ruhrgas could also create significant synergy potential for E.ON.

We derive a value for Ruhrgas from its infrastructure business as well as its wholesale gas trading business. We value Ruhrgas based on a DCF analysis in addition to an analysis of Ruhrgas' earnings multiples. Our assumptions are based on stable margins in the wholesale business and margin improvement in the infrastructure business, as we believe Ruhrgas will be able to achieve cost control if it combines with E.ON. Our assumption of relatively stable margins is controversial – we take the view that current back-to-back oil-indexed contracts will remain largely in place over the next several years providing for continued stability of margins. On this basis, we estimate the EV for Ruhrgas to be EUR11.3 bn, representing an equity value of EUR13.2 bn.

Synergy potential from Ruhrgas

An important driver of our valuation is the cost control we believe E.ON would be able to achieve with Ruhrgas. In our view, there are significant synergies to be extracted from the combination. These synergies focus on cost control and operational efficiency advantages:

- Combining their administrative activities

- Combining interface with a third party's such as network users
- Increasing their negotiating power vis-à-vis Germany's regulatory bodies

We would also expect E.ON to be able to apply some of the lessons learned from its extensive cost control programme to achieve these significant potential cost savings.

Our base case assumes a 3% reduction in the combined Ruhrgas/E.ON energy workforces over 2004-2008. We value the NPV of this base case scenario at EUR1.2 bn or EUR2 per share (including EUR415 mn in one-off restructuring costs).

Ruhrgas – the current acquisition process

On July 3, 2002, E.ON reached agreements to acquire the 40% interest in Ruhrgas held indirectly by ExxonMobile, Shell and Preussag. The completion of these transactions would make E.ON the sole owner of Ruhrgas.

Although Germany's Federal Cartel office blocked the acquisition of Ruhrgas by E.ON, the German Secretary of State, on behalf of the Minister of Economics, over-ruled this decision and on July 5, 2002 granted E.ON 'ministerial approval' to acquire Ruhrgas.

Shortly thereafter, the High Court of Dusseldorf suspended the decision and launched an extensive assessment of the approval process of the Federal Ministry of Economics as requested by several parties looking to block the deal. On August 15, the Ministry of Economics announced that it will hold a new hearing on E.ON/Ruhrgas takeover plans on September 5 to address concerns over the approval process.

We expect the Ministry of Economics to satisfy the outstanding procedural complaints. It is on this basis that we assume the Ruhrgas acquisition goes through and completes in 4Q2002. As this situation is very uncertain, we also assess the impact of the transaction being blocked.

Ruhrgas – the likely impact on E.ON if the acquisition does not happen

We expect the following repercussions if E.ON's acquisition of Ruhrgas is not approved:

- **Strategic impact:** E.ON would not be able to fulfill its objective of becoming Germany's leading integrated electricity and gas player. It would therefore need to develop a new strategy for redeploying its balance sheet in a value creative way. This may mean further commitment to expanding its current position in the US market and/or looking for other opportunities in Europe. Additionally, as the completion of RAG's acquisition of Degussa is triggered by the Ruhrgas transaction approval, if E.ON did not receive Ruhrgas approval, E.ON would need to identify a new solution to the difficult disposal of its majority stake in the non-core chemicals business, Degussa.
- **Valuation impact:** Based on our EUR11.3 bn EV value for Ruhrgas, if E.ON were not successful in its acquisition, it would have a negative impact of EUR3 per share for our E.ON valuation. As we value Degussa at EUR36 per share, the collapse of the Degussa disposal deal would not impact our fair value assessment.

- **Earnings impact:** We expect E.ON's EBITDA CAGR to be 3.1% over 2003E-2006E. As Ruhrgas would contribute to growth during this time, E.ON's EBITDA growth rates would reduce to 2.7% over the same period if E.ON were unsuccessful in its acquisition of Ruhrgas. Additionally, Degussa would remain consolidated which would result in earnings being more exposed to cyclicality.

- **Balance sheet impact:** Greater acquisition risks would be factored into E.ON as we believe its available 'firepower' would increase from EUR20 bn to approximately EUR27 bn, representing 75% of E.ON's market capitalisation.

Exhibit 20: E.ON sum-of-the-parts valuation excluding Ruhrgas
(EUR mn)

Business segment	EBITDA 03E	Corresponding EV	Implied multiple	Valuation assumptions
Energy	4,763	35,516	7.5x	DCF, WACC 6.5%, Beta: 1, LT growth: 1.5%
Powergen	1,839	12,563	6.8x	Fair value of 500p per share
Ruhrgas	0	0	n.m.	Assuming not completed
Total core businesses	**6,602**	**48,079**	**7.3x**	
Degussa	1,843	14,270	7.7x	Fair value of EUR36 per share
Viterra	646	4,621	7.2x	Veba/Viag independent merger valuation
Total Group EV	**9,091**	**66,970**	**7.4x**	
Net Debt		-245		2003E net debt
Participations		7,741		P/BV multiple of E.On 1.3X
Minorities		-9,001		P/BV multiple of E.On 1.3X
Pension and nuclear provisions		-19,417		2003E book value
Total adjustments		**-20,922**		
Total Equity value		**46,048**		
Implied price per share (EUR)		**67**		
Current price per share (EUR)		54.0		
Potential upside to implied price per share		24%		
Discount (premium)		19%		

Source: Goldman Sachs Research estimates.

Recent acquisitions: Powergen and LG&E

Powergen is active in electricity generation, distribution, gas transportation, shipping and energy supply business in the UK. Powergen has a total capacity of 7,800 MW, accounting for 10% of the UK generation market share. Through Powergen's brand, it holds over 3 mn customer relationships, predominately in electricity. Powergen has exposure to the US through its wholly owned subsidiary, LG&E Energy Corp.

The acquisition of Powergen was in line with E.ON's strategy. Through LG&E, E.ON entered the US market at an early stage in deregulation and consolidation. LG&E has 1.2% market share in electricity and 0.2% in gas.

We value Powergen at EUR12.6 bn on a sum-of-the-parts basis. We value the UK business as follows: generation capacity at £220/kW, supply business at £275 per customer, distribution business at 10% premium over RAB. We value LG&E at EUR6.7 bn. Our valuation for Powergen implies 500p per share, a 35% discount to the 765p paid.

Non-core assets: Disposals of Degussa and Stinnes underway

E.ON's current non-core assets include Degussa, Stinnes and Viterra. E.ON is currently in the process of disposing of Degussa and Stinnes.

Chemicals: The disposal of E.ON's 64.5% stake in Degussa is directly linked to E.ON's proposed acquisition of Ruhrgas. RAG would acquire a majority stake in Degussa as follows:

- The public cash offer by RAG at EUR38 per share to Degussa shareholders which ended on August 9 resulted in RAG announcing on August 12 that it had secured acceptances for 28.4% of Degussa.
- Assuming E.ON receives approval for Ruhrgas, RAG would buy Degussa shares from E.ON at EUR38 per share to have the same size stake in Degussa as E.ON. RAG's 28.4% acceptances imply that RAG would need to buy 18.1% of Degussa from E.ON so that they could both hold 46.5% in Degussa. The resulting free-float would be 7%.
- By May 31, 2004, E.ON should have sold the necessary amount of Degussa shares to RAG to allow RAG to hold 50.1% of Degussa. The price received per share would be EUR38. Subsequently, E.ON's remaining stake (46.5% at the most) would be sold on the market.

On Degussa's existing structure (majority owned by E.ON) we apply a fundamental fair value to Degussa of EUR36 per share.

Distribution and logistics: EO.N has approved the disposal of its stake in Stinnes to Deutsche Bahn AG for EUR1.6 bn, achieving a book gain of EUR600 mn. The transaction is expected to complete by management in 2H2002.

Property: E.ON has committed to disposing of its 100% owned property business, Viterra over the next five years. It is considering a variety of options and is currently preparing the business for disposal.

RWE (NR): Integration is key

RWE is undergoing a significant restructuring process to focus on multi-utility businesses: electricity, gas, water and waste management. As of the end of TY2001, 82% of RWE's EBITDA was derived from its core businesses. We expect this core contribution to increase to 95% of EBITDA by 2004. This increase would be fuelled by the disposal of non-core assets and the acquisition of businesses identified as within RWE's new core area of multi-utilities.

RWE's restructuring is almost complete

The acquisition phase began with the merger of RWE and German electricity and gas utility, VEW. This created Germany's largest electricity utility and second-largest gas supplier with over 1 mn customers and 177T Wh of gas sold. The subsequent phase of planned acquisitions is summarized in Exhibit 21.

Exhibit 21: Recent acquisitions – completed and proposed

RWE				
Acquisition date	**Name of target**	**Acquisition price**	**Sector**	**Closing**
25/09/00	Thames Water	£6.8 bn, EUR11.2 bn	Regulated water (UK)	Nov 2000
12/09/01	American Water Works	US$7.6 bn, EUR 7.7bn	Regulated water (USA)	expected by mid-2003
15/12/01	Transgas + GDCs	EUR 4 bn	Gas transportation and distribution (Cz. Rep.)	May 2002
16/03/02	Innogy	GBP5.3 bn, EUR8.5 bn	Electricity and gas (UK)	Jul 2002

Source: Goldman Sachs Research estimates.

Most significant strategic issue: Creating value from integration

We believe the key challenge for RWE is creating value from integration. Although we expect the process to be swift, we are skeptical that integrating Thames Water, Innogy, Transgas and eventually AWW (providing the acquisition is completed), would create material operational synergies.

This challenge is one for the new management. On May 31, 2002, the supervisory board appointed Harry Roels as the Chairman of the Executive Board. Mr. Roels is due to take over from Dr. Kuhnt on March 1, 2003. Mr. Roels spent 30 years of his career at Royal Dutch Shell, where he was appointed member of the management board in 1999, in charge of the gas and power business. Mr. Roels has extensive international experience in the UK, Malaysia, Brunei, Turkey, Norway and the Netherlands.

The potential impact from the change in management is uncertain as Mr. Roels is unknown to the capital markets. Mr. Roels has also yet to detail his plans for RWE.

SWOT analysis: Limited earnings growth without further acquisitions, in our view

Exhibit 22: RWE SWOT analysis

Strengths	Weaknesses
• Strong market share in German electricity and gas • Solid market presence in UK electricity and gas • Rebalanced business portfolio with a major presence in electricity and water • Solid balance sheet with an interest cover of 4x in TY2001	• High dependency on German coal both as an owner and as a user • Limited access to wholesale gas in Germany • A much smaller #3 in the global water market • Limited synergies expected from integration • Portfolio of mature businesses – limited growth • Remaining non-core assets • Exposure to coal and gas prices
Opportunities	**Threats**
• Group restructuring to focus on core by disposing of Heidelberger and Hochtief • Cost control to support profitability growth • ROIC incentive scheme • Growth prospects for global water • New management team • Leverage multi-utility strategy	• Firepower, which we estimate at EUR8.3 bn, 41% of market cap • Competition in European energy markets • Potential change in regulatory environment in Germany • Potential stock overhang: 35% owned by municipalities, 12% owned by Allianz • Exposure to CO_2 and SO_2 emissions regulation

Source: Company data, Goldman Sachs Research estimates.

Our SWOT analysis indicates that although RWE has strong market positions and a strong balance sheet, the potential for earnings growth without additional acquisitions is limited. If we look at the businesses RWE has acquired, they are primarily mature businesses in relatively mature markets. As we do not expect operational synergies from the acquisitions, we believe creating significant earnings growth on a standalone basis will be difficult.

As the group still believes it has plenty of 'firepower' for acquisitions, acquisition risk is likely to remain significant.

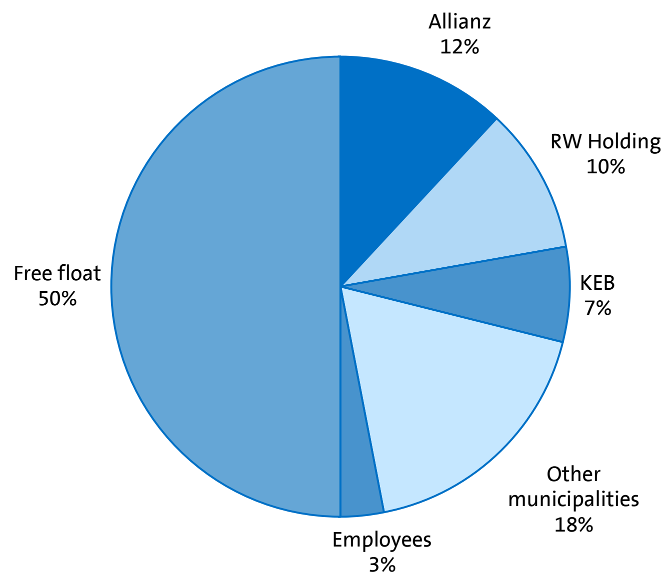
Potential risks from emission reduction programmes

In the medium term, RWE's German electricity business may be put under pressure by environmental programmes focused on reducing emissions. RWE continues to have the highest exposure to coal in Germany with 57% of its generation capacity based either on lignite or hard coal. We expect Germany to need to build new capacity over the next 5-10 years. If the ban on new nuclear power stations continues, utilities will be looking to replace coal with gas and other renewable energy sources. RWE has only limited access to gas. With the acquisition of Transgas (97% of the Czech gas transmission group as well as controlling stakes in the country's eight regional gas distribution companies), RWE gains full control of the Czech market, an important link within the gas supply chain in western Europe. Due to Transgas, RWE becomes one of Europe's largest pipeline operators with a customer base of over 4 mn.

Municipalities still represent an important shareholder base

RWE's shareholder structure continues to represent a significant weakness for the company, in our view. Municipal governments hold approximately 35% of RWE's capital and 37% of its voting rights. We believe this important shareholder base continues to have some influence over management decisions, although RWE has been successful at achieving its cost control targets to date.

Exhibit 23: RWE – shareholder structure



Source: Company data, Goldman Sachs Research estimates.

Recent acquisitions: Four main transactions proposed or completed 2000-2002

Thames Water – looking for growth

RWE completed the acquisition of Thames Water in November 2000 for £6.8 bn.

Thames Water's main business is the UK regulated activities, where it serves over 12 mn water customers. RWE targeted Thames for two reasons:

- Thames' outperformance of the UK regulatory environment provided for the expertise RWE would need to be competitive in the growing water outsourcing market.
- Thames offered some international experience, which RWE needed to accelerate its international expansion into the water and wastewater markets.

We derive an EV for Thames Water of £5.7 bn based on a sum-of-the-parts analysis. We value the UK regulated business at 2002-2003 Regulatory Asset Value (RAV), £4.5 bn, and the UK non-regulated and international operations at £1.2 bn. This values Thames Water at a 17% discount to the prices paid by RWE at the time of the acquisition.

Transgas – acquisition in line with RWE's strategy

In December 2001, RWE acquired 97% of the Czech gas transmission group Transgas, and a controlling or dominant stake in the country's' eight regional gas distribution companies. The transaction price amounts to EUR4.1 bn and the implicit enterprise value EUR4.05 bn.

This acquisition is in line with RWE's strategy – RWE will control 100% of the gas value chain in the Czech Republic and be positioned to provide an important point of transit for 20% of western European gas imports. As opportunities in Germany are limited for expansion in gas, we believe this asset represents a solid alternative.

We value Transgas at EUR3 bn on an EV and equity basis (net debt represents an immaterial positive figure). Our valuation is based on an earnings multiple analysis. Our analysis represents an 8.5x EV/EBITDA earnings multiple for 2002E. This value is 25% below the price paid by RWE.

Innogy: A building block of the multi-utility strategy

Innogy was created as part of the demerger of National Power in October 2000. It is an integrated energy company supplying 4.7 mn electricity customers and 1.9 mn gas customers in the UK. It has 8,713 MW of installed capacity (10% of the UK generation capacity) plus 800 MW in cogeneration and renewable capacity. Innogy also participates in a wind power business and Regenesys, the proprietary energy storage technology.

The acquisition of Innogy is in line with RWE's multi-utility strategy. We value Innogy at EUR6.8 bn on a sum-of-the-parts basis. We value the generation capacity at £190/kW and the supply business at £270 per customer. Our valuation represents a 20% discount to the EV paid. Our valuation implies 183p per share, a 33% discount to the 275p paid per share.

AWW: RWE is aiming to increase its exposure to the US market

In September 2001, RWE announced a friendly take-over of AWW. AWW's shareholders approved the proposed acquisition. The Hart-Scott-Rodino Antitrust Improvements Act of 1976 has expired without inquiry by the Federal Trade Commission or the Department of Justice. The local regulatory approval process has been completed in four states (Hawaii, Iowa, Texas, Tennessee). Approval is being discussed in nine other states. Separately, in a recent SEC filing, approval is expected in 3Q2002 in a further five states. We expect that most states are requiring some conditions linked to employment guarantees, and commitments on tariff levels. The completion and cash payment of the acquisition is still expected by mid-2003.

