20 September 2002

HSBC

RWE

Piecing it together

Stock rel to sector
Add

Changed from
Reduce

Sector rel to market
Overweight

Stock rel to market
Buy

Year to	Revenue (EURm)	EBITDA (EURm)	Reported PBT (EURm)	HSBC PBT (EURm)	HSBC Net profit (EURm)	HSBC EPS (EUR)	HSBC EPS gwth (%)	DPS (EUR)	PE (HSBC) (x)	PE rel^	Yield (%)	EV/ EBITDA (x)	EV/IC (x)	ROIC (%)	REP (x)
12/2001a	52,788	6,790	2,194	2,194	1,312	2.33	–	1.33	14.0	78	4.1	6.0	0.8	5.4	1.0
12/2002e	53,331	7,699	2,039	2,039	1,092	1.94	-16.8	1.33	16.8	93	4.1	7.3	0.8	5.7	1.0
12/2003e	52,104	9,318	1,936	1,936	1,981	3.52	81.4	1.33	9.3	55	4.1	6.7	0.8	5.4	1.1
12/2004e	54,200	10,106	1,994	1,994	2,336	4.15	17.9	1.33	7.8	50	4.1	6.1	0.8	5.7	1.0

- **Evolution to multi-utility virtually complete – delivery of multi-utility platform and acquisition targets now critical**
- **We expect RWE to focus primarily on integration; the move into US power will now only be in the medium term**
- **Our target price is downgraded to EUR38, reflecting lower consolidated value of acquisitions and non-core holdings**

Company and industry fundamentals

RWE's four core business areas are electricity, gas, water and waste, with the majority of its exposure in Europe, and a steadily growing presence in the US. In most cases, these businesses exhibit utility-style returns: low growth, but high cash flow stability and visibility. The development phase of building the multi-utility platform is now virtually accomplished. In all but one of its core businesses (waste), the group is at or near critical mass operationally.

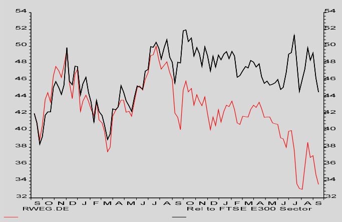
Economic performance and growth

Management now faces its sternest test, as it attempts to deliver on the next stage of its strategic mission – integration. Within this overriding objective, we believe RWE will be increasingly pressed for evidence of its multi-utility model delivering benefits. We forecast that European electricity will remain the largest contributor to earnings at group level to 2006; gas will be the second fastest growing segment of the group behind water. Despite high growth projections (largely acquisition-related), the combination of regulatory risk in the UK, a sub-scale European operation and weak operational performance at American Water Works lead us to a less than optimistic outlook for RWE Water. Waste remains sub-scale and low growth.

Valuation, catalyst and recommendation

We use two methods to value RWE – a DCF using the three-phase HSBC model, which reaches an appraised value per share of EUR39, and a sum-of-parts that values the group at EUR37. Our target price is downgraded from the previous level of EUR45, which predominantly reflects our lower valuation of RWE's recently completed acquisitions, rather than the amount expended by the company. There is 19% upside to our new EUR38 target price – we upgrade our recommendation from Reduce to Add.

Relative price



Source: Thomson Financial Datastream

Company report

Country	Germany
Sector	Diversified Industrials
Bloomberg	RWE GR
Reuters	RWEG.DE
REDD	40278
Mkt cap (EURm)	17,313
Mkt cap (USDm)	16,924
Free float (%)	70

Price

	1M	3M	12M
Absolute	39.81	39.31	41.05
Absolute (%)	-18.1	-17.1	-20.6
Relative (%)	-1.2	4.8	13.9

Relative to^ E300 Diversified Industries
Index level 684.09

Current (EUR)	Target (EUR)
32.02	**38.00**

Disclaimer & disclosures

This report must be read with the disclaimer & disclosures on p28 that form part of it.

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RWE summary table

	Group	Electricity	Gas	Water	Waste
Strategy					
Stated	1. Focused multi-utility 2. Integration is key 3. Higher regional customer focus priority	Bedding down of recent acquistitions, US move put on hold	Investment in upstream	1. Continue to implement water management techniques on a partnership basis	No near-term intentions to grow the business
Issues	1. Non-core disposals 2. Integration of new businesses 3. Account management structures need better co-ordination 4. Delivery of multi-utility platform	1. Integration of Innogy 2. Network tariff reductions	1. Integration of Transgas 2. Short of upstream exposure	1. Delivery of O&M growth targets in the US 2. Increasing European scale	1. The future of the environmental business is in question
Delivery	1. Integration of acquired business to enable synergies 2. Local profit responsibility instead of centralised management	1. Benchmarking of IOG and RWE best practice 2. Cost reduction to offset tariff reductions	1.Improving vertical hedge through investment in upstream	1. Bedding down AWK (RWE/Thames team in place to prepare integration process), China and Spain	1. Despite turnaround of business to profit-making in 1999, it remains low growth
Market position					
- By MV of EuroTop 300 Utilities	No. 4 (EUR18bn)				
- by MV Global Utilities	No. 7 (EUR18bn)	No.1 in Germany/UK, no.3 in Europe	No.2 in Germany/UK, no.5 in Europe	No.3 in World, no.1 in UK/Germany, no.1 in US	No.1 in Germany, no.3 in Europe
Earnings momentum					
- Low, medium, high	High (consolidation)	High (price recovery)	High (consolidation & synergies)	High (consolidation)	Low
- EBITDA CAGR 01-06	10.3%	10.3%	13.4%	17.0%	1.9%
Multiples					
- 2004 EV/EBITDA	6.1x	7.4x	8.0x	7.2x	5.4x
- 2004 PE (HSBC)	7.7x				
- 2004 dividend yield	4.0%				
Balance sheet					
- Strength (2002e) EURbn	Limited				
- Net debt (2002e) EURbn	(27)				
- Optimal gearing	150%				
Technical risk					
- Free float	70%				
- Major shareholders	Allianz (12%), RW Holding (11%), KEB (7%), Free Float (70%)				
Valuation					
- SOP	37.0				
- DCF	39.0				
- Target price	38.0				
Management					
- CEO	Dr. Dietmar Kuhnt, CEO-designate – Harry Roels				
- CFO	Dr. phil. Klaus Sturany				

Source: HSBC & Company

Executive summary

Evolution from diversified industrial to multi-utility

Over the past two years, RWE has spent over EUR33bn (in EV terms) on electricity, gas, water and waste acquisitions in its drive to become a truly global multi-utility. We estimate that the financial impact of these investments will see EBITDA contribution from these four divisions rise from EUR5.9bn in pro forma 2001, to over EUR10bn by 2006, accounting for some 94% of group EBITDA. In the same period, disposals notwithstanding, we estimate that the contribution from non-core operations will fall from 16% of EBITDA in pro forma 2001 to 6% in 2006.

We forecast that 'core' EBITDA will account for 94% of group by 2006

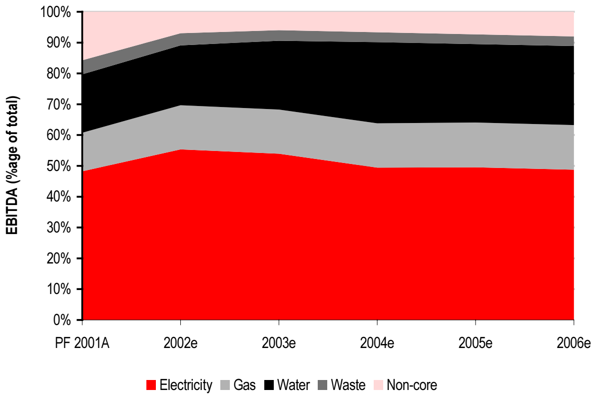
In our view, the greatest challenge for RWE now lies in creating value from these acquisitions. It is generally accepted that RWE paid a high price for its four biggest acquisitions; the average EV/EBITDA multiple for Thames Water (TW), American Water Works (AWK), Innogy (IOG) and Transgas was 10.7x. Our key concerns regarding the high entry multiples are excessive demands on integration teams to reach aggressive targets, and increasing pressure from the financial community for evidence of value creation.

High prices – management pressure

Completion of RWE's evolution from diversified industrial to multi-utility relies on the disposal of Heidelberger Druck and Hochtief, and establishing an asset base in US electricity. Neither of these steps will be easily achieved: RWE's CEO recently announced that achieving a sale of Heidelberger by the target of end-2003 would be tough; and the US merchant market remains in the shadow of overcapacity, accounting irregularities and trading scandals.

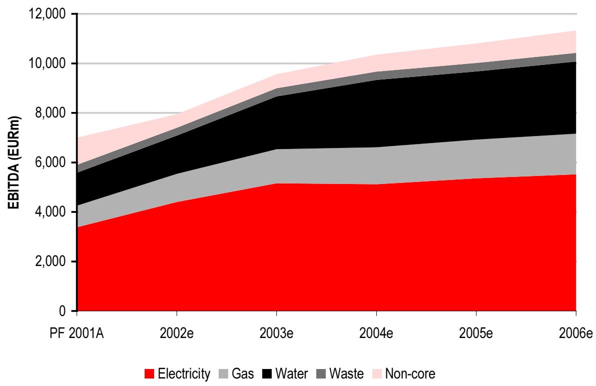
Non-core disposals and US energy platform remaining evolutionary hurdles

RWE: EBITDA evolution – PF 2001a to 2006e (percentage)



Source: HSBC

RWE: EBITDA evolution – PF 2001a to 2006e (EURm)



Source: HSBC

Executive summary

Delivering the multi-utility model

Implementing the integration of acquisitions is key

The development phase of building the RWE multi-utility platform is now virtually accomplished. In all but one of its core businesses (waste), the group is at or near critical mass operationally. However, management at this point faces its sternest test, as it attempts to deliver on its strategic mission statement of 'integration is key'. Within this overriding objective, we believe RWE will be increasingly pressed for evidence of its multi-utility model, delivering financial and strategic benefits that justify the high entry multiples paid for 'strategic' acquisitions mentioned above.

