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Rating: 2 → 2

# RWE (RWE GY)

Daiwa Capital Markets Europe

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Utilities: Germany

## Comparing wood: visit to Essent's Amercentrale biomass co-firing plant

- RWE recently hosted a trip to Essent's Amer biomass co-firing plant in the Netherlands. Essent reiterated its 2012 earnings guidance of +10% pa EBITDA / EBIT growth (excluding synergies and PPA) and raised its 2013 synergy target from €100m to €135m. RWE reported that the integration has gone well and Essent is performing ahead of RWE's expectations.
- Essent is the market leader in the Netherlands in co-firing biomass. We estimate the current cost premium (adjusted for carbon) of Essent's existing biomass co-firing plants to be around €30/MWh, however new, more efficient plants to be commissioned in 2013 could reduce this premium to around €25/MWh. With a far smaller cost premium than onshore (~€10/MWh) and offshore wind (~€30/MWh), we expect a new subsidy scheme to support further biomass co-firing.
- Our €65 DCF-derived fair value target includes our assumption of € per share from an 8-year nuclear lifetime extension and €5/MWh levy. The recent proposal of a €2.3bn per annum "windfall" nuclear levy would equate to €16/MWh, which on an 8-year extension would reduce our fair value estimate to €9 per share. We do not expect clarity on the extension issue until October. In Germany we continue to prefer RWE (Outperform, 2) to E.ON (Hold, 3) and in the European utilities sector we see better valuation upside and visibility with Enel (Buy, 1).

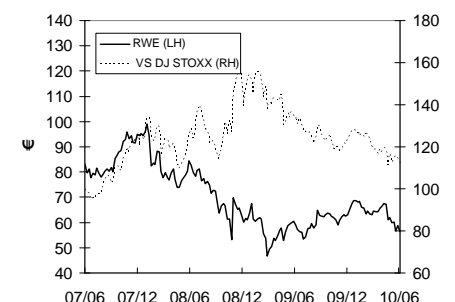
### Market Data

Share price	(€; 8 June)	56.26
Market cap	(€ mil; 8 June)	30,020
EV	(€ mil; 8 June)	64,274
Shares outstanding	(m; Q1/10)	534
Net debt : EBITDA	(x; 12/09)	2.8
EV/MW	(€ mil; 12/09)	1.3
ROE	(%; 12/09)	28.5
ROA	(%; 12/09)	3.8
Free float	(%; 12/09)	79

### Investment Indicators

P/E	(X; 12/10 E)	7.8
	(X; 12/11 E)	7.5
P/CF	(X; 12/10 E)	4.7
	(X; 12/11 E)	4.4
EV/EBITDA	(X; 12/10 E)	6.4
	(X; 12/11 E)	5.9
P/B	(X; 12/09)	2.3
Dividend yield	(%; 12/10 E)	6.4
Website	http://www.rwe.com	

### Adjusted Share Price



Source: Compiled by Daiwa CM Europe.

### Income Summary (€ mil; y/y)

Year to	Sales		EBITDA		EBIT		Net income		EPS (€)	CFPS (€)	DPS (€)
12/09	47,145	-4%	9,165	4%	7,090	4%	3,532	5%	6.6	9.6	3.5
12/10 E	52,110	11%	10,019	9%	7,457	5%	3,835	9%	7.2	11.9	3.6
12/11 E	53,893	3%	10,837	8%	7,926	6%	3,990	4%	7.5	12.9	3.8
12/10 PE	52,110	11%	10,109	10%	7,592	7%	3,923	11%	7.4	12.0	3.7
12/11 PE	53,893	3%	10,931	8%	8,105	7%	4,109	5%	7.7	13.0	3.9

Income Summary, Market Data &amp; Investment Indicators are adjusted figures

E: Daiwa CM Europe estimates.

## Amercentrale biomass co-firing and CHP plant

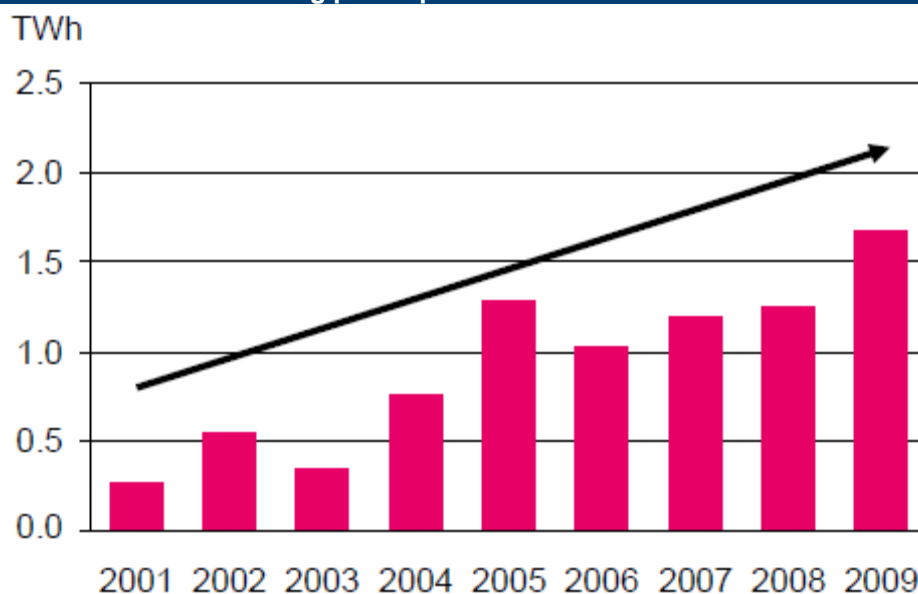
Over the past ten years Essent has invested over €130m in biomass-related investments and in 2009 produced 1.7 TWh from biomass co-firing generation, saving the equivalent of 1.2m tonnes of CO<sub>2</sub>.

Its leading biomass facility is at Amercentrale, a 1,180 MW hard coal-fired power plant (with additional 300 MW of district heating capacity). The plant operates at 40% electrical efficiency for its power output, rising to 60% total efficiency during the winter as a result of the district heating output. Both units at Amer have had FGD and SCR fitted and can therefore operate beyond 2015 (although the LCPD deadline may well slip).

Whilst historically 10% co-firing was seen as a stretching target for biomass, Essent currently co-fires (by mass) around 20% of Amer 8 (580 MW commissioned in 1980) and 35% of unit 9 (600 MW commissioned in 1993). In addition Amer unit 9 also has a 33 MW wood gasifier utilising demolition wood.