AWW is the US leader in water services to municipalities with around 3.75 mn customers and 15 mn people served (including AWW's recent acquisitions of Azurix and water and wastewater assets of Citizens Communications Corporation). With over 54,000 water service operators in the US, AWW is the market leader with 4% market share. In our view, the planned transaction is in line with RWE's strategy to expand in water and increase its exposure to the US market.

Non-core asset disposal process underway

RWE's current non-core activities include petroleum stations and refinery activities in Germany (RWE-DEA), a listed construction company (Hochtief) and Heidelberger Druckmaschinen, a listed printing machine manufacturer.

Downstream oil: on July 31, 2002, RWE announced that it had sold its remaining 50% stake in Shell & DEA Oil GmbH to Deutsche Shell. This deal will be accounted for as of July 1, 2002, however payment is scheduled for July 1, 2003. RWE is to receive US$1.35 bn for the equity stake. This disposal would enable RWE to fully transfer its downstream operations to Shell.

Printing machines: RWE intends to fully dispose of its remaining 50% stake of Heidelberger Druck by the end of 2003. RWE has already reduced its stake from 56.15% last year through a transaction designed to increase the free float of Heidelberger from 20%-26%. We would expect RWE to entertain both options to sell the remainder into the market over time or entertain a trade sale.

Construction: RWE owns a 62% stake in the construction business, Hochtief (this stake is held directly and indirectly). As RWE considers this business non-core, RWE consolidates the business only on an equity basis. Although RWE has been discussing the potential disposal of Hochtief for years, this is proving to be a significant challenge. To reduce the exposure to the ailing German construction market, Hochtief has recently strengthened its foreign business activities via the acquisition of Turner Corp in the US in October 1999 and the remaining shares of Leighton in the Asia Pacific zone. We would expect RWE to continue to consider all possible scenarios for disposal.

Sector analysis: Key drivers, news flow, and opportunities

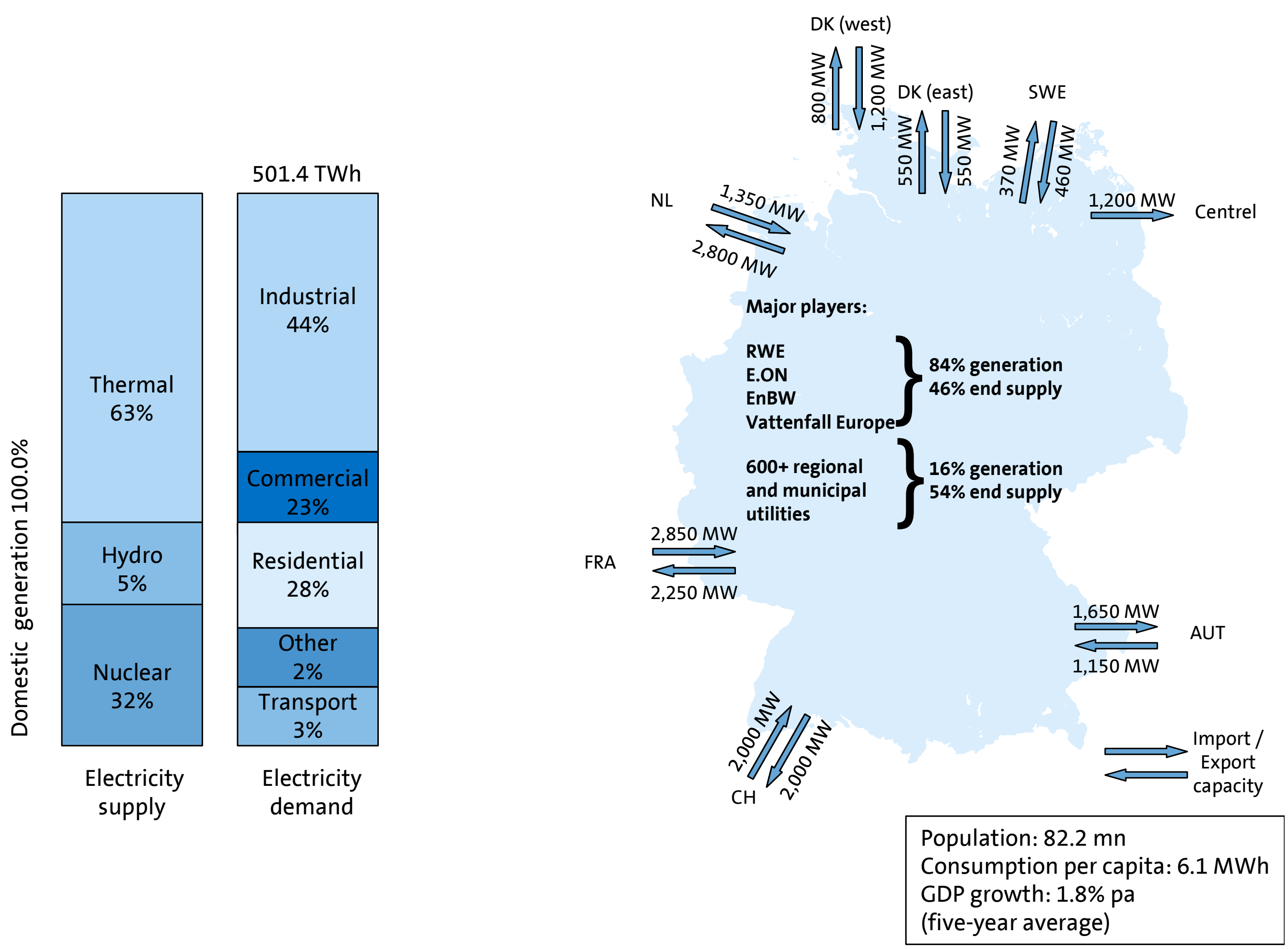
At the core of growth and profitability: German electricity

The German electricity business is core to E.ON and RWE. It is a relatively stable backbone in terms of cash flow, which has made diversification and refocusing possible. The German electricity business continues to represent the largest contribution to E.ON's and RWE's EBITDA (E.ON 41% in 2002E, RWE 42% in 2002E). We expect margin pressure in the electricity business from the gradual reduction in network tariffs to be more than offset by cost control and a slight increase in wholesale power prices.

As the scope for cost control in their existing German business becomes more limited, we expect E.ON and RWE to continue to look to tap further cost-control potential via acquisitions of smaller electricity and gas utilities in Germany.

German electricity sector: We expect consolidation to continue

Exhibit 24: German electricity market snapshot



Source: UCTE, CERA, ETSO, OECD, Datastream, Goldman Sachs Research.

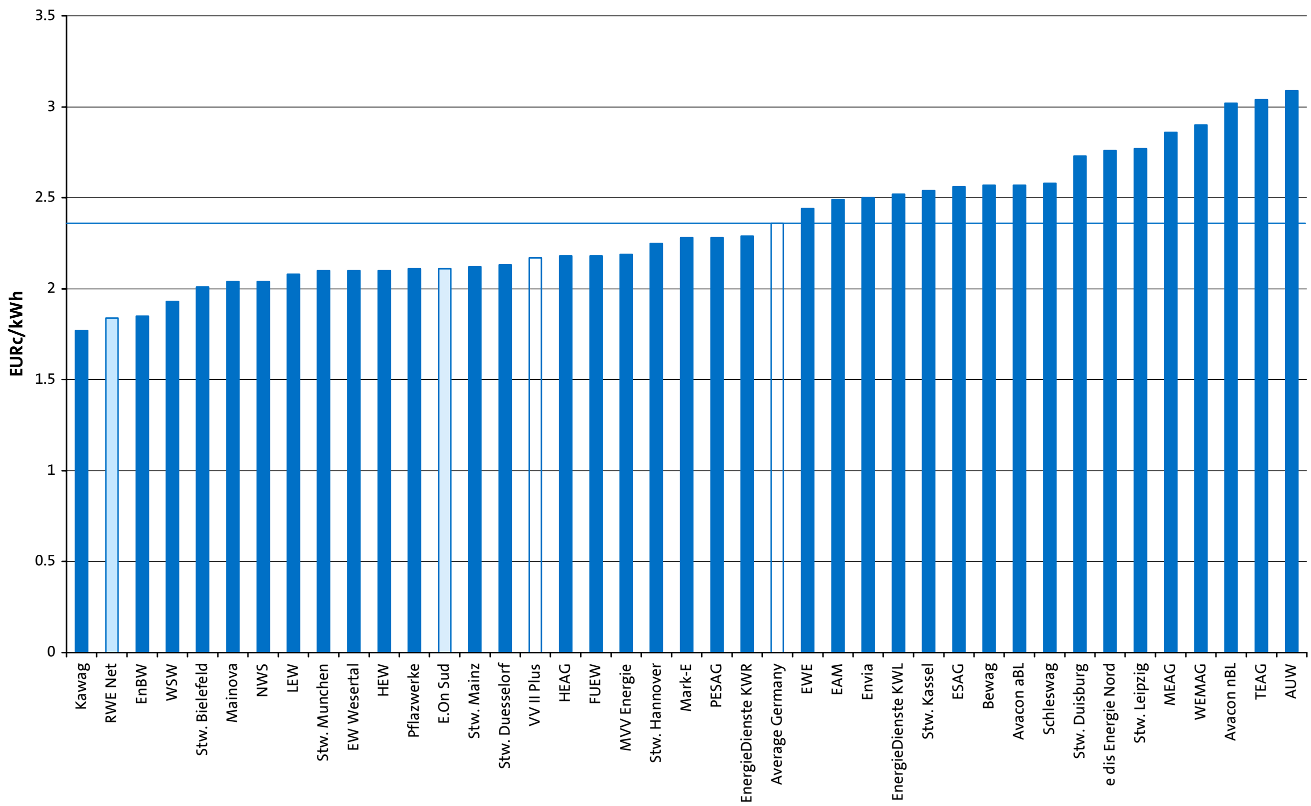
Over the past five years, the number of large supra-regional utilities has halved and the number of smaller regional and municipal utilities has reduced from 800 to 600. We expect this trend to continue as Germany's largest utilities continue to look to improve their natural hedge by accessing more customers directly. Taking over local utilities also provides the larger companies with improved cost control through the consolidation of similar businesses.

Currently, the four main generators control 85% of domestic generation but only 33% of direct customer supplies. E.ON currently controls 24% of domestic generation capacity, however it only has 6 mn direct customers (15% of the supply market). RWE currently controls 32% of the domestic generation capacity, however it only has 7 mn direct customers (18% of the supply market).

For the larger utilities in Germany, we believe margin pressure from a reduction in network tariffs could be largely offset by cost control. This is more difficult for many of the smaller regional and municipal utilities due to their inefficient size. It is on this basis that we expect the consolidation process to continue, reducing the number of independent municipal and regional utilities in Germany.

Network tariffs: The focus of current regulatory debate

Exhibit 25: Comparison of medium-voltage grid fees in Germany



Source: ViK, Verband der Industriellen Energie- und Kraftwirtschaft, April 2002.

VV II Plus is the latest industry agreement on grid tariffs (see Exhibit 25). The agreement is negotiated between the government and the major industry associations bi-annually.

We expect Germany's major utilities to continue to provide for a gradual reduction of the network tariffs as this is at the core of the domestic regulatory debate. Germany's regulatory system currently provides for significant disparity between network charges within Germany. We expect charges to converge at a lower point over time, a process we expect to be led by the major German utilities, which are typically already at the lower end of the scale (see Exhibit 25). The major utilities' approach is consistent with Germany's 'self-regulation' of its utility industry (see Exhibit 26).

Exhibit 26: German electricity regulation

The German electricity industry is self-regulated through a system of consensus which sets out non-binding regulation in agreements made between the major industry associations (ViK & VDEW) & government (BDI).

Regulatory body & responsibility
Ministry of Industry (BMWi): Energy policy
Federal Kartellamt: Promoting competition and consumer protection
State governments: End-tariff approvals

Associated legislation
EC legislation on electricity
Energiewirtschaftsgesetz (EnGW): Constitution
Distribution code: Technical parameters
VV II Plus: Practical approach to tpa

Timing of reviews
Ongoing revision of VV agreements, updates on a bi-annual basis
Reviews of tariffs by local regulators on a 12-24 month basis

Level of market opening
Supply: 100% competition since 1998 legislation; to date 4% end-customer churn
Generation: Competition through authorisation process
Wholesale market: Bulk of trading done through bilateral contracts, wholesale market only represented 6% of demand

Grid access
Negotiated third party access

Returns
Imbedded generation stations: No set returns
Transmission: Cost plus 6%-7% return on equity based on regulatory accounts
Distribution: Cost plus calculation, providing for a 6%-7% return on equity based on regulatory accounts
End-customer tariffs: Cost plus basis by state regulators

Regulatory policy issues at the forefront of the debate:
Level of transmission and distribution tariffs and tariff structure
Consistent unbundling: Across all utilities (move from only accounting to include legal unbundling)
Increasing transparency of trading

Our view of the future
Gradual reduction in grid fees
Continued progress on unbundling and transparency of trading
Growth in the trading market

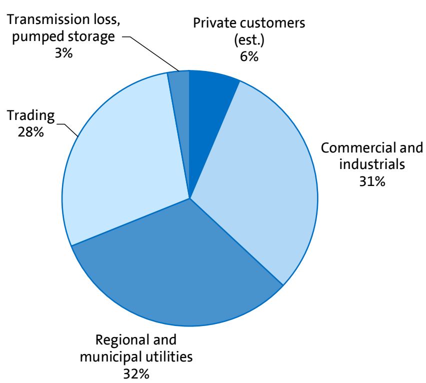
Source: Goldman Sachs Research estimates.

RWE and E.ON margins in the electricity business

Due to different fuel mix and customer portfolios, E.ON's underlying EBITDA margin in its German electricity business is higher than RWE's. Although RWE enjoys higher average prices due to a higher degree of direct contact with end-customers, its average margins are lower than E.ON's as its power stations have higher variable operating costs and as trading – a low-margin business – comprises a greater portion of electricity revenues. Due to the structural differences, we believe:

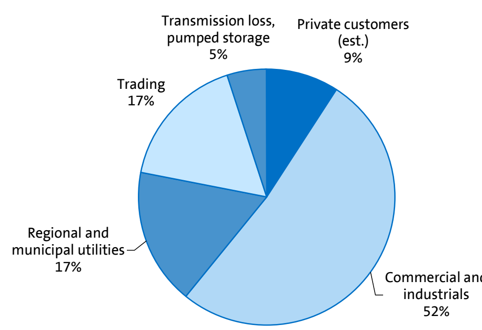
- E.ON has a higher exposure to network margin pressure
- RWE has a higher exposure to end-customer price competition and fluctuations in fuel costs.

Exhibit 27: E.ON – breakdown of electricity sales



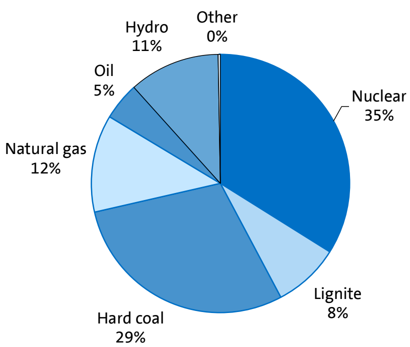
Source: Company data, Goldman Sachs Research estimates.

Exhibit 28: RWE – breakdown of electricity sales



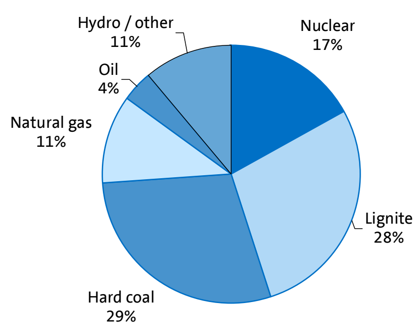
Source: Company data, Goldman Sachs Research estimates.

Exhibit 29: E.ON – breakdown of generation capacity



Source: Company data, Goldman Sachs Research estimates.