TW and IOG integration provide first sight of multi-utility benefits

The most explicit evidence to date of RWE delivering value from integrating its utility businesses is the EUR50m pa saving (0.7% margin uplift at IOG) expected from the integration of TW and IOG. We believe that the majority of up-front savings will be delivered through the integration of corporate cost bases, transition to a single billing platform and in IT.

In Germany, RWE is still some way off delivering comparable multi-utility savings. The company is, however, beginning to roll out comparable programmes at its regional redistributors in an attempt to harness multi-utility savings.

Water and waste will be difficult to integrate into the RWE offering

RWE is developing a new approach to customer management to extract multi-utility leverage, which involves breaking down the total base into regional customer centres. The planned inclusion of gas into this offering should deliver benefits both financially and strategically. For example, RWE will be able to generate higher margins through cost consolidation and customers should become stickier with the additional utility offering. Going forward, RWE aims to roll out this regional policy across Germany and to potentially include water and waste as the third and fourth utility offerings to further exploit margin and customer retention benefits.

Amalgamation of water and waste offering a medium-term prospect

We view the amalgamation of water and especially waste into RWE's service offering as medium- to long-term prospect and investors should therefore not expect to see financial benefits in the next two to three years. In Germany in particular, structural barriers prevent the full integration of these customer bases.

German electricity – improving generation marred by network tariff cuts

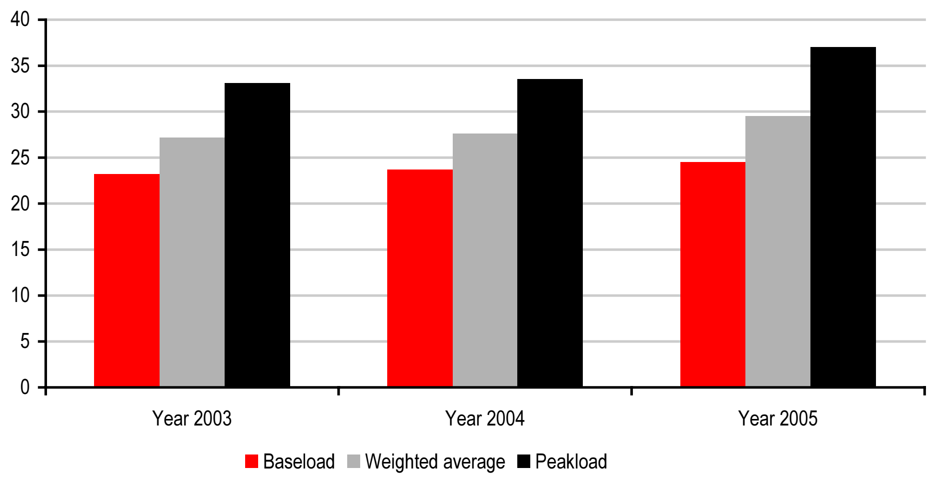
The recent improvement in wholesale prices, combined with extensive cost rationalisation, has heralded a turnaround in RWE's electricity earnings, which we forecast will continue to grow through 2003 (+9.8% in EBITDA). We expect prices in the German wholesale market will continue to rise through 2004, when we expect baseload prices to reach EUR24.

Network tariff reductions will impact from 2004

However, having weathered the storm of an electricity price war, the threat of Federal Cartel Office (FCO) led network tariff reductions has become more real. We expect tariff cuts will impact earnings from 2004. The FCO has ex-ante price-setting powers, and as a consequence we expect that tariff cuts are highly likely to occur over the next couple of years. Relative to E.ON, however, we expect a lesser impact on the RWE figures as tariffs are already lower and cost cutting will offset reductions.

Executive summary

HSBC German electricity price forecasts



Source: HSBC

M&A

The table below provides a snapshot of a frenzied period of corporate activity at RWE, during which the group has expended (in EV terms) over EUR33bn on electricity, gas and water acquisitions. Following completion of the Transgas and Innogy purchases, management re-iterated that group focus in the near term would be on bedding down these acquisitions; as such we don't expect any major corporate activity in the next 6-12 months.

RWE is in a period of integration, US electricity will be next point of focus

RWE – major acquisitions over the past two years

Acquisition	EV	Stake	EV/EBITDA entry multiple	Date	Comment
Transgas	4,100	97%	10.5x	May-02	Transgas supplies 100% of Czech gas demand and has an extensive pipeline network
Innogy	8,500	100%	10.7x	Mar-02	UK division of National Power that was demerged in October 2000
Elettra GLL	70	100%	unknown	Mar-02	Small Italian generator
Harpen	unknown	unknown	unknown	Dec-01	Acquisition of RAG's 23.5% stake in Harpen. Harpen now specialises in renewables based and distributed power generation
VSE	unknown	unknown	unknown	Dec-01	RWE raises its stake by some 14% from 41.33%
American Water Works	8,900	100%	11.9x	Sep-01	Of similar size customer base to Thames
Stadtwerke Dueren	unknown	25%	unknown	Jul-01	Municipal authorisation for RWE Plus to raise its 25.15% stake with effect from 2002 after FCO green light
Kärnten Energieholding (owner of Kelag)	304	49%	unknown	May-01	RWE beat Verbund to 49% stake in Kaernten Energieholding which owns 63.85% of Kelag. European Commission approval given in August 2001
Thames Water	11,700		9.5x	Sep-00	RWE's strategic platform for expansion of its water business on a global basis

Source: Company information and HSBC

Executive summary

Encouraging decision not to enter US IPP market in the near term

An encouraging factor in recent discussions we have had with the company is its intention to delay entry into the US Independent Power Market. Although the valuations of most IPPs are at all-time lows, the continued weakness of US demand and widespread overcapacity suggest a long period of low return ahead. Furthermore, anecdotal evidence from the US IPP market suggests that sellers' prices are still well above buyers' offers. RWE's previous strategy to enter the US IPP market in the near term was contrary to a feature we highlight as key to managing risk in electricity – vertical integration. In terms of our upgraded recommendation, we now believe that the potential downside of a move into the US IPP market has been eliminated.

Limited investment in waste to date – likely to remain sub-scale

Out of RWE's 'four pillars', the area that has seen the lowest capital allocation is waste. Given the high barriers to entry in waste, we believe that RWE's only option to build a European platform is through an acquisition of sufficient scale to elevate the existing business onto a competitive footing. Nonetheless, as management has made clear – its current focus is on bedding down recent deals – therefore we do not expect any M&A developments in waste for sometime. We are not of the opinion, however, that RWE is looking to exit at this stage, but rather to maintain its existing position, essentially as an option for future growth.

Eastern Europe and Asia could be future investment targets

In our view, RWE's current geographical portfolio could benefit from investment in two particular regions. First, electricity in Eastern Europe; we were surprised by how little interest was shown in CEZ for example, where there are obvious opportunities for multi-utility development with Transgas. Second, in emerging markets; despite RWE often having been associated with various privatisations (Asia in particular), little has been said by the company.

In terms of disposals, over the past two years RWE has sold businesses in oils, chemicals, telecoms, cable television and car washes.

Cost-cutting benefits

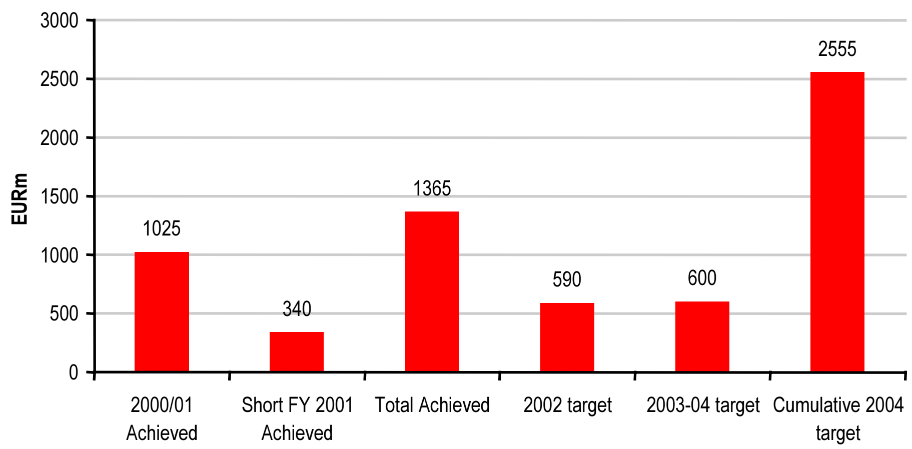
RWE's has a strong track record in achieving cost reduction targets, and as a result we expect the company to succeed in reaching the objectives set out in the graph below.

RWE has put in place an extensive cost reduction programme across its generation fleet. Last year, the full cost of (including capital costs) of RWE Rheinbraun's lignite-fired plants was EUR24/MWh – above the wholesale price that averaged EUR22.50/MWh.

A substantial element of the company's cost reduction programme is reducing Rheinbraun's unit cost to EUR22/MWh by 2004. At the group's other generation division – RWE Power (nuclear, coal and gas) – full costs were EUR30/MWh above the comparable EUR28/MWh in 2001. RWE Power is targeting a unit cost of EUR26/MWh by 2004, which gives a healthy net margin of 6%, vs our forecast of weighted average annual prices of EUR27.6/MWh in 2004.