Essent produced around 1.7TWh of power from co-firing bio-mass in 2009, up from 1.3 TWh in 2008. Whilst this represented around 10% of Essent's total 2009 generation, we estimate the EBIT contribution from co-firing biomass accounted for around 20% of Essent's generation EBIT (or an estimated €60m out of €300m).

### Essent biomass co-firing power production



Source: Company materials; compiled by Daiwa Capital Markets Europe.

### Technical overview

Whilst many existing hard-coal plants could theoretically be converted to co-firing biomass, a number of technical/operational issues must be overcome for the co-firing process to work effectively.

The physical volume flow of biomass is significantly greater than that of hard coal, as coal contains a far greater amount of energy per cubic meter than most biomass fuels (e.g. wet sawdust has a calorific value of about 8 MJ/kg and wood pellets around 17 MJ/kg vs 25 MJ/kg for hard coal). Whilst some biofuels are drier and denser, co-firing still leads to an increased total volume flow which will require additional investment (storage, conveyors etc).

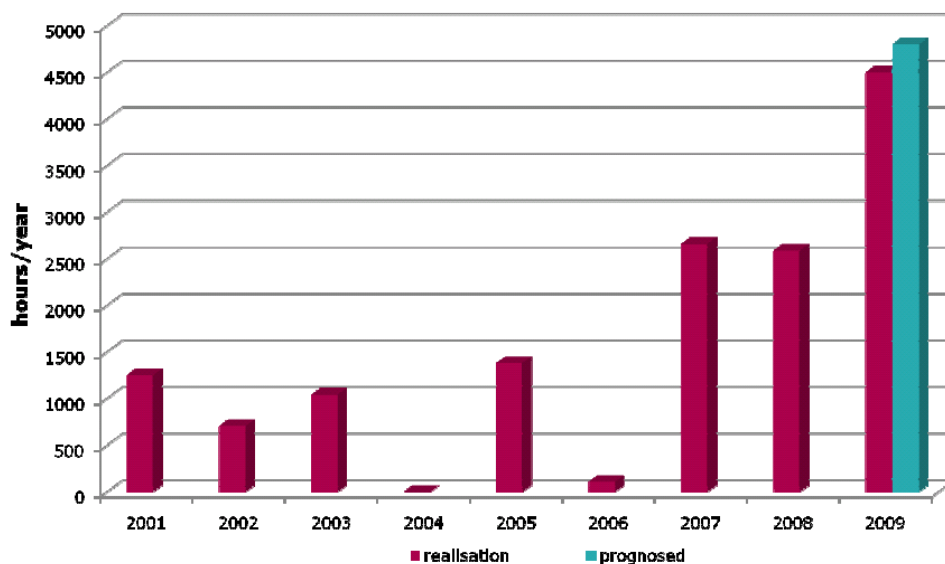
Biomass also typically requires separate milling as whilst coal can be grinded to less than 100 micrometers (<0.1 millimeters), biomass is soft and fibrous and ideally needs to be shredded rather than crushed.

In addition, burning biomass tends to be more corrosive to the plant and equipment which can result in a change in the combustion process as well as additional maintenance cost and investment.

Overall this means that biomass co-firing is technically more challenging than conventional thermal generation. Unlike the FGD and SCR market (where Alstom has over 37 GW of installed FGD and over 37 GW of SCR capacity), the international biomass market is still relatively immature with no clear equipment manufacturing leader. Whilst Essent has dealt with both Alstom and Siemens (who has entered a biomass joint venture with Drax in the UK), partly out of necessity it has designed and implemented the majority of the specific biomass processes itself.

For example, the original wood gasifier project at Amer was developed in conjunction with Lurgi (Air Liquide). Contracting, construction and commissioning were undertaken between 1998-2000 but whilst the design used proven components, the process was still not viable even after two substantial modifications by Lurgi (between 2001 and 2003) and in the end Essent commenced its own process re-design (2004-2005). More than ten years into the process Essent now (largely independently) seems to have overcome the operational issues of the process. Essent expects the wood gasifier output to remain around the 5,000 hours per annum over the next four years.

#### Amer wood gasifier production profile

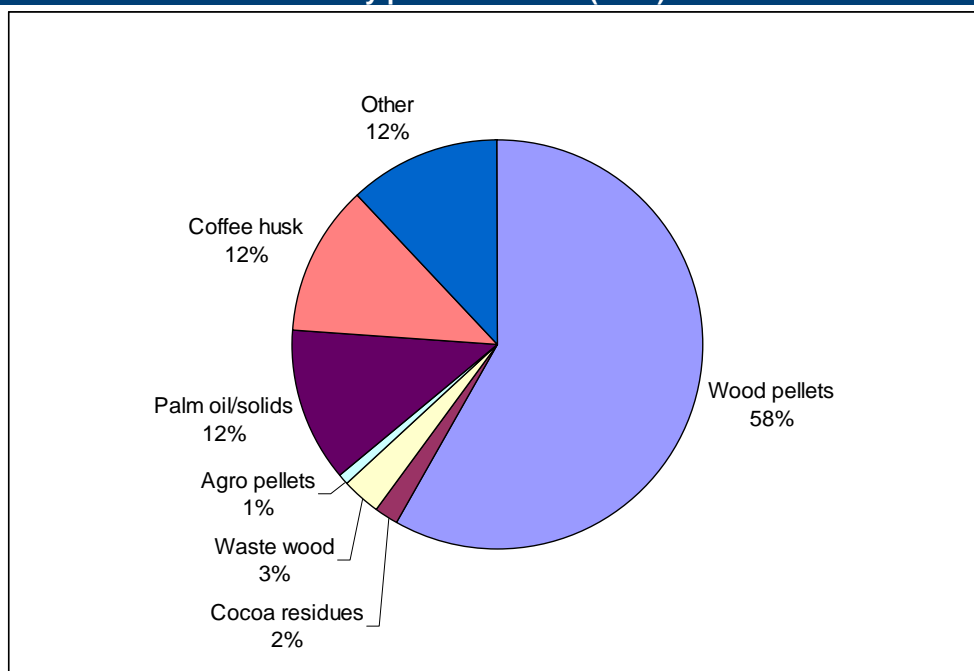


Source: Company materials; compiled by Daiwa Capital Markets Europe.

## Sourcing

The majority (58%) of biomass power production in the Netherlands in 2008 utilized wood pellets (derived from sawmill dust), which is generally the most simply way to co-fire biomass.

### Netherlands biomass fuel by product source (2008)



Source: IEA; compiled by Daiwa Capital Markets Europe.