Exhibit 30: RWE – breakdown of generation capacity

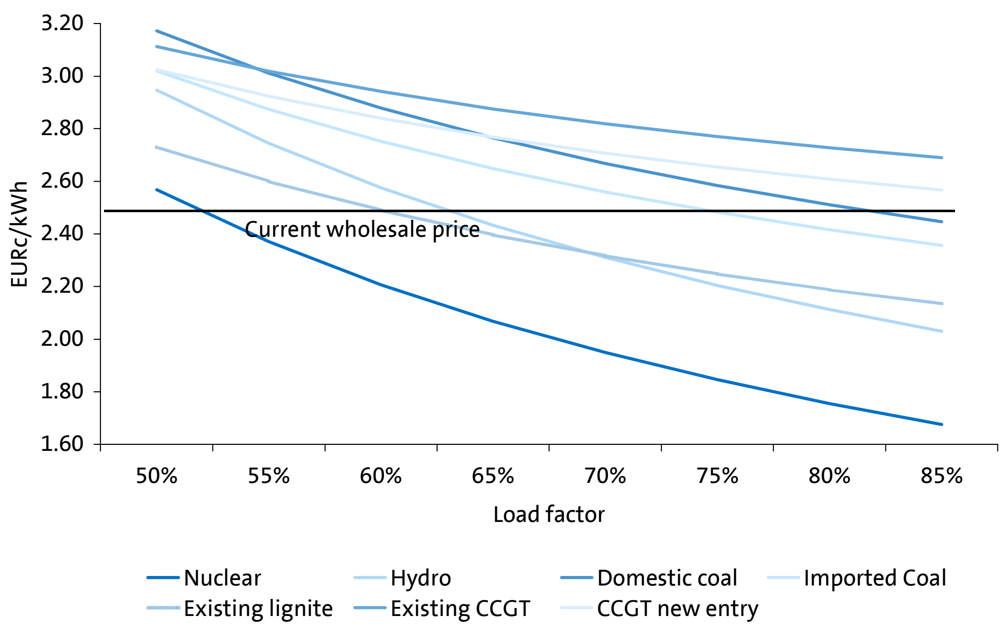


Source: Company data, Goldman Sachs Research estimates.

E.ON has higher exposure to hydro and nuclear, whereas RWE has higher exposure to lignite and hard coal. As highlighted in Exhibit 31, we estimate that the operating costs of nuclear and hydro at high load factors are lower than those of domestic and imported coal. Our operating cost calculations reflect:

- Technical characteristics of each plant type, primarily efficiency, investment cost and life of the operating cycle.
- Energy characteristics of fuels and fuel cost per kWh
- Variable operating and maintenance costs
- Total fixed cash costs
- Depreciation, which depends on the investment costs as well as the expected life of the assets.

Exhibit 31: Analysis of operating costs by fuel type



Source: Goldman Sachs Research estimates.

Earnings forecasts: German electricity business

We expect E.ON's and RWE's margins in the German electricity business to expand slightly in the short term and then remain broadly stable. We expect margin pressure from the gradual reduction in network tariffs to be offset by cost control and a slight increase in wholesale power prices.

Revenues driven by prices, tariffs, competition and volume

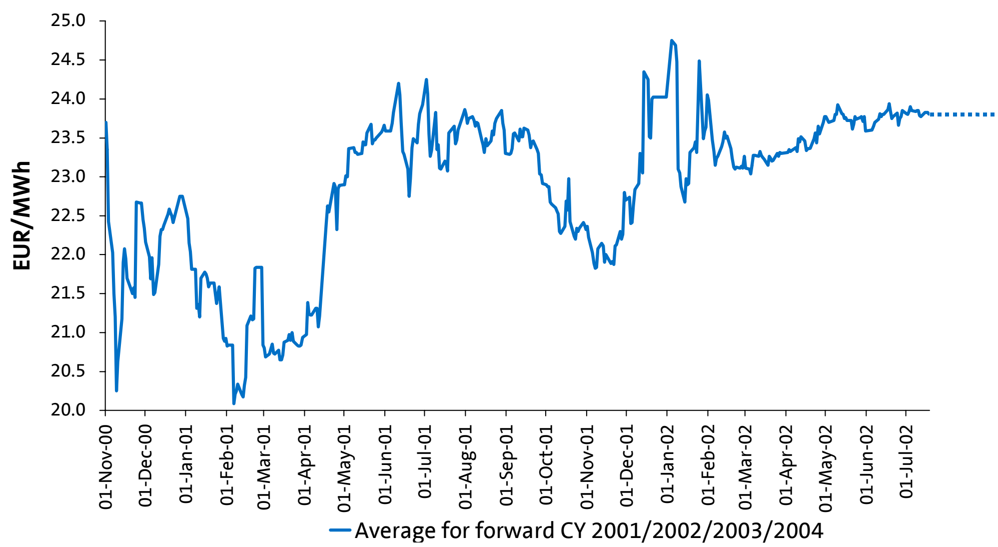
Our assumptions regarding German electricity revenues are primarily driven by wholesale price movements, movements in network tariffs and supply competition.

Wholesale prices: We expect a marginal increase

Our forecasts of wholesale prices in the short term are driven by the following assumptions:

- Maintenance of healthy reserve margins in Germany. The UCTE forecasts a capacity reserve margin including exchanges in Germany of 13% for 2001 reducing to c.10% over the next two to three years.
- Stable fuel input costs
- No further material capacity closures to come from within the German system

Exhibit 32: Forward pricing average



Source: The Heren Report, Goldman Sachs Research estimates.

In the medium term (the next four to six years), we expect the reserve margin to tighten, prices to increase and further capacity to be added. Depending on the outcome of the current debate on CO_2 and SO_2 emissions control, new capacity in Germany is likely to focus on gas.

Network tariffs: We expect gradual reductions

RWE and E.ON are expected to lead by example. We believe both groups are focusing cost control efforts on their network business to provide for gradual tariff reductions not only to demonstrate that self regulation works, but also to apply pressure to Germany's smaller utilities, where there is limited opportunity to achieve appropriate economies of scale. On this basis, we assume a gradual reduction of network tariffs (3%-4% pa) to reflect cost control within this activity.

Supply competition is waning

Supply competition has cooled off in Germany. With only very limited switching among standard-rate customers (less than 5%), utilities have reduced their direct customer acquisition campaigns. The higher levels of switching among industrial and commercial customers (up to 20%) have reduced, as the significant discounts originally offered are no longer easily achieved. It is on this basis that we expect supply margins in the German electricity industry to continue to be very small but stable.

Cost control: Both companies have good track records

RWE and E.ON have ongoing cost control programmes as outlined in Exhibits 33 and 34. Both companies have demonstrated a strong track record on cost control: E.ON has reduced costs by over EUR3.5 bn since 1993 and RWE has reduced them by over EUR2 bn since 1999. We believe that the companies will be able to continue to reduce costs, but at a lower annual level. We forecast that both groups will be able to cut at least EUR50 mn pa out of their cost base on the completion of their cost reduction programmes in 2004.

As the scope for cost control in their existing German business becomes more limited, we expect E.ON and RWE to continue to look to tap further cost control potential through acquisition of smaller electricity and gas utilities. We believe this is one of the rationales behind E.ON's interest in Ruhrgas. In our view, there are significant synergies to be extracted from E.ON's proposed acquisition of the company. These synergies focus on cost control and operational efficiency advantages. We would expect the following synergies to be created by E.ON's acquisition of Ruhrgas:

- Combining their administrative activities
- Combining interface with third parties, such as network users
- Increasing their negotiation power vis-à-vis Germany's regulatory bodies

Exhibit 33: E.ON's announced cost control plans
(EUR mn)

Cost cutting and restructuring measures	Realised 1993-1999	Realised 2000	Realised 2001	Planned 2002-2004	Total synergies realised 2000-2001
Energy	1,060	430	633	385	
Oil	308	32	25	0	
Chemicals	796	80	50	450	
Holding company	0	0	50	0	
Total	**2,164**	**542**	**758**	**835**	**1,300**

Source: Company data, Goldman Sachs Research estimates.

Exhibit 34: RWE's announced cost control plans
(EUR mn)

Cost cutting and restructuring measures (EUR mn)	Realised 99/00	Realised 00/01	Realised Short Year 2001	Planned 2002	Planned 2003-2004	Total synergies realised 2000-2001
Merger synergies		125	100	210	300	
Energy division	395	800	220	380	300	
Other divisions	210	100	20	0	0	
Total	**605**	**1,025**	**340**	**590**	**600**	**1,365**

Source: Company data, Goldman Sachs Research estimates.

Operating profit forecasts: Short-term increase expected to stabilize

Our operating profit forecasts indicate a short-term increase in margins, which should stabilize eventually due to limited cost control to offset pressure on revenues.

Exhibit 35: German electricity – EBITDA margins
(EUR mn)

E.ON's German electricity		2001	2002E	2003E	2004E	2005E	2006E
Excluding trading							
EBITDA		2,739	3,154	3,303	3,457	3,471	3,494
EBITDA margin		**27.6%**	**30.5%**	**31.0%**	**31.5%**	**31.0%**	**30.9%**
yoy growth			15.1%	4.7%	4.7%	0.4%	0.7%
Including trading							
EBITDA		2,780	3,198	3,351	3,508	3,523	3,549
EBITDA margin		**23.0%**	**21.7%**	**21.6%**	**21.9%**	**21.4%**	**21.1%**
yoy growth			15.0%	4.8%	4.7%	0.4%	0.7%
RWE's German electricity	**2000/2001**	**TY2001A[1]**	**2002E**	**2003E**	**2004E**	**2005E**	**2006E**
Excluding trading							
EBITDA	2,305	1,413	2,951	2,974	3,083	3,121	3,152
EBITDA margin	**21.8%**	**23.6%**	**25.0%**	**24.3%**	**24.3%**	**24.1%**	**24.0%**
yoy growth			4.4%	0.8%	3.7%	1.2%	1.0%
Including trading							
EBITDA	2,360	1,445	3,041	3,075	3,194	3,241	3,279
EBITDA margin	**20.3%**	**17.1%**	**14.6%**	**13.8%**	**13.4%**	**13.0%**	**12.7%**
yoy growth			5.2%	1.1%	3.9%	1.5%	1.2%

Note 1) TY 2001: July to December 2001

Source: Company data, Goldman Sachs Research estimates.

RWE and Consol – RWE's US coal, gas and electricity generation business

Although RWE includes Consol's results in its Electricity figures, we strip them out to gain a clearer picture of the underlying electricity businesses.

RWE's 74%-owned US subsidiary, Consol, represents 13.2% of RWE's TY2001 'German electricity' EBITDA and 11.6% of our forecast 2002 group EBITDA. Consol achieved an EBITDA margin of c.20% in 2001. Consol is active in coal mining, upstream gas and power generation in the US. The coal mine facilities are located on the east coast, upstream gas in southwestern Virginia and its 88 MW of gas-fired generation station (joint venture with Allegheny Energy) in southwestern Virginia. RWE views Consol as a multi-fuelled provider which may be developed further through generation acquisitions in the US.

Consol has been a very volatile business. Consol suffered from operational problems in its coal mines a year ago, which meant that off-take volumes were down. Thereafter, the demand for coal dropped with a significant negative impact on Consol's off-take volumes. Additionally, the depressed gas and electricity prices of the past few months have hit profitability. In response, Consol has been restructuring – including taking mining capacity out of the system to support coal prices. Fundamentally, these difficulties highlight Consol's exposure to coal and gas commodity risk, and its own operating leverage.

We expect Consol's 2002E EBITDA contribution to be EUR400 mn (according to IAS Accounting), down EUR200 mn compared with FY2001, which was down on the figure for the year before. Over the next two to three years, we expect Consol's EBITDA to remain flat, as we are not optimistic about the prospects of a short-term turnaround.

Access to gas and the environment

RWE is most exposed to emissions reduction targets in Germany due to its reliance on coal. With the opportunity costs of emissions reduction added to coal generation, the cost competitiveness of this fuel source will reduce. We expect a fuel mix shift to favour those companies with access to nuclear, hydro, gas CCGT and renewable facilities, which is likely to disadvantage RWE and benefit E.ON.

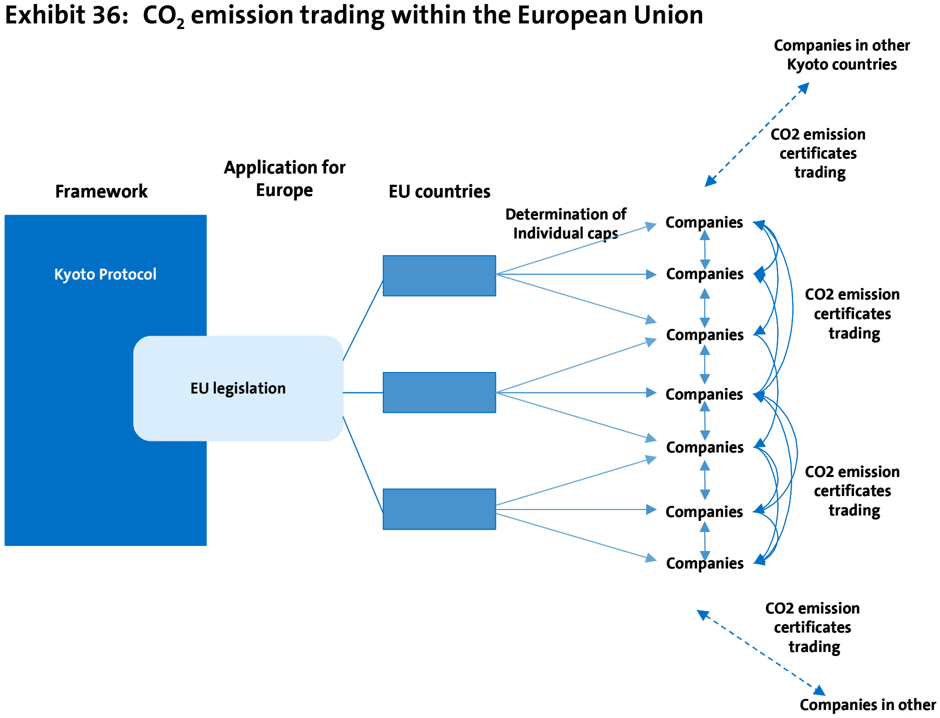
European emission reduction commitments

EU countries have pledged to reduce their greenhouse gas emissions significantly by 2010. As the electricity industry is the biggest producer of greenhouse gases, it is the focus of EU policies. Each country will impose emission limits on a company-specific basis. We believe the risks for the European utilities are:

- Requirement to share the costs of reducing emissions, which would weigh on profitability.
- A fuel mix shift, which may change the competitive position of utilities.
- How greenhouse gas emission certificates are allocated on a company-by-company basis and how the value of, and market for, these certificates develops.

To provide a system to benefit those companies that outperform their targets and penalise those which fall short, a market for greenhouse gas certificates is being developed, whereby companies can trade to satisfy their deficit or reduce their surplus. The allocation of certificates to companies will be determined on a country-by-country basis over the next several years; the market for certificates is expected to begin trading in 2005.

Exhibit 36: CO_2 emission trading within the European Union

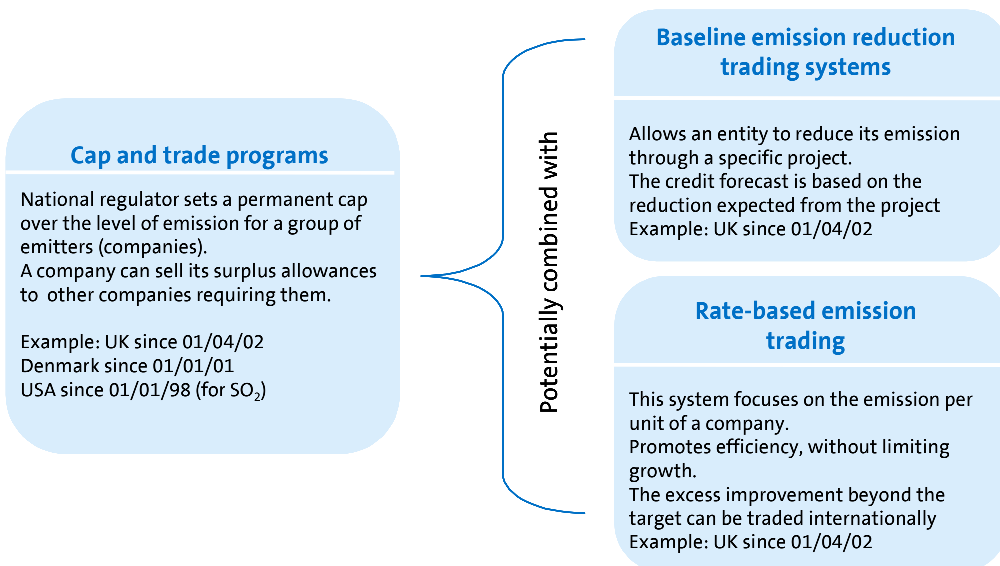


Source: Goldman Sachs Research estimates.

We expect the value of greenhouse gas certificates to represent the marginal cost of the reduction of 1 tonne of CO_2. CO_2 emissions can be reduced by:

- Improving the efficiency of the generation station (greater output, less fuel input)
- Closing a generation station with high emissions, such as coal and oil
- Building new efficient generation stations using gas or renewable energies
- Avoid running own stations by buying power through the wholesale market
- Reducing final demand

Exhibit 37: Certificates provide for under/outperformance on targets



Source: International Emission Trading Association.

Impact on the German utilities: RWE may be more negatively affected than E.ON

RWE is most exposed to these potential environmental risks in Germany due to its reliance on coal. With the opportunity costs of emission reduction added to coal generation, the cost competitiveness of this fuel source could significantly reduce.

