VERBUND AG

COMPANY REPORT

UTILITIES

03 JUNE 2013

STUDENT: TOBIAS RABENSTEIN

Floating down the river

Strong asset base in a weak power market

- **We initiate coverage of Verbund with a Sell rating and a YE13 target price of EUR 14.50.** The stock currently trades at a P/E ratio of 17.2x – a 54% premium to the utilities sector. We see this as only partially justified given Verbund's strong asset mix focused on long-life hydro plants and expect a downside correction in the medium-term due to low power prices in Central Europe.

- **Key value driver:** Verbund generates approx. 85% of its electricity from fixed cost based hydro plants. This makes its margins highly dependent on the power price level in Central Europe where prices have been falling by 13% this year. In our opinion the market has not yet fully priced in the downside potential from lower power prices which we forecast to drive down EBITDA by 27% over the next two years.

- **Leverage**: Stretched debt metrics with net debt / EBITDA forecasted at 4.1x in 2014E offer limited balance sheet flexibility for Verbund. In addition, a difficult environment for Verbund's gas power stations in Austria / France and at its associate Sorgenia in Italy put further downward pressure on the company's financials.

- **Valuation:** Our YE13 target price is based on a sum-of-the-parts valuation. We use a discounted cash flow analysis for Verbund's generation and grid segments. The company's equity interests are valued applying market multiples and book values for struggling associates. Our EUR 14.50 target price implies a downside of 10.5% to the current share price of EUR 16.25.

Company description

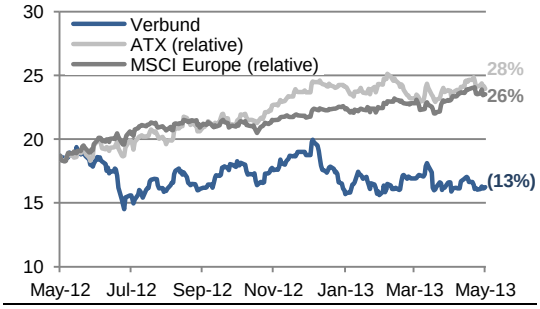
Verbund is Austria's largest utility, operating in the generation, transmission, trading and distribution of electricity. More than 85% of Verbund's generation comes from hydropower plants. The company operates the Austrian high-voltage grid and holds equity interests in other foreign and domestic utility companies.

Recommendation:	**SELL**
Vs Previous Recommendation	-
Price Target YE13:	**14.50 €**
Vs Previous Price Target	-
Price (as of 31-May-2013)	**16.25 €**

Reuters: VERB.VI, Bloomberg: VER.AV

52-Week Range (EUR)	14.50-19.94
Av. Daily volume (last 3M)	227,028
Av. Daily Value (EUR mn) (last 3M)	3.75
Enterprise Value (EUR mn)	10,245
Market Cap (EUR mn)	5,604
Outstanding Shares (EUR mn)	347.4
Exp. Share Price Return	(10.5%)
Exp. Dividend Yield	-
Exp. Total Return	(10.5%)

Source: Bloomberg, Thomson Reuters, Analyst's estimates



Source: Bloomberg, Thomson Reuters

(Values in EUR millions)	2012A	2013E	2014E
Revenues	3,174	2,818	2,567
EBITDA	1,236	1,061	907
Net Profit	499	1,474	381
EPS (EUR)	1.12	4.16	0.87
P/E (x)	16.8	16.7	13.3
DPS (EUR)	0.60	1.00	0.43
Dividend Yield (%)	3.20	6.87	2.98
EV/EBIT (x)	12.7	13.4	17.0
EV/EBITDA (x)	9.3	9.7	11.3
Net debt	4,199	3,676	3,727
Net debt / EBITDA (x)	3.40	3.46	4.11
ROIC (%)	7.4	7.1	4.5

Source: Bloomberg, Thomson Reuters, Analyst's estimates

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Investment Case

Verbund is an integrated electric utility generating approx. 70 TWh a year

1. Verbund is Austria's largest utility with an annual electricity output of approx. 70 TWh. The company furthermore operates 95% of the Austrian high-voltage grid network and holds several domestic and foreign equity interests in energy companies. From Verbund's current capacity of 10 GW approx. 70% are installed in run-of-river and storage hydropower plants.

We expect low power prices to continue putting pressure on Verbund's earnings

2. Power prices in Central Europe have recently been driven down by falling CO_2 (-42% yoy) and coal prices (-11% yoy) to a level of around EUR 40 per MWh vs. EUR 50 per MWh a year ago. Since hydro plants operate on a fixed-cost basis, lower realized prices in the market almost directly affect operating margins. We do not anticipate power prices to recover and expect an achievable price of EUR 45 per MWh in the long run which triggers downside pressure for Verbund.

A difficult market for gas plants triggers losses at Verbund's own plants and those of associated firms

3. Verbund owns three gas power plants with a capacity of 1.7 GW (approx.16% of total) and is further exposed to the gas market via its associate Sorgenia in Italy. Low power price levels and long-term oil-linked supply contracts for gas leave spreads / gross margins for those plants negative (we estimate a current negative EUR 18 per MWh). We forecast this environment to persist in the near future and expect continuing loss contributions from Verbund's gas power plants.

Higher power prices would be the main positive stock catalyst in the near term

4. We see three stock catalysts that would be supportive for Verbund: (i) rising wholesale power prices for instance through CO_2 backing measures would result in higher margins for Verbund; (ii) the renegotiation of supply contracts for gas plants could improve the operating environment of the power stations; (iii) higher water levels would boost generation and financial performance of the company.

We see Verbund's current premium over the sector as unjustified and expect a correction in the medium term

5. Verbund currently trades above its long-term average premium versus European utility peers both in terms of EV/EBITDA (premium of 41%) and P/E (54%). We see this premium as only partially justified due to Verbund's asset mix focused on hydro power plants that require low maintenance expenditures over a long lifespan when compared to other technologies. However, we expect a downward correction in the medium term due to an environment of low wholesale prices for electricity.

We initiate coverage with a Sell recommendation and a target price of EUR 14.50

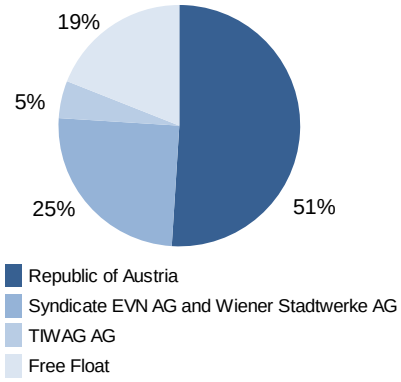
7. We initiate coverage on Verbund with a Sell recommendation and a sum-of-the-parts derived target price of EUR 14.50, representing a downside of 10.5% on the current share price. Verbund's investment case is conjoined with the development of power prices in Central Europe that we expect to remain on low levels in the future.

Company Overview

Verbund is Austria's largest utility...

Verbund AG is Austria's largest utility with its operational focus on the generation of electricity via hydropower. The company has been listed on the Vienna Stock Exchange (Wiener Börse) since 1988 and is member of the country's leading index, the Austrian Traded Index (ATX). The ATX is composed of 20 local stocks and Verbund currently constitutes approx. 3.0% of it.

Figure 1: Shareholder structure

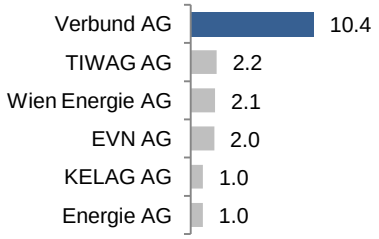


Source: Company data

Shareholder Structure

With the 2nd Nationalization act of 1947, Verbund was founded in order to rebuild the Austrian electricity system. In 1987 the act was amended so that Verbund could be partially privatized under the condition that the government would hold at least 51% of the shares. Since constitutional law still requires the majority ownership of the state in local utilities, the Austrian government holds 51% in Verbund. A syndicate of the local utilities EVN AG and Wiener Stadtwerke AG owns another 25% with Tiroler Wasserkraft AG (TIWAG AG) holding a 5% share.[1] The remaining 19% are free float. A further legal requirement regarding Verbund's shareholders follows the Foreign Trade Act (amended in 2011): the ownership of infrastructure companies by non-Europeans is limited to 25% and would need consent from the Ministry of Economy, Family, and Youth (BMFWJ) if it passes that limit.

Figure 2: Austrian utilities by installed capacity (in GW; 2012A)



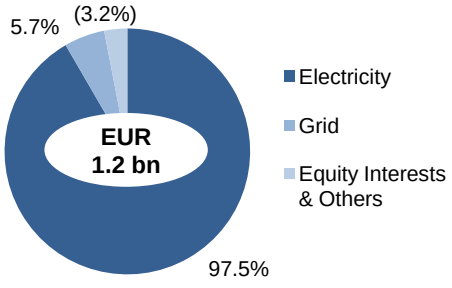
Source: Company data

...with 85% of the generation coming from hydropower

Business Description

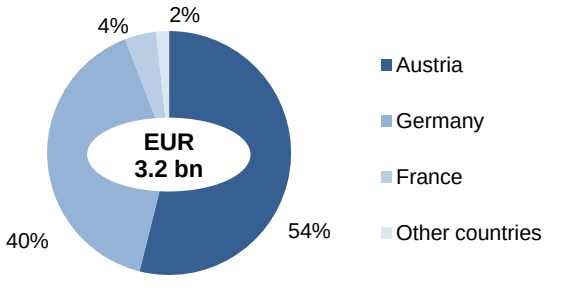
Verbund has a vertically integrated business structure and is active in all areas of the electricity sector from generation to (unbundled) transmission, distribution and trading. The company's operations are split in three segments: the **Electricity** segment covers the generation business which is mainly based in Austria and the Southern German state of Bavaria. Most of the company's generation comes from hydropower (85% of electricity output in 2012).

Figure 3: EBITDA split by business segment (2012A)



Source: Company data, Analyst's estimates

Figure 4: Sales split by region (2012A)



Source: Company data, Analyst's estimates

[1] The shareholders of EVN AG are: 51% State of Lower Austria, 32.5% EnBW AG, 16.5% Free float; Wiener Stadtwerke AG is 100% owned by the city of Vienna, TIWAG AG 100% by the state of Tyrol.

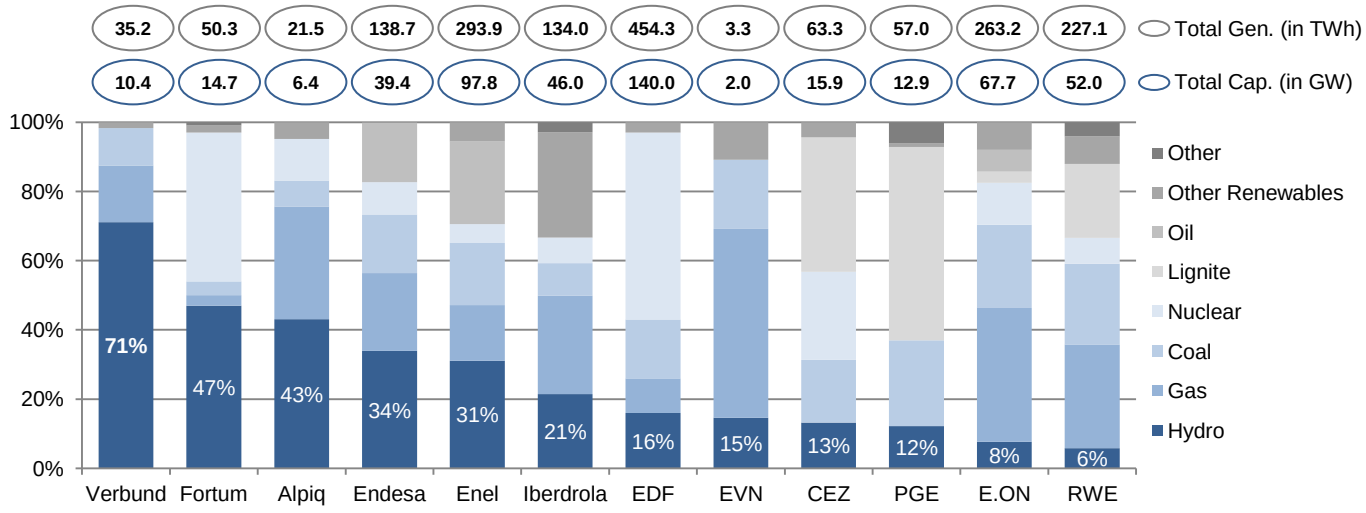
The Grid and Equity Interests segments only constitute minor parts of the overall business

Besides generation, Verbund, over its unbundled transmission subsidiary Austrian Power Grid AG (APG), operates the Austrian high voltage grid in its **Grid** segment. This is complemented by several equity interests in Austrian and foreign electric utilities that are bundled in the **Equity Interests & Others** segment. Those two areas only contribute marginally to the value of the firm as indicated in Figure 3. We will discuss all segments in more detail later on.

Verbund is Europe's utility with the highest share in hydro generation

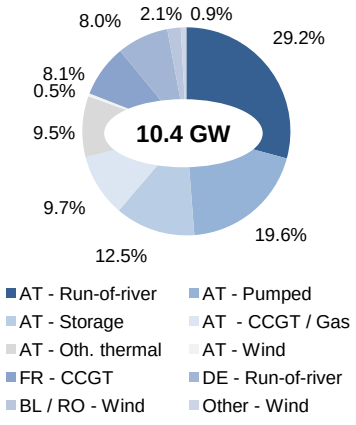
At the end of 2012, 85% of Verbund's electricity was generated from hydropower while 71% of its capacity was utilized in hydro plants. This gives Verbund a unique positioning among its European peers with Finland's Fortum only coming in second with a 47% hydro share in total capacity. The influence of this specialization on the company's profitability will be analyzed in the chapter 'Power Prices as Key Value Driver'.