The Netherlands currently has annual production capacity of just 130,000 tonnes and demand for around 1m tonnes of wood pellets. Imports are largely made from North America, Scandinavia and the Baltic States. As global demand for wood pellets is likely to grow (global market for wood pellets is currently estimated at 10m tonnes up from 7m in 2005) securing a reliable source of supply is critical.

The Amer plant currently consumes around 800,000 to 900,000 tonnes of wood pellets per annum., representing around 90% of the total Dutch demand and around 10% of global output.

RWE has therefore announced that it will invest €120m to build the world's largest biomass pellet plant in southern Georgia, in the United States. The facility will have a production capacity of 750,000 metric tonnes (utilising 1.5m tonnes of wood) and is due to begin operation in Q3 2011. A long term transport contract has already been concluded to ship the pellets from Savannah to the Amer port in Geertruidenberg.

In addition to wood pellets, Amer has developed a 33 MW wood gasifier that consumes around 150,000 tonnes per annum of demolition wood, substituting around 70,000 tonnes of hard coal. Although there were some issues in the Dutch government's classification of its output in 2006 (when the process was deemed waste incineration rather than biomass power), this has now been resolved and resulting gas has been tested as clean as "clean biomass" (i.e. the gas is free of the paint and other inorganic substances that may be contained within the demolition wood) and has been put on the Dutch government 'white list' of "clean biomass" materials (requires <30mg/MJ of heavy metals).

The wood gasifier technology has attracted significant international interest and the technology could potentially be expanded. The total amount of domestically

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available used wood in the Netherlands is estimated at around 1.5m tonnes, but around 1.2m tonnes of this are currently exported to Germany and Belgium.

Essent is also investigating other biomass materials. As well as coconut husks and cocoa bean shells, Essent has also reviewed the possibility of using coffee dregs as a source of biomass but concluded that the amounts required could not be effectively supplied from the catering and coffee industries. Essent's 25 MW dedicated biomass Cuijk plant will be used to test other potential biomass materials such as paper sludge (sludge from wastewater purifiers in the paper industry and the residue from de-inking old paper before recycling) and verge grass.

Essent is currently co-operating with Topell (in which RWE owns 25%) to produce torrefied wood pellets (bio-coal). Bio-coal is a high grade solid bio-fuel made from wood residues that have been heated in a process known as torrefaction to reduce its fibrous structure whilst retaining most of its energy content.

The resulting fuel has the advantage of a high calorific value (21 MJ/kg – similar to hard coal) and a more durable nature (less susceptible to water damage). The additional investment and loss in energy during the pretreatment process should be recovered from lower transportation costs given the higher energy density and the torrefaction process allows for a wider use of source material (including grasses and roots).

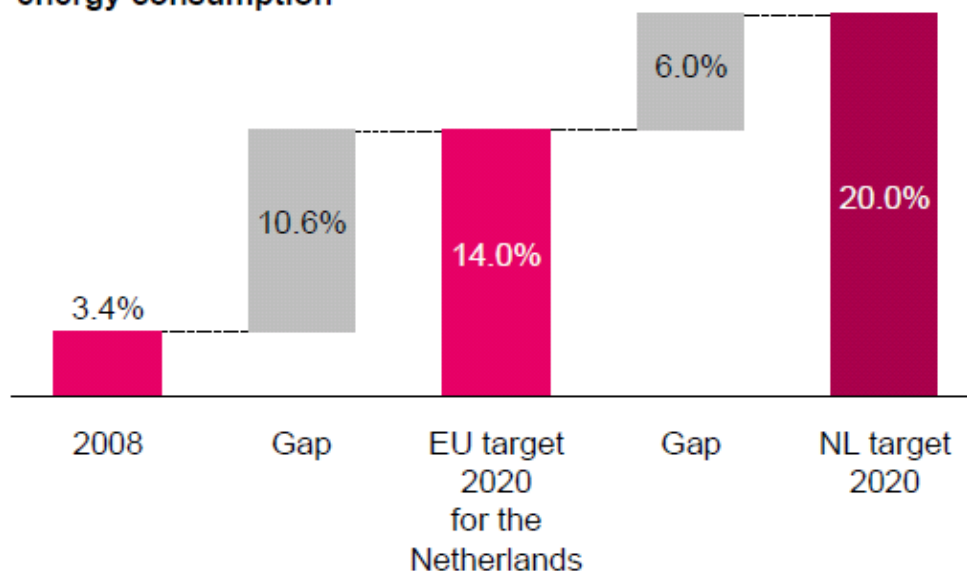
The group also continues to evaluate the potential use of bio-oils for power production. Whilst historically palm oil was used in oil/gas-fired generators, following a change in subsidies and increased environmental concern, the large power producing companies have stopped buying palm oil and all the palm oil burned in 2008 was drawn from stocks. Essent ceased the use of palm oil in its Clauscentrale plant in 2005. Current attention is focused on pyrolysis oil, which is a liquid made from plant material whereby the original biomass material (e.g. wood residue or sugar cane bagasse) is heated in the absence of oxygen and the resulting gas is condensed into a liquid.

### Netherlands renewable targets

Together with the 2008 budget, the Dutch government introduced a new renewable energy target. The “New Energy for the Climate” programme targets a 20% share of renewables in overall energy consumption by 2020, significantly higher than the EU mandatory 14% target.

#### Netherlands 2020 renewable energy target

##### Share of renewables in primary energy consumption



Source: Company materials; compiled by Daiwa Capital Markets Europe.

The 3.4% renewable share of primary energy achieved in 2008 suggests the Netherlands is above its target trajectory to achieve the mandatory target of 14%, as this would imply a 2.8% share from renewable energy in 2011/2012 (based on 20% of the final 2020 target). This advanced progress is also reflected in the 9% target share of electricity from renewable sources being achieved in 2009, one year earlier than the original 2010 target.

Whilst this current position may support the government decision taken in August 2006 to remove premium tariffs from new renewable installations, given the government's expectation that the 2010 target would be achieved with existing applicants, both the EU mandated and the higher national 2020 target may still prove to be ambitious given the indicative target trajectory accelerates towards 2020 (e.g. is 30% of 2020 target in 2013/14, 45% in 2015/2016 and 65% in 2017/18).