We expect a fuel mix shift that favours those companies with access to nuclear, hydro, gas CCGT and renewable facilities. In our view, this shift is likely to disadvantage RWE and benefit E.ON, especially if E.ON is successful in its acquisition of Ruhrgas.

A key factor in analysing the impact of the emissions reduction targets on European utilities will be how each country decides to allocate the emissions certificates to the companies. In this process, national politics may position utilities to benefit from these changes or at least suffer less than they proportionally should. As these programmes are still being developed, it is difficult to assess the impact on RWE and E.ON.

To provide a benchmark, we analyse the potential impact by:

- Applying the overall emissions reduction Germany has committed itself to and applying this % reduction to the utility industry and each company.
- Assuming the utilities will be forced to share the burden with tax-payers and consumers – on this basis we assume utilities will bear 50% of the costs.
- Estimating the costs of emissions reduction through the application of the current estimate for the cost of non-compliance (EUR100 per tonne).

Using this approach, we calculate that the potential cost burden is material, up to 13.1% of RWE's market cap and up to 6.6% of E.ON's market cap. In EBITDA terms, this cost burden represents 8.6% of RWE's annual group 2002E EBITDA and 6.9% of E.ON's group 2002E EBITDA.

Potential impact of the German elections

German elections on September 22 are likely to have an impact on the German utilities. The three main contentious utility-related issues are: nuclear policy, political support for indigenous coal and the role of a regulator. In the exhibit below, we lay out the fundamental positions of the CDU/CSU and the SPD. As there are currently a variety of possible political outcomes from the elections, the implications for utilities are still uncertain:

- **A retraction of the current nuclear compromise would be good news for both E.ON and RWE, but we believe it would be more significant for E.ON,** which has a higher reliance on nuclear power than RWE. Nuclear represents 35% of E.ON's installed capacity versus only 17% for RWE.

- **Support for indigenous coal** – Germany's next government will be determining the country's approach to the allocation of greenhouse gas emissions certificates which could have a significant impact on the future of lignite and hard coal in Germany. The CDU plans to reduce hard coal subsidies to only 'survivable levels' from 2005. (RWE's fuel mix is based on 28% lignite/29% hard coal; E.ON's 8% lignite/29% hard coal.)

- **Regulation continues to be an issue as there are demands from Brussels for Germany to install an official electricity regulator** (Germany is the only EU country without one). The key issues for the regulator are likely to be grid prices and unbundling. We would not expect a regulator to materially affect our scenario for a gradual reduction in grid fees, which are of most consequence for Germany's smaller utilities rather than E.ON and RWE.

Exhibit 38: Federal election policy platforms and the potential implications for E.ON and RWE

Energy policy platforms of SPD and CDU/CSU

	Political parties		Potential implications for E.ON and RWE	
	SPD	**CDU/CSU**	**SPD**	**CDU/CSU**
Nuclear	No change to status quo: Uphold nuclear compromise	Looking to renegotiate nuclear compromise in favour of using nuclear power	No change	Good news for RWE and E.ON. E.ON benefits more
Coal	No change to status quo: Support significant subsidies	Support/subsidies may be questioned	No change	Bad news for RWE and E.ON. RWE suffers more
Regulation	No change to status quo: Support self-regulation	Introduction of electricity regulator	No change	Likely to be neutral news – no change expected in short term. Regulator likely to intensify consolidation process.

Source: Company data, Goldman Sachs Research estimates.

In the German Federal Elections on September 22, the Social Democratic Party (SPD) led by German Chancellor Gerhardt Schroeder will have significant competition from the Christian Democrats (CSU/CDU) led by the Bavarian Prime Minister Edmund Stoiber. Both parties apply a fundamentally middle-of-the-road gradualist approach to economic policy reform.

To gain majority power, one of the two parties may be required to link up with the Free Democrats (FDP), lead by Guido Westerwelle, which favours more rigorous market-oriented reforms. Although no coalitions have been announced, the FDP has been more closely linked recently to the CDU/CSU than the SPD. An additional scenario is a grand coalition with alternatives: 1) CDU/CSU and SPD with Stoiber as Chancellor; 2) SPD and CDU/CSU with Schroeder as Chancellor; or 3) SPD, FDP and Greens. We would expect structural reforms to be less likely under a grand coalition.

Valuation assumptions, key risks, financials

Our valuation assumptions for E.ON and RWE

We detail below the assumptions underpinning our valuation of E.ON's and RWE's core and non-core assets. We also set out our valuation approach to equity investments and minority interests, as well as pension, nuclear and mining provisions.

Existing core businesses: We combine DCF and multiples analyses

Our valuation of E.ON's Energy division implies a 7.5x EV/EBITDA 2003E multiple, whereas the valuation of the Electricity division of RWE implies a 7.8x EV/EBITDA 2003E multiple.

We value RWE Gas based on a DCF approach implying a 7.9x EV/EBITDA 2003E multiple. We use a DCF approach to value DEA-Upstream. Our long-term oil assumption is US$16 per barrel from 2004 onwards.

To value the core businesses of E.ON and RWE, we use a multi-criteria approach, in which we combine DCF analyses with multiples analyses.

For our DCF analysis, the weighted average cost of capital calculation is based on the following assumptions:

- A unlevered beta of 1
- An equity risk premium of 3.5%
- A cost of debt of 6%, 5.5% risk free rate and 50 bps debt premium

As we assume the same targeted financial structure for both groups, 40% equity – 60% debt, we compute a WACC of 6.5% for both companies.

As our forecast period is extended to 2010, we assume 1.5% terminal growth rates for the core energy and environment services activities.

Non-core businesses: Chemicals, property, capital goods and construction

For E.ON, we deconsolidate and expect the subsequent disposal of Degussa at the level of EUR36 per share. Vittera is the only remaining non-core asset of E.ON. We value Vittera at EUR4.6 bn, as we believe the value of this business has been maintained over the past couple of years. Viterra is primarily exposed to the residential market in Germany, which is much more defensive than the commercial and offices markets. Over the past two years, residential valuations remained broadly stable.

For RWE, we use the current market value of Heidelberger Druck and Hochtief.

Equity investments and minority interests valued on P/BV trading multiples

We value the equity investments and the minority interest at the P/BV multiple at which E.ON and RWE are trading. We use a 1.3x P/BV multiple for E.ON and a 2.5x P/BV for RWE.

If we were to value these at book value, it would have a EUR2 per share negative impact on our implied RWE equity value per share. If we were to value these assets at book value for E.ON, the impact would be EUR1 per share.

Provisions: At book value

We apply the book value of pension, nuclear and mining provisions as debt. The profit and loss (P&L) is charged with the financial expense (c.6%) of this 'debt' below the EBIT line with other financial income & expenses.

We treat the full value of the provisions as debt in our EBITDA interest cover. As this is not necessarily how the companies calculate their own interest cover – we believe we are more conservative than they are in terms of how much they still have to spend on acquisitions.

Key risks to our valuation

We detail below the key risks to our valuation assumptions for both RWE and E.ON. We believe the key risks for E.ON are acquisition, integration, regulation and competition. For RWE, the key risks are integration, competition, regulation, country-based and operational risks. Additionally, both RWE and E.ON are exposed to the fluctuations of capital markets through their debt and equity investments.

E.ON: Key risks to our valuation

Ruhrgas acquisition is blocked

Although E.ON has a strong market position in Germany and the UK, if the company is unable to provide for the next leg of its strategy, it will likely have difficulty in creating significant additional synergistic value and growth from its current asset portfolio. As we see Ruhrgas key to E.ON's strategy, if the deal were to fall through, we believe this would have a negative impact on the company's strategy, our valuation, expected earnings growth and implied acquisition risk. Our sum-of-the parts valuation without Ruhrgas equals EUR67 bn on an EV basis, EUR3 less than with Ruhrgas on a per share basis.

Integration and acquisitions may stretch management

E.ON is in the process of completing a number of complex transactions of varying sizes, some of which are outside Germany. These transactions represent a mix of disposals and acquisitions. This could stretch management, particularly as the various integrations are happening simultaneously.

Increased competition in core markets

Market liberalisation is being introduced throughout Europe. This results in competition for customers, price competition and hence margin pressure. As E.ON controls more generation than it does customers in Germany, E.ON is fundamentally long generation and is hence more exposed to wholesale generation prices and network tariffs than it is to end-consumer tariffs. In the UK, through Powergen, E.ON is exposed to wholesale price movements and supply margin shifts.

Regulatory risk, particularly if government changes at next election

As E.ON controls regulated grid assets, it continues to be exposed to regulatory risk in Germany and in the UK. The Federal Kartell Office plays the role of the de facto regulator in Germany. The current grid pricing schemes in Germany appear to be constantly changing. So although there seems to be support for continued self-regulation of the industry, this could alter, especially if there is a change of government at the next federal elections in September 2002.

Commodity pricing risks increase if planned disposal of Degussa fails

Through a variety of E.ON's businesses, it is exposed to the cyclicality of commodity prices. The commodities E.ON is most exposed to include electricity, gas, coal and oil.

Assuming E.ON is unsuccessful at disposing of Degussa, it would continue to be exposed to the commodity pricing risks (predominately to oil) and capacity risks in the industrial, fine and specialty chemicals (although the specialty chemical business is more demand-driven).

Value fluctuations in the German property market

Vittera, E.ON's wholly owned property subsidiary, would be affected by any shift in the values of German commercial and residential property, and/or shifts in rents.

Financial market risks

We estimate that E.ON had approximately EUR8 bn of value from short-term equity investments on its books at the end of FY2001. The company has said the current market value of these assets is no more than 10% lower than the book value as of the end of FY2001. To be conservative, we have reduced the value of these assets in our analysis by 10%.

RWE: Key risks to our valuation

We believe integration will be a key challenge for RWE

RWE is in the process of completing a number of complex transactions of varying sizes, some of which are abroad. These transactions represent a mix of disposals and acquisitions. This could stretch management, especially for the acquisitions as the different integrations are running in parallel.

Increased competition in core markets: Exposed to wholesale via Innogy

Market liberalisation is being introduced throughout Europe in electricity and gas. This results in competition for customers, price competition and hence margin pressure. As RWE controls more generation than it does customers in Germany, RWE is fundamentally long generation and is hence more exposed to wholesale generation prices and network tariffs than it is to end-consumer tariffs. In the UK, through Innogy, RWE is exposed to wholesale price movements and supply margin shifts.

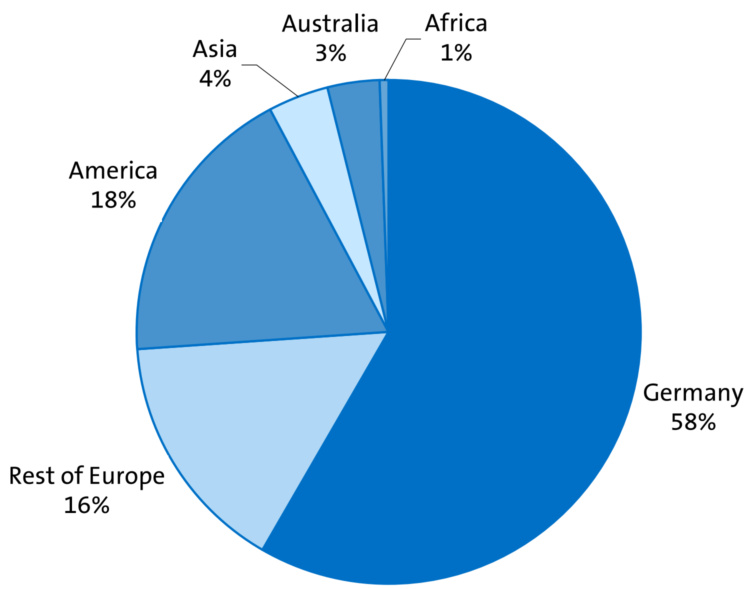
Regulatory risk, particularly if government changes at next election

As RWE controls regulated grid assets, it continues to be exposed to regulatory risk in Germany as well as in the UK. The Federal Kartell Office plays the role of the de facto regulator in Germany. The current grid pricing schemes in Germany appear to be constantly changing. So although there seems to be support for a continued self-regulation of the industry, this could alter, especially if there is a change of government at the next federal elections in September 2002.

Country risks: Large portfolio of international businesses

Through recent acquisitions, the portfolio of RWE's strategic investments has extended significantly beyond Germany and now includes Asian, Latin American and North American countries (42% of RWE's 2001 turnover was generated outside Germany). The risks associated with conducting business in some countries outside Western Europe, the US and Canada include slower payment of invoices, nationalization, social, political and economic instability, increased currency exchange risk and currency repatriation restrictions.

Exhibit 39: RWE – geographic split of TY2001 turnover



Note: Truncated year (TY2001). Changed to December year-end.

Source: Company data.

Operational risks: Could be most significant in the Water division

Operational risks exist throughout RWE's utility portfolio. These risks are limited within regulated businesses as long as RWE has provided for required standards of maintenance and capex. Operational risks could be more significant especially within RWE's Water division where, depending on the contract structure, RWE can be made responsible for water quality as well as meeting universal service obligations even if RWE has provided for required standards of maintenance and capex.

Financial market risks

RWE currently holds EUR11 bn in short-term securities. These assets are split between triple A long dated bonds (c.80%) and equity (c.20%). At its 1H results, RWE announced that its c.EUR2.4 bn of equity holding had lost 28% in value on average to June 30, 2002.

Commodity pricing risks, particularly for electricity, gas, coal, oil & paper

Through a variety of businesses, RWE is exposed to the cyclicality of commodity prices. The commodities RWE is most exposed to include: electricity, gas, coal, oil and paper.

Influence of the communal shareholders over strategy

Due to the shareholder structure of RWE, there is a risk that the communal shareholders – which hold 35% of the capital and 37% of the voting rights of RWE – have influence over management decisions. In our view, the areas in which this influence could play a role are local energy policy (coal) and future cost control programmes.

German pension reform: Potential impact on valuations

The German pension reform was introduced as a result of previous system's inability to sustain a rapidly ageing population. The new system provides for individual funded pension schemes to be introduced along side the existing PAYG system. We believe the reform is unlikely to alter the level of company liabilities as a result of a number of tax and valuation disadvantages. We detail the new scheme below.

Individual funded pension schemes complement PAYG system

Until 2001, German state pension schemes were based on a PAYG (pay-as-you-go) system, also known as a 'contract between generations'. Pension benefits were paid from contribution by employee and employer (50% each) and contributions from the federal government based on current tax inflows. Pensions were not paid from pension savings accumulated over the pensioner's working life. Historically, to provide adequate pension levels to retirees, German companies made pension pledges to their staff. Traditionally, corporations promised a certain level of pension (usually a function of the pensioner's salary while employed by the company).

However, due to the state pensions system's inability to sustain the rapid ageing population:

- Benefits from existing public PAYG schemes will reduce over time, implying that individuals are becoming responsible for part of their pension income.
- Individuals will have to work longer to be eligible for the same public pension benefits.

In response, a pension reform was introduced whereby the government set up individual funded pension schemes as of 2002. To complement the existing PAYG scheme, the government has also introduced a new funding method for German corporate pension schemes, the 'Pensionsfonds', which takes over all guarantees related to the defined benefit pension scheme.

This new system should help to overcome the difficulties of the PAYG system by:

- Incentivising workers to save through advantageous tax schemes to secure higher pension income later.
- Providing a way to smooth the impact of demographic changes.

The participation rate for the new private funded pensions so far is very low with less than 10% of eligible workforce.

We believe the pension reform is unlikely to have significant impact on E.ON's and RWE's financial status. We expect liabilities to remain relatively static in the medium to long term, as a result of the following:

The 'Pensionsfonds' is not yet an alternative to book reserves

- **Change of discount rate for the actuarial calculation increases liabilities and therefore discourages companies from participating**. According to German accounting standards, on-balance sheet pension liabilities are calculated based on a discount rate of 6%, whereas 'Pensionsfonds' is based on a life insurance rate of 3.25%. This shift would result in the need for the company to inject excess cash into the new established 'Pensionsfonds' to maintain the current level of corporate benefits.

- **Loss of pension liability tax advantages**. Benefits financed through the off-balance sheet 'Pensionsfonds' receive a less favourable income tax treatment than corporate pensions financed directly on balance sheet.

- **Incremental liability created as a result of discount rate changes is only partially tax deductible**. Only one-tenth of the cash injections into the life insurance fund due to the change in the discount rate is tax deductible (10-year transition period).

As the company is liable for pensions, we treat these liabilities as debt. Our treatment of pensions for E.ON and RWE is as follows:

E.ON

Balance sheet: The book value of provisions for pension liabilities was EUR8,748 mn at the end of FY2001, which accounts for 0.3x net assets.

Profit and loss: Total interest expense and other service-type costs charged through the P&L were at EUR599 mn at 2001 (EUR503 mn for 2000), or 7.4% (5.9% in 2000) in terms of the interest expense related to total pension liabilities.