Executive summary

RWE – cost-cutting programme to 2004



Source: HSBC

New management

Roels to succeed Kuhnt in February 2003

As of February 2003, CEO-designate Harry Roels will succeed RWE's current chief executive – Dietmaar Kuhnt who has been at the helm of the company for over eight years. The appointment of Roels gives insight into the importance to RWE of general international experience and specific expertise in gas. Roels brings both of these to the table; his international experience encompasses Malaysia, Turkey, Norway, America, the UK, the Middle East and Africa, and his gas pedigree stems from over 30 years experience at Royal Dutch/Shell. Against these strengths, Roels has no experience in utilities and he lacks the political connections of Kuhnt. The CEO-designate faces a daunting challenge: he will be responsible for delivering the benefits of RWE's acquisition spree – a significant challenge in light of the high prices paid for Thames, AWK, Innogy and Transgas.

Valuation and forecasts

On our combined SOP and DCF target price

We use two methods to value RWE – a DCF using the three-phase HSBC model, which reaches an appraised value per share of EUR39, and a sum-of-parts that values the group at EUR37. Our target price is downgraded from the previous level of EUR45, which predominantly reflects our lower valuation of RWE's recently completed acquisitions, rather than the amount expended by the company. There is 19% upside to our new EUR38 target price – we upgrade our recommendation from Reduce to Add.

Executive summary

In terms of our forecasts:

All of RWE's announced acquisitions are now included in our forecasts

- We have now included in 2002 the proportionate earnings from Transgas, Innogy and RWW
- In 2003, we have made the assumption that AWK is completed mid-year and therefore have accounted for six months of earnings.
- The impact at EBITDA and HSBC EPS (pre-amortisation) level is a significant uplift
- However, at a PBT level, as a result of higher interest and amortisation charges, the effect is dilutive vs our previous forecasts

Valuation and forecast summary

SOP	37.03
DCF	39.61
Target price	38.00
Implied EV/EBITDA 2004E	7.0x
Implied PE 2004E	9.1x
2001-06 EBITDA CAGR	10.1%
2001-06 EPS CAGR	17.4%

Source: HSBC

Electricity

Managing the impact of network tariff cuts

Delivery of synergies and completion of strategic platform – key value driver in electricity

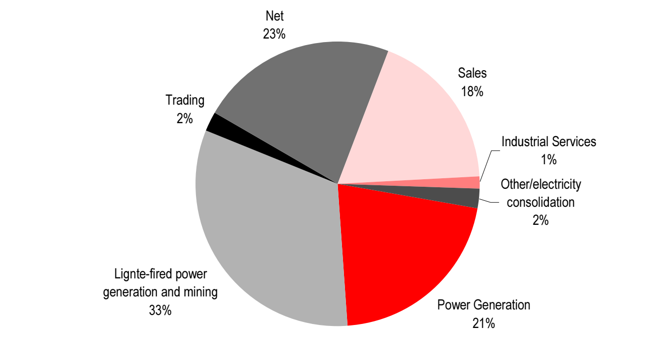
The merger of RWE and VEW in mid-2000 led to the creation of Germany's largest electricity company by output (26% market share); in 2001, RWE generated 135TWh, some 20% more than E.ON. The premise of the deal was to release substantial potential savings from merging the activities of the two organisations across the value chain. The synergistic benefits of the deal were somewhat offset by the collapse in German wholesale prices, but the savings have not yet fully been exhausted and the future cost reduction programme owes partly to the further integration of RWE and VEW operations.

The acquisition of Innogy (UK) earlier this year, took the RWE strategy on to a European platform, and provided the opportunity to extract synergies both at a corporate and multi-utility level through integration with Thames Water. Fulfilment of the RWE electricity strategy exists in acquiring a US presence and delivering a true multi-utility platform through integration with its now substantial gas operation.

Network tariff reductions will impact revenues from 2004

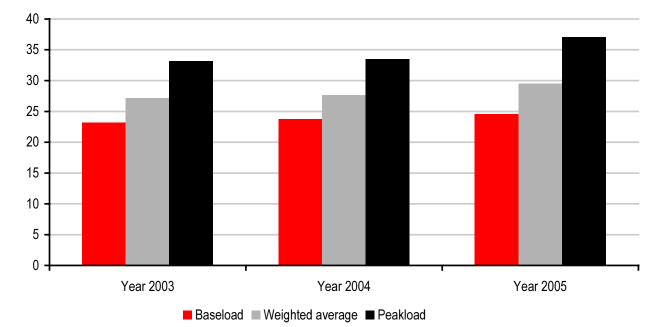
The recent improvement in wholesale prices, combined with extensive cost rationalisation has heralded a turnaround in RWE's electricity earnings, which we forecast will continue in 2003 (+9.8% in EBITDA). However, having weathered the storm of an electricity price war, the threat of Federal Cartel Office (FCO) led network tariff reductions has become more real. We expect tariff cuts will impact earnings from 2004.

RWE Electricity – EBITDA breakdown 2001



Source: HSBC

German electricity – price forecasts to 2005



Source: HSBC

Power generation and sales (supply)

Defensive selling practices impaired performance in 1999-01

RWE is emerging from a prolonged period of losses in its combined generation and supply operations. Following the liberalisation of the German market in 1998, both RWE and E.ON sold power at sub-market prices in an effort to preserve market share. Last year, for example, Rheinbraun's achieved price was c20% below baseload spot price, while RWE Power was selling c10% below market prices. As the chart above shows, RWE derives over 70% of its EBITDA from its generation and supply businesses, the performances of which were severely impaired by the adverse pricing environment. Prices have, however, begun to recover, which we expect will continue to improve through 2004. This combined with further cost reduction – largely in the form of station closures – form the key drivers of our forecast 16% rise in EBITDA (excluding Innogy) this year.

HSBC

Electricity

Reducing unit costs in generation a key element of overall cost reduction programme

RWE has put in place an extensive cost reduction programme across its generation fleet. Last year, the full cost of (including capital costs) of RWE Rheinbraun's lignite-fired plants was EUR24/MWh – above the wholesale price that averaged EUR22.50/MWh. A substantial element of the company's cost reduction programme is reducing Rheinbraun's unit cost to EUR22/MWh by 2004. At the group's other generation division, RWE Power (nuclear, coal and gas), full costs were EUR30/MWh above the comparable EUR28/MWh in 2001. RWE Power is targeting a unit cost of EUR26/MWh by 2004, which gives a healthy net margin of 6%, vs our forecast of weighted average annual prices of EUR27.6/MWh in 2004.

Transfer pricing mechanism provides margin protection

Further compounding the upstream losses were the retail price reductions implemented in an effort to attract new household and SME customers. To redress this negative position and protect margin, RWE introduced a transfer pricing mechanism between generation and supply. The new strategy uses the wholesale price from RWE Trading as the transfer price between sales and production. The sales division can only contract at a margin above the forward price quoted by the wholesale trading division.

Limited customer growth opportunities in Germany

Unlike the UK, RWE has little scope to develop its multi-utility retail customer offering to encompass gas and water. The nature of utility billing in Germany is partly to blame – some householders don't even see their bills, while the administrative cost of switching a customer still remains prohibitively high. RWE has stated that for the time being it will concentrate on profitability in gas and electricity as stand-alone businesses. The focus, in terms of customer growth, remains firmly on SME.

Networks

RWE has some 20% of German distribution

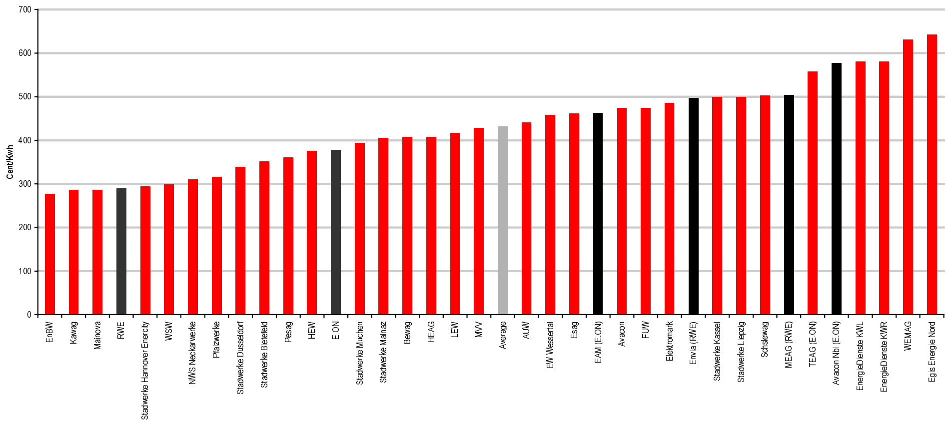
The profitability of transmission and distribution operations in Europe has drawn wide criticism from governments, consumer groups and industry alike. By and large, the censure has focused on the lack of independence from generation and customers, the opaque price-setting mechanisms and inequitable terms of access employed by network companies. Germany's method of price setting under a cost-plus system implemented via the Verbändevereinbarung II Plus (V-V 2 Plus) has often been derided as easily manipulated.

Industrial consumer groups exert pressure

Industrial consumer organisations are constantly criticising the level of network usage charges in Germany. One group in particular – the VEA – highlights the 300% difference between some grid operators' charges. Both RWE and E.ON have claimed that the new bidding system for procuring balancing power is responsible for recent price increases. Network charges comprise 30-50% and in some cases 70% of the final bill paid by industrial customers. The chart below produced by RWE for a specialised seminar on their German network operations starkly highlights differential in grid tariffs.

Electricity

Comparative network tariffs in Germany



*** RWE has increased tariffs since the publication of this chart but remains well below the average*
Source: HSBC and company information

FCO investigation into netowrk tariffs includes two RWE companies

The FCO has taken up the calling of the consumer organisations and earlier this year launched an investigation into 11 network operators tariffs. RWE owns two of the companies, Envia Energie Sachsen Brandenburg of Chemnitz and Mitteldeutsche Energieversorgung (Meag), which are now merged. E.ON also owns three of the companies under investigation. The FCO has ex-ante price-setting powers, and as a consequence we expect that tariff cuts are highly likely to occur over the next couple of years. . Relative to E.ON, however, we expect a lesser impact on the RWE figures as tariffs are already lower and cost cutting will offset reductions.