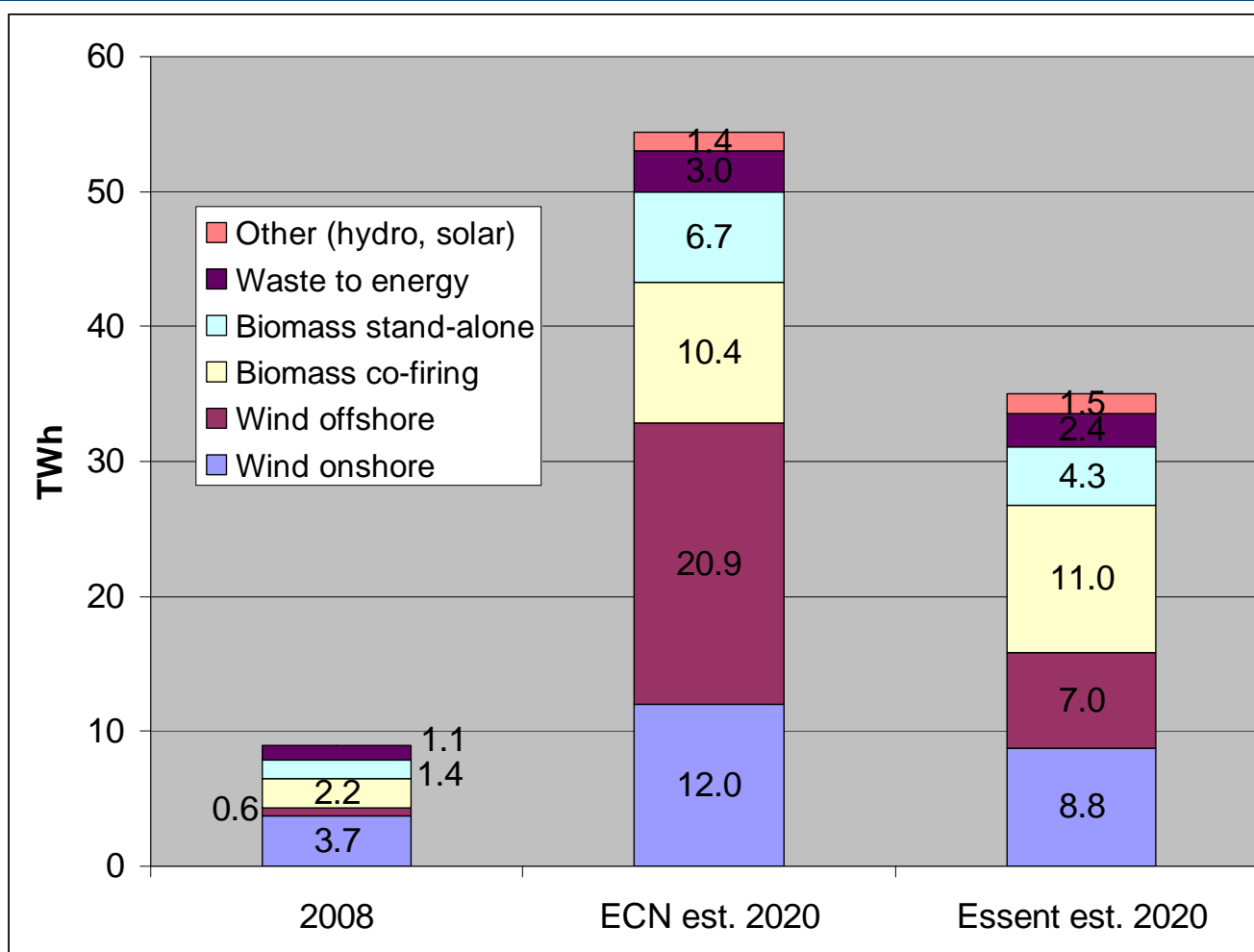
#### Netherlands indicative renewable energy targets

Proportion of primary energy from renewables	2011/2012	2013/2014	2015/2016	2017/2018	2020
EU mandated 14% target	2.8%	4.2%	6.3%	9.1%	14.0%
Netherlands 20% target	4.0%	6.0%	9.0%	13.0%	20.0%

Source: Daiwa CM Europe.

To reach the Dutch government's target of share of energy from renewable sources by 2020 (translates to 35% renewable electricity – biodiesel investments currently experiencing write-offs) is estimated by the Energy Research Centre of the Netherlands (ECN) to require a massive increase in wind (7.7x), biomass (4.8x) and waste to energy (2.7x) output.

## Dutch 2020 renewable electricity targets



Source: Statistics Netherlands (CBS), company materials; compiled by Daiwa CM Europe.

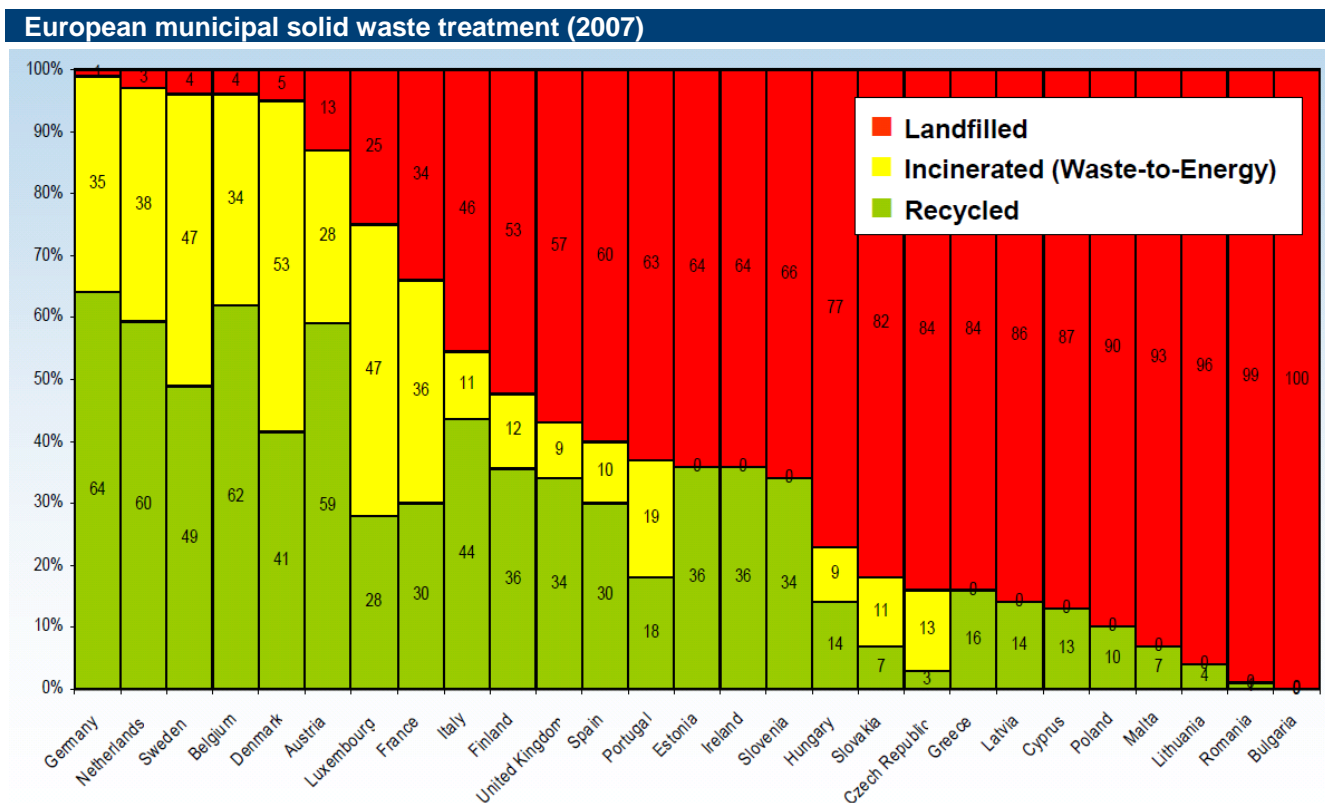
Essent's own estimates of the likely renewable electricity output in 2020 are over a third lower than ECN's and would only just meet the mandated EU target of 14% primary energy (translates to ~25% renewable electricity share).