Valuation: We use the book value of the pensions and treat this as debt.

RWE

Balance sheet: Book value of pension provisions at year-end December 2001 was EUR13,915 mn, representing 1.25x net assets.

Profit and loss: Cost of retirement benefits including interest cost accounted for as part of the staff cost in the P&L, totaling EUR620 mn and EUR1,142 mn in 2001 and 2000 respectively. Pension-related expenses relative to provisions were 8.4% for the full year 2000/01 and 4.5% for the truncated 2001 financial year.

Valuation: We use the book value of the pensions and treat this as debt.

Exhibit 40: E.ON - Overview of pension assets and liabilities
(EUR mn)

Assets	1999	2000	2001
Pension assets			
B/F	188	324	977
Actual return on plan	29	2	-33
Contributions	87	631	261
Pension paid	-17	-42	-72
Other adjustments	37	62	50
C/F	**324**	**977**	**1183**
Securities (held as current assets) *			
Book value	271	7104	7906
Value in excess of BV	7	196	158
Market Value	**278**	**7300**	**8064**

Liabilities	1999	2000	2001
Funding status:			
Benefit Obligation	6246	10084	10643
Fair Value of Plan Assets	324	977	1183
Surplus / (deficit)	**-5922**	**-9107**	**-9460**
	Deficit	**Deficit**	**Deficit**
Present value of benefit obligations	5922	9107	9460
Adjusted for unrecognised actuarial gains/losses	-343	-573	-1392
Total pension provision and similar obligations	**5579**	**8534**	**8068**
Additional minimum liability	99	203	680
Pension provision in B/S	**5678**	**8737**	**8748**

* Company assets which may be invested through pension funds or through business growth, which ever management expects to be most profitable.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 41: RWE - Overview of pension assets and liabilities
(EUR mn)

Assets	1999/00	06/30/01	12/31/01
Pension assets			
B/F	462	616	2251
Actual return on plan	13	47	97
Contributions	1	5	2
Pension paid	-9	-32	-99
Other adjustments	149	1615	-236
C/F	**616**	**2251**	**2015**
Securities (held as current assets) *			
Book value	7339	3237	10611
Value in excess of BV	66	83	0
Market Value	**7405**	**3320**	**10611**

Liabilities	1999/00	06/30/01	12/31/01
Funding status:			
Benefit Obligation	10628	14826	15230
Fair Value of Plan Assets	616	2251	2015
Surplus / (deficit)	**-10012**	**-12575**	**-13215**
	Deficit	**Deficit**	**Deficit**
Present value of unfunded benefit obligations	**8822**	**10757**	**10917**
Adjusted for unrecognised actuarial gains/losses	1524	1071	700
Total pension provision and similar obligations	**11536**	**13646**	**13915**
Pension provision in B/S	**11536**	**13646**	**13915**

* Company assets which may be invested through pension funds or through business growth, which ever management expects to be most profitable.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 42: P&L impact and our valuation assumptions
(EUR mn)

E.ON

Annual impact on profit and Loss: *	1999	2000	2001
	478	623	705

Valuation Assumptions:	1999	2000	2001
Actuarial method:			
Defined Benefit	Projected Unit Credit		
Defined Contribution	Expensed in P&L		
Discount rate	6.3%	6.3%	5.8%
Rate of compensation increase	2.8%	2.8%	2.8%
Expected return on plan assets	6.3%	6.3%	5.8%
Projected pension payment increases	1.3%	1.3%	1.3%
Accounting standard	US GAAP		

RWE

Annual impact on profit and Loss: *	1999/00	06/30/01	12/31/01
	479	435	241

Valuation Assumptions:	1999/00	06/30/01	12/31/01
Actuarial method:			
Defined Benefit	Projected Unit Credit		
Defined Contribution	Expensed in P&L		
Discount rate	6.0%	6.0%	6.0%
Rate of compensation increase	3.0%	3.0%	3.0%
Expected return on plan assets	NA	NA	NA
Projected pension payment increases	2.0%	2.0%	2.0%
Accounting standard	IAS19		

* Note: US GAAP includes interest on pension as part of employee costs, whereas IAS19 accounts for it as part of the financing results

Source: Company data, Goldman Sachs Research estimates.

E.ON: Financials

Exhibit 43: E.ON summary financials
(EUR mn)

Year to December	2000	2001	2002E	2003E	2004E	2005E	2006E	CAGR 01-05E %
Profit and loss account								
Total revenues	80,279	79,664	42,195	45,195	46,526	47,944	49,255	-11.92
Operating expenses	(73,706)	(72,438)	(34,410)	(36,971)	(38,091)	(39,178)	(40,254)	-14.24
EBITDA	**6,573**	**7,226**	**7,785**	**8,224**	**8,434**	**8,767**	**9,001**	4.95
Depreciation/amortisation	(4,242)	(4,363)	(3,032)	(3,146)	(3,017)	(3,160)	(3,305)	-7.75
EBIT	**2,331**	**2,863**	**4,753**	**5,078**	**5,417**	**5,606**	**5,696**	18.29
Associate/other income	616	1,400	412	361	505	410	410	-26.42
Net interest	(691)	(710)	(692)	(980)	(599)	(450)	(381)	-10.77
Pre-exceptional PBT	**2,256**	**3,553**	**4,473**	**4,459**	**5,324**	**5,567**	**5,725**	11.88
Exceptionals/extraordinaries	4,367	(582)	2,910	(200)	1,510	(200)	(200)	-23.43
Profit before tax	6,623	2,971	7,383	4,259	6,834	5,367	5,525	15.93
Tax	(2,573)	(396)	(740)	(1,278)	(1,537)	(1,610)	(1,658)	41.98
Minorities	(480)	(527)	(654)	(731)	(495)	(545)	(601)	0.86
Net income	3,570	2,048	5,989	2,250	4,802	3,211	3,266	11.90
Balance sheet								
Tangible assets	28,844	34,286	41,175	36,170	37,230	38,188	39,042	2.73
Investments/intangibles	34,496	25,755	41,497	39,156	37,432	37,432	37,432	9.80
Fixed assets	**63,340**	**60,041**	**82,672**	**75,326**	**74,662**	**75,620**	**76,474**	5.94
Cash and cash equivalents	8,501	12,144	13,411	12,886	12,886	12,886	12,886	1.49
Other current assets	34,374	26,861	26,219	20,072	20,466	20,876	21,302	-6.11
Total assets	**106,215**	**99,046**	**122,301**	**108,283**	**108,014**	**109,381**	**110,662**	2.51
Current liabilities	19,416	16,730	12,983	8,330	8,532	8,743	8,962	-14.98
Long/short term debt/leases	14,700	12,987	31,229	24,911	20,183	18,669	16,957	9.50
Provisions	33,535	32,801	33,233	31,450	32,001	32,576	33,177	-0.17
Other liabilities	5,408	5,704	8,679	8,679	8,679	8,679	8,679	11.06
Net assets	**33,156**	**30,824**	**36,177**	**34,914**	**38,619**	**40,715**	**42,887**	7.21
Shareholders equity	28,033	24,462	29,067	30,106	33,317	34,867	36,438	9.26
Minority interest	5,123	6,362	7,109	4,807	5,302	5,847	6,449	-2.09
Total liabilities	**106,215**	**99,046**	**122,301**	**108,283**	**108,013**	**109,381**	**110,661**	2.51
Cash flow								
EBIT	2,331	2,863	4,753	5,078	5,417	5,606	5,696	18.29
Depreciation	4,242	4,363	3,032	3,146	3,017	3,160	3,305	-7.75
Change in working capital	(4,572)	2,220	(199)	(159)	(192)	(199)	(207)	NM
Non cash items/other	(5,593)	(5,590)	(826)	460	351	375	401	NM
Cash flow from operations	**(3,592)**	**3,856**	**6,760**	**8,525**	**8,593**	**8,943**	**9,195**	23.40
Dividends received from assoc./JVs	616	1,400	412	361	505	410	410	-26.42
Tax	(1,676)	(159)	(740)	(1,278)	(1,537)	(1,610)	(1,658)	78.38
Capex and investments	(3,940)	10,844	(14,223)	(3,997)	(643)	(4,118)	(4,159)	NM
Free cash flow	**(8,592)**	**15,941**	**(7,791)**	**3,611**	**6,918**	**3,625**	**3,789**	-30.95
Dividends	(702)	(1,230)	(1,384)	(1,211)	(1,592)	(1,661)	(1,695)	7.80
Interest	(691)	(710)	(692)	(980)	(599)	(450)	(381)	-10.77
Financing	11,000	(11,212)	0	0	0	0	0	NM
Net cash flow	**1,015**	**2,789**	**(9,867)**	**1,420**	**4,728**	**1,514**	**1,712**	-14.17
Per share data								
EPS	5.07	3.03	9.18	3.45	7.37	4.92	5.01	12.91
EPS - normalised	3.05	3.70	2.40	3.45	4.74	4.92	5.01	NM
DPS	1.35	1.60	2.00	1.75	2.30	2.40	2.45	10.67
CEPS	5.37	10.56	10.74	10.10	10.63	11.12	11.52	1.28
FCF	(11.26)	21.91	(11.26)	5.22	10.00	5.24	5.47	-30.07
NAV	43.44	42.36	52.28	50.45	55.81	58.84	61.98	8.56
Ratios								
EBIT margin (%)	2.9%	3.6%	11.3%	11.2%	11.6%	11.7%	11.6%	
Effective tax rate (%)	39%	13%	10%	30%	22%	30%	30%	
P/E	17.7	14.6	22.5	15.6	11.4	11.0	10.8	
Underlying DPS cover	2.3	2.3	1.2	2.0	2.1	2.1	2.0	
Gross Yield (%)	2.5%	3.0%	3.7%	3.2%	4.3%	4.4%	4.5%	
EV/EBITDA	8.1	7.4	6.9	6.5	6.3	6.1	5.9	
P/CEPS	10.1	5.1	5.0	5.3	5.1	4.9	4.7	
P/FCF	(4.8)	2.5	(4.8)	10.3	5.4	10.3	9.9	
ROE (%)	13%	8%	21%	7%	14%	9%	9%	
ROCE (%)	7%	13%	10%	12%	13%	13%	13%	
P/BV	1.5	1.6	1.3	1.2	1.1	1.1	1.0	
Interest cover	4.3	6.0	7.5	5.6	9.9	13.4	16.0	
Gearing (%)	19%	3%	49%	34%	19%	14%	9%	
Ave. number of shares in issue (mn)	763	728	692	692	692	692	692	
Yr. end number of shares in issue (mn)	763	692	692	692	692	692	692	

Source: Company data, Goldman Sachs Research estimates.

Exhibit 44: GS Quantum^{SM} – E.ON key ratios and share price performance

E.ON — Market Outperformer — €54.00

Price performance US$ (%)	1M	3M	6M	12M	YTD	3 years	5 years
Absolute	0.4%	1.4%	7.6%	(4.1%)	3.0%	(12.6%)	(10.1%)
Rel to FTSE Europe	(1.1%)	17.8%	15.7%	7.6%	19.0%	14.3%	(8.6%)
Rel to MSCI Europe	2.4%	22.3%	21.4%	19.7%	25.6%	28.7%	(0.2%)
Rel to FTSE Eur Utilities	(2.0%)	11.5%	10.2%	9.8%	6.1%	9.3%	(10.5%)
Rel to FTSE World Utilities	(6.2%)	13.4%	16.3%	25.8%	18.2%	12.0%	(1.6%)

12 month high	€61.70
12 month low	€47.20
Market cap	€37.4bn
Bloomberg code	EOA GF
Reuters code	EONG.DE

Valuation	2000	2001	2002E	2003E	2004E
EV/NOPLAT	14.5x	9.3x	18.9x	14.9x	13.1x
EV/EBITDA	6.7x	6.1x	8.2x	6.4x	6.0x
EV/debt-adjusted cash flow	NM	15.8x	9.6x	6.6x	6.6x
EV/post-tax cash flow from operations	NM	18.2x	10.2x	7.1x	6.9x
EV/gross cash invested	0.4x	0.4x	0.4x	0.4x	0.4x
EV/capital employed	1.0x	1.2x	1.0x	0.9x	0.9x
Gross dividend yield	2.1%	2.8%	3.7%	3.2%	4.3%

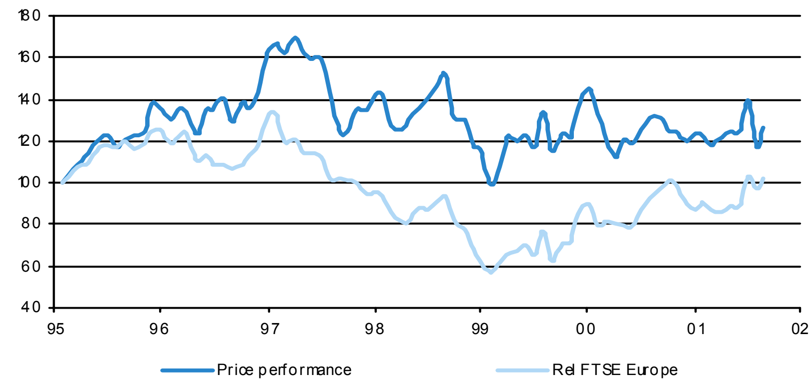
Forecasts (€ mn)	2000	2001	2002E	2003E	2004E
EBITDA*	7,189	8,626	8,198	8,585	8,940
NOPLAT	3,309	5,605	3,557	3,697	4,071
Net income	3,570	2,048	5,989	2,250	4,802
Debt-adjusted cash flow	335	3,308	7,051	8,362	8,116
Post-tax cash flow from operations	(80)	2,877	6,632	7,767	7,753
Gross cash invested	126,227	130,859	163,565	147,388	149,933
Capital employed	47,856	43,811	67,406	59,824	58,801

Per share data (€)	2000	2001	2002E	2003E	2004E
Cash flow per share	(0.13)	4.27	9.58	11.22	11.20
FCF per share	(5.63)	37.16	(11.22)	6.27	9.04
BVPS	45.14	36.29	42.00	43.51	48.15
DPS	1.35	1.60	2.00	1.75	2.30

Key ratios	2000	2001	2002E	2003E	2004E
ROACE	5.1%	7.3%	6.4%	5.8%	6.9%
CROCI (nominal)	0.3%	2.6%	4.8%	5.4%	5.5%
CROCI (real)	0.2%	1.9%	3.0%	3.1%	3.2%
WACC	5.6%	5.2%	4.9%	5.6%	5.5%
Net debt/equity	18.7%	2.7%	49.3%	34.4%	18.9%
Cash flow cover of interest	(0.1x)	4.1x	9.6x	7.9x	13.0x
Cash flow cover of dividends	(0.1x)	2.7x	4.8x	6.4x	4.9x

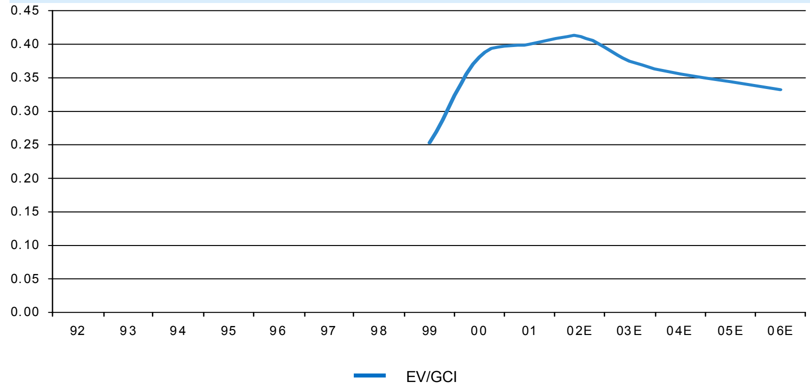
* GS Quantum EBITDA includes income from associates

Price performance (US$ rebased to 100)



Source: MSCI, Goldman Sachs Quantum.