Continued cost reduction yield higher than market valuation

On our DCF analysis of RWE's electricity division we arrive at an implied standalone EV/EBITDA of 7.4x vs an average sector of 7.0x. We ascribe the majority of this hidden value to RWE's ongoing cost reduction programme and the benefits of the transfer pricing system. Indeed, we feel that this multiple would be higher if RWE was to focus more closely on the integration of its gas business with electricity.

Electricity

RWE Electricity-structurally well positioned for success

In our comprehensive accompanying document *Industry Review – Deconstructing the Diversified Industrials*, we isolate a number of factors we consider as critical for the delivery of effective strategy. The tables below provide an overview of those criteria and our view of where RWE is positioned currently:

RWE Electricity – criteria for success

Criteria	Does RWE have it?	Comment
Balance sheet flexibility enabling advantageous growth and consolidation opportunities	Limited	On completion of the AWK acquisition, but pre divestment, RWE's gearing will be above 150%, limiting balance sheet flexibility
Vertical integration to enable full operation of the transfer pricing mechanism	Yes	In both its key markets – Germany and the UK – RWE is vertically integrated, which, in the UK especially, has enabled margin recovery through supply
Access and exposure to upstream gas	Limited	A key element of the RWE strategy is to build its exposure to upstream gas, both for its gas business but also for future positioning in CCGT
Strong risk mitigation controls in place for trading and generation	Yes	RWE arguably has the most advanced and active trading business in Europe, which acts as in important internal pricing mechanism as well as being profitable on a standalone basis
Degree of branding to minimise customer churn rates	Yes	Less of an issue in Germany as churn rates have been below 2% for the past couple of years. In the UK, however, IOG has, in a short space of time, built up a strong brand
Critical mass in retail to optimise economies of scale	Yes	RWE has critical mass in its two markets – Germany and the UK. In the UK, RWE has further opportunities to maximise its customer position through the integration of TW and IOG
Strong regulatory relationships	Deteriorating	In both Germany and the UK we feel that RWE is facing regulatory scrutiny. In the UK, the very high level of retail margins will have to be dealt with by Ofgem or the government and in Germany network tariffs reductions will become a reality within the next couple of years

Source: HSBC

Electricity

Forecasts and valuation

- In 2004, we expect some 2% of revenue (excluding IOG) will be clawed back through network tariff cuts; however, we expect the impact on earnings to be offset through cost reduction
- We expect some margin dilution this year as a result of the rapid growth of the low margin trading business – trading accounted for 15% of revenue growth in H1
- We account for the EUR50m of savings from the Thames integration through the Innogy earnings, hence the strong underlying growth in EBITDA (5% 2004-06)
- DCF yields above sector average electricity EV/EBITDA at 7.4x

RWE Electricity – financials and valuation

EURm	PF2001a	2002e	2003e	2004e	2005e	2006e	2002e/2001a	CAGR 2001-06
Income statement								
Sales	21,590	29,779	33,514	33,140	33,637	34,142	37.9%	9.6%
Operating costs	(18,212)	(25,378)	(28,354)	(28,019)	(28,283)	(28,622)		
EBITDA	3,378	4,401	5,160	5,121	5,354	5,520	30.3%	10.3%
Depreciation	(1,573)	(2,028)	(2,231)	(2,202)	(2,235)	(2,268)		
Operating result (EBITA)	1,805	2,373	2,928	2,919	3,119	3,252	31.5%	12.5%
DCF valuation								
Operating earnings		2,373	2,928	2,919	3,119	3,252		
+ depreciation		2,028	2,231	2,202	2,235	2,269		
+/- change in provisions		0	0	0	0	0		
+/- change in WC		0	0	0	0	0		
+/- capital expenditure		(2,266)	(2,756)	(2,642)	(2,611)	(2,581)		
- notional cash tax payable		(475)	(878)	(876)	(936)	(975)		
OpFCF		1,660	1,525	1,603	1,807	1,964		
NPV of OpFCF (incl TV)	37,648							
Discount rate	6.89%							
TV growth rate	2.60%							
Implied 04E EV/EBITDA	7.4x							
Multiple-based valuation								
2004E								
6.0x	30,725							
6.5x	33,285							
7.0x	35,846							
7.5x	38,406							
8.0x	40,967							
Valuation summary								
DCF	37,648							
EV/EBITDA	35,846							
SIMPLE AVERAGE	36,747							
Implied 2004 EV/EBITDA	7.2x							

Source: HSBC

Gas

Strategic evolution requires more upstream exposure

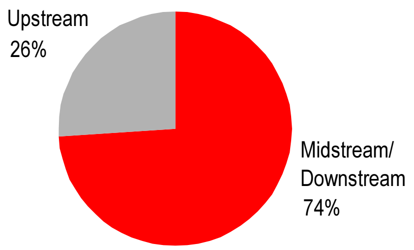
In 2001, following completion of the VEW merger and subsequent realignment of group strategy, RWE Gas was formally established as a stand-alone division. The division has activities in the Czech and Slovak Republics, the Netherlands, Hungary and Poland. Formally part of DEA, RWE's upstream gas business was transferred into the gas division when RWE agreed its (now wound up) downstream oil JV with Shell. Ruhrgas remains RWE Gas' main supplier – accounting for c80% of sendout in Germany.

RWE Gas set up as a stand-alone division in 2001

We expect the outcome the current ministerial review of the E.ON/Ruhrgas merger will demand a more far-reaching break-up of long-term contracts, which will (beneficially) allow RWE to source more gas from its majority-owned subsidiary, Thyssengas. Completion of the Transgas deal has given RWE the strategic platform to develop a fully integrated European gas operation. As the revenue chart below shows, RWE is short upstream, hence the investment focus.

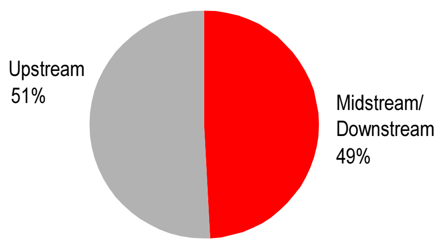
Current ministerial review of E.ON/Ruhrgas should allow gas supply diversification

RWE Gas – 2002 revenue analysis



Source: HSBC

RWE Gas – 2002 EBITDA analysis



Source: HSBC

Transgas – strategic enhancement at a price

RWE's strategic rationale for the acquisition of Transgas is difficult to fault: critical mass, geographic positioning, further exposure to the high growth gas industry and the future benefits of Czech Republic inclusion in the EU. In terms of critical mass, RWE and Transgas become the second largest pipeline operator in Europe, and with a combined customer base at 4.4m, the entity is approaching critical retail mass. However, these benefits have in our view been more than offset by the price RWE paid for Transgas – we estimate an overpayment of some 10%.

On an EV/EBITDA basis RWE overpaid by 10%

We include in our figures the benefit of the EUR100m synergies. These will be generated through: common procurement, a combination of existing gas grid dispatch centres at RWE Gas and Transgas and a stronger co-operation between Transgas and the GDCs. In addition, we have broadly replicated the regulatory deal, which allows Transgas to earn 8% ROCE and a 5% allowed margin in trading – phased in over three years to 2004.

Announced synergies and regulatory deal assumed within our forecasts

Gas

Upstream

RWE Gas targeting expansion with 'high capital expenditure in the years ahead'

The acquisition of Highland Energy (consolidated from 2002) was the first step in RWE's stated intention to expand its upstream activities "at high capital expenditure in the years ahead". In the same vein as E.ON, the strategic basis for this investment is to further entrench the vertical integration of RWE's gas business. As discussed in the separate publication *(Gas – industry review),* we consider both exposure and vertical integration as critical success factors in gas. Countries being targeted for expansion are Norway, Egypt, the UK, Kazakhstan, Poland and Denmark. Along the lines of the group's strategy in electricity, investments are being considered on a partnership basis. At this stage, RWE covers less than 10% of its gas needs – achieving its upstream objectives is critical in limiting exposure to gas price volatility.

Midstream and downstream (supply)

RWE Gas has the second longest pipeline network in Europe

Following the Transgas deal, RWE has become the second largest pipeline operator (94,00km) in Europe after Gaz de France (182,000km). We see this position as having dual benefits for RWE.

Midstream – attractive cash flow profile

- First, the predictable, highly cash-generative nature of pipeline assets serves to offset some of the risk associated with the cyclicality of the upstream business

Geographical positioning of pipeline key

- Second, the combined pipeline system is now the most important transit system for gas shipped from Russia to Western Europe, which will give RWE the opportunity to expand its midstream and wholesale position on a European basis

Lattice JV will offset some midstream margin erosion

In a pre-emptive move to offset pressure on midstream margins, RWE has set up a gas logistics company with Lattice (UK). RWE (40%) expects the JV will provide access to a skill base capable of dealing with the impact of liberalisation and tighter regulation across Europe. As a logistics operation, Viavera will be a very small part of RWE Gas; if, however, plans go ahead to become a capacity risk taker, the contribution would rise to material levels.

Obragas, Intergas and Innogy acquisitions expand sales

RWE's European gas supply strategy has recently been extended by the recent acquisitions in the Netherlands of Obragas (7.4TWh and EUR165m sales in 2001) and Intergas (5TWh and EUR90m in 2001). In addition, Innogy's gas business further enhances RWE Gas' sales portfolio. The experience of the electricity business in 1999-01 should provide some valuable markers for the gas supply pricing strategy; RWE is not planning to aggressively going after household customers. We believe the approach of the rest of the industry (in Germany at least) is much the same, hence we expect supply margins to remain relatively immune from competitive erosion in the medium term.