This is because the ECN estimate includes an increase in the contribution from offshore wind from 0.6 TWh to 20.9 TWh, which as well as being technically/operationally challenging (would equate to around 600MW additions per annum), is unlikely under the current regulatory regime.

RWE/Essent did not apply for any of the lots within the recent 950 MW Round 2 national offshore wind tender as they were unlikely to meet its IRR hurdle rates. In Essent's view for the current regime to become attractive it must allow scope for future repowering (e.g. 6 MW turbines vs current 3 MW technology) as well as make adjustments for the degree of connection/operational cost which differs as a result of the distance from shore of the various lots.

Whilst Essent deems the support system for onshore wind as currently sufficient (€4/MWh), the >8 TWh increase forecast by ECN also looks ambitious as capacity growth is likely to be restricted by planning/residential resistance (as is the case in the UK and Germany).

The scope for Netherlands to expand its power production from waste to energy is limited by the availability of domestic waste, hence a forecast increase in output by both ECN and Essent of only 1-2 TWh. The Netherlands has a landfill tax of €5/tonne plus an additional €7/tonne if the waste is combustible, which already makes landfill more expensive than incineration. This high level of landfill tax has reduced the amount of waste sent to landfill to just 3% in 2007, with 38% of the waste incinerated and the remainder recycled.



Source: Eurostat; compiled by Daiwa CM Europe.

Therefore unless the offshore wind subsidies improve dramatically, co-firing of biomass is expected by both ECN and Essent to produce the major (+8TWh) increase in renewable energy output. Stand-alone biomass is forecast by both ECN and Essent to make a smaller contribution (just 90 MW or 0.6 TWh added during 2008) with its expansion limited by the higher investment costs required compared to co-firing.

Whilst ECN's estimate of 10.4 TWh of potential in 2020 for co-firing biomass is in line with Essent's own estimate of 11.0 TWh, for this to be achieved a supportive regulatory framework for co-firing biomass needs to be in place.

### **Biomass subsidies in the Netherlands**

In 2008 the contribution of power production in the Netherlands from co-firing biomass was around 20 PJ (petajoule), accounting for a quarter of the contribution from renewable electricity (17% of renewable energy).

However based on the current support system it is expected<sup>1</sup> that current wood pellet consumption will remain stable until 2012 (overall biomass co-firing could therefore reduce as 2008 still contained some palm-oil co-firing).

The current Dutch biomass co-firing support scheme for existing installations is based upon the feed-in premium tariff system introduced in 2003 (MEP –

<sup>1</sup> Source: pellets@las Pellet market country report (April 2009)



Milieukwaliteit van de Elektriciteitsproductie), whereby generators received a fixed fee (on top of the market power price) for a guaranteed period of 10 years. Whilst the subsidy is dependent upon a number of factors, in general the premium tariff from clean wood pellets is around €61/MWh.

However the MEP-premium for new installations was removed in August 2006 when the Minister for Economic Affairs judged that the 9% renewable electricity target for 2010 could be achieved under existing applicants.

In October 2007, the Renewable Energy Incentive Scheme (SDE – Stimuleringsregeling duurzame energie) was introduced, which again offers a premium tariff per technology but with an effective ceiling (base) price. However whilst the SDE offers subsidies for the burning of solid biomass and manure biogas at around €44/MWh (to a total amount of €715m for biomass and €195m for anaerobic digestion biogas in 2009), large scale biomass co-firing is not currently supported under this scheme.

Given the MEP subsidies for existing co-firing biomass schemes will only run for a ten year period they will generally expire between 2012-2015.

In our view without the renewal of subsidies, biomass capacity will be withdrawn. Essent's 25 MW stand-alone biomass plant at Cuijk began biomass production (using forest residues) in 1999 but the plant was mothballed earlier this year post expiry of the 10 year subsidy.

Similarly, the removal in 2005 of the subsidy from bio-energy projects using crude palm oil resulted in a drop in the usage of liquid biomass from 15.9 PJ in 2005 to 0.6 PJ in 2007 (Essent ceased its 92 MW bio-oil co-firing at Clauscentrale A in 2006). Overall this led to a reduction in biomass co-firing from 30.5 PJ in 2005 to 19.7 PJ in 2008.