Valuation



Source: Company data, Goldman Sachs Research estimates.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 44 cont'd: GS Quantum[SM] – E.ON key ratios and share price performance

E.ON — Germany

Sales by destination	2001
Sales - Domestic %	57%
Sales - Europe %	23%
Sales - Latin America %	11%
Sales - North America %	9%

Next result	
Date (Full Year)	Mar 06, 2003
Sales (€ mn)	42195 (-47%)
Pre Tax Profit (€ mn)	4473 (+26%)
Operating CF (€ mn)	6632 (+131%)
Net income (€ mn)	5989 (+192%)
EPS (€)	3.59 (+1%)

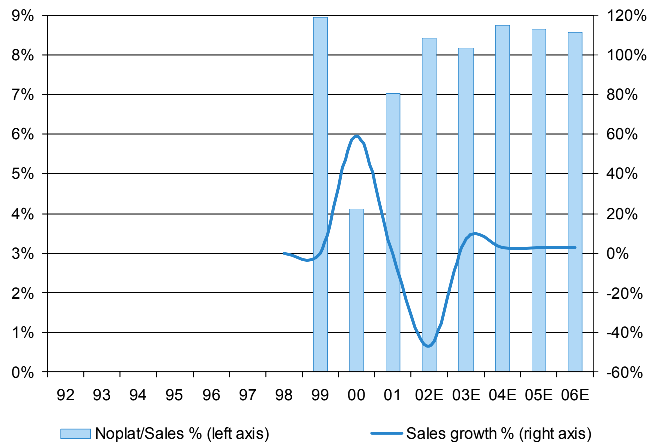
Next Dividend (NA)	
Amount (EUR - Euro)	NA
XD date	NA
Paid date	NA

Next AGM	Apr 30, 2003
Next year end	Dec 31, 2002
Database updated	Aug 20, 2002

Major shareholders	
Free Float	92%
Allianz AG	8%

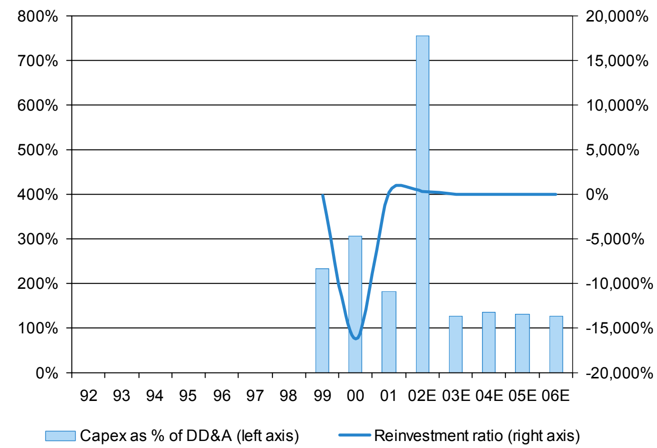
Source: Goldman Sachs Quantum.

Margin and growth



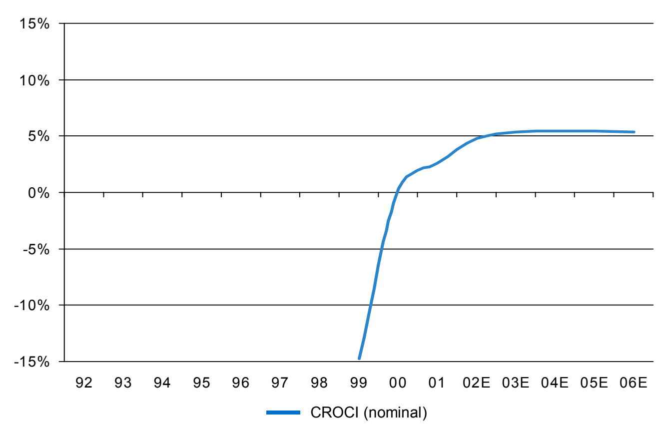
Source: Company data, Goldman Sachs Research estimates.

Reinvestment ratios



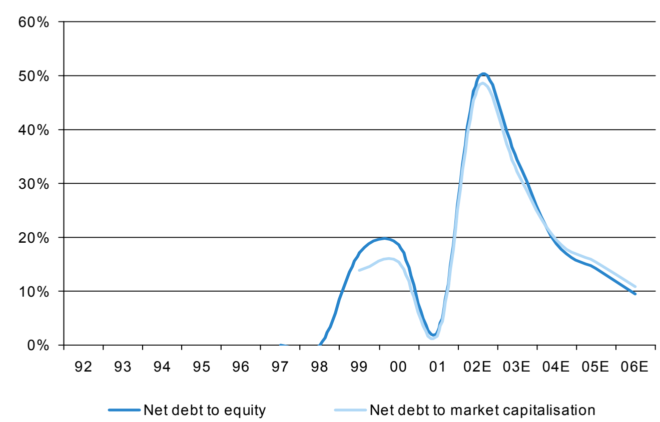
Source: Company data, Goldman Sachs Research estimates.

CROCI



Source: Company data, Goldman Sachs Research estimates.

Capital structure



Source: Company data, Goldman Sachs Research estimates.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 45: GS Quantum℠ – E.ON – key multiples and ratios

E.ON Market Outperformer €54.00

	1999	2000	2001	2002E	2003E	2004E	2005E	2006E
Share price (€)[1]	51.6	55.0	57.9	54.0	54.0	54.0	54.0	54.0
Valuation: Multiples								
Enterprise value/sales	0.4x	0.6x	0.7x	1.6x	1.2x	1.1x	1.1x	1.1x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/EBITDA	3.4x	6.7x	6.1x	8.2x	6.4x	6.0x	5.8x	5.6x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/debt-adjusted cash flow	-3.4x	143.8x	15.8x	9.6x	6.6x	6.6x	6.5x	6.3x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/post-tax cash flow from operations	-3.2x	-601.3x	18.2x	10.2x	7.1x	6.9x	6.7x	6.5x
Enterprise value/gross cash invested	0.3x	0.4x	0.4x	0.4x	0.4x	0.4x	0.3x	0.3x
Enterprise value/capital employed	0.8x	1.0x	1.2x	1.0x	0.9x	0.9x	0.9x	0.9x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM
Gross dividend yield	2.6%	2.1%	2.8%	3.7%	3.2%	4.3%	4.4%	4.5%
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM
Abbreviated financials (€ mn)								
Earnings:								
Sales	50,515	80,279	79,664	42,195	45,195	46,526	47,944	49,255
EBITDA	6,041	7,189	8,626	8,198	8,585	8,940	9,177	9,412
NOPLAT	4,520	3,309	5,605	3,557	3,697	4,071	4,151	4,220
Underlying net earnings	1,711	950	2,401	2,483	2,371	3,214	3,332	3,388
Net income	2,991	3,570	2,048	5,989	2,250	4,802	3,211	3,266
Cash flow:								
Post-tax cash flow from operations	(6,581)	(80)	2,877	6,632	7,767	7,753	7,942	8,155
Capital expenditure	7,017	12,992	7,931	22,899	3,997	4,077	4,118	4,159
Dividends	646	702	1,230	1,384	1,211	1,592	1,661	1,695
Net cash flow from operations	(14,244)	(13,774)	(6,284)	(17,651)	2,559	2,084	2,163	2,300
Balance sheet:								
Gross tangible assets	51,689	64,675	77,666	95,599	84,159	88,236	92,354	96,514
Gross intangible assets	6,459	11,684	13,042	27,289	22,361	22,361	22,361	22,361
Non-depreciating assets	23,992	49,868	40,151	40,676	40,868	39,335	39,535	39,742
Gross cash invested	**82,140**	**126,227**	**130,859**	**163,565**	**147,388**	**149,933**	**154,250**	**158,617**
Ordinary shareholders' funds	15,813	28,033	24,462	29,067	30,106	33,317	34,867	36,438
Minorities	3,895	5,123	6,362	7,109	4,807	5,302	5,847	6,449
Short-term debt	1,604	7,227	3,799	7,346	4,979	4,979	4,979	4,979
Long-term debt	3,623	7,473	9,188	23,883	19,932	15,204	13,690	11,978
Capital employed	**24,935**	**47,856**	**43,811**	**67,406**	**59,824**	**58,801**	**59,383**	**59,844**
Adjustment for unfunded pensions, goodwill	11,567	19,906	19,488	19,536	17,753	18,304	18,879	19,480
Adjusted capital employed	**36,502**	**67,762**	**63,299**	**86,941**	**77,577**	**77,105**	**78,262**	**79,323**
Per share data (€):								
Cash flow per share	(13.08)	(0.13)	4.27	9.58	11.22	11.20	11.48	11.78
DPS	1.25	1.35	1.60	2.00	1.75	2.30	2.40	2.45

[1] Average price for completed years, current price for future years.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 45 cont'd: GS Quantum[SM] – E.ON – key multiples and ratios

E.ON								Germany
	1999	2000	2001	2002E	2003E	2004E	2005E	2006E
Key drivers: Growth								
Sales		58.9%	(0.8%)	(47.0%)	7.1%	2.9%	3.0%	2.7%
EBITDA		19.1%	20.0%	(5.0%)	4.7%	4.1%	2.7%	2.6%
Post-tax cash flow from operations		98.8%	NM	130.7%	17.1%	(0.2%)	2.4%	2.7%
NOPLAT		(26.8%)	69.3%	(36.5%)	3.9%	10.1%	2.0%	1.7%
Gross cash invested		53.7%	3.7%	25.0%	(9.9%)	1.7%	2.9%	2.8%
Capital employed		91.9%	(8.5%)	53.9%	(11.2%)	(1.7%)	1.0%	0.8%
Cash flow per share		99.0%	NM	124.5%	17.1%	(0.2%)	2.4%	2.7%
DPS		8.0%	18.5%	25.0%	(12.5%)	31.4%	4.3%	2.1%
Key drivers: Margins and ratios								
EBITDA as a % of sales	12.0%	9.0%	10.8%	19.4%	19.0%	19.2%	19.1%	19.1%
Post-tax cash flow from operations as % of sales	(13.0%)	(0.1%)	3.6%	15.7%	17.2%	16.7%	16.6%	16.6%
NOPLAT as % of sales	8.9%	4.1%	7.0%	8.4%	8.2%	8.8%	8.7%	8.6%
Net income as % of sales	3.4%	1.2%	3.0%	5.9%	5.2%	6.9%	7.0%	6.9%
Net income as % of post-tax cash flow	(45.4%)	NM	71.2%	90.3%	29.0%	61.9%	40.4%	40.1%
Cash payout ratio	-9.6%	NM	37.5%	20.9%	15.6%	20.5%	20.9%	20.8%
Key drivers: Reinvestments								
Reinvestment ratio	NM	NM	275.7%	345.3%	51.5%	52.6%	51.9%	51.0%
Capital expenditure as % of DD&A	234%	306%	182%	755%	127%	135%	130%	126%
Capital expenditure as % of gross cash invested	8.5%	10.3%	6.1%	14.0%	2.7%	2.7%	2.7%	2.6%
Returns and cost of capital								
ROE	NM	4.3%	9.1%	9.3%	8.0%	10.1%	9.8%	9.5%
ROACE	NM	5.1%	7.3%	6.4%	5.8%	6.9%	7.0%	7.1%
ROACE adjusted	NM	4.5%	5.8%	4.7%	4.5%	5.3%	5.3%	5.4%
CROCI (nominal)	NM	0.3%	2.6%	4.8%	5.4%	5.5%	5.4%	5.4%
CROCI (real)	NM	0.2%	1.9%	3.0%	3.1%	3.2%	3.1%	3.1%
Net cash flow return	NM	(54.9%)	(16.0%)	(43.1%)	9.7%	10.0%	10.1%	10.3%
Cost of equity	5.5%	5.8%	5.7%	6.4%	6.4%	6.4%	6.4%	6.4%
Cost of debt	4.6%	2.6%	2.2%	2.2%	3.2%	2.0%	1.5%	1.2%
CAPM weighted ave. cost of capital (WACC)*	5.6%	5.6%	5.2%	4.9%	5.6%	5.5%	5.4%	5.5%
Value spreads								
ROACE/WACC	3.4x	0.9x	1.4x	1.3x	1.0x	1.3x	1.3x	1.3x
CROCI/WACC	-2.7x	0.1x	0.5x	1.0x	1.0x	1.0x	1.0x	1.0x
Real CROCI/WACC	-1.9x	0.0x	0.4x	0.6x	0.6x	0.6x	0.6x	0.6x
Capital structure and indebtedness								
Shares outstanding (mn)	503	621	674	692	692	692	692	692
Market capitalisation (€ mn)	24,240	40,241	39,213	37,368	37,368	37,368	37,368	37,368
Net debt (mn)	(4,396)	(2,046)	(6,958)	7,992	3,147	(1,581)	(3,095)	(4,807)
Minorities & unfunded pensions and other (€ mn)	937	9,907	20,112	22,039	14,702	17,608	18,880	20,248
Enterprise value (€ mn)	20,781	48,102	52,367	67,399	55,217	53,395	53,152	52,809
Net debt to equity	17.2%	18.7%	2.7%	49.3%	34.4%	18.9%	14.2%	9.5%
Net debt to market capitalisation	14.0%	15.4%	2.1%	47.7%	32.2%	19.5%	15.5%	10.9%
Cash flow cover of interest	(6.8x)	(0.1x)	4.1x	9.6x	7.9x	13.0x	17.6x	21.4x
Return to shareholders				YTD				
Annual return in €	(2.9%)	37.8%	(7.7%)	(5.1%)				
5 year rolling return in €	12.3%	16.9%	6.7%	1.7%				
Annual return in US$	(16.5%)	28.7%	(12.9%)	4.8%				
5 year rolling return in US$	7.9%	9.9%	(0.5%)	(0.3%)				

Note: *GS Quantum[SM] WACC is based on E.ON's current capital structure.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 46: E.ON financial summary excluding Ruhrgas
(EUR mn)

Year to December	2000	2001	2002E	2003E	2004E	2005E	2006E	CAGR 01-05E %
Profit and loss account								
Total revenues	82,611	82,854	40,356	44,796	46,552	47,712	48,751	-12.89
Operating expenses	(76,038)	(75,628)	(32,649)	(35,542)	(37,006)	(37,873)	(38,718)	-15.88
EBITDA	**6,573**	**7,226**	**7,707**	**9,255**	**9,546**	**9,839**	**10,034**	8.02
Depreciation/amortisation	(4,242)	(4,363)	(3,314)	(3,601)	(3,764)	(3,931)	(4,103)	-2.57
EBIT	**2,331**	**2,863**	**4,393**	**5,653**	**5,782**	**5,908**	**5,931**	19.86
Associate/other income	616	1,400	412	334	334	334	334	-30.13
Net interest	(691)	(710)	(519)	(619)	(501)	(366)	(238)	-15.25
Pre-exceptional PBT	**2,256**	**3,553**	**4,286**	**5,368**	**5,614**	**5,876**	**6,026**	13.40
Exceptionals/extraordinaries	4,367	(582)	2,243	(200)	(200)	(200)	(200)	-23.43
Profit before tax	6,623	2,971	6,529	5,168	5,414	5,676	5,826	17.56
Tax	(2,573)	(396)	(832)	(1,550)	(1,624)	(1,703)	(1,748)	43.98
Minorities	(480)	(527)	(654)	(658)	(725)	(800)	(882)	11.00
Net income	3,570	2,048	5,043	2,960	3,064	3,173	3,196	11.57
Balance sheet								
Tangible assets	28,844	34,286	39,246	39,642	39,996	40,306	40,571	4.13
Investments/intangibles	34,496	25,755	31,882	31,882	31,882	31,882	31,882	5.48
Fixed assets	**63,340**	**60,041**	**71,128**	**71,524**	**71,878**	**72,188**	**72,453**	4.71
Cash and cash equivalents	8,501	12,144	12,948	12,948	12,948	12,948	12,948	1.62
Other current assets	34,374	26,861	23,156	23,657	24,178	24,720	25,284	-2.06
Total assets	**106,215**	**99,046**	**107,232**	**108,129**	**109,004**	**109,856**	**110,684**	2.62
Current liabilities	19,416	16,730	11,498	11,675	11,860	12,052	12,252	-7.87
Long/short term debt/leases	14,700	12,987	22,517	20,212	18,058	15,729	13,267	4.91
Provisions	33,535	32,801	30,915	31,533	32,179	32,855	33,563	0.04
Other liabilities	5,408	5,704	7,787	7,787	7,787	7,787	7,787	8.09
Net assets	**33,156**	**30,824**	**34,515**	**36,922**	**39,120**	**41,432**	**43,815**	7.67
Shareholders equity	28,033	24,462	28,121	29,870	31,342	32,854	34,355	7.65
Minority interest	5,123	6,362	6,395	7,053	7,778	8,578	9,461	7.76
Total liabilities	**106,215**	**99,046**	**107,232**	**108,129**	**109,004**	**109,856**	**110,685**	2.62
Cash flow								
EBIT	2,331	2,863	4,393	5,653	5,782	5,908	5,931	19.86
Depreciation	4,242	4,363	3,314	3,601	3,764	3,931	4,103	-2.57
Change in working capital	(4,572)	2,220	(398)	(323)	(336)	(350)	(364)	NM
Non cash items/other	(5,593)	(5,590)	(826)	418	446	476	508	NM
Cash flow from operations	**(3,592)**	**3,856**	**6,483**	**9,349**	**9,655**	**9,966**	**10,178**	26.79
Dividends received from assoc./JVs	616	1,400	412	334	334	334	334	-30.13
Tax	(1,676)	(159)	(832)	(1,550)	(1,624)	(1,703)	(1,748)	80.90
Capex and investments	(3,940)	10,844	(6,045)	(3,997)	(4,117)	(4,241)	(4,368)	NM
Free cash flow	**(8,592)**	**15,941**	**18**	**4,135**	**4,247**	**4,356**	**4,396**	-27.70
Dividends	(702)	(1,230)	(1,384)	(1,211)	(1,592)	(1,661)	(1,695)	7.80
Interest	(691)	(710)	(519)	(619)	(501)	(366)	(238)	-15.25
Financing	11,000	(11,212)	0	0	0	0	0	NM
Net cash flow	**1,015**	**2,789**	**(1,885)**	**2,305**	**2,155**	**2,329**	**2,462**	-4.41
Per share data								
EPS	5.07	3.03	7.73	4.54	4.70	4.87	4.90	12.57
EPS - normalised	3.05	3.70	1.97	4.54	4.70	4.87	4.90	NM
DPS	1.35	1.60	2.00	1.75	2.30	2.40	2.45	10.67
CEPS	6.19	11.38	10.74	11.61	12.14	12.69	13.14	2.76
FCF	(11.26)	21.91	0.03	5.98	6.14	6.29	6.35	-26.79
NAV	43.44	42.36	49.88	53.36	56.53	59.87	63.32	9.04
Ratios								
EBIT margin (%)	2.8%	3.5%	10.9%	12.6%	12.4%	12.4%	12.2%	
Effective tax rate (%)	39%	13%	13%	30%	30%	30%	30%	
P/E	17.7	14.6	27.4	11.9	11.5	11.1	11.0	
Underlying DPS cover	2.3	2.3	1.0	2.6	2.0	2.0	2.0	
Gross Yield (%)	2.5%	3.0%	3.7%	3.2%	4.3%	4.4%	4.5%	
EV/EBITDA	8.9	8.1	7.6	6.3	6.1	5.9	5.8	
P/CEPS	8.7	4.7	5.0	4.6	4.4	4.3	4.1	
P/FCF	(4.8)	2.5	NM	9.0	8.8	8.6	8.5	
ROE (%)	13%	8%	18%	10%	10%	10%	9%	
ROCE (%)	7%	13%	11%	14%	14%	14%	14%	
P/BV	1.5	1.6	1.3	1.3	1.2	1.1	1.1	
Interest cover	4.3	6.0	9.3	9.7	12.2	17.0	26.3	
Gearing (%)	19%	3%	28%	20%	13%	7%	1%	
Ave. number of shares in issue (mn)	763	728	692	692	692	692	692	
Yr. end number of shares in issue (mn)	763	692	692	692	692	692	692	

Source: Company data, Goldman Sachs Research estimates.