Figure 5: Peer comparison by installed capacity (2012A)



Source: Company data, Analyst's estimates

Figure 6: Capacity by region (2012A)



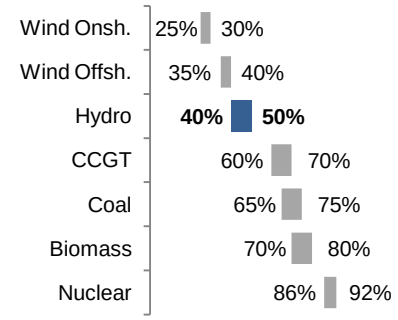
Source: Company data

More than 80% of Verbund's installed capacity is located in Austria, with France and Germany being the second largest markets both representing approx. 8% of the total. In addition to the capacity illustrated in Figure 5, Sorgenia SpA in Italy, in which Verbund holds 44.9%, has approx. 5.1 GW installed (see further information on Sorgenia in the chapter 'Equity Interests & Services').

The average load factor for Verbund's hydro plants was 47% in 2012, driven by above average hydro conditions.[2] Going forward, we expect this value to normalize to around 43%. In contrast, wind load factors were low at 16% (our future expectations: 20%). The load factors at thermal plants (of which 70% are gas power stations) were 18%. Here it is importatant to distinguish between technical and market-driven load factors: hydro load factors are determined by

[2] Load factor: $L = \frac{Electricity\ generation\ in\ a\ given\ year\ (in\ MWh)}{8{,}760\ (hours\ per\ year)\ x\ Maxium\ capacity\ (in\ MW)}$.

Figure 7: Av. technical load factors



Source: EIA, RWE

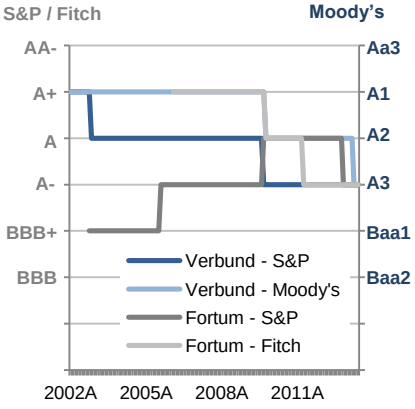
the technical settings of its generating units and prevailing hydro levels – they usually range from 40% to 50%.[3] This compares with CCGT[4] plants where the load factors of Central European plants are currently driven by the market, i.e. dependent on electricity demand and available capacities. The 20% load factor that management guides for 2013E in Verbund's CCGTs is below the technically possible 60%-70% level since gas plants currently are "out of the market"; they often run loss-making and are only revved up to burn gas from fixed supply contracts (see more details in the chapters 'Electricity' and 'Power Prices as Key Value Driver').

Leverage Position

The company was recently downgraded due to weak credit metrics

Verbund is currently rated A-/stable by S&P and A3/negative by Moody's. Moody's downgraded the company in April 2013 by one notch following concerns about the difficult European energy market and its influence on Verbund's financial position.

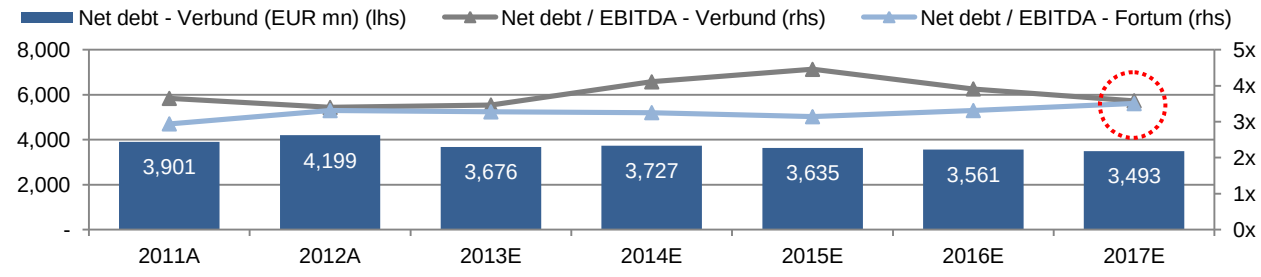
Figure 8: Rating over time Verbund vs. Fortum



Source: Bloomberg

The historical rating development of Verbund against the one of Fortum, as its main peer, is shown in Figure 8 – both companies show similar debt ratios and are rated equally by the big three rating agencies. In its strategic program Verbund's management tragets to to stay within the A-rating category in both Standard & Poor's and Moody's ratings. This is interpreted as the "Upper Medium"-grade for both agencies, meaning that low credit risk is expected. In contrast, a downgrade to the BBB+/Baa1 category would already imply speculative characteristics and that the company would be subject to moderate credit risk.[5] As Figure 9 illustrates, Verbund's net debt to EBITDA ratio for FY12 stood at 3.4x and according to our estimates, should increase to 3.6x by 2017E. When compared to Fortum, we see that the Finnish company shows more capital discipline, especially over the coming few years.

Figure 9: Net debt evolution vs. Fortum as main peer

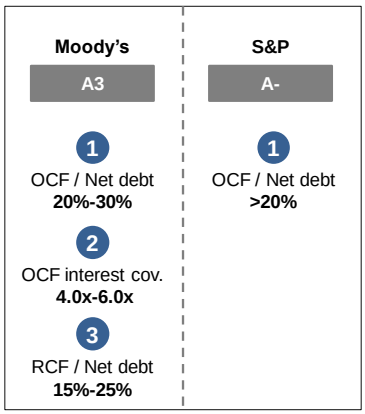


Source: Company data, Bloomberg consensus, Analyst's estimates

Note: Fortum is rated A-/negative by both Standard & Poor's and Fitch.

[3] Source: RWE Fact Book Renewable Energy March 2013, EIA – Electric Power Annual 2009.
[4] Combined Cycle Gas Turbine (CCGT) power plants produce electricity in two processes: (i) by burning natural gas; (ii) by using heat from waste gases to drive steam turbines; the plants can so reach efficiency grades of around 60%. Source: Franco, Alessandro. 2011. Analysis of small size combined cycle plants based on the use of supercritical HRSG. *Applied Thermal Engineering* 31 (5): 785-794.
[5] Source: Moody's.

Figure 10: Rating criteria



Source: S&P, Moody's

However, the focus of credit rating agencies is rather on debt servicing ratios: in order to keep the current rating, Verbund should have an operating cash flow (OCF) interest coverage of 4.0x-6.0x, an OCF to net debt ratio of 20%-30%, and a retained cash flow (RCF) to net debt ratio from 15%-25%.[6] However, as Table 1 shows we see Verbund's credit metrics not significantly improving and actually worsening over the short term thus confirming the negative outlook that Moody's put on the firm.

Table 1: Forecasted credit metrics

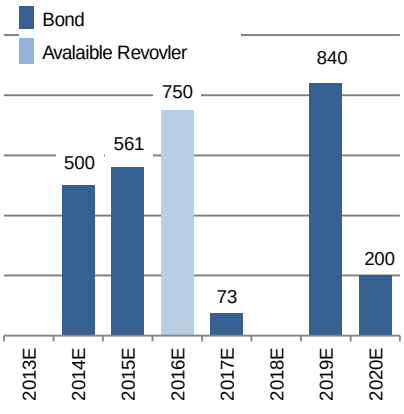
	2011A	2012A	2013E	2014E	2015E	2016E	2017E
OCF / Net debt	20%	24%	24%	20%	19%	21%	23%
OCF interest coverage	3.6x	5.5x	4.6x	4.5x	4.0x	4.5x	4.9x
RCF / Net debt	15%	20%	18%	11%	15%	18%	19%

Source: Company data, Analyst's estimates

Verbund's leverage increased significantly after the purchase of 13 run-of-river plants in 2009

The company's current high leverage results from a national and international expansion strategy that Verbund pursued over recent years. The starting point was the EUR 1.4 bn acquisition of 13 run-of-river power plants from E.ON (312 MW capacity or EUR 4.5 mn per MW with an av. load factor of 66%) in 2009. In the same year, the company's net debt position increased by almost 50% and net debt / EBITDA jumped to 3.3x (from 2.1x a year earlier). In response, in 2010, Verbund raised EUR 1 bn in an equity offering which was supported by the Austrian government. Today, as the Austrian economy is recovering from the sovereign debt cirsis, we see the probability of the government as main shareholder backing another equity issuance as being very low. Therefore, in our opinion, Verbund will need to continue deleveraging by disposing non-core assets and / or reducing capital expenditures to improve its credit metrics.

Figure 11: Debt maturity profile 2013-20 (EUR mn)



Source: Company information, Bloomberg

Deleveraging via disposals was already attempted by Verbund over the course of 2012 with the most important action being the exit of its investment in Turkey's Enerjisa which explains its improved metrics at YE12.[7] In addition, following the exit of Turkey, management recently announced an approx. 30% cut in its growth capex program for the period up to 2017. The disposal program and rationale behind it will be explained in detail in the chapter 'Equity Interests & Services'.

As shown in Figure 11, Verbund's liquidity position requires the refinancing of a EUR 500 mn bond in 2014. Despite the unfavorable leverage position, we do not see difficulties given that the company has accesss to a undrawn EUR 750 mn revolving credit line. The 51% ownership of the Austrian state, which is rated AA+/negative, should also be advantageous for this.

[6] RCF measures recurring cash flow after dividends but before changes in working capital, capex or other investing or financing activities; it thus incorporates the "need to service dividends in all but extreme circumstances" (Source: Moody's) and factors in the company's target to maximize shareholder value.
[7] A full summary of Verbund's recent transaction activities is given in Appendix 1, with a detailed description of the asset swap transaction with E.ON following in Appendix 2.

Market Overview

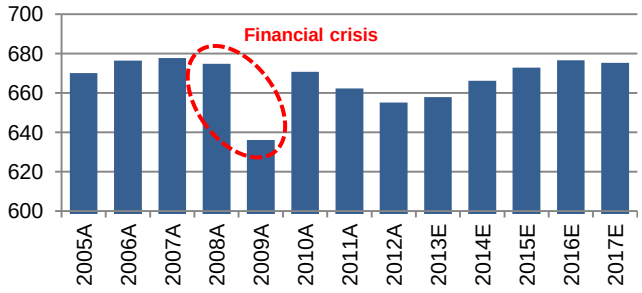
Verbund serves approx. 40% of the Austrian electricity market

The Austrian electricity market is characterized by a high level of public ownership (as required by law) and vertical integration. With Verbund being the largest utility in the country, serving approx. 40% of the total demand, the market is less concentrated than in other European countries (e.g. in France or Czech Republic the largest suppliers have a 87% and 73% market share, respectively).[8] In total, more than 130 electricity suppliers operate within Austria.

Supply and Demand

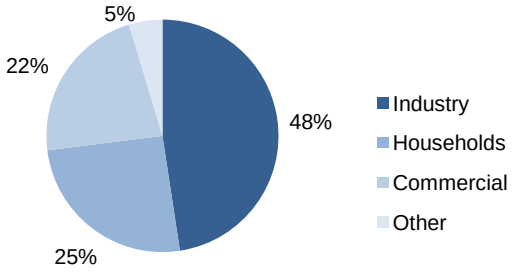
Demand. When analyzing demand relevant for Verbund, it is important not only to look at Austria but also at Germany: as the country's largest trading partner it is responsible for 54% of electricity imports and 24% of exports. As shown before, Germany is also the second largest market for Verbund (40% of 2012A sales). Electricity consumption in the enlarged market has recovered in recent years after a drop following the financial crisis in 2009 mainly due to reduced consumption from industrial companies (-10% yoy). However, that segment - with a 48% share the largest consumer group in the market - also rebounded the strongest with a 10% increase in demand in the following year.

Figure 12: Austrian and German gross electricity consumption 2005-17 (in TWh)



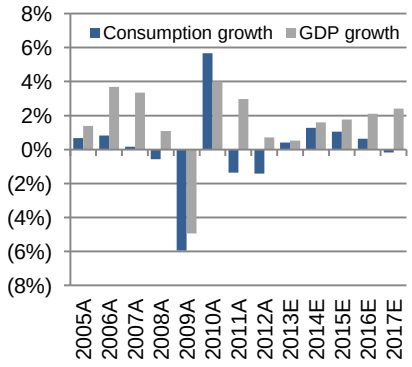
Source: E-Control, Destatis, Analyst's estimates

Figure 13: Austrian and German electricity consumption by customer (2011A)



Source: E-Control, BDEW

Figure 14: Electr. consumption vs. real GDP growth (DE and AT)



Source: E-Control, Destatis, Analyst's estimates

We expect electricity demand to increase until 2015 based on economic recovery and increased industrial activity in both countries. From 2016 onwards, we forecast decreasing demand as efficiency measures, stimulated by environmental regulation of the European Union, become effective (see chapter "Regulatory Framework" for more details on efficiency programs). For the same reason, we anticipate the historic relationship between electricity demand and economic growth to decouple: while we assume electricity demand to decrease by an average 0.5% p.a. up to 2020, GDP is expected to grow by an annual 1.9% in real terms.

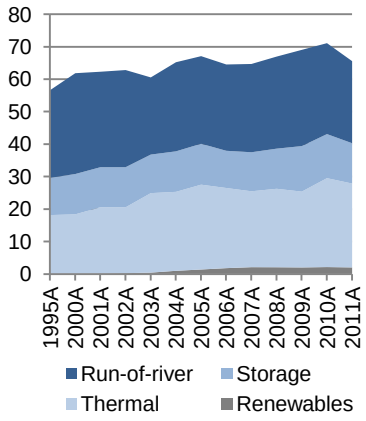
[8] Source: Eurostat.