### Netherlands renewable energy performance (according to substitution method)

	1990	1995	2000	2005	2006	2007	2008	Share within renewable energy 2008
Avoided use of fossil primary energy (PJ)								
Source/technology								
Hydropower	0.8	0.8	1.2	0.7	0.9	0.9	0.8	0.7%
Wind energy	0.5	2.8	6.9	17.2	22.5	28.2	35.1	30.8%
Solar electricity	0.1	0.0	0.1	0.3	0.3	0.3	0.3	0.3%
Solar heat	0.0	0.2	0.4	0.8	0.8	0.8	0.9	0.8%
Heat pumps	0.0	0.3	0.6	1.8	2.6	3.4	4.6	4.0%
Heat/cold storage	0.0	0.0	0.2	0.5	0.6	0.7	0.8	0.7%
Municipal waste - renewable	6.1	6.1	11.4	11.9	12.4	13.0	12.7	11.1%
Biomass co-firing large scale power	0.0	0.0	1.8	30.5	29.4	15.7	19.7	17.3%
Wood stoves for industry heating	1.3	1.6	1.8	1.9	2.1	2.4	2.5	2.2%
Household wood stoves	6.2	5.3	5.7	5.5	5.5	5.5	5.5	4.8%
Other biomass combustion	0.4	0.6	2.3	4.4	5.3	5.6	9.1	8.0%
Landfill gas	0.3	2.1	1.9	1.6	1.5	1.4	1.3	1.1%
Biogas from sewage	1.9	2.2	2.3	2.1	2.1	2.1	2.3	2.0%
Biogas on farms	0.0	0.0	0.0	0.1	0.5	1.4	2.8	2.5%
Other biogas	0.5	0.8	1.0	1.2	1.4	1.4	1.7	1.5%
Biofuels for road transport	0.0	0.0	0.0	0.1	2.0	13.0	14.0	12.3%
Type of electricity								
Electricity from domestic sources	6.3	10.6	22.0	60.3	65.4	59.0	74.6	65.4%
Heat and cold	10.4	10.3	13.7	18.5	20.9	22.6	24.3	21.3%
Gas	1.4	1.9	1.9	1.6	1.5	1.3	1.2	1.1%
Transport fuels	0.0	0.0	0.0	0.1	2.0	13.0	14.0	12.3%
Total uses of renewable energy	18.1	22.8	37.6	80.5	89.8	95.9	114.1	100.0%
Total energy use in the Netherlands with renewable sources	2689	2951	3048	3298	3222	3343	3319	
Share of renewables in energy supply	0.7%	0.8%	1.2%	2.4%	2.8%	2.9%	3.4%	

Source: Statistics Netherlands (CBS); compiled by Daiwa CM Europe.

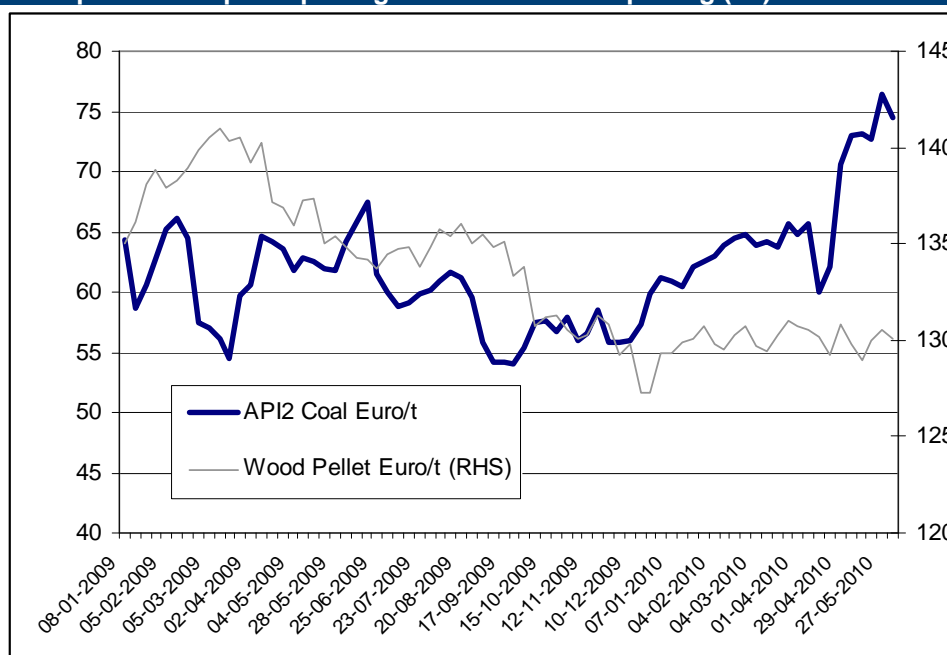
Given the large contribution of wood pellet co-firing to the overall Dutch renewable electricity production (current and forecast), the Dutch government is likely to introduce a new instrument to continue/grow the use of biomass co-firing.

Biomass support could be given in the form of a minimum share of renewable electricity to be derived from biomass, which in effect would therefore be funded through the wholesale market price. With Essent accounting for around 75% of the current biomass co-firing output compared to an overall power generation share of just 16%, such a measure would be a relative benefit to Essent.

However should future bio-mass incentives be provided in the form of an extension of the fixed premium tariff, we estimate the overall level of the subsidy would reduce from the current €1/MWh level to around €40/MWh.

The chart below illustrates the historical pricing trend of API2 coal (priced in euros) and wood pellets (17MJ/kg calorific value), both delivered into Rotterdam. Given the recent strength in the coal price does not appear to have been replicated into wood pellet pricing, the relative position of biomass vs coal has strengthened recently.

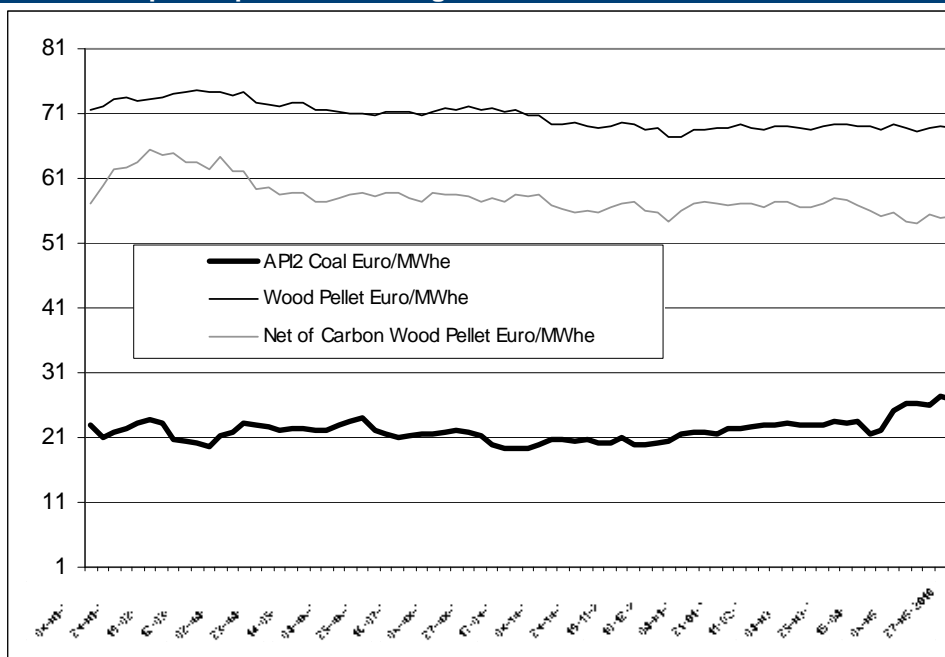
**European wood pellet pricing vs API2 hard coal pricing (€/t)**



Source: APX-Endex; compiled by Daiwa Capital Markets Europe.