Growth underestimated – but high priced acquisitions offset

Gas will be a key growth element of the RWE group

On an EBITDA basis we are forecasting that RWE Gas will be the second fastest growing segment of the group to 2006 at 13.4% CAGR. From a valuation perspective we consider the rapid growth of the business is undervalued relative to consensual EV/EBITDA valuations in European gas at 7.5x EV/EBITDA. However, in light of the estimated 8.5x entry multiple for Transgas, RWE has paid a high price to increase its exposure to European gas.

Gas

RWE Gas – upstream needed

In our comprehensive accompanying document *Industry Review – Deconstructing the Diversified Industrials*, we isolate a number of factors we consider as critical for the delivery of effective strategy. The tables below provide an overview of those criteria and our view of where RWE is positioned currently:

RWE Gas – criteria for success

Criteria	Does RWE have it?	Comment
Upstream integration (gas production)	Limited	A key element of the RWE strategy is to build its exposure to upstream gas, both for its gas business but also for future positioning in CCGT
Active involvement in gas purchasing/supply	Likely improvement	We expect the outcome of the current ministerial review of the E.ON/Ruhrgas merger will demand a more far-reaching break-up of long-term contracts, which will (beneficially) allow RWE to source more gas from its majority-owned subsidiary, Thyssengas.
Experience and skill at international gas contracting	Limited	While RWE through DEA (divested to Shell) has gained domestic expertise, we expect this will be an important area of strategic focus going forward to enhance margin and hedge
Presence in midstream transportation assets (LNG tankers) as part of an integrated LNG chain	No	At this stage RWE has no LNG capability but may increase its involvement as part of its strategy to increase upstream exposure
Customer market (retail hedge) or own-consumption via electricity generation (CCGT)	Yes	In the UK RWE has both through its subsidiary Innogy. While in Germnany the retail hedge is in place, it will be some time before CCGT forms a meaningful element of the generation mix
Preponderance of households within customer mix (lower churn rate)	Yes	With a combined customer base at 4.4m, the entity is approaching critical retail mass. We expect churn in German domestic gas to be very low – probably in line with the current 2% in electricity
Marketing ability/branding – differentiated products and services	Yes	Less of an issue in Germany, as churn rates have been below 2% for the past couple of years. In the UK, however, IOG has, in a short space of time, built up a strong brand

Source: HSBC

Gas

Forecasts and valuation

- Thyssengas increases ex-Transgas EBITDA by 4% in 2002e. This consolidation effect more than offsets the negative impact of weak oil and gas prices
- Group EBITDA margin falls 23.5% to 21% due to the consolidation of Transgas in H2 (seasonal low). We have assumed implementation of the Transgas regulatory deal as well as the EUR100m of integration savings RWE expects to achieve
- We are forecasting a 12% underlying increase in total sales in 2003 as a result of the lagged effect of high current oil prices
- Based on our DCF, we reach an implied EV/EBITDA multiple of 8.0x 2004e

RWE Gas: forecasts and valuation

EURm	PF2001a	2002e	2003e	2004e	2005e	2006e	2002e/2001a	CAGR 2001-06
Income statement								
SALES	3,724	5,403	6,331	6,768	7,038	7,249	45.1%	14.3%
Operating costs	(2,847)	(4,267)	(4,957)	(5,279)	(5,468)	(5,605)		
EBITDA	877	1,136	1,374	1,489	1,570	1,644	29.6%	13.4%
Depreciation	(178)	(323)	(395)	(427)	(444)	(458)		
Operating result (EBITA)	699	814	979	1,061	1,126	1,187	16.4%	11.2%
DCF valuation								
Operating earnings		814	979	1,061	1,126	1,187		
+ DA		323	395	427	444	458		
+/- change in provisions		0	0	0	0	0		
+/- change in WC		0	0	0	0	0		
+/- capital expenditure		(567)	(664)	(710)	(739)	(761)		
- notional cash tax payable		(141)	(244)	(266)	(282)	(295)		
OpFCF		428	466	512	550	589		
NPV of OpFCF (incl TV)	11,834							
Discount rate	6.89%							
TV growth rate	2.85%							
Implied 2004E EV/EBITDA	8.0x							
Multiple-based valuation								
8.5x	12,652							
9.0x	13,397							
7.5x	11,164							
8.0x	11,908							
8.5x	12,652							
Valuation summary								
DCF	11,834							
EV/EBITDA	11,164							
SIMPLE AVERAGE	11,499							
Implied 2004 EV/EBITDA	7.7x							

Source: HSBC

Water

Long-term attraction – short-term drag

On 25 September 2001, RWE announced the acquisition of Thames Water; the deal created the third force in global water and provided the first threat to the dominance of the French pair – Vivendi and SUEZ. In addition, through E'Town (Thames' US subsidiary) RWE had found a springboard into the largest and fastest growing private water market in the world – North America. However, what the deal gained in strategic clarity it lacked in financial sense. The substantial c30% premium to regulatory asset base was in our view excessive, particularly in light of the aggressive cuts brought in by the UK water regulator for the AMP3 period. Undeterred by criticism about the deal's high price, RWE pressed on and in September of the following year the group announced the EUR8.9bn acquisition of American Water Works. At 11.9x EV/EBITDA, the deal also garnered a negative reaction from the market.

RWE has acquired over EUR20bn of water businesses over the past two years

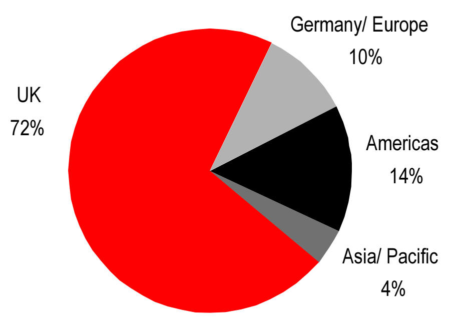
RWE's water evolution is now virtually complete; the last piece of the jigsaw remains the achievement of scale in Germany, which was partially achieved through the Rheinisch-Westfalische Wasserwerksgesellschaft (RWW) deal but should be fully realised on acquisition of Gelsenwasser (divestment condition of the E.ON/Ruhrgas merger). Despite the achievement of scale, RWE still faces considerable political, regulatory and economic risk across its asset base. In the US, seven state approvals are still required, in the UK AMP4 is just two-years away, and in Germany operational efficiency remains below par.

RWE's water business still faces numerous political, regulatory and economic risks

RWE's strategy to offset the negative effects of these factors is to target growth in municipal outsourcing in the US. In our review of the global water industry, we draw the conclusion that the increasing risk of non-regulated operations detracts from the perceived longer-term value. Furthermore, the expected explosion in outsourcing has failed to materialise as expected – especially in the US – which leads us to question the growth expected by RWE depicted in the chart below – *Global water market potential*. Taking all of these factors into account, we have a negative outlook for RWE's water division.

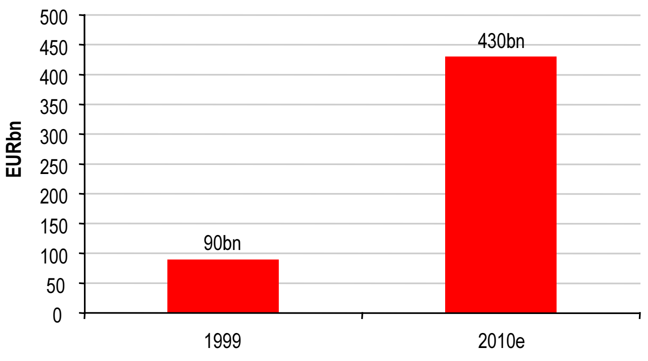
HSBC has a negative view on growth water outsourcing

RWE Water – geographical revenue analysis 2002



Source: HSBC

Global water market potential



Source: Thames Water

Water

Thames Water – AMP4 likely to reduce earnings

AMP4 review due to start next year – we are forecasting a 0% Po

The UK water sector is now in the early stages of the process leading up to the fourth five-yearly period (AMP4) in its incentive-based regulatory cycle. Towards the middle of 2003, the first phase of negotiations between the UK regulator (OFWAT) and the industry begins, with the publication of initial proposals from OFWAT. Following the harsh conditions imposed in AMP3, there is considerable uncertainty over the likely price cap for 2005-10, not least as there is a new, more lenient (arguably) head of OFWAT. At this stage we are forecasting that Thames will receive a Po (percentage price reduction in year 1) of 0%, but will be burdened with a front-end loaded capex programme (to deal with increase leakage problems), which will lead to a fall in earnings in 2005.

Impact of Po offset by integration savings with IOG

We estimate that the impact of the above will be a cEUR50m fall in EBITDA. However, on a positive note this will be almost fully offset through the synergies derived from integrating the Thames and Innogy businesses. We expect the benefit of this cost reduction will be shown in the Innogy figures to avoid potential regulatory clawback.

European water operations – lacking scale and profitability

RWE is leading contender for Gelsenwasser

The recent acquisition of RWW has provided an important boost to the group's scale in German water. In total RWE Water services over 11m people with water and wastewater services in Germany and Hungary. The group has partnerships with Vivendi in Berlin, SUEZ in Budapest and SHW in Zagreb. To date, however, RWE has lacked scale in Germany (even with RWW) and failed to reach profitability with Vivendi on Berlinerwasser. Although the potential acquisition of Gelsenwasser from the E.ON/Ruhrgas divestment programme will improve the group's position, our view remains negative.

American Water Works – not out of the woods yet

AWK's Q2 results revealed a worrying exposure to cyclicality

American Water Works' (AWK) Q2 results exposed a greater degree of cyclical risk than we had previously banked on. For example, the results statement cited that average water use per customer declined by over 4% y-o-y due to adverse weather patterns and the weak US economy. Furthermore, the 8% decline in industrial water use y-o-y revealed a worrying trend in a market segment that RWE expects to generate the growth to validate the high price of the AWK acquisition.