RWE: Financials

Exhibit 47: RWE summary financials
(EUR mn)

Year to December	2000/01	2001	2002E	2003E	2004E	2005E	2006E	CAGR 01-05E %
Profit and loss account								
Total revenues	62,878	33,301	56,616	56,952	59,452	61,905	63,955	16.77
Operating expenses	(56,303)	(29,664)	(49,363)	(49,073)	(51,516)	(53,720)	(55,551)	16.00
EBITDA	**6,575**	**3,637**	**7,253**	**7,879**	**7,936**	**8,185**	**8,404**	22.48
Depreciation/amortisation	(3,412)	(1,837)	(3,685)	(3,986)	(4,135)	(4,285)	(4,437)	23.58
EBIT	**3,163**	**1,800**	**3,568**	**3,893**	**3,801**	**3,900**	**3,967**	21.32
Associate/other income	638	312	325	325	325	325	325	1.04
Net interest	(1,561)	(921)	(3,139)	(2,683)	(2,629)	(2,649)	(2,639)	30.23
Pre-exceptional PBT	**2,240**	**1,191**	**754**	**1,535**	**1,497**	**1,576**	**1,653**	7.25
Exceptionals/extraordinaries	(2)	(48)	1,520	0	0	0	0	NM
Profit before tax	2,238	1,143	2,274	1,535	1,497	1,576	1,653	8.35
Tax	(478)	(339)	(226)	(460)	(449)	(473)	(496)	8.66
Minorities	(496)	(183)	(400)	(330)	(338)	(341)	(338)	16.87
Net income	1,264	621	1,647	745	710	761	819	5.23
Balance sheet								
Tangible assets	31,720	32,310	33,284	34,195	34,999	35,697	36,287	2.52
Investments/intangibles	15,528	16,206	24,148	23,460	22,773	22,085	21,398	8.05
Fixed assets	**47,248**	**48,516**	**57,431**	**57,655**	**57,772**	**57,782**	**57,684**	4.47
Cash and cash equivalents	13,630	15,119	11,907	11,907	11,907	11,907	11,907	-5.80
Other current assets	26,548	27,814	28,612	27,266	28,094	28,910	29,594	0.97
Total assets	**87,426**	**91,449**	**97,951**	**96,828**	**97,773**	**98,599**	**99,186**	1.90
Current liabilities	21,987	23,677	22,185	22,002	22,292	22,578	22,817	-1.18
Long/short term debt/leases	13,992	15,796	22,746	19,776	18,344	16,654	14,624	1.33
Provisions	40,062	40,383	41,523	43,048	44,657	46,355	48,145	3.51
Other liabilities	542	464	0	0	0	0	0	NM
Net assets	**10,843**	**11,129**	**11,497**	**12,001**	**12,479**	**13,012**	**13,600**	3.99
Shareholders equity	7,321	7,730	8,750	8,925	9,065	9,257	9,506	4.61
Minority interest	3,522	3,399	2,746	3,076	3,414	3,756	4,094	2.53
Total liabilities	**87,426**	**91,449**	**97,951**	**96,828**	**97,773**	**98,599**	**99,186**	1.90
Cash flow								
EBIT	3,163	1,800	3,568	3,893	3,801	3,900	3,967	21.32
Depreciation	3,412	1,837	3,685	3,986	4,135	4,285	4,437	23.58
Change in working capital	(590)	(698)	(540)	(186)	(538)	(530)	(445)	-6.64
Non cash items/other	(737)	(1,231)	3,694	1,525	1,609	1,697	1,791	NM
Cash flow from operations	**5,248**	**1,708**	**10,408**	**9,218**	**9,007**	**9,352**	**9,750**	52.97
Dividends received from assoc./JVs	638	312	325	325	325	325	325	1.04
Tax	(941)	(518)	(226)	(460)	(449)	(473)	(496)	-2.26
Capex and investments	(7,520)	(4,119)	(13,535)	(2,859)	(4,252)	(4,295)	(4,339)	1.05
Free cash flow	**(2,575)**	**(2,617)**	**(3,028)**	**6,223**	**4,631**	**4,909**	**5,240**	NM
Dividends	(1,359)	(236)	(627)	(570)	(570)	(570)	(570)	24.66
Interest	(1,561)	(921)	(3,139)	(2,683)	(2,629)	(2,649)	(2,639)	30.23
Financing	5,735	4,564	0	0	0	0	0	NM
Net cash flow	**240**	**790**	**(6,795)**	**2,970**	**1,432**	**1,690**	**2,031**	20.93
Per share data								
EPS	2.24	1.10	2.89	1.31	1.25	1.34	1.44	4.88
EPS - normalised	2.44	1.01	1.16	2.51	2.45	2.54	2.64	0.85
DPS	1.00	1.00	1.10	1.00	1.00	1.00	1.00	0.00
CEPS	11.95	4.78	7.39	10.27	9.09	9.45	12.62	18.58
FCF	(4.56)	(4.65)	(5.31)	10.92	8.12	8.61	9.19	NM
NAV	19.21	19.79	20.17	21.05	21.89	22.83	23.86	3.64
Ratios								
EBIT margin (%)	5.0%	5.4%	6.3%	6.8%	6.4%	6.3%	6.2%	
Effective tax rate (%)	21%	30%	10%	30%	30%	30%	30%	
P/E	16	38	33	15	16	15	15	
Underlying DPS cover	2.4	1.0	1.1	2.5	2.5	2.5	2.6	
Gross Yield (%)	2.6%	2.6%	2.8%	2.6%	2.6%	2.6%	2.6%	
EV/EBITDA	8.0	14.4	7.2	6.7	6.6	6.4	6.2	
P/CEPS	3.2	8.1	5.3	3.8	4.3	4.1	3.1	
P/FCF	(8.5)	(8.3)	(7.3)	3.6	4.8	4.5	4.2	
ROE (%)	17%	8%	19%	8%	8%	8%	9%	
ROCE (%)	34%	18%	17%	21%	22%	24%	26%	
P/BV	3.0	2.8	2.5	2.5	2.4	2.4	2.3	
Interest cover	2.4	2.3	1.2	1.6	1.6	1.6	1.6	
Gearing (%)	3%	6%	94%	66%	52%	36%	20%	
Ave. number of shares in issue (mn)	565	562	570	570	570	570	570	
Yr. end number of shares in issue (mn)	570	570	570	570	570	570	570	

Source: Company data, Goldman Sachs Research estimates.

Exhibit 48: GS Quantum[SM] – RWE key ratios and share price performance

RWE	Not Rated	€38.81 €30.52(Pref)

Price performance US$ (%)	1M	3M	6M	12M	YTD	3 years	5 years
Absolute	8.1%	1.0%	7.2%	(13.5%)	2.0%	(1.7%)	(15.1%)
Rel to FTSE Europe	6.4%	17.3%	15.3%	(3.0%)	17.9%	28.6%	(13.6%)
Rel to MSCI Europe	10.1%	21.8%	21.0%	8.0%	24.5%	44.8%	(5.7%)
Rel to FTSE Eur Utilities	5.4%	11.0%	9.9%	(0.9%)	5.2%	23.0%	(15.5%)
Rel to FTSE World Utilities	1.0%	12.9%	15.9%	13.5%	17.1%	26.0%	(7.1%)

12 month high	€48.15
12 month low	€31.50
Market cap	€21.8bn
Bloomberg code	RWE GF
Reuters code	RWEG.DE

Valuation	2000/01	2001	2002E	2003E	2004E
EV/NOPLAT	11.8x	19.2x	16.4x	17.1x	17.7x
EV/EBITDA	8.6x	13.1x	7.7x	7.1x	7.1x
EV/debt-adjusted cash flow	8.7x	15.4x	6.3x	6.2x	6.3x
EV/post-tax cash flow from operations	10.0x	18.5x	8.0x	7.5x	7.6x
EV/gross cash invested	0.5x	0.4x	0.4x	0.4x	0.4x
EV/capital employed	2.5x	1.9x	1.7x	1.8x	1.9x
Gross dividend yield	2.2%	2.4%	2.9%	2.6%	2.6%

Forecasts (€ mn)	2000/01	2001	2002E	2003E	2004E
EBITDA *	7,213	3,949	7,578	8,204	8,261
NOPLAT	5,243	2,707	3,564	3,389	3,330
Net income	1,264	621	1,647	745	710
Debt-adjusted cash flow	7,141	3,360	9,256	9,371	9,406
Post-tax cash flow from operations	6,204	2,802	7,352	7,744	7,812
Gross cash invested	122,125	126,229	143,893	146,939	151,729
Capital employed	24,835	26,925	34,243	31,777	30,824

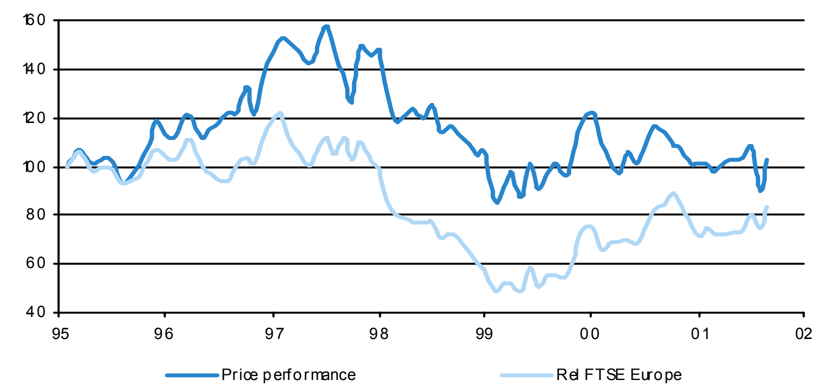
Per share data (€)	2000/01	2001	2002E	2003E	2004E
Cash flow per share	11.68	5.28	13.85	14.58	14.71
FCF per share	(9.61)	0.47	(18.38)	8.76	3.49
BVPS	13.79	14.56	16.48	16.81	17.07
DPS	1.00	1.00	1.10	1.00	1.00

Key ratios	2000/01	2001	2002E	2003E	2004E
ROE	18.5%	8.6%	8.8%	8.4%	7.9%
ROACE	14.9%	5.4%	9.9%	8.2%	8.4%
CROCI (nominal)	6.8%	2.7%	6.9%	6.4%	6.3%
CROCI (real)	3.9%	1.5%	3.9%	3.7%	3.6%
WACC	4.6%	3.8%	6.3%	5.6%	5.3%
Net debt/equity	3.3%	6.1%	94.3%	65.6%	51.6%
Cash flow cover of interest	4.0x	3.0x	2.3x	2.9x	3.0x
Cash flow cover of dividends	11.7x	5.3x	12.6x	14.6x	14.7x

* GS Quantum EBITDA includes income from associates

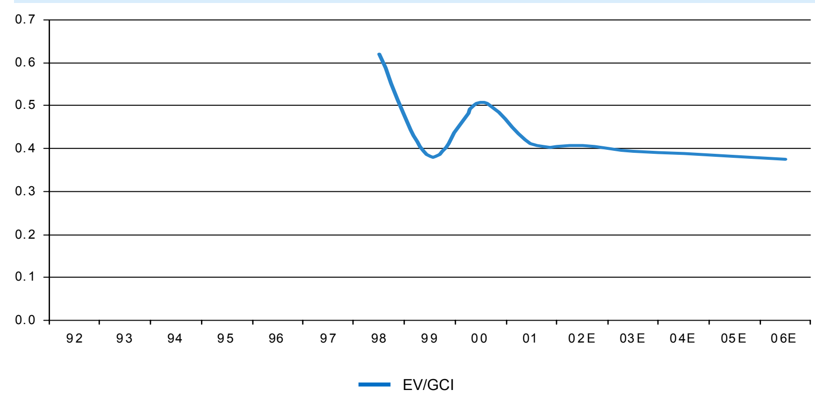
NR (Not Rated) indicates that our investment rating and target price, if any, have been suspended temporarily. Such suspension is in compliance with applicable regulation(s) and/or Goldman Sachs policies in circumstances where Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances.

Price performance (US$ rebased to 100)



Source: MSCI, Goldman Sachs Quantum.

Valuation



Source: Company data, Goldman Sachs Research estimates.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 48 cont'd: GS Quantum[SM] – RWE key ratios and share price performance

RWE Germany

Sales by destination	2001
Sales - Domestic %	58%
Sales - North America %	18%
Sales - Europe %	16%
Sales - Asia (ex Japan) %	4%
Sales - Other %	4%

Next result	
Date (Full Year)	NA
Sales (€ mn)	56616 (+70%)
Pre Tax Profit (€ mn)	754 (-37%)
Operating CF (€ mn)	7352 (+162%)
Net income (€ mn)	1647 (+165%)
EPS (€)	1.37 (+12%)

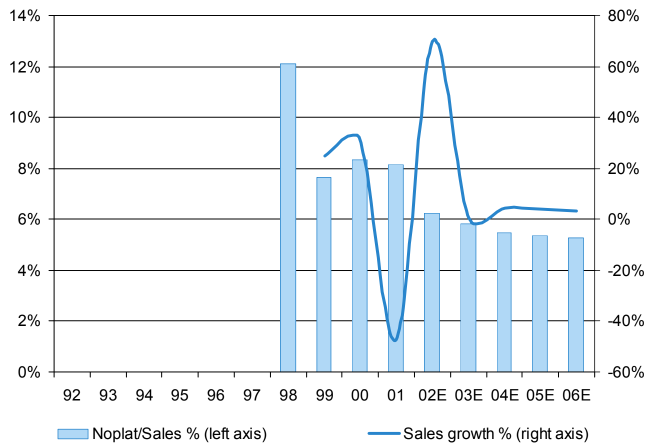
Next Dividend (NA)	
Amount (NA)	NA
XD date	NA
Paid date	NA

Next AGM	NA
Next year end	Dec 31, 2002
Database updated	Aug 20, 2002

Major shareholders	
Free Float	50%
Other municipalities	18%
Allianz	12%
RW Holding	10%
Kommunale Energie-Beteiligungsgesellschaft mbH	7%
Employees	3%

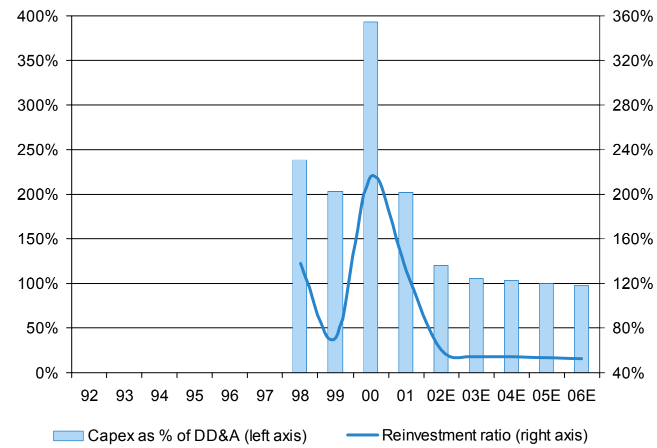
Source: Goldman Sachs Quantum.