At current 2010 forward prices, we estimate the marginal cost of biomass co-firing (at 40% efficiency) based on European wood pellet prices to be around €69/MWh gross or €55/MWh post the CO<sub>2</sub> carbon savings (at 0.9g/kWh). This compares to around €27/MWh for hard coal currently.

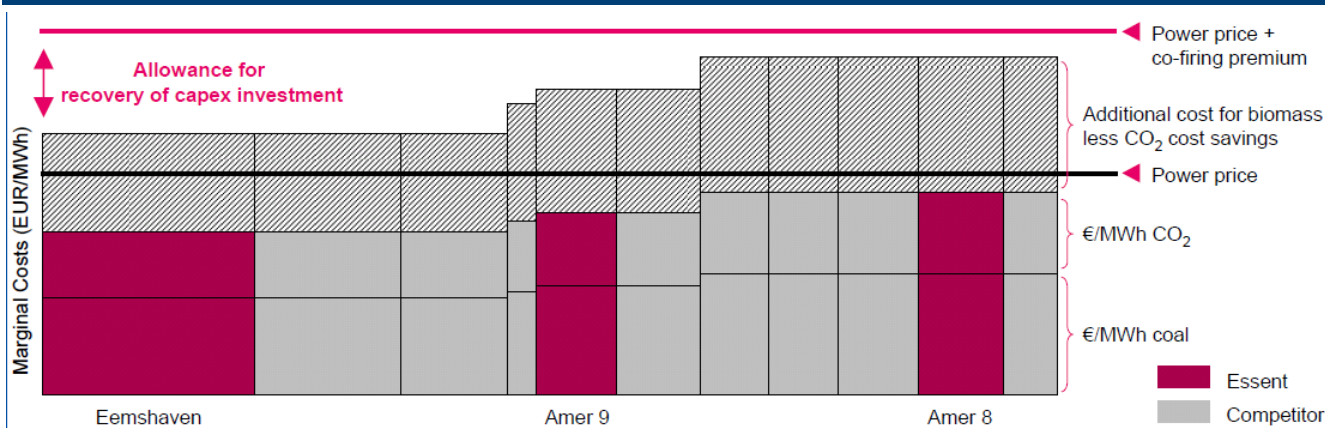
Estimated power production marginal costs – hard coal vs biomass



Source: Daiwa Capital Markets Europe estimates.

We estimate co-firing in new facilities at higher electrical efficiency rates (e.g. 46%) would reduce this marginal cost (net of carbon saving at 0.8g/kWh) to €48/MWh (vs hard coal output at €23/MWh). Compared to a 2010 Dutch baseload price of around €4/MWh we believe these estimates are in line with the illustrative levels provided by Essent

RWE Divisional forecasts



Source: Company materials; compiled by Daiwa CM Europe.

Based on these calculations, a biomass subsidy level of at least €25/MWh must be introduced to encourage co-firing at new facilities and at least €30/MWh is required for existing facilities. However these subsidy levels do not take into account additional investment/maintenance costs required for co-firing.

Given Essent has spent €130m to produce 1.7 TWh of biomass output, this suggests an additional premium of around €7.5/MWh would produce an investment return of around 10%. Higher transportation charges (closed barges) and increased maintenance also add to costs. This suggests the subsidies required for both new and existing facilities should be around €35/MWh-€40/MWh.

### Biomass profitability

Essent management reported that its biomass output has a profit contribution of around €60m. We estimate a subsidy rate of €61/MWh should produce incremental profit of around €50m (1.7TWh x €61/MWh subsidy less €30/MWh cost premium), which suggests the profitability of the wood gasifier may be higher than that of wood pellets (white list biomass subsidy may be higher and cost of demolition wood likely to be lower).

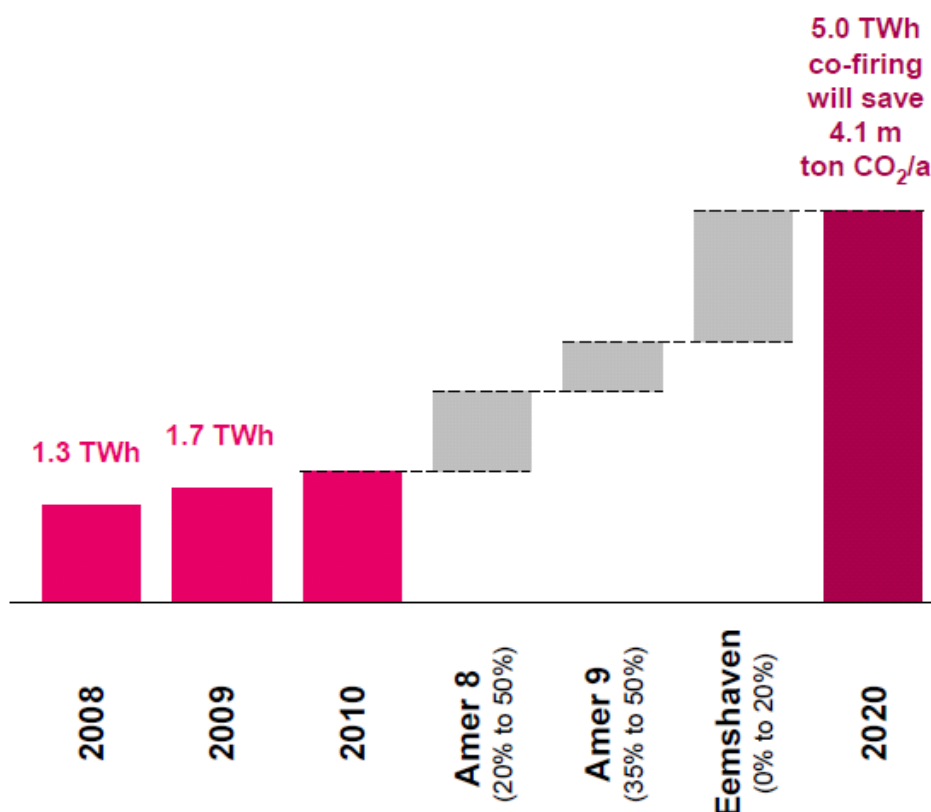
An introduction of new biomass subsidies from 2012 at a lower rate of around €40/MWh suggests Essent's biomass contribution would (all else being equal) fall to around €20m. However this doesn't take account the potential for Essent to increase output on the basis of a new subsidy regime.