Figure 15: Electricity prices for industrial consumers (2012, in EUR/kWh)

Source: Eurostat, Energia
Note: Tax data as of 2011.

Besides economic growth, a further driver of electricity demand is the end user price for electricity. Here, not only local prices should be taken into account, but also prices on an international level. The reason for this is that energy-heavy industries might move their production to low price countries if domestic prices for electricity are remarkably high. As Figure 15 shows, with 9 cents per kilowatt hour, prices in Austria are slightly below the EU average, especially when taking into account tax effects.[9] Furthermore, prices in the country (excl. taxes) have been stable and actually decreased by 2% since 2010 while prices in the EU27 on average increased by 4% (in France they even hiked by 18%).[10] We see therefore no major influence on electricity demand from that source.

Figure 16: Generation over time (in TWh)

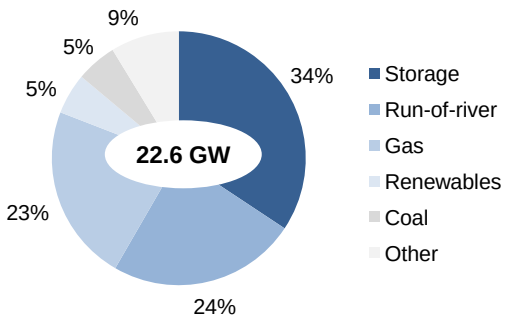


Source: E-Control

Supply. On the supply side, we focus on Austria only, as the majority of Verbund's generation assets (>80%) are located in the Alpine state. The main characteristic of the market is its large portion of hydropower in the total generation mix (57% in 1H12). Gas power plants, mainly in the form of CCGTs represent the second largest group with a total 18% while renewables (wind, photovoltaic, biomass) represent 8%.

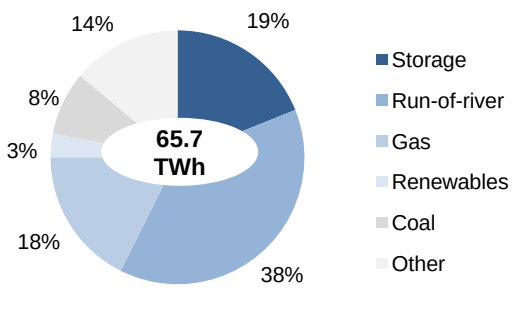
When looking at the generation split over recent years, the largest increase was experienced by renewable energy with a jump from 67 GWh in 2000 to 1,985 GWh in 2011. The share of hydropower actually decreased from around 68% to 57% in the same period, mainly because of the construction of new CCGT plants and the emergence and promotion of renewable energy sources. The construction of nuclear power facilities is prohibited by law in Austria since 1978. Furthermore, the Austrian government announced a ban on the import of electricity generated by nuclear power plants that will be effective from 2015 onwards. We see this as good news for Verbund since it strengthens the company's local market leadership in generation and the competitive positioning of its hydro plants in Austria.

Figure 17: Capacity mix (1H12)



Source: E-Control, Analyst's estimates

Figure 18: Generation mix (2011A)

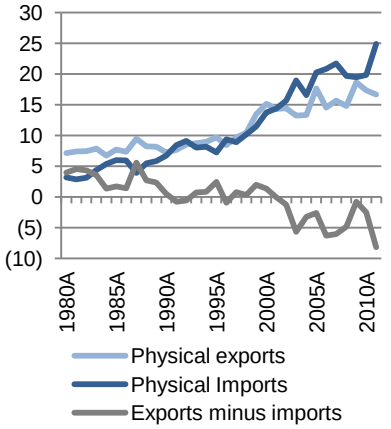


Source: E-Control, Analyst's estimates

[9] In comparison to that, electricity prices in China averaged 6-7 cents per kWh while prices for industrial consumers were approx. 7 cents per kWh both in India and the US over 2011/12 – all excluding taxes. (Source: EIA – Key World Energy Statistics, Shenzhen Government, Government of India – Planning Commission)
[10] Source: Eurostat.

Transmission Network

Figure 19: Electricity Exports/ Imports (in TWh)



Source: E-Control

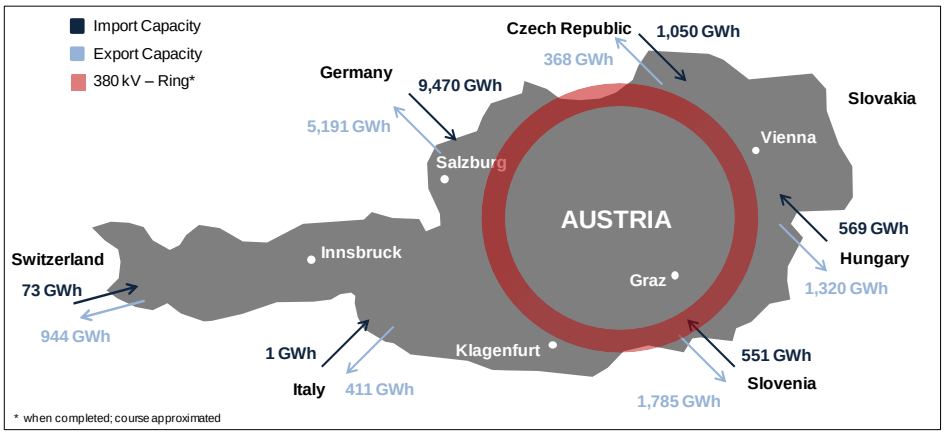
Before 2012, the Austrian transmission system was split in two control areas: the Eastern area (which covered the largest part of the country) was operated by Austrian Power Grid AG. The western state of Vorarlberg was a separated area and part of the German ENTSO-E block.[11] Following a cooperation agreement between APG and Vorarlberger Übertragungsnetz GmbH, the former was named sole control area manager from 2012 on.

Since there is no congestion at the borders to Germany, the two countries pose an arbitrage-free single price zone and share a wholesale electricity market (both over-the-counter and on exchanges). In contrast, the borders to the Czech Republic, Hungary, Italy, Slovenia and Switzerland are congested and trade is limited; capacities for cross-border trade are allocated via auctions.

Germany is Austria's largest trading partner in terms of cross-border electricity trade

In 2011, Austria's exports and imports amounted to 24.9 TWh and 16.7 TWh, respectively. As Figure 19 shows, while Austria historically was a net exporter of electricity, this picture changed from 2002 on. Germany accounted for 54% of imports in 2012 and Czech Republic was the second largest import source with a 40% share; the most electricity was exported to Switzerland (44%) and Germany (24%).[12] Through the construction of the 380 kV line from St. Peter to the federal border to Germany – a project that will be further described in the 'Grid' chapter - Verbund will expand the capacity to its main trading partner. Due to Germany's decision to phase out all of its nuclear power plants after the catastrophe in Fukushima in March 2011, the rapid expansion of offshore wind capacity in Northern Germany and the need to transport this energy to storage plants in the Alps (which work as 'electricity batteries'), we expect trade between the two countries to expand in the future.

Figure 20: Commercial electricity imports and exports in Q4 2012



Source: European Commission – Quarterly Report on European Electricity Markets, Vol.5; Analyst's research

[11] The European Network of Transmission Operators for Electricity (ENTSO-E) is an association representative for all transmission system operators (TSOs) in the EU. One of its main tasks is the network planning on an EU-wide level.
[12] Source: E-Control – Market Report 2012.

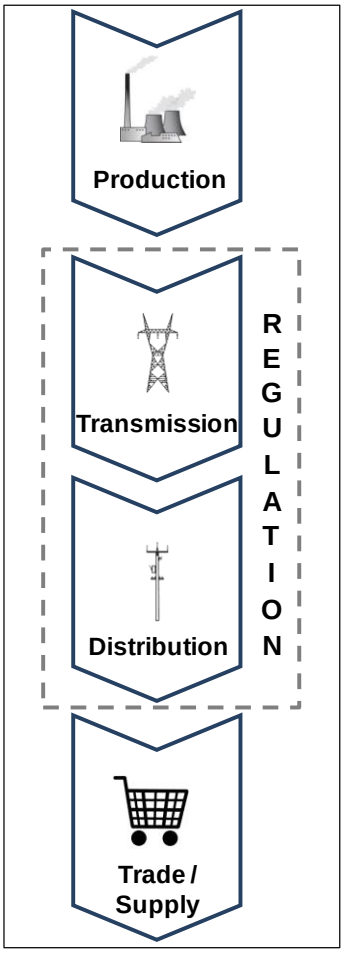
Regulatory Framework

The Austrian market for electricity has been liberalized since 2001.

Austria has a federal system of government. Therefore, legal responsibilities are divided between the federation and the nine federal states as set out in the constitution. While the federal legislature has the authority to enact regulations, the states can regulate electricity concerns on the basis of federal law. The Austrian energy market has been fully liberalized since October 2001 and is subject to the rules of free competition. The basis for this is the Electricity Act (ElWOG) from 1998. With the ElWOG, the European Union's Electricity Directive for the Single European Market was implemented into Austrian law. The aim of the directive was the creation of a competitive electricity market in the EU.

With the amended ElWOG 2010, Energie-Control Austria (E-Control), an institution of public law, was established as sole energy market regulator. The regulation of the grid is managed, for instance, through fixed system charges that are set based on network costs and the quantity structure of the network operator. Since 2008 an incentive-based scheme covers all grid operators with annual output >50 GWh in order to stimulate investments (through a premium on WACC for new investments). As of 2011, network regulation also provides that APG, as grid operator, is responsible for elaborating a 10-year network development plan that is approved, supervised and amended by E-Control. The third regulatory period in the country starts in 2014 and lasts for four years.

Figure 21: Austrian electricity market model



Source: E-Control

In terms of environmental regulation, the so-called '20/20/20 goals'[13] of the EU set a 34% target of renewable energy sources in Austria for 2020. Over the same time, greenhouse gas (GHG) emissions are to be reduced by 16% vs. 2005 levels. As a consequence, the Austrian government released the Energy Strategy Austria in 2010 – guidelines for the energy policy in the next 10 years. Within this context, in June 2010, Austria submitted its National Renewable Energy Action Plan (NREAP) to the European Commission under which Austria plans to stabilize its final energy consumption at 2005 levels by the year 2020 (to achieve the 34% target). To implement efficiency measures (2/3 of savings are to be realized by energy suppliers and 1/3 by businesses), the government announced in April 2013 that it will provide funds of up to EUR 300 mn by 2019 as support.

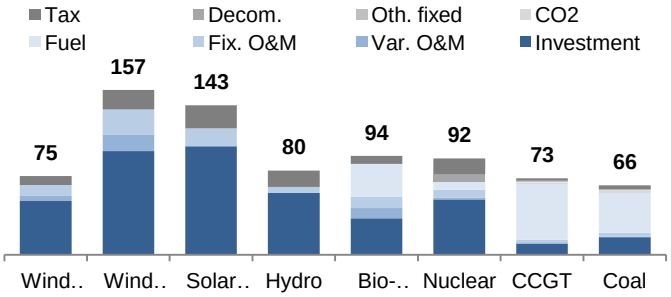
We see the regulatory developments, especially regarding renewable energy sources, as positive for Verbund given the company's market leader position and experience with the development of wind energy. Furthermore, as we will show later on, Verbund is able to profit from the regulatory incentive mechanisms to generate wealth for shareholders.

[13] With the Directive 2009/28/EC, the European Union targets an overall 20% reduction in greenhouse gas emissions below 1990 levels, a 20% share of renewables in energy consumption and a 20% increase in energy efficiency by 2020.

Power Prices as Key Value Drivers

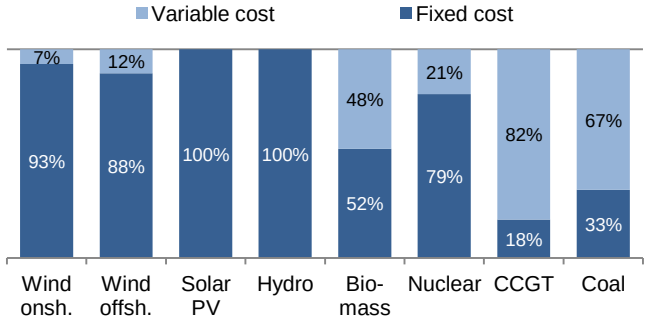
As most of Verbund's generation comes from hydro plants and this generation form is mainly based on fixed costs, lower wholesale prices for electricity and thus lower revenues translate almost directly in EBITDA and cash margins.

Figure 22: Total average cost of generation technology (in EUR / MWh)



Source: EDP – DPE, EIA, Analyst's estimates
Note: Assumption CCGT working 5,000h, Coal 7,500h.

Figure 23: Variable vs. fixed cost components by technology

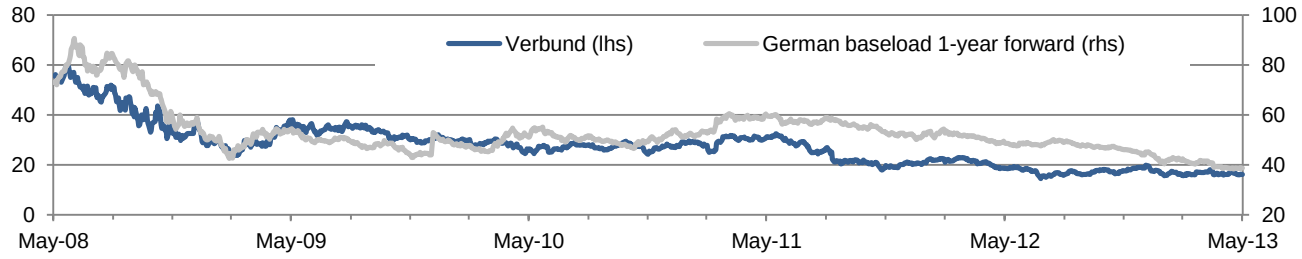


Source: EDP – DPE, EIA, Analyst's estimates
Note: Excluding taxes.