Merger with AWK remains on track for mid-2003 closing

The merger with AWK remains on track for a mid-2003 closing date. RWE has received approvals in six states, with approvals still outstanding in seven. While we expect the deal to complete as planned, we consider the likelihood of pressure on allowed returns on equity to result in a reduction in overall earnings expectations. We use 11% ROE as a benchmark from the recent Citizens (Illinois) rate case. However, this will to some extent be offset by the opportunity to integrate the RWE and AWK businesses prior to completion.

Market is overestimating value of growth in water

The combination of regulatory risk in the UK, a sub-scale European operation and weak results at AWK lead us to a less than optimistic outlook for RWE's water business. Current water EV/EBITDA valuations are standing at around 8.0x, which look pricey when compared to our 7.2x DCF-generated equivalent for RWE Water.

Water

RWE Water – mostly well positioned

In our comprehensive accompanying document Industry Review – Deconstructing the Diversified Industrials, we isolate a number of factors we consider as critical for the delivery of effective strategy. The tables below provide an overview of those criteria and our view of where RWE is positioned currently:

RWE Water – criteria for success

Criteria	Does RWE have it?	Comment
An international track record in water operations	Improving	The acquisition of Thames Water in 2000 provided RWE with an international base of water operations and contracts to be a serious threat to the dominant French pairing of SUEZ and VIE. In addition, the pending acquisition of AWK should give RWE significant scale advantage in US water
Commercial skills to win bids (this is not the same as buying a utility or buying a partial stake in a company)	Yes	While lacking the track record and experience of the French, Thames Water has shown to have a strong commercial sense when bidding for contracts
A high technical rating and proficiency in water and waste treatment	Yes	Proficient in water and waste water treatment operations. However, in the TW domestic market the increasing problems with leakage is diminishing the company's technical rating
An R&D capability in UV filtration, membranes, sludge disposal, speciality chemicals	No	RWE has no in-house capability in UV filtration, membranes and specialty chemicals, but does have expertise in sludge
Balance sheet firepower to bid	Limited	On completion of the AWK acquisition, but pre divestment, RWE's gearing will be above 150%, limiting balance sheet flexibility
Critical mass to manage projects worldwide	Yes	Thames Water has an impressive spread of international contracts, ranging from South America to Asia. Recently, however, the company has experienced problems with its Turkish project – Izmit
Competitive edge in the domestic market	Yes	Thames has two Scottish water projects and has the billing and customer services for Hyder. In Germany, however, the company lacks critical mass, but this should be resolved through the acquisitioni of Gelsenwasser – a condition of the E.ON/Ruhrgas merger

Source HSBC

Water

Forecasts and valuation

- The sharp rise in earnings and sales in the current year largely reflects consolidation effects, which include RWW (1 April 2002), Chile and China
- At this stage we are assuming a 0% Po for the regulated UK business of Thames Water in 2005; however, we are also expecting a front-end loaded capex programme (leakage) and hence we are forecasting a fall in earnings
- As the water business of RWE is predominantly made up of regulated operations, we apply a low TV growth rate of 2.5%, despite high expected growth

RWE Water: forecasts and valuation

EURm	PF2001a	2002e	2003e	2004e	2005e	2006e	2002e/2001a	2001-06 CAGR
Income statement								
SALES	2,746	3,158	4,452	5,706	5,854	6,055	15.0%	17.1%
Operating costs	(1,419)	(1,611)	(2,316)	(2,981)	(3,103)	(1,895)		
EBITDA	1,327	1,547	2,136	2,725	2,751	2,906	16.6%	17.0%
Depreciation	(462)	(537)	(730)	(909)	(930)	(959)		
Operating result (EBITA)	865	1,011	1,406	1,816	1,822	1,947	16.8%	17.6%
DCF valuation								
Operating earnings		1,011	1,406	1,816	1,822	1,947		
+ depreciation		537	730	909	930	959		
+/- change in provisions		0	0	0	0	0		
+/- change in WC		0	0	0	0	0		
+/- capital expenditure		(840)	(1,094)	(1,262)	(1,247)	(1,245)		
- notional cash tax payable		(202)	(422)	(545)	(547)	(584)		
OpFCF		505	621	918	958	1,077		
NPV of OpFCF (incl TV)	19,706							
Discount rate	6.89%							
TV growth rate	2.50%							
Implied 2004E EV/EBITDA	7.2x							
Multiple-based valuation								
2004E EBITDA:								
7.0x	19,075							
7.5x	20,438							
8.0x	21,800							
8.5x	23,163							
9.0x	24,525							
Valuation summary								
DCF	19,706							
EV/EBITDA	21,800							
SIMPLE AVERAGE	20,753							
Implied 2004 EV/EBITDA	7.6x							

Source: HSBC

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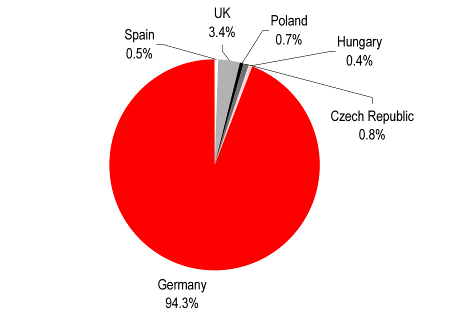
Waste

The waste attraction

RWE Umwelt was established in 1989 as part of the Group's diversification strategy. The rationale behind the original expansion into waste was based on the prediction that the unregulated energy sector offered insufficient growth prospects vs the waste management sector. This market appraisal failed to materialise, however, and as the German economy weakened, RWE's results disappointed. The implementation of financial, managerial and portfolio changes over the past three years have turned RWE Umwelt into a profitable division, but it continues to exhibit low growth characteristics

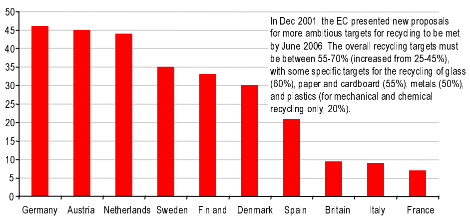
RWE waste expansion based on expected 'growth' characteristics in the 1980s

Geographical Waste revenues 2001



Source: HSBC

European recycling and composting rates 2001



Source: House of Commons

Legislation

In Germany, the 'Ordinance of Waste Disposal Act' (2001) calls for landfills to reach higher standards by 2005 or face closure. In reaction landfill owners are depressing prices to fill sites by 2005, before higher costs are imposed or sites are forcibly closed. The law is likely to see the focus shift on to alternative treatments such as incineration, and it is in this sector that we expect RWE will concentrate activities in 2002-03.

Legislation shifts focus from landfill to treatment

Portfolio problems

RWE's current waste portfolio encompasses five units:

Low margins and depressed pricing slow growth

- Domestic waste
- Recyclable packaging materials
- Product recycling units
- Hazardous waste
- Industrial waste

Domestic waste (collection and handling) remains low margin, despite EU legislation aimed at improving operating conditions to incentivise environmental improvements. The recyclable packaging materials unit has been negatively affected by the depressed market for secondary raw materials such as recycled glass/plastic, in addition to a drop in recycled paper prices.

Waste

Size matters

RWE strength in Germany but lacks global reach

RWE's strength in waste comes largely from its regional customer base through the municipalities in Germany, where it holds c30% of the market. The remainder of the domestic market is still relatively fragmented and there is a high degree of competition. On a global scale RWE lacks the reach of the French Diversified Industrials. In 1993 it started an international expansion policy but success has been limited and the company stated recently that it no longer had international aspirations.

Cyclical aspects

Domestic weakness to continue, Water/Waste synergies offer limited scope

As discussed in the 'Industry Overview', growth in quantity of waste produced is directly related to GDP. With RWE's waste exposure predominantly in Germany (94% of 2001 waste revenues), the weak economy has been a major negative factor in the unit's performance over the past two years. Our current year expectations are for a slight increase in German GDP growth to 0.9%, but as a result of the ongoing weakness of the German sector, structural inefficiencies, plus issues with landfill volumes in the UK, we expect RWE's waste earnings to fall in 2002. The lack of growth in waste could to some extent be offset by any synergies gained through offering water and waste together. However, we do not consider cross-selling a near-term prospect. RWE benefits from strong links with the municipalities, which can increase access to customers in Germany, but high additional value may not be possible with industrial customers that squeeze margins to the utmost extent.

The future for RWE Umwelt

Sale of waste division on the cards?

Given its poor performance over the last decade the future of RWE's waste business is in the balance; a sale possible or it could be retained as an option for future multi-utility growth.