Margin and growth



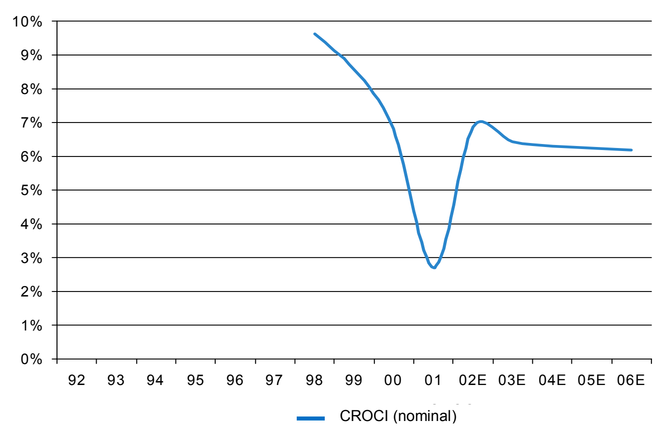
Source: Company data, Goldman Sachs Research estimates.

Reinvestment ratios



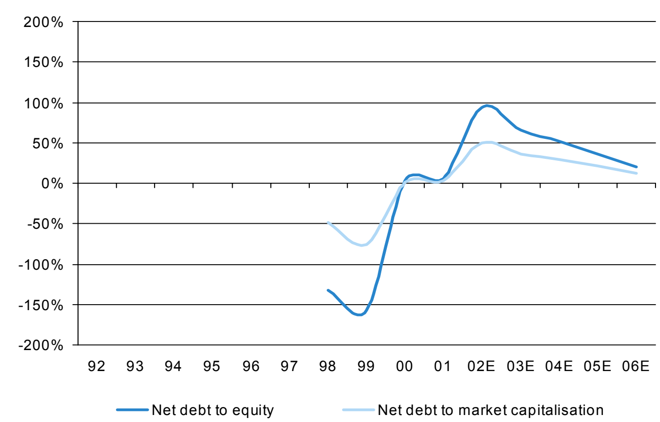
Source: Company data, Goldman Sachs Research estimates.

CROCI



Source: Company data, Goldman Sachs Research estimates.

Capital structure



Source: Company data, Goldman Sachs Research estimates.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 49: GS Quantum[SM] – RWE multiples and ratios

RWE	Not Rated	€38.81

	1998/99	1999/00	2000/01	2001	2002E	2003E	2004E	2005E	2006E
Share price (€)¹	44.0	37.2	42.8	43.8	38.8	38.8	38.8	38.8	38.8
Valuation: Multiples									
Enterprise value/sales	1.4x	0.7x	1.0x	1.6x	1.0x	1.0x	1.0x	1.0x	0.9x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/EBITDA	10.1x	4.4x	8.6x	13.1x	7.7x	7.1x	7.1x	7.0x	6.9x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/debt-adjusted cash flow	12.9x	4.5x	8.7x	15.4x	6.3x	6.2x	6.3x	6.2x	6.1x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM	NM
Enterprise value/post-tax cash flow from operations	14.0x	4.8x	10.0x	18.5x	8.0x	7.5x	7.6x	7.4x	7.3x
Enterprise value/gross cash invested	0.6x	0.4x	0.5x	0.4x	0.4x	0.4x	0.4x	0.4x	0.4x
Enterprise value/capital employed	4.6x	3.0x	2.5x	1.9x	1.7x	1.8x	1.9x	2.0x	2.1x
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM	NM
Gross dividend yield	2.3%	2.9%	2.2%	2.4%	2.9%	2.6%	2.6%	2.6%	2.6%
Relative to sector	NM	NM	NM	NM	NM	NM	NM	NM	NM
Abbreviated financials (€ mn)									
Earnings:									
Sales	38,415	47,918	62,878	33,301	56,616	56,952	59,452	61,905	63,955
EBITDA	5,307	7,620	7,213	3,949	7,578	8,204	8,261	8,510	8,729
NOPLAT	4,642	3,654	5,243	2,707	3,564	3,389	3,330	3,397	3,445
Underlying net earnings	1,047	2,400	1,265	650	726	745	710	761	819
Net income	1,149	1,212	1,264	621	1,647	745	710	761	819
Cash flow:									
Post-tax cash flow from operations	3,817	6,957	6,204	2,802	7,352	7,744	7,812	8,037	8,233
Capital expenditure	5,244	4,923	13,408	3,706	4,435	4,209	4,252	4,295	4,339
Dividends	688	770	1,359	236	627	570	570	570	570
Net cash flow from operations	(2,115)	1,264	(8,563)	(1,140)	2,290	2,964	2,990	3,172	3,324
Balance sheet:									
Gross tangible assets	57,606	58,859	84,851	86,119	90,033	94,243	98,495	102,790	107,129
Gross intangible assets	3,630	2,943	10,198	10,649	18,229	18,229	18,229	18,229	18,229
Non-depreciating assets	24,699	26,044	27,076	29,461	35,631	34,467	35,005	35,535	35,980
Gross cash invested	**85,935**	**87,846**	**122,125**	**126,229**	**143,893**	**146,939**	**151,729**	**156,555**	**161,339**
Ordinary shareholders' funds	6,619	6,366	7,321	7,730	8,750	8,925	9,065	9,257	9,506
Minorities	3,405	3,191	3,522	3,399	2,746	3,076	3,414	3,756	4,094
Short-term debt	320	465	4,995	5,198	4,618	4,618	4,618	4,618	4,618
Long-term debt	1,319	1,333	8,997	10,598	18,128	15,158	13,727	12,037	10,006
Capital employed	**11,663**	**11,355**	**24,835**	**26,925**	**34,243**	**31,777**	**30,824**	**29,667**	**28,223**
Adjustment for unfunded pensions, goodwill	22,811	23,344	26,365	26,809	27,727	29,252	30,861	32,558	34,349
Adjusted capital employed	**34,474**	**34,699**	**51,200**	**53,734**	**61,969**	**61,029**	**61,684**	**62,225**	**62,572**
Per share data (€):									
Cash flow per share	6.87	13.29	11.68	5.28	13.85	14.58	14.71	15.14	15.51
DPS	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00

¹ Average price for completed years, current price for future years.

Source: Company data, Goldman Sachs Research estimates.

Exhibit 49 cont'd: GS Quantum[SM]– RWE multiples and ratios

RWE — **Germany**

	1998/99	1999/00	2000/01	2001	2002E	2003E	2004E	2005E	2006E
Key drivers: Growth									
Sales		24.7%	31.2%	(47.0%)	70.0%	0.6%	4.4%	4.1%	3.3%
EBITDA		43.5%	(5.3%)	(45.4%)	91.8%	8.3%	0.7%	3.0%	2.6%
Post-tax cash flow from operations		82.3%	(10.8%)	(54.8%)	162.4%	5.3%	0.9%	2.9%	2.4%
NOPLAT		(21.2%)	43.5%	(48.4%)	31.6%	(4.9%)	(1.7%)	2.0%	1.4%
Gross cash invested		2.2%	39.0%	3.4%	14.0%	2.1%	3.3%	3.2%	3.1%
Capital employed		(2.6%)	118.7%	8.4%	27.2%	(7.2%)	(3.0%)	(3.8%)	(4.9%)
Cash flow per share		93.4%	(12.1%)	(54.8%)	162.4%	5.3%	0.9%	2.9%	2.4%
DPS		0.0%	0.0%	0.0%	10.0%	(9.1%)	0.0%	0.0%	0.0%
Key drivers: Margins and ratios									
EBITDA as a % of sales	13.8%	15.9%	11.5%	11.9%	13.4%	14.4%	13.9%	13.7%	13.6%
Post-tax cash flow from operations as % of sales	9.9%	14.5%	9.9%	8.4%	13.0%	13.6%	13.1%	13.0%	12.9%
NOPLAT as % of sales	12.1%	7.6%	8.3%	8.1%	6.3%	6.0%	5.6%	5.5%	5.4%
Net income as % of sales	2.7%	5.0%	2.0%	2.0%	1.3%	1.3%	1.2%	1.2%	1.3%
Net income as % of post-tax cash flow	30.1%	17.4%	20.4%	22.2%	22.4%	9.6%	9.1%	9.5%	10.0%
Cash payout ratio	16.7%	8.2%	9.2%	20.3%	8.5%	7.4%	7.3%	7.1%	6.9%
Key drivers: Reinvestments									
Reinvestment ratio	137.4%	70.8%	216.1%	132.3%	60.3%	54.4%	54.4%	53.4%	52.7%
Capital expenditure as % of DD&A	239%	204%	393%	202%	120%	106%	103%	100%	98%
Capital expenditure as % of gross cash invested	6.1%	5.6%	11.0%	2.9%	3.1%	2.9%	2.8%	2.7%	2.7%
Returns and cost of capital									
ROE		37.0%	18.5%	8.6%	8.8%	8.4%	7.9%	8.3%	8.7%
ROACE	30.2%	28.1%	14.9%	5.4%	9.9%	8.2%	8.4%	9.0%	9.5%
ROACE adjusted	11.0%	9.9%	7.2%	3.1%	6.2%	5.5%	5.4%	5.5%	5.5%
CROCI (nominal)	9.6%	8.6%	6.8%	2.7%	6.9%	6.4%	6.3%	6.3%	6.2%
CROCI (real)		5.0%	3.9%	1.5%	3.9%	3.7%	3.6%	3.6%	3.7%
Net cash flow return	(16.7%)	11.8%	(29.4%)	(2.8%)	8.9%	10.5%	10.3%	10.6%	10.8%
Cost of equity	6.4%	5.1%	6.2%	5.8%	6.5%	6.5%	6.5%	6.5%	6.5%
Cost of debt	2.8%	2.1%	3.8%	2.1%	7.0%	5.7%	5.3%	5.1%	4.8%
CAPM weighted ave. cost of capital (WACC) *	4.6%	3.8%	4.6%	3.8%	6.3%	5.6%	5.3%	5.2%	5.0%
Value spreads									
ROACE/WACC	6.6x	7.3x	3.2x	1.4x	1.6x	1.5x	1.6x	1.7x	1.9x
CROCI/WACC	2.1x	2.2x	1.5x	0.7x	1.1x	1.2x	1.2x	1.2x	1.2x
Real CROCI/WACC		1.3x	0.8x	0.4x	0.6x	0.7x	0.7x	0.7x	0.7x
Capital structure and indebtedness									
Shares outstanding (mn)	555	523	531	531	531	531	531	531	531
Market capitalisation (€ mn)	27,653	19,802	26,323	23,627	21,798	21,798	21,798	21,798	21,798
Net debt (mn)	(2,626)	(10,151)	5,489	(2,413)	7,235	4,266	2,834	1,144	(887)
Minorities & unfunded pensions and other (€ mn)	28,332	23,937	30,176	30,662	29,567	31,913	34,364	36,912	39,545
Enterprise value (€ mn)	53,359	33,589	61,988	51,876	58,600	57,977	58,997	59,855	60,456
Net debt to equity	(132.6%)	(156.7%)	3.3%	6.1%	94.3%	65.6%	51.6%	36.5%	20.0%
Net debt to market capitalisation	(48.1%)	(75.4%)	1.4%	2.9%	49.7%	36.1%	29.5%	21.8%	12.5%
Cash flow cover of interest	6.6x	7.8x	4.0x	3.0x	2.3x	2.9x	3.0x	3.0x	3.1x
Return to shareholders					**YTD**				
Annual return in €	(4.7%)	(14.3%)	27.5%	(8.6%)	(6.4%)				
5 year rolling return in €	11.5%	12.7%	14.1%	7.1%	1.0%				
Annual return in US$	1.4%	(26.4%)	19.1%	(13.7%)	3.3%				
5 year rolling return in US$	12.5%	8.2%	7.3%	(0.1%)	(0.9%)				

Note: *GS Quantum[SM] WACC is based on RWE's current capital structure.

Source: Company data, Goldman Sachs Research estimates.

Potential expansion in the US

E.ON's management has indicated its intention to expand its US operations beyond LG&E. E.ON has stated that it is focusing on the mid-west region in its search for a synergistic deal for LG&E. Platts Commodities News of May 14 suggested that companies of potential interest to E.ON could include Cinergy Corp. and DP&L. This has not been confirmed by E.ON.

Cinergy Corp. (MP, US$35.23)

Cinergy Corp., created in October 1994, is the holding company for 100% of outstanding common stocks of two public utility subsidiaries:

- **Cincinnati Gas & Electric Company (CG&E)**. Provides services in the southwestern portion of Ohio, Kentucky and Indiana. Business activities include generation, transmission, distribution and electricity supply (Ohio and North Kentucky), plus sale and transmission of gas in North Kentucky.
- **PSI Energy, Inc. (PSI)**. A vertically integrated and regulated electric utility that provides services in north central, central, and southern Indiana.

Goldman Sachs currently has a Market Performer rating on the stock.

Cinergy Corp. includes both regulated and unregulated business. Exhibit 50 shows the components of the two businesses.

Exhibit 50: Business arms of Cinergy Corp.

	Regulated	Energy Merchant
Business description	Integrated utility serving Indiana, and electric and gas tranmission and distribution companies serving Southwest Ohio and Nothern Kentucky	Midwest leader of low-cost generation, customer origination and energy commodities trading
Product & services	Electricity generation, transmission and distribution	Electricity generation and operation of coal, gas, cogeneration and renewable power plants
	Gas distribution	Wholesale energy marketing, trading and risk-managemnt
		Customized energy solutions
Customers ('000)		BP Amoco, General Motors, Millennium Chemicals
Electric	1,500	
Gas	495	
Transmission & distribution (circuit miles)		NA
Electric	46,100	
Gas	8,200	
Generation capacity (MW)[1]	6,000	7,000

Note 1): Approx. 75% of the total generation capacity is coal-fired.

Source: Company data.

Dayton Power and Light

DP&L is the principal subsidiary of DPL Inc., (MP, US$18.90), and supplies electricity to 500,000 residential, commercial, industrial and governmental customers over 6,000 square miles of West Central Ohio. The power is generated by the eight existing power plants, with total capacity of 2,121 MW. DP&L competes with privately and municipally-owned electric utilities and rural electric cooperatives, and other alternate fuel suppliers on the basis of price and service.

Goldman Sachs currently rates DPL Inc. as a Market Performer.

Market deregulation in Ohio

Under the competitive legislation to provide customer choice as of January 1, 2001, electric generation is no longer subject to supervision and regulation by the PUCO. Both CG&E and DP&L became subject to the introduction of customer choice as part of the electric deregulation in Ohio.

The competitive retail electric market in Ohio is still in its development phase. A three-year transition plan, ending December 31, 2003, has been put in place to provide smoother implementation of competition. Details of the transition plan are:

- Retail electric rates and costs approved by the Public Utilities Commission of Ohio (PUCO) will be frozen for the duration of the transition period for those customers who wish to continue relationships with their existing suppliers.
- Rate certainty for a six-year period for transmission and delivery services.

Post the transition period, companies are able to sell all capacity from generation assets to the market with no supervision by the regulator.

Disclosures

Analyst coverage
Companies that the analysts listed on the cover follow

Covering analyst: Jean-Hugues de Lamaze	
Company name	**Ticker**
E.ON	EONG.DE
Suez	LYOE.PA
RWE	RWEG.DE
Vivendi Environnement	VIE.PA

Covering analyst: Bertrand Cliquet	
Company name	**Ticker**
E.ON	EONG.DE
RWE	RWEG.DE

Covering analyst: Bertrand Lecourt	
Company name	**Ticker**
Suez	LYOE.PA
Vivendi Environnement	VIE.PA

Source: Goldman Sachs Research.

Goldman Sachs is acting as advisor to American Water Works Company, Inc. in the proposed sale to RWE AG.

Goldman Sachs International advised E.ON on the acquisition of Powergen.

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LL = Latin America Recommended List. Expected to provide price gains at least 10 percentage points greater than the Latin America MSCI Index over the next 6-18 months.
TB = Trading Buy. Expected to provide price gains of at least 20 percentage points sometime in the next 6-9 months.
MO = Market Outperformer. Expected to provide price gains of at least 5-10 percentage points greater than the market over the next 6-18 months.
MP = Market Performer. Expected to provide price gains similar to the market over the next 6-18 months.
MU = Market Underperformer. Expected to provide price gains of at least 5 percentage points less than the market over the next 6-18 months.

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