Verbund's stock is highly correlated to German pool power prices

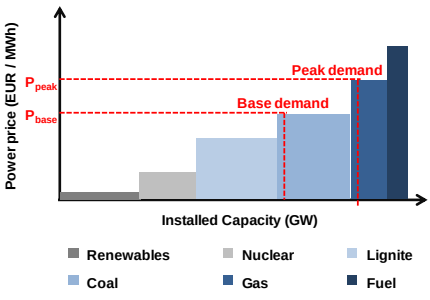
We see the German pool price as key driver for Verbund given the company's main operations in Austria and Germany and the fact that there is no congestion on the borders between the two countries. The high correlation between both the German power price and Verbund's stock is shown in Figure 24.

Figure 24: Verbund's stock vs. German power prices (in EUR)



Source: Bloomberg

Figure 25: Merit order curve Germany

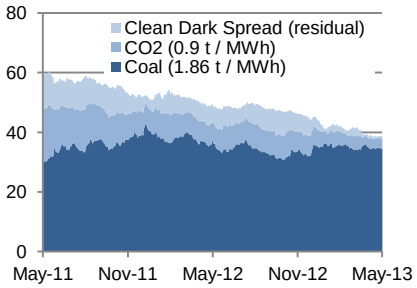


Source: Bundesnetzagentur, Analyst's estimates

The current market for electricity in Austria/Germany is a so-called "energy-only"-market, i.e. solely quantities of electricity are traded (security of supply is not subject to the market behaviour of the participating agents). Therefore, supplier and consumers trade kilowatt hours; the balance between supply and demand is taken over by the network operators. Prices in the market are built according to the **merit order** principle at the intercept between supply and demand. Figure 25 shows the current merit order for the German/Austrian market. A description of the pricing mechanism through the merit order scheme is given in Appendix 3. An overview of the German electricity market can be seen in Appendix 4.[14]

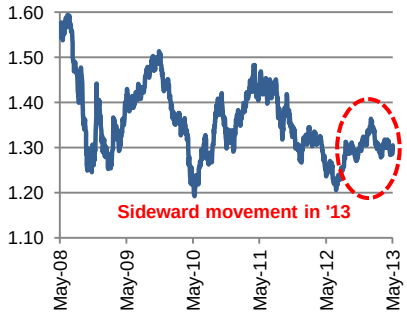
[14] Our merit order analysis solely focuses on the German market given its clear dominance over the market in Austria; the demand/supply stemming from Austria plays a negligible role in the price formation in the common price area.

Figure 26: 1-year forward power price layers (in EUR / MWh)



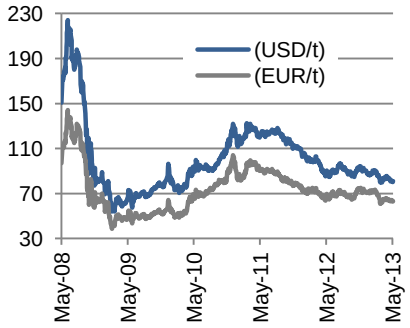
Source: Bloomberg, Analyst's estimates

Figure 27: EURUSD exchange rate



Source: Bloomberg

Figure 28: Coal price development



Source: Bloomberg
Note: Incl. transportation and insurance cost

For the coming years, we expect coal prices to slightly recover from recent losses

The wholesale price for electricity itself is composed of different layers which will be described in detail in the following subchapters. Firstly, the **fuel cost** of the marginal technology in the merit order system is an important driver. For Germany, we expect coal to be the marginal technology for our forecast period. The **price for CO_2 allowances** constitutes the second layer. The recent fall in CO_2 prices was one of the major forces behind falling power prices in Central Europe. The third and final layer is the **clean dark spread**, the difference between the power price and the price for coal including carbon cost.

Fuel Prices

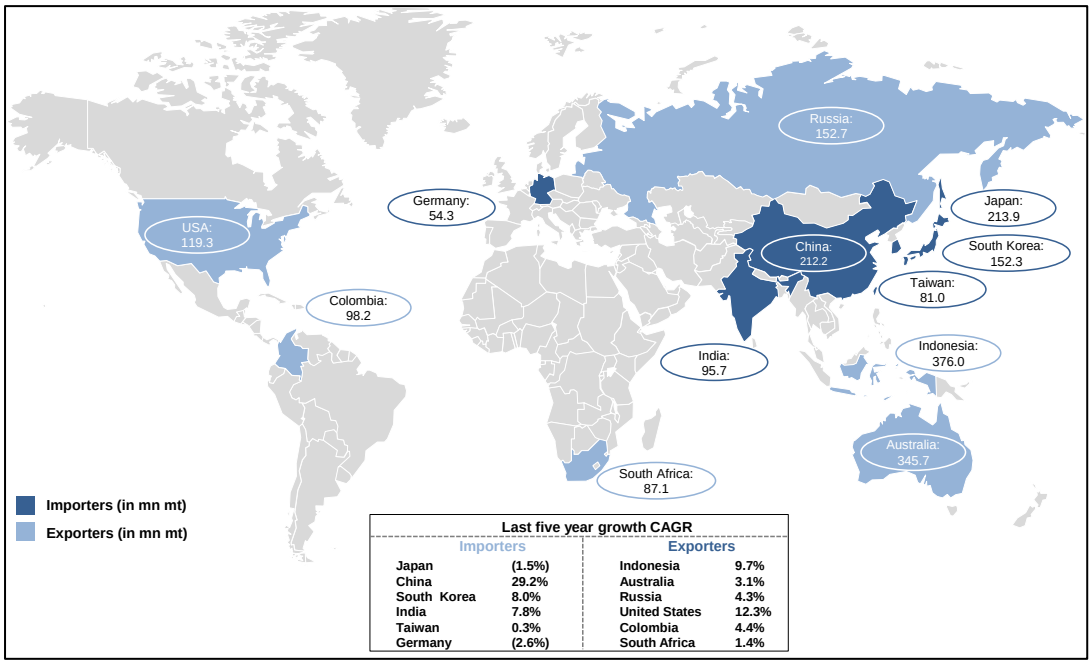
Our previous estimations show that the price of coal is crucial for the power price in the German/Austrian market. Given that the price for ARA[15] coal is set in USD, the EURUSD exchange rate plays an important role in the determination of coal prices for European companies. Since the beginning of the year, the EUR moved sideways and now stands at approx. 1.30 against the USD. For the future we expect the currency to weaken versus the USD due to ongoing economic uncertainties in the Eurozone. Our long-term fx-rate is set at 1.25, in line with market consensus, which is (c.p.) positive for coal producers since it makes commodity imports cheaper.

A key driver for the global coal price are exports from the US, whose level grew strongly with a CAGR[16] >12% in the last five years (see Figure 29). The shale gas boom in the country led to higher gas extraction, lower gas prices and a switch away from coal. As a consequence the US could strongly increase its coal exports to the world markets. Furthermore, the demand from East Asian countries, in particular China where imports almost quadrupled over the last five years, is crucial. However, import growth in China slowed from an approx. 190% jump between 2008 and 2009 to 32% and 18% in the following two years. Therefore, the continuing high supply together with slower growing demand (total export five-year CAGR 3.9% vs. 2.4% for imports) caused a steep drop in coal prices since 2011. This again put pressure on power prices.

For the future, we expect coal prices to slowly recover from recent losses mainly due to an overall economic upswing and higher demand from emerging countries. For the long-term, we assume a price of USD 102.2 per tonne of coal (which translates into EUR 80.5 per tonne using our forecast of a 1.30 EURUSD exchange rate). Our full economic and commodity forecasts are given in Table 1 of the chapter 'Power Price Forecasts'.

[15] ARA is the abbreviation for Amsterdam-Rotterdam-Antwerp, the major coal importing ports in Central/Northern Europe.
[16] Compounded annual growth rate.

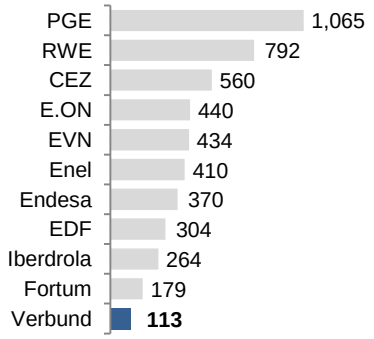
Figure 29: Main coal importers and exporters worldwide (2011)



Source: EIA, Analyst's estimates

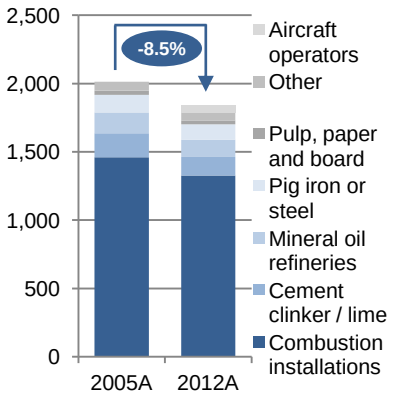
CO_2 Prices

Figure 30: CO_2 emissions vs. peers (g/kWh; 2012A)



Source: Company data, Analyst's research

Figure 31: Emissions by sector (in mt CO_2 equivalent)



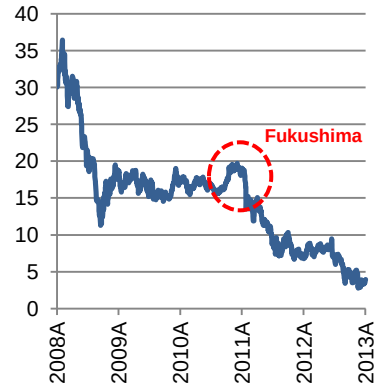
Source: European Commission

The price for CO_2 constitutes the second largest influence factor on the Central European wholesale power price. As a consequence of coal being the marginal technology in the market, prices are higher affected by swings in CO_2 prices as, for instance, in the UK where gas is the marginal technology. This is due to the CO_2 intensity of coal power plants: a coal-fired plant produces approx. 0.9 tonnes of CO_2 per MWh generated vs. 0.4 tonnes for gas-fired plants. Verbund profits from higher carbon prices due to its focus on hydropower, since revenues that are driven by rising power prices, increase faster than costs for fuel inputs.

The EU Emission Trading Scheme (ETS) is the largest international system for trading greenhouse gas (GHG) emission allowances - it covers >11,000 plants in 31 countries. The system works on a 'cap and trade' basis, i.e. a cap is set on the total amount of GHG emissions that can be emitted by companies. To lower emissions, that cap is reduced over time.[17] Under the cap, companies receive or buy the so-called EU allowances (EUAs) which can be traded with others states. After each year a company has to surrender enough EUAs to cover all its emissions (otherwise fines will be imposed). If a company reduces its emissions, it can keep the allowances and sell them. Each EUA counts for one tonne of CO_2 produced. After the introduction of the ETS in 2005, the price for carbon licences dropped from heights of EUR 28 in mid-2008 by approx. 90% to nowadays EUR 3-4 per tonne of CO_2.

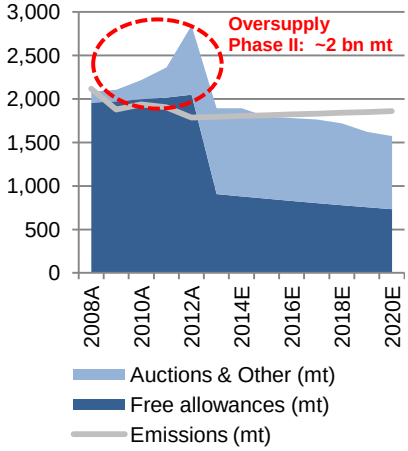
[17] The EU targets emissions by 2020 to be 21% below 2005 levels.

Figure 32: CO_2 price from Apr-08 on (EUR/t)



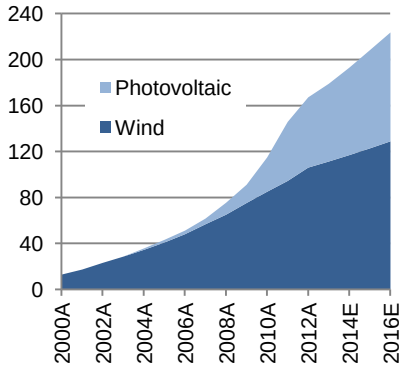
Source: Bloomberg, Analyst's research

Figure 33: ETS Suppy & Demand



Source: Bloomberg, EC, Analyst's estimates

Figure 34: Cumulative PV and wind installations in the EU (in GW)



Source: EWEA, EPIA, EurObserv'ER

One of the main reasons behind the huge drop in prices is a current oversupply of EUAs in the market driven by several factors: firstly, there has been a high growth of renewable energy capacity in Europe promoted by subsidies that reduced electricity production from CO_2-intensive power plants. Secondly, a weaker-than-expected economic outlook led to lower power consumption and generation of thermal plants (as was oppositely expected after Germany's decision to phase out its nuclear power plants in March 2011; see price spike in Figure 32). The growth in energy demand was also abated by ongoing efficiency measures within the EU (see '20/20/20 targets').