RWE Waste – criteria for success

Criteria	Does RWE have it?	Comment
A wide geographic spread to hedge against economic downturn in one area	No	94% of waste revenues from Germany
Ability to adapt to changing legislation and take advantage of associated opportunities in different geographic locations	No	Limited international exposure
Investment in R&D to increase waste treatment skills and increase cost efficiencies/margins	Yes	
Offer multi-utility product (waste with waste water treatment and/or energy services)	No	Only offered domestically. No energy services division
Balance services between low margin but medium-term municipal contracts and high-margin, short-term industrial contracts to minimise risks in any one segment or type of product	Yes	

Source: HSBC

HSBC

Waste

Forecasts and valuation

- We are forecasting 1.0% growth in waste revenues for 2002 and a low CAGR in revenues of 1.6% to 2006. This is a result of soft German GDP growth forecasts and continued pressure on secondary raw material prices and paper prices in Germany and landfill in the UK
- EBITDA and EBITA CAGR benefit from progressive cost reduction
- Based on our DCF we reach an implied EV/EBITDA multiple of 5.6x for 2004, which is below the sectoral average, reflecting the sub-scale nature of the business

RWE Waste – forecasts and valuation

EURm	PF2001a	2002e	2003e	2004e	2005e	2006e	2002e/2001a	CAGR 2001-06
Income statement								
SALES	2,055	2,076	2,121	2,153	2,185	2,218	1.0%	1.5%
Operating costs	(1,734)	(1,762)	(1,796)	(1,819)	(1,842)	(1,865)		
EBITDA	321	314	325	334	344	353	-2.2%	1.9%
Depreciation	(174)	(176)	(180)	(182)	(185)	(188)		
Operating result (EBITA)	147	138	145	152	159	165	-6.1%	2.4%
DCF valuation								
Operating earnings		138	145	152	159	165		
+ depreciation		176	180	182	185	188		
+/- change in provisions		0	0	0	0	0		
+/- change in WC		0	0	0	0	0		
+/- capital expenditure		(180)	(184)	(187)	(190)	(192)		
- notional cash tax payable		(28)	(44)	(46)	(48)	(50)		
OpFCF		106	97	102	106	111		
NPV of OpFCF (incl TV)	1,811							
Discount rate	6.89%							
TV growth rate	1.50%							
Implied 2004E EV/EBITDA	5.6x							
Multiple-based valuation								
2004E								
5.5x	1,787							
6.0x	1,950							
6.5x	2,112							
7.0x	2,275							
7.5x	2,437							
Valuation summary								
DCF	1,811							
EV/EBITDA	2,112							
SIMPLE AVERAGE	1,962							
Implied 2004 EV/EBITDA	6.0x							

Source: HSBC

Non-core businesses

Heidelberger Druckmaschinen

Delayed sale of Heidelberger will result in continued application of discount

Following the sell-down in RWE's stake, the company's share in the business is 50.02% effective Q2 2002. The outlook given by RWE at H1 was that Heidelberger's performance would continue to decline as a result of the weak demand in the printing machine industry. In particular, the 13.9% decline in order intake in H1 indicated the significant impact of the general downturn of global economy.

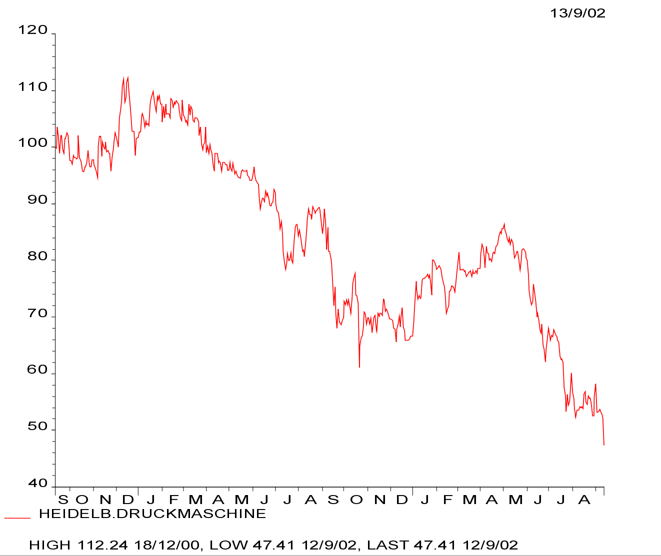
Despite Heidelberger forming under 2% of group EV, we expect this weakness along with the recent statement that the target sale date (end-2003) may be missed will continue to be a negative factor for the RWE share.

Hochtief

Hochtief sale has also been put off indefinitely

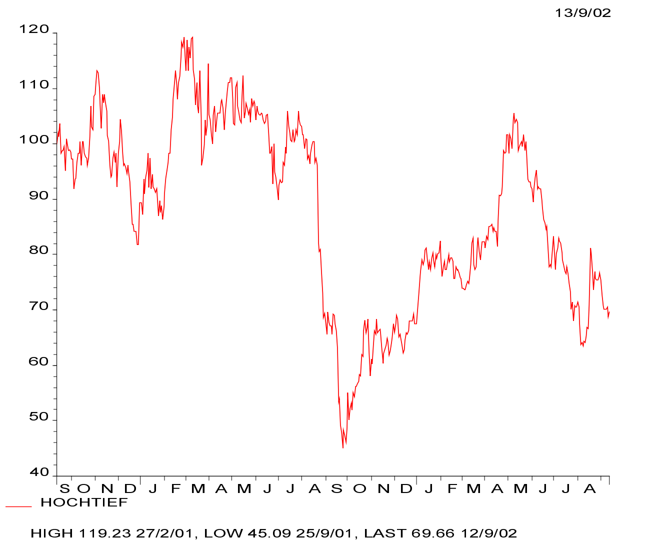
RWE now accounts for Hochtief on an equity basis, that is the contribution is taken on a pro-rated net profit basis with sales, capex and employees now excluded from the group figures. The German construction industry remains in the doldrums, although with Hochtief's international expansion and an improving outlook for Germany, we expect marginal improvements in the company's performance.

Heidelberger – 2-year performance (rebased)



Source: HSBC

Hochtief – 2-year performance (rebased)



Source: HSBC

Sum-of-parts

We use two methods to value RWE – a DCF using the three-phase HSBC model, which reaches an appraised value per share of EUR39, and a sum-of-parts that values the group at EUR37. Our target price is downgraded from the previous level of EUR45, which predominantly reflects our lower valuation of RWE's recently completed acquisitions, rather than the amount expended by the company. There is 19% upside to our new EUR38 target price – we upgrade our recommendation from Reduce to Add.

RWE: sum-of-parts valuation

Current price (p)	32.02		DCF	39.61
Target price	38.00		SoP	37.03
Discount/(premium) to TP	15.8%		Average	38.32
Average number of shares	562		Upside/(downside)	19.7%
Electricity terminal value growth rate	2.60%		Discount/(premium)	16.5%
Gas terminal value growth rate	2.85%			
Water terminal value growth rate	2.50%			
Waste terminal value growth rate	1.50%			
Segment	**Valuation technique/comment**	**EURm**	**EUR/share**	**% of EV**
Core businesses:				
Electricity	DCF / Implied 7.4x EV/EBITDA	37,654	66.95	49.8%
Gas	DCF / Implied 8.0x EV/EBITDA	11,834	21.04	15.6%
Water	DCF / Implied 7.2x EV/EBITDA	19,706	35.04	26.0%
Waste	DCF / Implied 5.6x EV/EBITDA	1,811	3.22	2.4%
TOTAL CORE		71,005	126.25	93.8%
Non-core businesses:				
Heidelberger	50% of current HSBC EV	1,028	1.83	1.4%
Hochtief	Current share of MV	600	1.07	0.8%
Shell JV	Reported of Shell transaction	2,000	3.56	2.6%
Telecoms	At book	500	0.89	0.7%
Victoria Mathias	At book	550	0.98	0.7%
TOTAL NON-CORE		4,678	8.32	6.2%
TOTAL GROUP ENTERPRISE VALUE		75,683	135	100%
Less: Minorities	2004E	(4,366)	(7.76)	
Less: pension provisions	2004E	(13,915)	(24.74)	
Less: nuclear provisions	2004E	(10,604)	(18.85)	
Less: mining provisions	2004E	(2,958)	(5.26)	
Less: Financial assets & net debt	Adjusted - see below	(1,516)	(2.70)	
Less: AWK total cost	As reported by RWE	(8,900)	(15.82)	
Less: Innogy total cost	As reported by RWE	(8,500)	(15.11)	
Less: Transgas total cost	As reported by RWE	(4,100)	(7.29)	
TOTAL GROUP SoP VALUATION		**20,824**	**37.03**	
CURRENT MARKET VALUE		18,005	32.02	
Upside from current price			**15.7%**	
Discount to SoP			**13.5%**	

Source: HSBC

Recommendation structure

	Sector (vs market)		
	Overweight	Neutral	Underweight
Stock (vs sector)			
Buy (outperform >15%)	Key Buy	Buy	Add
Add (outperform <15%)	Buy	Add	Hold
Hold (Sector neutral)	Add	Hold	Reduce
Reduce (underperform <15%)	Hold	Reduce	Sell
Sell (underperform >15%)	Reduce	Sell	Key Sell

For companies covered on a sector basis, we apply a two-stage recommendation structure: a combination of the analysts' view on the stock relative to its sector and the sector call relative to the market, together giving a view on the stock relative to the market. The sector call is the responsibility of the strategy team set in co-operation with the analysts. For other companies, we show a recommendation relative to the market. The performance horizon is 6-12 months. The target price is the level the stock should currently trade at if the market accepted the analysts' view of the stock and, therefore, abstracts from the need to take a view on the market or sector.

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HSBC Securities (Canada) Inc, Toronto; HSBC Investment Bank plc, London; HSBC CCF Securities (France) SA, Paris; HSBC Trinkaus & Burkhardt KGaA, Dusseldorf; HSBC Securities and Capital Markets (India) Private Limited, Mumbai; HSBC Securities (Japan) Limited, Tokyo; HSBC Investment Bank (Netherlands) N.V, Amsterdam; HSBC Securities Polska SA, Warsaw; HSBC Investment Services (Africa) (Pty) Ltd, Johannesburg; HSBC Investment Bank plc, Stockholm; HSBC Securities (USA) Inc, New York.

Notes

Competitive position

Industry

Average score 3.8

Scoring range 1-5 (high score is good)

Power of suppliers — 4
Medium and decreasing

Downstream integration is leading to increasing disintermediation of suppliers.

New entrants — 5
Low and stable

Significant unit cost reduction through economy of scale advantages is raising barriers to entry. High capital requirements are a significant barrier to entry.

Rivalry — 3
Medium and stable

Increasing integration across the value chain is reducing rivalry; however, in water there are a few global customers and as such the upside from winning one customer can be significant, so the competition will be intense.

Substitute products — 4
Low and stable

The very nature of the utility market is a lack of substitutes.

Power of customers — 3
Medium and stable

Strong differentiation of customers with industrial customers exerting higher power than SMEs and households.