In total, we estimate a doubling of biomass co-firing at Amer, co-firing 20% of Eemshaven's output and the resumption of production at Cuijk would increase the biomass contribution by around €17m vs the 2009 level (e.g. €70m-€80m).

In addition, biomass co-firing could also be extended to other Essent plants such as Moedijk (339 MW), Inesco (133 MW), Moerdijk 2 (426 MW) and Claus C (1,304) if an appropriate biomass subsidy regime existed. This suggests scope for over 1 GW of biomass/bio-oil co-firing in Essent's generation portfolio, up from a current capacity of 412 MW.

Essent co-firing target of 5.0 TWh for 2020

Chart 2



Source: Company materials; compiled by Daiwa Capital Markets Europe.

As well as the additional profit contribution (based on current carbon forwards), an extension of biomass co-firing would also reduce the carbon intensity of the RWE/Essent generation portfolio. (e.g. Eemshaven co-firing would have a life cycle carbon intensity of around 0.1t/MWh even if transportation included vs 0.8t/MWh for its hard coal production).

## RWE Divisional forecasts

€m	2008A	2009A	2010E	2011E	2012E	2013E
German Generation EBITDA	3,500	3,889	4,206	3,841	3,834	2,516
D & A , other	-428	-461	-487	-512	-537	-561
German Generation EBIT	3,072	3,428	3,719	3,329	3,297	1,954
Total capex	-1,421	-1,836	-1,500	-1,500	-1,500	-1,500
German Sales & Distribution EBITDA	2,045	1,922	1,960	1,960	2,147	2,336
D & A , other	-557	-570	-570	-576	-581	-587
German Sales & Distribution EBIT	1,488	1,352	1,390	1,385	1,566	1,749
Total capex	-812	-2,302	-1,500	-1,500	-1,500	-1,500
Netherlands & Belgium EBITDA		277	861	1,007	1,199	1,080
D & A , other		-97	-360	-400	-440	-440
Netherlands & Belgium EBIT		180	501	607	759	640
Total capex		-1987.5	-600	-600	-600	-600
Central & Eastern Europe EBITDA	1,142	1,285	1,279	1,326	1,373	1,436
D & A , other	-234	-230	-248	-229	-228	-233
Central & Eastern Europe EBIT	908	1,055	1,031	1,098	1,145	1,203
Total capex	-366	-371	-350	-350	-350	-350
Upstream gas & oil EBITDA	748	437	659	1,105	1,216	1,464
D & A , other	-253	-234	-350	-547	-606	-689
Upstream gas & oil EBIT	494	203	309	558	609	775
Capex	-606	-855	-850	-850	-850	-850
Trading / gas midstream EBITDA	487	986	300	500	550	550
D & A , other	-1	-1	-4	-9	-13	-17
Trading / gas midstream EBIT	486	985	296	491	537	533
United Kingdom EBITDA	714	445	509	642	612	460
D&A	-180	-198	-206	-236	-298	-298
United Kingdom EBIT	534	247	303	405	314	162
Capex	-611	-967	-900	-900	-900	-417
Renewables EBITDA	103	126	244	456	559	756
Depreciation	-43	-70	-117	-176	-227	-276
Renewables EBIT	55	56	127	280	332	481
Capex	-1,102	-733	-1,000	-1,300	-1,200	-1,200
Other EBITDA	34	-202	0	0	0	0
D&A	-245	-214	-220	-227	-234	-241
EBIT	-211	-416	-220	-227	-234	-241
Capex	-454	-480	0	0	0	0
External Revenue	48,950	47,145	52,110	53,893	55,101	56,492
EBITDA	8,773	9,165	10,019	10,837	11,489	10,599
Growth	11%	4%	9%	8%	6%	-8%
D & A	-1,948	-2,075	-2,562	-2,911	-3,165	-3,343
EBIT	6,826	7,090	7,457	7,926	8,325	7,256
Growth	4%	4%	5%	6%	5%	-13%
Non-operating result	-485.1	498	-241	-252	-252	0
Financial result	-1,475	-1,990	-1,611	-1,835	-1,953	-2,048
Income from cont ops before tax	4,866	5,598	5,605	5,839	6,120	5,208
Taxes on income	-1,423	-1,858	-1,738	-1,810	-1,897	-1,615
Effective tax rate	29%	33%	31%	31%	31%	31%
Income from cont ops	3,443	3,740	3,867	4,029	4,223	3,594
Income from discontinued ops	2,876	3,831	3,867	4,029	4,223	3,594
Minority interest	-318	-260	-273	-291	-305	-266
Net income	2,558	3,571	3,594	3,738	3,917	3,328
Recurrent net income	3,367	3,532	3,835	3,990	4,169	3,328
EPS (€)	4.75	6.70	6.74	7.01	7.34	6.24
Recurrent EPS (€)	6.25	6.63	7.19	7.48	7.81	6.24
Growth	18%	6%	8%	4%	4%	-20%
DPS (€)	4.50	3.50	3.59	3.81	4.20	3.69
Growth	43%	-22%	3%	6%	10%	-12%
Payout	72%	52%	50%	51%	54%	59%

Note: Figures may not sum due to rounding.

Note: Daiwa divisional reporting includes all Essent activities (including Trading and Renewables) within Netherlands & Belgium

Source: Daiwa CM Europe estimates.

### Risks associated with our valuation and financial forecasts

There are risks associated with the share price reaching our Fair Value target and our financial forecasts. Commodity prices, volumes and costs may not match our forecasts; as with any utility company, there are operating risks involved with power production; foreign currency exchange rate changes may impact the company's revenues and costs; tax rates, industry regulation and legislation may be changed. There are also a large number of technical and environmental risks associated with a utility company that could have an impact upon the company's valuation and financial forecasts. Specific to RWE, our fair value target has material sensitivity to the quantum of any German nuclear levy and lifetime extension period.

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E.ON (EOAN GY, 3, Hold – €23.275 8/6/2010)

Enel (ENEL IM, 1, Buy - €3.675 8/6/2010)

### Recommendation history

RWE		
Date	Rating	Share price
19-Jan-09	2	60.0
26-Feb-09	2	51.3
14-May-09	2	58.6
3-Jul-09	2	56.0
5-Aug-09	2	58.3
13-Aug-09	2	59.8
12-Nov-09	2	61.3
25-Feb-10	3	63.3
6-May-10	3	61.3
12-May-10	2	59.8

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Corporate Name: Daiwa Securities Capital Markets Co. Ltd.

Financial instruments firm: chief of Kanto Local Finance Bureau (Kin-sho) No.109

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