Since 2013 and until 2020, the ETS is in its 3rd phase, which is quite different from the previous two periods: allowances are now increasingly allocated via auctions and decreasingly for free. As Figure 33 shows, the excess supply of allowances accumulated over Phase II is approx. 2.0 bn tonnes and we expect this oversupply to narrow only slowly. As a consequence of this, what we see today is a CO_2 price mainly driven by political decisions on carbon backing measures. An example for this was the 35% drop in prices within one day when the European Commission voted against the plan of **carbon backloading** on 16th of April 2013 (at the same date, Verbund's stock fell by approx. 7%). The plan envisaged to reduce carbon permit auctions by 900 mt in Phase III of the ETS between 2013-15 (400 mt in 2013, 300 mt in 2014 and 200 mt in 2015) and reintroduce them again through auctions in 2019-20 to stimulate the price for EUAs. On 19th of June 2013, an amended version of the backloading proposal will be discussed in the Environmental Committee of the European Union. If there will be a vote in favour of backloading (we only expect this to happen with a very low probability and if at all in an alleviated version of the prior proposal) the EU Parliament might vote on it again on a meeting before its summer recess, around 3/4 of July 2013. However, an ultimate decision of the Commission, if all previous steps would be successful, is not expected before the end of this year.

Given the dependence of CO_2 prices on political actions in the current environment of excess EUA supply, it is hard to forecast future price developments. In our estimates, we do not assume the CO_2 price to fall to zero due to the high effort the European Union spent on introducing the trading scheme as a global prestige project. Furthermore, once the economy recovers in Europe, we expect more political support from countries that now strictly oppose the support of higher carbon prices in order to keep power prices low and reflate their local economies. In our base case, however, we take a more reserved position and forecast prices for carbon allowances to be stable at EUR 3 per tonne, at the lower end of the current trading range.

Clean Dark Spread

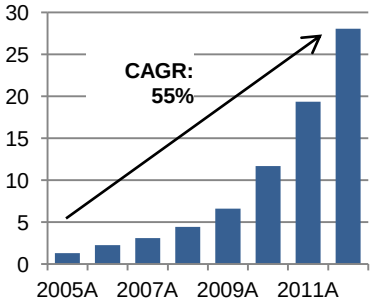
Figure 35: German clean dark spread (in EUR / MWh)

Source: Company data

The clean dark spread is the gross profit that a coal power plant generates from selling one unit of electricity after costs for fuel (coal) and carbon (CO_2 licenses) required to produce that unit. A positive clean dark spread indicates that coal plants are operating competitively and profitably. The German clean dark spread is the last layer in our power price model. Besides the cost of fuel, spreads are further determined by supply and demand for electricity in the market.

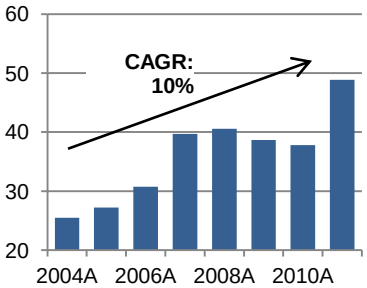
One of the main drivers behind the falling clean dark spread is the increased output from renewable energy sources, mainly from wind and photovoltaic plants. As part (2) in Appendix 3 (bullet point ⑦) shows, increased output from renewable energy sources with low marginal costs puts pressure on the margins of coal plant operators. Figures 36-38 show the development of renewable and thermal generation output in Germany and indicate the squeezing out of conventional power plants by carbon-free sources. This is the one hand positive for Verbund since the company has the opportunity to profit from expanding its renewables portfolio and only generates approx. 16% of its electricity from thermal plants (FY12). On the other hand, the resulting lower power price reduces the company's operating margins and affects its earnings negatively.

Figure 36: Generation from PV plants in Germany (in TWh)



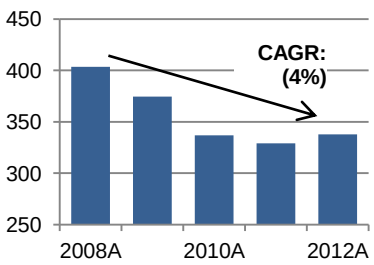
Source: BMU (Ministry for Environment)

Figure 37: Generation from wind plants in Germany (in TWh)



Source: BMU (Ministry for Environment)

Figure 38: Generation from thermal plants in Germany (in TWh)



Source: Eurostat

Power Price Forecast

Taking into account the above described developments and trends we built our commodity forecasts as summarized in Table 2.

Table 2: Main commodity and economic forecasts (in current prices)

	2013E	2014E	2015E	2016E	2017E
Coal (USD/t)	84.7	91.5	97.4	98.7	102.2
CO_2 (EUR / t)	3.0	3.0	3.0	3.0	3.0
Natural gas (EUR / MWh)	26.6	26.6	26.6	26.6	26.6
German baseload (EUR / MWh)	48.0	43.0	40.0	42.3	44.6
EURUSD	1.27	1.26	1.30	1.25	1.27
Inlfation (Germany)	1.9%	2.1%	2.1%	2.1%	2.1%
Inflation (Austria)	1.9%	1.9%	1.9%	1.9%	1.9%
Real GDP growth (Germany)	0.5%	1.6%	1.8%	2.1%	2.4%
Real GDP growth (Austria)	0.8%	1.5%	1.9%	2.2%	2.5%

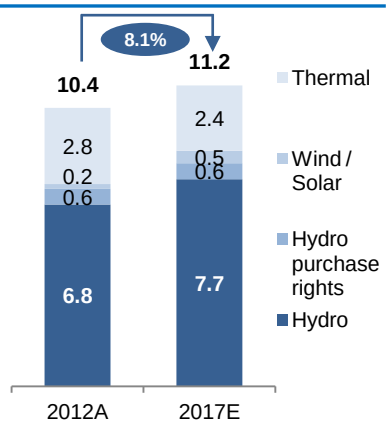
Source: IMF, Bloomberg, Analyst's estimates

While we expect coal prices to increase slightly by 2.3% p.a. in the coming years, we set the CO_2 price fix at EUR 3 per tonne in line with its current price level and our assumptions that there will be no solution out of the carbon difficulties in the near future. Baseload pool prices, in contrast are forecasted to increase, mainly driven by the higher coal price.

Segmental Forecasts

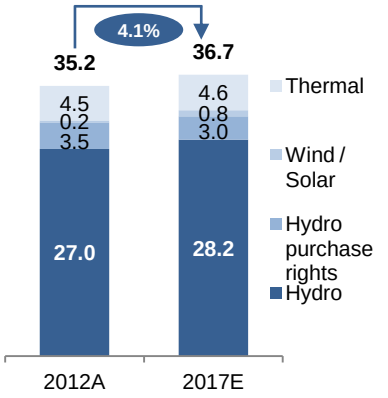
Electricity

Figure 39: Installed Capacity 2012A-17E (in GW)



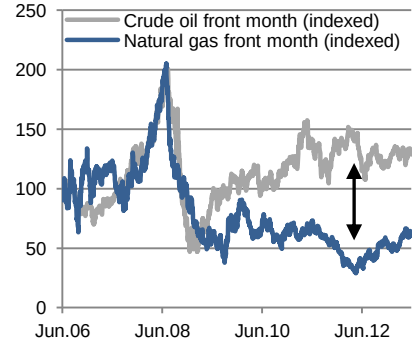
Source: Company data, Analyst's estimates

Figure 40: Electricity Generation 2012A-17E (in TWh)



Source: Company data, Analyst's estimates

Figure 41: Oil vs. Gas price development



Source: Bloomberg (Tickers: NG1, CL1)

In the 'Electricity' segment, Verbund bundles all operations relating to the construction, operation and maintenance of the group's power plants as well as electricity trading and supply to consumers.

Verbund's installed capacity in 2012 amounted to 10.4 GW (incl. power purchase rights). Besides the majority of the plants that are located in Austria and the Southern German state of Bavaria (see Figure 6 for comparison), Verbund also owns wind parks in Bulgaria (16 MW) and Romania (99 MW, plus another 184 MW planned) and a run-of-river plant in Albania (53 MW). Since 2012 the two French CCGTs Pont-sur-Sambre and Toul (together 842 MW) had also been fully consolidated and allocated to the 'Electricity' segment.

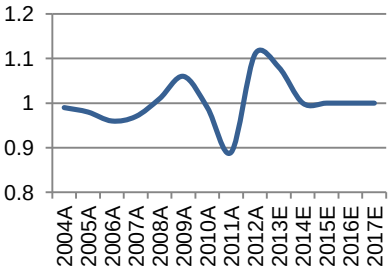
In total, we expect capacity to grow by approx. 8.1% over the next five years to a total of 11.2 GW by 2017E as shown in Figure 39. At the same time our generation forecasts imply a (lower) 4.1% increase, mainly due to normalized hydro conditions (see later on in this chapter). While we expect the company's Dürnrohr coal power plant (405 MW) to be closed in 2016, management is guiding for approx. 450 MW additions in hydro plants, 270 MW additional capacity in wind power and efficiency improvements in existing stations. An overview of Verbund's full project pipeline is given in Appendix 1.

At the beginning of 2012 Verbund started operations at the Mellach CCGT - Austria's largest power plant with a capacity of 848 MW. However, the company had to book impairment losses of EUR 164 mn in 2011-12 (30% of capex), following a difficult market environment for gas plants. As Figure 41 shows, over recent years, oil and gas prices decoupled from their historical pricing relationship, mainly due to increased gas supply from newly explored reserves.[18] Yet, supply contracts are still commonly designed on a long-term take-or-pay basis with linkage to the oil price. Given the thereby artificially high purchase prices combined with a low electricity output price in the market, CCGTs often operate loss-making. By now, Verbund managed to renegotiate some parts of its supply contracts on a short-term basis, but still has to finalize conclusive negotiations.

Apart from the dependency on the wholesale power price, the focus of Verbund on hydro generation within the 'Electricity' segment also brings another value

[18] In the last few years, oil-linked prices for gas stopped reflecting the actual supply and demand for the resource, driven in large part by new exploration techniques for gas - especially the discovery of shale gas reserves - that lowered the cost of production and increased global gas supply.

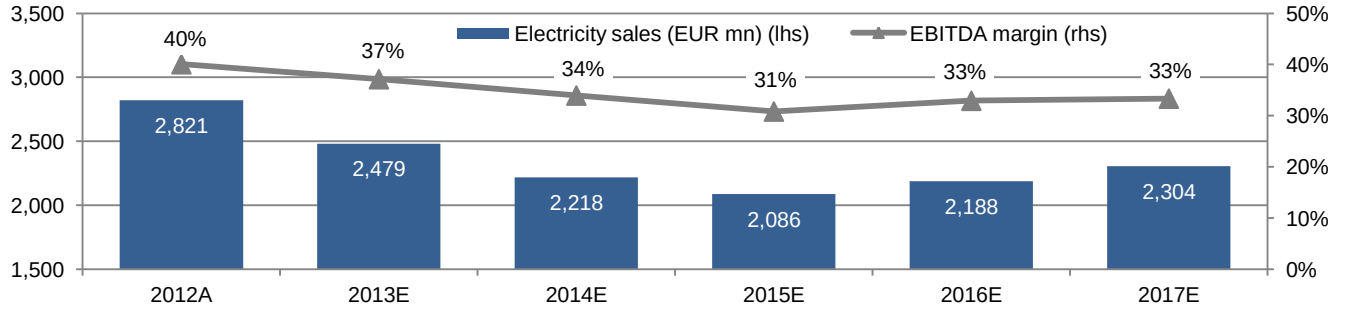
Figure 42: Hydro coefficient 2004A-2017E



Source: Company data, Analyst's estimates

driver: hydro conditions in Southern Germany and Austria. In 2012, the hydro coefficient[19] rebounded to 1.11 from a weak 2011 level of 0.89 as shown in Figure 42. For 2013, we estimate a hydro coefficient 8% above the long-term average at 1.08 driven by favourable conditions during the first quarter (hydro coefficient of 1.20). For our further forecasts we estimate the coefficient to remain stable at 1.0 to make our estimates robust to non-controllable short-term fluctuations in hydro levels.

Figure 43: Electricity sales and EBITDA margin 2012A-2017E (excl. intragroup eliminations)



Source: Company data, Analyst's estimates

We expect segment sales to decrease in the short- to medium term due to lower achieved power prices

As Figure 43 shows, we expect segment sales to decrease over the next years from the EUR 2.8 bn level in 2008. This is mainly due to lower realized power prices which we assume to be EUR 50 per MWh in 2013 (as indicated by Verbund's management) and EUR 43 per MWh in 2014, in line with current forward prices. From 2015E on, we forecast a slight recovery in power prices; with a long term achievable price of EUR 45 per MWh. Table 3 summarizes our explicit forecasts for the 'Electricity' segment.

Table 3: Electricity segment forecasts - Summary

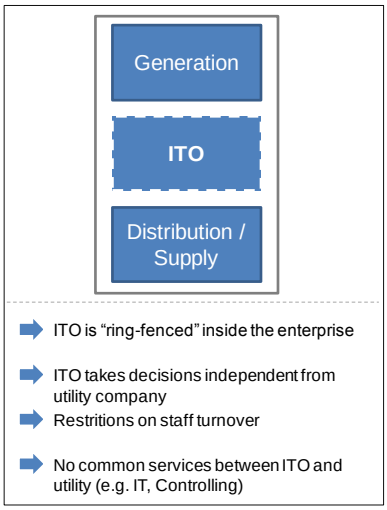
(in EUR mn if not stated differently)	2013E	2014E	2015E	2016E	2017E
Achieved power price (EUR)	50.0	43.0	40.0	42.3	44.6
Total electricity supply (TWh)	49,581	51,582	52,149	51,723	51,701
Revenues (from electricity sales)	2,479	2,218	2,086	2,188	2,304
Total revenues	2,600	2,345	2,214	2,307	2,425
EBITDA	921	753	643	721	769
Depreciations & Amortizations	(228)	(233)	(236)	(239)	(242)
EBIT	693	520	407	482	527
Total assets	8,384	8,412	8,519	8,563	8,606
Total installed capacity	10,977	11,534	11,623	11,229	11,229

Source: Analyst's estimates

[19] The hydro coefficient describes the actual electricity generation in one period divided by the long-term average generation potential. The long-term average is set at 1.00.