Company

Average score 2.8

Scoring range 1-5 (high score is good)

Strengths

- Leading positions in German electricity and gas, no.3 in global water and no.3 in European waste
- Track record at rapid integration of VEW, Thames
- Renewed management vigour with clearly defined strategic objectives

Weaknesses

- Willingness to pay 'strategic' premia for acquisitions
- Sub-scale waste business adversely affected by German structural inefficiencies
- RWE is short of upstream gas exposure – increasing earnings volatility

3

Future opportunities for investment

- Expansion of German multi-utility platform – Gelsenwasser
- Pursuit of further growth in global water/waste-water via Thames
- US IPP market – activity highly unlikely in short term

Risks to performance

- The imposition of a single regulator in gas and electricity increasing scrutiny on profitability
- Failure of expected growth in US water O&M to materialise
- Position short of upstream increases leverage and gas price exposure risk

2.5

The upper score represents an assessment of the balance of strengths and weaknesses. Similarly the bottom number scores the balance of opportunities and risks.

Valuation

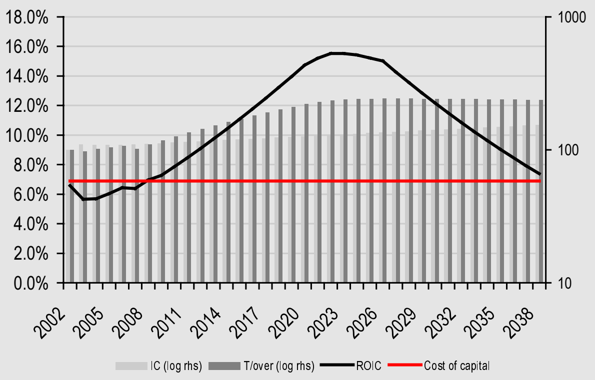
Discounted economic profit

PV of economic profit	27,631
PV of tax shield	0
Opening invested capital	52,903
Appraised value of the enterprise	80,534
Value of non-core assets	0
Value of debt	-54,859
Value of minorities	-3,399
Appraised value of the equity	22,277
Number of shares	562
Appraised share price	39.6
Current share price	33.01
Upside/(downside)	20.0%

Discounted cash flow

PV of operating free cash flows	80,534
PV of tax shield	0
	80,534
Value of non-core assets	0
Value of debt	-54,859
Value of minorities	-3,399
Appraised value of the equity	22,277
Number of shares	562
Appraised share price	39.6
Current share price	33.01
Upside/(downside)	20.0%

ROIC vs growth



Model drivers

	2002	2003	2004	2005	fading to	2040
Asset turn (x)	1.01	0.76	0.72	0.75	fading to	1.20
Pre-tax margin (%)	8.2	10.6	11.2	11.5	fading to	9.0
Tax effect (%)	20.0	30.0	30.0	30.0	fading to	36.4
ROIC (%)	6.6	5.7	5.7	6.0	fading to	6.9
Cost of capital (%)	6.9	6.9	6.9	6.9	fading to	6.9
Turnover growth (%)	na	-2.3	4.0	2.8	fading to	-0.3
IC growth (%)	29.3	9.4	-0.5	-0.3	fading to	1.1
ROIC - Cost of capital	-0.3	-1.2	-1.2	-0.9	fading to	-0.0

Sensitivity table

Cost of capital vs fade period	10 years	13 years	15 years
3.9%	195.2	202.2	174.9
4.9%	121.8	126.5	118.1
5.9%	72.5	75.8	74.6
6.9%	37.3	39.6	41.1
7.9%	10.9	12.6	14.8
8.9%	-9.3	-8.1	-5.9
9.9%	-25.3	-24.4	-22.5
10.9%	-38.1	-37.4	-35.9

Source: HSBC

Peer group comparison

			Enterprise measures				Equity measures				
			EV/ Sales	EV/ EBITDA	EV/ EBIT	EV/ IC	HSBC REP	PE	PEG	Price to Book	PCE
E.ON		12/2001a	1.6	8.7	18.2	1.1	2.0	12.3	9.9	1.3	5.3
EONG.DE	Buy	12/2002e	1.8	8.2	13.9	1.0	1.1	8.6	0.6	1.1	4.6
(EUR)	47.64	12/2003e	1.4	6.5	10.8	1.0	1.2	8.3	-3.2	1.0	4.1
		12/2004e	1.1	5.5	9.1	0.9	1.1	8.1	-2.7	0.9	4.0
RWE		12/2001a	0.8	6.0	11.5	0.8	1.0	13.9	n/a	2.4	4.0
RWEG.DE	Add	12/2002e	1.0	7.2	15.5	0.8	1.0	16.7	0.8	2.2	3.5
(EUR)	32.36	12/2003e	1.2	6.7	13.5	0.8	1.1	9.2	0.3	2.1	2.7
		12/2004e	1.1	6.1	12.8	0.8	1.0	7.8	0.6	2.0	2.4
SUEZ		12/2001a	1.0	5.4	11.5	0.9	0.9	10.3	-1.4	1.3	3.2
LYOE.PA	Buy	12/2002e	0.9	5.5	11.0	0.9	1.1	24.8	-10.8	1.4	4.1
(EUR)	18.00	12/2003e	0.9	5.4	10.2	0.9	0.9	12.7	0.3	1.4	3.5
		12/2004e	0.9	5.2	9.2	0.9	0.9	11.0	0.8	1.3	3.3
Vivendi Environnement		12/2001a	0.8	6.5	12.9	0.9	1.1	10.6	0.3	1.3	3.0
VIE.PA	Buy	12/2002e	0.7	5.9	12.5	0.9	1.1	9.5	0.7	1.1	2.9
(EUR)	20.55	12/2003e	0.7	5.5	10.7	0.9	1.0	9.4	0.8	1.1	2.8
		12/2004e	0.7	5.2	9.8	0.9	0.9	7.2	0.5	1.0	2.5

Summary financials

Current price (EUR)	32.61	Target price (EUR)	38.00	Market cap (EURm)	17,313	Bloomberg code	RWE GR
Recommendation	Add			Enterprise value (EURm)	55937	Reuter RIC	RWEG.DE

Year to	12/2001a	12/2002e	12/2003e	12/2004e
Per share data (EUR)				
Reported EPS	2.40	2.38	1.84	1.85
HSBC EPS	2.33	1.94	3.52	4.15
CEPS	8.09	9.23	11.94	13.60
DPS	1.33	1.33	1.33	1.33
NAV	13.74	14.79	15.31	15.83
P&L summary (EURm)				
Revenue	52,788	53,331	52,104	54,200
EBITDA	6,790	7,699	9,318	10,106
EBIT	3,552	3,598	4,582	4,793
Net interest	-1,752	-2,570	-2,723	-2,917
PBT	2,194	2,039	1,936	1,994
HSBC PBT	2,194	2,039	1,936	1,994
Taxation	-661	-408	-581	-598
Reported net profit	1,350	1,339	1,036	1,041
HSBC Net profit	1,312	1,092	1,981	2,336
NOPLAT	2,831	3,481	3,869	4,262
Cash flow summary (EURm)				
Op free cash flow	-82	4,833	8,243	8,338
HSBC cash flow	1,025	2,726	6,598	6,649
Capital expenditure	-2,295	0	0	0
Cash earnings	4,550	5,193	6,717	7,649
Change in net debt		14,608	5,854	-1,030
Balance sheet summary (EURm)				
Intangible fixed assets	8,502	8,749	7,804	6,509
Tangible fixed assets	32,310	45,840	54,072	55,280
Cash	3,842	-10,766	-16,619	-15,590
Current assets	33,868	21,998	14,647	15,150
Operating liabilities	17,935	18,958	18,287	18,055
Gross debt	15,796	15,796	15,796	15,796
Net debt	11,954	26,562	32,415	31,386
Shareholders funds	11,129	12,012	12,620	13,268
Invested capital	52,903	68,394	74,855	74,473

Year to	12/2001a	12/2002e	12/2003e	12/2004e
Ratios (%)				
Revenue/IC (x)	2.0	0.9	0.7	0.7
NOPLAT margin	5.4	6.5	7.4	7.9
ROIC	5.4	5.7	5.4	5.7
ROE	33.9	13.6	23.4	26.7
ROA	6.0	4.0	3.5	3.7
ROCE	20.5	13.5	11.6	12.0
ROIC/Cost of capital	0.8	0.8	0.8	0.8
Cost of capital	6.9	6.9	6.9	6.9
EBITDA margin	12.9	14.4	17.9	18.6
EBIT margin	6.7	6.7	8.8	8.8
PAT margin	2.9	3.1	2.6	2.6
Interest Cover	2.0	1.4	1.7	1.6
Net debt/equity	107.4	221.1	256.9	236.6
Net debt/EBITDA	1.8	3.4	3.5	3.1
Growth (%)				
Revenue		1.0	-2.3	4.0
EBITDA		13.4	21.0	8.5
EBIT		1.3	27.4	4.6
PBT		-7.1	-5.1	3.0
HSBC Net profit		-16.8	81.4	17.9
HSBC NOPLAT		22.9	11.2	10.1
HSBC EPS		-16.8	81.4	17.9
Valuation (x)				
PE	14.0	16.8	9.3	7.8
PNAV	2.4	2.2	2.1	2.1
PCE	4.0	3.5	2.7	2.4
Yield (%)	4.1	4.1	4.1	4.1
EV/Revenue	0.8	1.0	1.2	1.1
EV/EBITDA	6.0	7.3	6.7	6.1
EV/IC	0.8	0.8	0.8	0.8
ROIC/Cost of capital	0.8	0.8	0.8	0.8
HSBC REP	1.0	1.0	1.1	1.0

Business description

RWE's four core business areas are electricity, gas, water and waste, with the greatest exposure to Europe and a steadily growing presence in the US. In most cases, these industries exhibit utility-style returns: low growth but high cash flow resilience. The development phase of building the RWE multi-utility platform is now virtually accomplished. In all but one of its core businesses (waste), the group is at or near critical mass, both operationally and geographically.

RWE: EBITDA by division 2002e