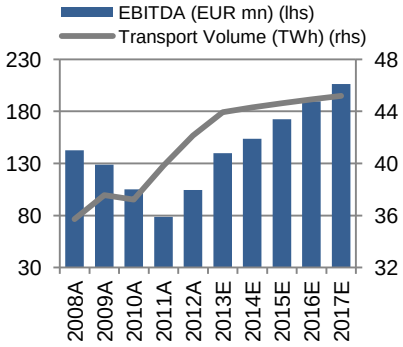
Grid

Figure 44: ITO model



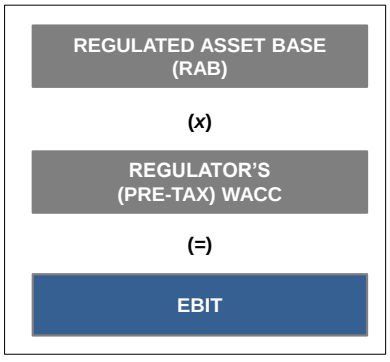
Source: BMWI, analyst's research

Figure 46: Grid EBITDA vs. Transport Volume



Source: Analyst's estimates

Figure 45: Computation of allowed return



Source: E-Control

In the Grid segment, Verbund allocates the operations of Austrian Power Grid AG, Austria's largest transmission system operator that controls approx. 95% of the system at the voltage levels 110, 220 and 380 kV as control area manager.

APG was certified as the first Austrian independent transmission system operator (ITO) in March 2012 following the Third Single Energy Market Package of the EU. With the legislation, the EU intended to unbundle the operations from transmission operators of integrated utilities in order to prevent vertical integration in the energy market. By virtue of being certified as ITO, Verbund was able to retain ownership over the grid, while APG would operate separately from the parent ('legal unbundling'). In 2012, APG transported 42.1 TWh of electricity and had a headcount of 450 employees.

In its "Master Plan" for the Austrian grid, APG defines its long-term planning for the period up to 2020. The main focus in the next years is the completion of the 380 kV Salzburg line between Tauern and Salzburg (essential for the completion of 380 kV Austrian ring[20]). A total of 128 km of new lines and approx. 450 poles will be newly constructed while 256 km of old lines will be detached. Furthermore, a 380 kV connection to Germany is scheduled to be constructed in 2015-16 and the line between Dürnrohr and Vienna Southeast needs to be expanded in order to connect new renewable energy sources in the East of the country to the grid (Austria plans to triple its wind power capacity from currently 1 GW to 3 GW by 2020). For those and various smaller investments, APG estimated capital expenditures of approx. EUR 1 billion for 2013-17. We furthermore expect significant expenses in the distant future for upgrades of the existing grid to secure local energy supply with the increasingly dominant and more volatile wind and solar electricity sources.

The grid's operating income is based on a return that the regulator defines (WACC) on the company's regulated asset base (RAB) which itself is computed on adjusted book values of APG's balance sheet.[21] The tariff is reviewed each year. For 2013E, we expect a RAB of EUR 1,150 mn with the pre-tax WACC being set at 6.42% before tax. Since the rate was suggested to be fixed for the next years, we estimate a constant return on RAB equal to the regulator's WACC in our model. Table 3 compares the allowed return as computed by E-Control with the opportunity cost of capital as assumed in our model. As the figure

[20] The Austrian high-voltage grid is arranged in a ring structure to ensure high reliability since every point on the ring is served from two sides; please refer to Figure 20 for an illustration.
[21] RAB = Intangible Assets + Tangible Assets + Leased Facilities – Construction grants – Gain from restructuring - Other corrections (Source: E-Control; for further information on the 'Gain from restructuring'-component see Austrian Commercial Code, §202 Section 2).

indicates, we forecast the 'Grid' segment to be value supportive in the future. We will scrutinize the composition of our cost of capital computation in the Chapter 'WACC'.

Table 4: WACC computation E-Control vs. Analyst's estimates

	Risk-free rate	Debt risk premium	Cost of debt	Market risk premium	Beta (unlevered)	Beta (levered)	Cost of equity (after-tax)	Gearing	Tax	WACC (pre-tax)	**WACC (after-tax)**
E-Control	3.27%	1.45%	4.72%	5.00%	0.33	0.69	6.72%	60%	25%	6.42%	**4.81%**
Analyst's estimates	2.10%	1.02%	3.12%	5.50%	0.24	0.44	5.18%	114%	25%	4.89%	**3.66%**

Source: E-Control; Analyst's estimates

With the computation of the RAB as described above, our estimated segmental EBIT for 2013 stands at EUR 74 mn. The strong increase in RAB and consequently in EBIT is due to the management's guidance of investing the above mentioned EUR 1,000 mn over the next five years.

Table 5: Grid segment forecasts - Summary

(in EUR mn if not stated differently)	2012A	2013E	2014E	2015E	2016E	2017E
Revenues	550	472	476	480	483	486
Operating expenses	(446)	(333)	(323)	(308)	(294)	(279)
EBITDA	104	140	154	172	190	206
Depreciation & Amortization	(66)	(66)	(72)	(80)	(87)	(94)
EBIT	38	74	82	92	102	112
Capital expenditures	(138)	(374)	(246)	(255)	(262)	(269)
Capex / D&A	2.1x	5.7x	3.4x	3.2x	3.0x	2.9x
Regulated Asset Base (RAB)	914	1,150	1,278	1,440	1,596	1,750
Invested Capital (IC)	727	909	1,050	1,152	1,266	1,365
EBIT as % of RAB	4.2%	6.4%	6.4%	6.4%	6.4%	6.4%
EBIT as % of IC	5.3%	8.1%	7.8%	8.0%	8.1%	8.2%

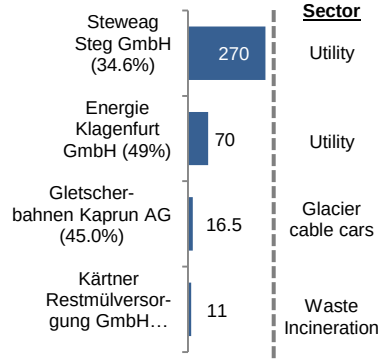
Source: Company data; Analyst's estimates

Equity Interests & Services

Within the 'Equity Interests & Services' segment, Verbund bundles the management and control functions of its domestic and foreign equity interests. Furthermore, subsidiaries that provide corporate functions (e.g. financing, telecommunications) are part of this area. In 2012, the segment generated an overall loss of EUR 80.3 mn (2011: EUR -176.5 mn).

During the last year, Verbund sold most of its non-core equity stakes that it had accumulated on its balance sheet. The divestments, as shown in Figure 47, generated an overall cash inflow of approx. EUR 370 mn.

Figure 47: Cash inflows from recent asset sales (in EUR mn)



Source: Company data

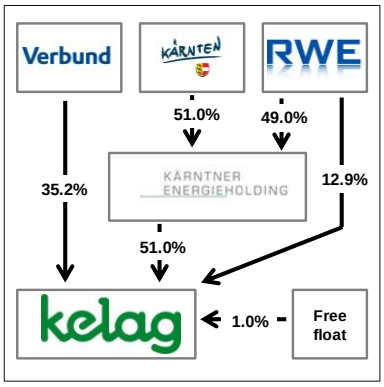
The most important change in this segment was the already mentioned asset swap with E.ON that was closed in April 2013: under the agreement Verbund received the ownership in eight run-of-river plants with a total capacity of approx. 680 MW. In addition, E.ON's 50% share in three hydropower projects was acquired by Verbund. Finally, E.ON reduced its drawing rights from the Zemm-Ziller power plant by 60% (equivalent to 237 GWh p.a.). In return, E.ON acquired Verbund's 50% share in the Turkish Enerjisa (total capacity of 830 MW).

With the exit from Turkey, Verbund swapped expensive growth opportunities against well-known hydro potential

Consequently, the company swapped growth opportunities in an emerging market against value assets in its core markets. We see the exit from the Turkish market, which was established in 2007 in a JV with the Turkish industry conglomerate Sabanci, as a good move: the business plan of Enerjisa would have required high capital expenditures in order to achieve the JV's target to install a total capacity of 5,000 MW by 2015 that Verbund cannot afford at its current debt levels. Furthermore we see Verbund's expertise and know-how clearly in the field of hydro energy.

By now, the domestic equity interests remaining are Österreichisch-Bayerische Kraftwerke AG (50%), Donaukraftwerk Jochenstein AG (50%), Ennskraftwerke AG (50%) and KELAG-Kärntner Elektrizitäts-AG (35.2%). The latter is by far the largest of Verbund's local participations: KELAG is an Austrian utility that generated revenues of EUR 1.6 bn in 2011. In terms of interests paid to Verbund, KELAG delivered stable income of EUR 33.0 mn and EUR 33.5 mn in 2010 and 2011, respectively. We expect this contribution to remain constant around EUR 35.0 mn for the future, in line with management guidance.

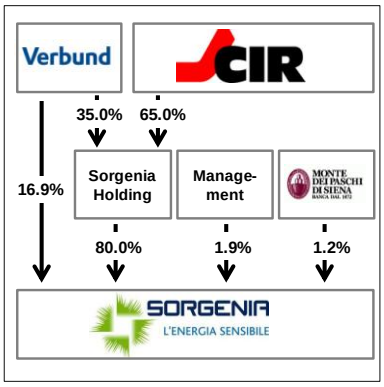
Figure 48: Verbund and KELAG



Source: Company data

After the full-consolidation of the CCGTs Toul and Pont-sur-Sambre in France and the completion of the Ashta run-of-river plant in Bulgaria, the last remaining foreign interest on Verbund's balance sheet is the 44.9% stake in Italy's Sorgenia SpA that was established in 1999 in cooperation with the Italian industrial holding CIR. Sorgenia is a utility with approx. 5 GW installed capacity, of which 95% are CCGTs. The company struggles with a currently difficult market environment for gas power stations and long-term gas supply contracts that are linked to the oil price. The company contributed EUR -81.2 mn in 2012 and EUR -3.3 mn to Verbund's earnings from equity interests. In the presentation of its FY12 results, Verbund management described the investment in Sorgenia as non-core and that it would not inject further equity in the company. Sorgenia is currently going through a restructuring process (FY12 net debt / EBITDA 18x) in which Verbund, however, indicated to have no influence as minority shareholder.

Figure 49: Verbund in Italy

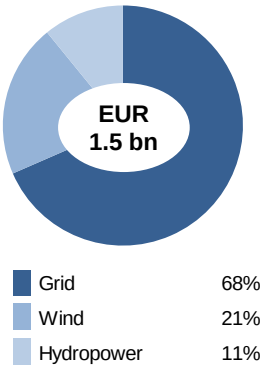


Source: Company data

The results from the different equity stakes enter Verbund's balance sheet as a caption below the EBIT level as 'Income from Equity Interests' while revenues from subsidiaries that provide corporate functions are accounted regularly. Since, however, there is insufficient data provided by the company for the latter supporting subsidiaries, for valuation purposes we merged the revenues from this segment with the 'Electricity' segment and thus valued both areas in one approach. We see this as reasonable given a similar risk profile due to the dependency of the subsidiaries on operations from the generation units.

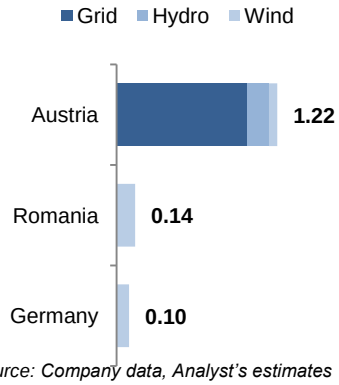
Strategic Outlook

Figure 50: Growth capex split by segment 2013E-2017E



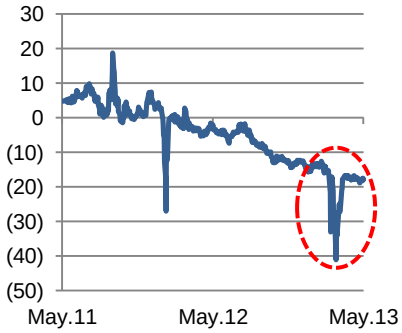
Source: Company data

Figure 51: Growth capex split by country 2013E-2017E (in EUR bn)



Source: Company data, Analyst's estimates

Figure 52: German clean spark spread (in EUR / MWh)



Source: Bloomberg, Analyst's estimates

Given the company's high debt level, Verbund's main focus in the short term is deleveraging: with the announcement of the FY12 results management revised its growth capital expenditures forecasts for 2013E-17E down from EUR 2.2 bn to EUR 1.5 bn (EUR 140 mn less p.a.) following the exit from its Turkish operations. Furthermore, the company declared its interests in Italy and France as non-strategic for the future while it sees growth potential in Southeastern Europe. However, due to legal uncertainties in these countries, a further expansion is expected to be carried out only in the medium to long term.

Therefore, over the short-run, Verbund puts the focus on Austria and Germany, specializing in its core technologies hydro and wind. This is confirmed when looking at the company's growth capex split in Figures 50 and 51. The asset swap with E.ON is in line with the new strategic outlook. Following the transaction, Verbund announced an extra 40 cents per share one-off dividend resulting in a total dividend per share (DPS) of EUR 1 (this implies an extra EUR 139 mn payment that can be fully financed from the savings in capex). We consider the exit from the Turkish market and the payout of cash to shareholders as rather positive. However, given the company's high debt levels, we would have recommended to use the saved capital for debt reduction purposes. For the period after 2013, the company aims for a 50% payout ratio.

Besides the already realized divestments, Verbund is further evaluating the sale of its two French CCGTs Pont-sur-Sambre and Toul (together 842 MW capacity). Moreover, the participation in Sorgenia was classified as non-growth. The restructuring at the Italian utility is ongoing, but as Verbund management stated it is not in the "driver's seat" of these measures. In our opinion, with the appointment of the former investment banker Peter Kollmann as new CFO from 2014 on, Verbund set a clear sign that it wants to push forward the sale of these non-strategic assets.

However, we believe it is highly unlikely that the company will find a buyer willing to pay an adequate price for these assets given the troubled European gas market and forecasted low / negative clean spark spreads in the near-future.[22] With the disposal of further assets being unlikely, the only options we see for management to take away financial pressure are further capex cuts or a reduction in its dividend payouts. While the former is rather unlikely since it would question management's future guidance, we see lower dividends going forward as the most likely option, particularly after the extra dividend being paid in 2013.

[22] The clean spark spread for gas plants is the equivalent to the clean dark spread for coal plants. It shows the gross margin for one unit of sold electricity after costs for gas inputs and carbon allowances for that unit.

SWOT Analysis

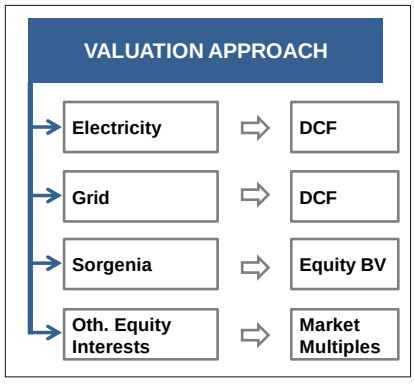
Table 6: SWOT analysis

Strengths	Weaknesses
▪ Market leader position in the Austrian electricity market, strengthened by the political decision to ban nuclear imports ▪ Vertically integrated structure; regulated cash flows from APG ▪ Focus on core markets with growing footprint in Southeastern Europe (Bulgaria, Romania) ▪ Longevity of hydro assets; low maintenance and replacement cost	▪ Focus on hydro makes earnings hardly predictable due to the dependency on variable power prices ▪ Troubled leverage position and limited counteracting options might lead to further downgrades from rating agencies ▪ Government ownership limits refinancing option via the issuances of new equity
Opportunities	**Threats**
▪ Rising power prices due to nuclear phase out in Germany (lower baseload capacity) ▪ Lower installed capacity in core markets makes gas plants competitive (needed for security of supply) ▪ Tightening CO_2 market leads to higher prices for carbon allowances ▪ Possible carbon tax in Germany ▪ Positioning in electric vehicle market (JV with Siemens AG)	▪ Slowdown of economic recovery in Central Europe ▪ Low hydro levels in times of no rain / light snowfall ▪ Delayed efficiency improvements in French and Italian operations ▪ German elections in September 2013 → possible new government which is less focused on clean energy promotion

Source: Analyst's research

Valuation

Figure 53: Valuation approach

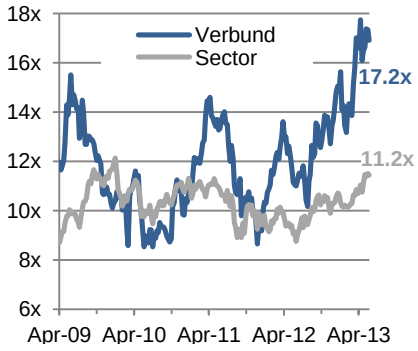


Source: Analyst's research

Our EUR 14.5 target price is derived from a sum-of-the-parts (SOTP) valuation, applying a discounted cash flow (DCF) model to both the generation and the transmission business in order to incorporate the potential in Verbund's core activities in an optimal way. Furthermore, the participation in Sorgenia was valued at equity book value given its troubled financial position and intransparent restructuring program. Finally, we have valued Verbund's various other equity interests separately using a blend of trading multiples of comparable firms specific to each business. In addition to our base case scenario that will be described in detail in the next subchapters, we have also constructed a worst case outcome in order to incorporate uncertainties in our assumptions.

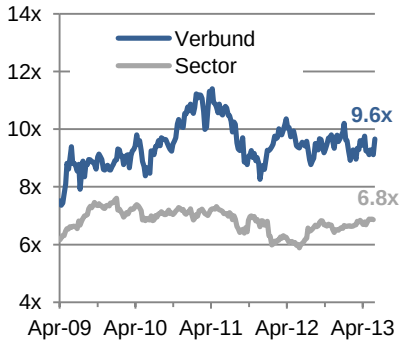
At the moment, Verbund trades at a premium to its peers on a P/E (17.2x for Verbund versus 11.2x for the sector – a 54% premium) as well as on an EV/EBITDA basis (9.6x versus 6.8x in the sector – a 41% premium). While part of this premium is justified due to Verbund's unique asset mix, at the moment it is clearly above the long-term average for P/E (~17%) and EV/EBITDA (~38%).[23] In our opinion, given the company's high leverage and the environment of low power prices in Central Europe, this premium is unjustified and we expect Verbund's stock to show a reverting trend over the medium term.

Figure 54: P/E vs. sector



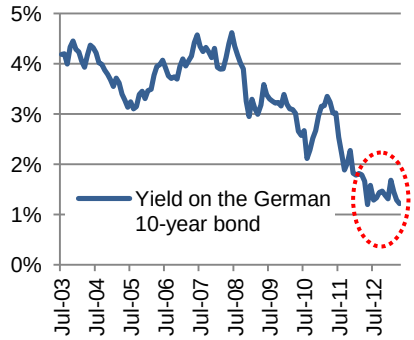
Source: Bloomberg
Note: Sector = BEUTIL Index

Figure 55: EV/EBITDA vs. sector



Source: Bloomberg
Note: Sector = BEUTIL Index

Figure 56: German 10-year government bond yields



Source: Bloomberg

WACC

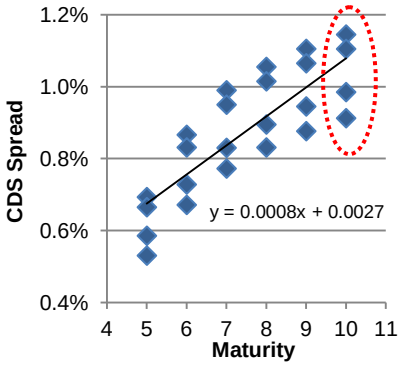
To better assess Verbund's operations in electricty generation and the regulated transmission business, we computed a cost of capital for each of the divisions. Our WACC computation for the 'Grid' segment was already shown above, we will now introduce the different cost components and their respective derivation.

We estimated the **cost of equity** in both areas using the capital asset pricing model (CAPM) applying a market risk premium of 5.50% and a risk-free rate of 2.11% based on the yield of the German 10-year government bond.[24] With regard to the sector beta, we have calculated it departing from the average asset beta of comparable companies. In order to get a sample of comparables for the 'Electricity' segment, we have analyzed competitors by their proportion of hydro generation in total generation and their business activity in Europe to ensure that the firms' betas would be appropriate benchmarks to Verbund. For the 'Grid' segment, our selection criteria was the companies' sole focus on electricity transmission in Europe. This resulted in average unlevered betas of 0.55 and 0.24 for the 'Electricity' and 'Grid' segment, respectively. The computations and results are given in detail in Appendix 6. In order to incorporate country-specific risk, we have also computed a country beta of 1.26 by regressing returns on the ATX on returns of the MSCI World over the last two years.

In order to relever the so-obtained average asset betas of, we needed to determine a target **gearing** for Verbund. The gearing is the weight of debt in the company's financial structure. By now, there is no generally accepted model to calculate an optimal gearing that minimizes the WACC for the firm.[25] Therefore we estimated it using the same comparables as for the cost of equity. We see the average gearing of comparables as a good and unbiased measure since all firms in the market have the incentive to optimize their financial structure over time.

[23] Appendix 5 gives a full benchmarking of Verbund 's valuation versus European utility and transmission peers.
[24] Since yields on the German 10-year note are currently on an extraordinary low level, we applied an average yield over the last three years.
[25] See, among others: Grinblatt, Mark, and Sheridan Titman. 2002. *Financial markets and corporate strategy*. Ed. 2. New York: McGraw-Hill/Irwin.

Figure 57: CDS estimation



Source: Bloomberg, Analyst's estimates
Note: Analyzed companies incl. EDF, Fortum, E.ON, RWE.

Table 7: WACC composition

	Grid	Electricity
Risk-free rate	2.10%	2.10%
Average asset beta	0.24	0.55
Target D/E	114%	104%
Relevered Equity Beta	**0.44**	**0.99**
Country Beta	1.26	1.26
Market risk premium	5.50%	5.50%
Cost of Equity	**5.18%**	**8.94%**
Debt risk premium	1.02%	1.02%
Cost of Debt	**3.12%**	**3.12%**
Tax rate	25%	25%
Target E/C	46.6%	48.9%
Target D/C	53.4%	51.1%
WACC	**3.66%**	**5.57%**

Source: Analyst's estimates

From the comparables shown in Appendix 6, we have obtained an average debt-to-equity ratio of 1.04 and 1.14 for the 'Electricity' and 'Grid' segment, respectively. Using these values and the relevered betas in the CAPM finally resulted in a cost of equity of 8.49% for the 'Electricity' and 5.18% for the 'Grid' segment.

Regarding the **cost of debt** it seems reasonable to use the company's current interest rate. However, for valuation purposes, the cost of debt needs to reflect the future market cost and thus has to be estimated. To estimate an appropriate effective interest rate, we have added a debt premium based on the CDS spread on 10-year bonds to the risk-free rate. Since there are no CDS of Verbund traded in the market, we have estimated the debt premium from investment grade rated competitors as illustrated in Figure 57. An average of the 10-year CDS spreads resulted in a value of 1.02%. Added up to the risk-free rate, this gave us an effective interest rate of 3.12%.[26]

Electricity & Grid

For the 'Electricity' and 'Grid' segments, we have explicitly forecasted financials for 2013E-20E and assumed a terminal value for the period thereafter based on a growth rate of 0.5%. We deemed the growth rate reasonable given the low growth potential due to the mature nature of the utilities industry.

Table 8: DCF valuation for 'Electricity' and 'Grid' segments

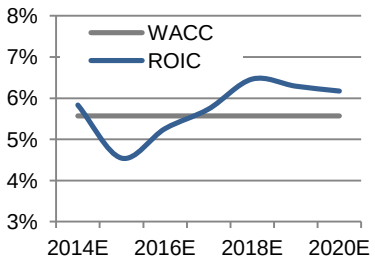
ELECTRICITY SEGMENT	2014	2015	2016	2017	2018	2019	2020		
EBIT	520	407	482	527	596	592	587		
less: Adjusted tax	(130)	(102)	(120)	(132)	(149)	(148)	(147)		
NOPLAT	**390**	**306**	**361**	**395**	**447**	**444**	**440**		
plus: Depreciation & Amortization	233	236	239	242	245	247	250		
Operating Gross Cash Flow	**623**	**541**	**600**	**637**	**692**	**691**	**690**		
less: Capital Expenditures	(314)	(317)	(319)	(322)	(313)	(316)	(318)		
less: Change in NWC	(34)	(44)	33	27	(24)	(11)	(2)		
less: Change in other operating assets	(8)	(17)	18	14	(14)	(1)	(0)		
plus: Change in other operating liabilities	3	8	5	(16)	6	1	1		
plus: After-tax financial income	43	37	39	41	40	40	40		
Investing Gross Cash Flow	**(309)**	**(333)**	**(225)**	**(256)**	**(304)**	**(286)**	**(280)**	**Valuation - Electricity**	
less: Change in non-operational assets	67	13	(10)	9	(20)	12	1	**PV cash flows**	**2,049**
plus: Change in non-operational liabilities	(4)	(0)	12	(4)	(3)	0	1	Terminal growth rate	0.5%
Non-operational cash flow	**63**	**12**	**2**	**5**	**(23)**	**12**	**2**	FCF (t+1)	413
FREE CASH FLOW TO THE FIRM	**377**	**221**	**378**	**386**	**365**	**417**	**411**	WACC - g	5.1%
Discount factor	0.95	0.90	0.85	0.81	0.76	0.72	0.68	**Terminal value**	**5,584**
Discounted Free Cash Flows	**358**	**198**	**321**	**311**	**278**	**301**	**281**	**Enterprise value**	**7,633**

GRID SEGMENT	2014	2015	2016	2017	2018	2019	2020		
EBIT	82	92	102	112	122	131	138		
less: Adjusted tax	(21)	(23)	(26)	(28)	(30)	(33)	(34)		
NOPLAT	**62**	**69**	**77**	**84**	**91**	**98**	**103**		
plus: Depreciation & Amortization	72	80	87	94	101	107	112		
Operating Gross Cash Flow	**133**	**149**	**164**	**178**	**192**	**205**	**215**		
less: Capital Expenditures	(246)	(255)	(262)	(269)	(240)	(246)	(252)		
less: Change in NWC	43	46	50	54	60	63	68		
less: Change in other operating assets	(23)	11	(6)	3	(1)	1	(0)		
plus: Change in other operating liabilities	14	16	16	19	23	26	29		
Investing Gross Cash Flow	**(212)**	**(181)**	**(202)**	**(193)**	**(158)**	**(157)**	**(155)**	**Valuation - Grid**	
less: Change in non-operating assets	-	-	-	-	-	-	-	**PV cash flows**	**69**
plus: Change in non-operat	16	17	18	18	19	19	20	Terminal growth rate	0.5%
Non-operational / Non-core cash flow	**16**	**17**	**18**	**18**	**19**	**19**	**20**	FCF (t+1)	80
FREE CASH FLOW TO THE FIRM	**(64)**	**(15)**	**(20)**	**3**	**52**	**67**	**80**	WACC - g	3.2%
Discount factor	0.96	0.93	0.90	0.87	0.84	0.81	0.78	**Terminal value**	**1,975**
Discounted Free Cash Flows	**(61)**	**(14)**	**(18)**	**3**	**44**	**54**	**62**	**Enterprise value**	**2,045**

Source: Analyst's estimates

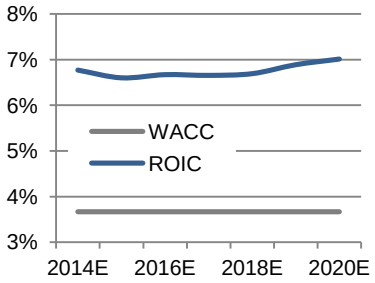
[26] We see the default probability of Verbund, as investment grade rated company backed by the Austrian state, as zero. This is confirmed by Moody's; see "Corporate Default and Recovery Rates, 1920-2010", p. 9, Exhibit 12.

Figure 58: ROIC vs. WACC 'Electricity' segment



Source: Analyst's estimates

Figure 59: ROIC vs. WACC 'Grid' segment



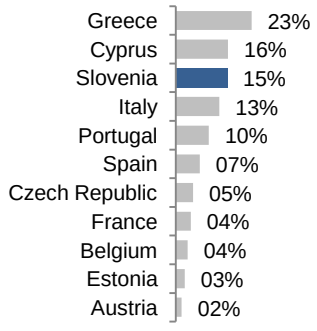
Source: Analyst's estimates

Table 9: Valuation Sorgenia & Kelag

Sorgenia	2012
Total Assets	3,809
Total Liabilities	2,966
Equity Book Value	843
% share Verbund	44.9%
Value Sorgenia	**379**
Kelag	**2012**
Revenues	2,007
EBITDA	195
D&A	(97)
EBIT	98
Net income	96
EV / EBITDA 2013E	1,164
EV / EBIT 2013E	959
Average on EV / EBITDA and EV / EBIT	1,062
% share Verbund	35.2%
Value Kelag	**374**

Source: Company data, Analyst's estimates

Figure 60:Non-performing bank loans in % of total loans (2012)



Source: IMF

Our results prove our initial thesis that the majority of Verbund's value is allocated in the 'Electricity' segment. The generation business has an overall value of EUR 7.6 bn or EUR 22.0 per share while the transmission grid is valued at EUR 2.0 bn or EUR 5.9 per share. From Figures 58 and 59, we see that while the 'Grid' segment is clearly creating value, the generation business goes into a two-year phase of value destruction before generating a higher ROIC than its opportunity cost of capital again. We attribute this mainly to our projected decrease in power prices that are only forecasted to recover from 2017 onwards.

Equity Interests

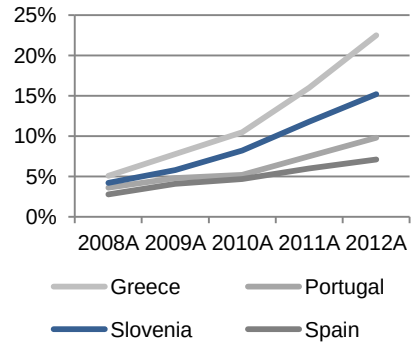
With regard to Verbund's equity interests, we have applied different valuation techniques which we considered to be most suitable for the characteristics of each associated company. To start off, we have valued the 44.9% participation in Sorgenia at equity book value. We see this as reasonable, given the management's classification as non-strategic asset, the firm's high debt levels and its intransparent restructuring process. By subtracting total liabilities from total assets (both obtained from Sorgenia's FY12 statements) we obtain a value of EUR 843 million. Taking into account the 44.9% stake that Verbund holds in the Italian utility, we derive a fair value of EUR 379 million or EUR 1.1 per share.

For the participation in Kelag, we have first built a group of comparable integrated utilities as shown in Appendix 5 and estimated the median trading multiples of those peers (6.0x and 9.7x for EV / EBITDA and EV / EBIT, respectively, on a forward-looking 2013E basis). Applying the multiples to Kelag's FY12 EBITDA yielded enterprise values of EUR 1,173 million and EUR 951 million, respectively. Taking the average of both and considering Verbund's 35.2% share results in a fair value of EUR 374 million for Kelag, equivalent to EUR 1.1 per share. For the remaining, smaller equity interests in Österreichisch-Bayerische Kraftwerke AG. Donaukraftwerke Jochenstein AG and Ennskraftwerke AG, we have applied a similar methodology as for Kelag. This resulted in an overall fair value of EUR 42 mn for the three stakes or EUR 0.1 per share. Overall, we reach an EV of EUR 10.5 bn or EUR 30.2 per share for Verbund. Subtracting all debt positions (that will be described later) we obtain a value per share for Verbund of EUR 15.2.

Scenario Analysis

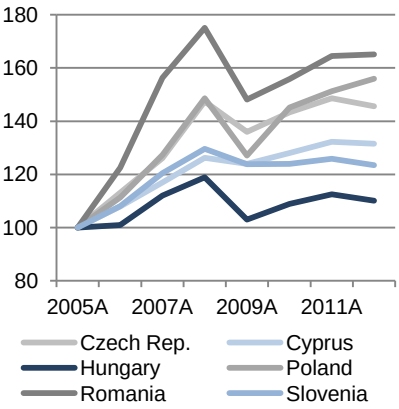
In our analysis, we value Verbund's main operations, the 'Electricity' and the 'Grid' segment using DCF models. As shown above, this approach is based on many assumptions and expectations about the future. In order to minimize the risk of making inaccurate assumptions, we have decided to not only take into account our base case, but also a worst case scenario. As one of the main

Figure 62: Bank NPLs as % of total loans evolution



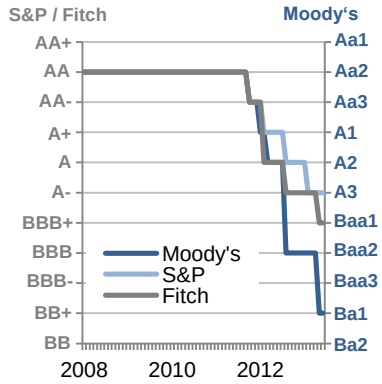
Source: IMF

Figure 61: Real GDP evolution in Eastern Europe (2005=100)



Source: Eurostat

Figure 63: Slovenia's credit rating evolution



Source: Bloomberg

issues within Central European markets was and still is the recovery from the most recent recession, we have built our model around this topic. The still struggling economies in the European periphery states and the recent bailout of Cyprus question the economic stability within the common currency zone. In our base case scenario we assume that Austria as well as Germany and the overall Eurozone will recover from the recession in the next years. The problems in countries such as Greece and Spain will be solved through ongoing reform processes and support from other EU members and no further bailout will occur.

In addition to this base case, we have constructed a scenario under which reform proceedings will not be accomplished as expected. We assume that another European country, namely Slovenia, will face bankruptcy and seek a bailout from the EU. As a consequence, the Eurozone will dip into another recession and correspondingly the Austrian and German GDP will decrease by 0.2% and 0.4% between 2014 and 2017 and then recover with an annual 1.9% and 1.5% growth, respectively. Following the downturn, industrial activity and coherently the demand for electricity will narrow and power prices will drop even further. Finally, CO_2 supportive measures will be halted in order to keep power prices low and support the industrial sector.

Why Slovenia? The Eastern European country was the first former communist state that joined the Eurozone and adopted the Euro as official currency in 2007. At the moment the country finds itself in a banking crisis. As Figures 60 and 61 show, the ratio of non-performing bank loans over total loans grew excessively in recent years and is, with a level of 15.2%, one of the highest in Europe – close to the 15.5% from Cyprus which requested a bailout in March 2013. Furthermore, GDP growth stalled in recent years when compared to other Eastern European countries (see Figure 62). In the course of the sovereign debt crisis in Europe, Slovenia's credit profile weakened considerably as reflected in its credit rating shown in Figure 63. This was even reinforced with the bailout of Cyprus which led to further downgrades by rating agencies.

In our worst case, we expect the newly elected government (as of March 2013) will not be able to solve the banking issues itself and will have to seek aid from the EU. While Slovenia is a rather small country when compared to, for instance, Greece – the Slovenian GDP stands at EUR 35 bn versus EUR 193 bn for Greece[27] - our estimation of a subsequent recession is based on investor's renewed perception of sovereign risk within the Eurozone. As major stock markets in Central Europe currently trade at all-time highs (e.g., the German DAX stands at approx. 8,300 points), anxious investors will withdraw their investments

[27] Source: Eurostat.

from the markets and initiate a downward spiral thus dragging economies into a downturn. Table 10 summarizes our assumptions and changes in the valuation.

Table 10: Assumptions and valuation results - worst case

	2013-17	2017 on
Real GDP growth DE	0.4%	1.9%
Real GDP growth AT	0.4%	1.5%
Electr. Consumption growth AT	(0.2%)	1.9%
Electr. Consumption growth DE	(0.4%)	1.5%
Av. achieved power price	40.3	42.0
WACC Electricity	5.96%	
WACC Grid	4.07%	
Valuation	**EV (in EUR mn)**	**Per share (in EUR)**
Electricity	5,727	16.5
Grid	1,825	5.3
Sorgenia	303	0.9
Kelag	299	0.9
Other Equity Interests	34	0.1
Enterprise Value	**8,188**	**23.6**
Deductions	(5,215)	(15.0)
Equity Value	**2,973**	**8.6**

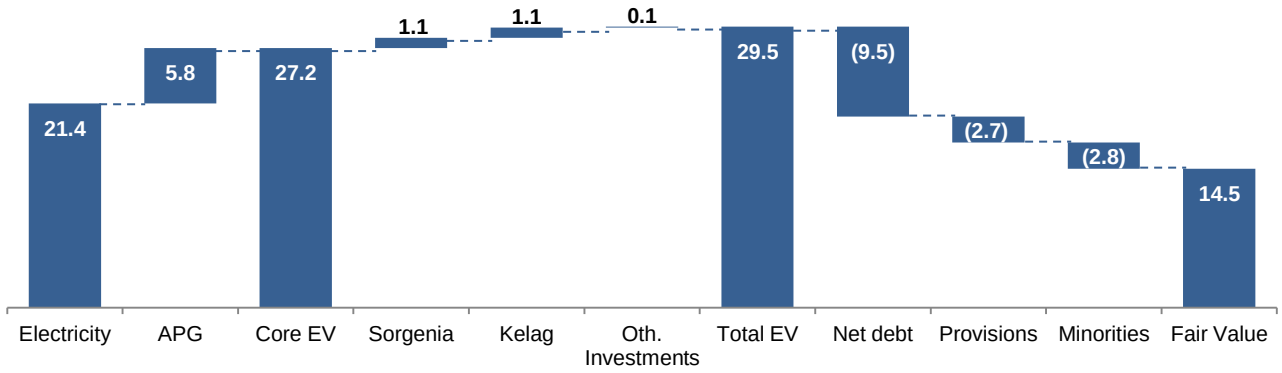
Source: Analyst's estimates

As we see from the table, the 'Electricity' segment is strongly affected by the downturn scenario losing more than 25% in value and now representing a mere EUR 16.5 per share. This is due to both lower assumed electricity consumption and achieved power prices. Since the transmission is less affected by the market prices for electricity but rather by lower volumes in the grid its value reduced by 11% to EUR 5.3 per share. Finally, a higher debt premium that we assumed to double due to the crisis situation and lending constraints influences both segments negatively. The overall resulting effect is strong, reducing the fair value of Verbund to EUR 8.6 per share - only half of the current market price. However, we do not consider this scenario to be fully unrealistic and therefore allocated a probabiliy of 10% to our worst case.

Sum-of-the-Parts Valuation

Finally, we put the valuation outputs of the scenarios together by probability-weighting with a 90:10 split between base and worst case. From there, we derived our YE13 target price of EUR 14.5 as shown in Figure 64 and Table 11.

Figure 64: Value per share by segment (in EUR)



Source: Company data, Analyst's estimates

Table 11: Valuation Summary

VALUATION SUMMARY					
Segment	**Methodology**	**Value (EUR mn)**	**% of total EV**	**EUR per share**	**Implied 2013E EV/EBITDA**
Electricity Generation	DCF @ WACC of 5.6%	7,442	72.7%	21.4	8.1x
Transmission (Austrian Power Grid AG)	DCF @ WACC of 3.7%	2,023	19.7%	5.8	14.5x
ENTERPRISE VALUE - CORE BUSINESS		**9,465**	**92.4%**	**27.2**	**8.9x**
Sorgenia Spa	Equity Book Value	371	3.6%	1.1	
Kelag AG	Market multiples blend	366	3.6%	1.1	
Other investments	Market multiples blend	42	0.4%	0.1	
TOTAL ENTERPRISE VALUE		**10,244**	**100.0%**	**29.5**	**9.7x**
less: Net debt	YE13 Market Value	(3,312)		(9.5)	
less: Provisions	2012A Book Value	(939)		(2.7)	
less: Minorities	Market multiples blend	(964)		(2.8)	
TOTAL EQUITY VALUE		**5,029**		**14.5**	
Total number of shares outstanding (mn)		347.4			
EQUITY VALUE PER SHARE		**14.5**		14.5	

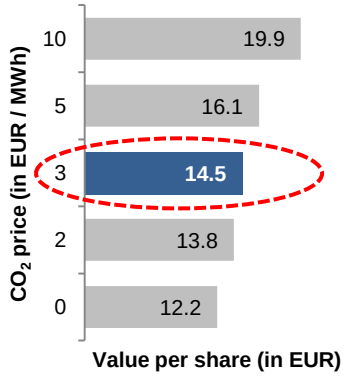
Source: Company data, Analyst's estimates

Sensitivity Analysis

Table 12: Fair value sensitivity to changes in ROIC and RR

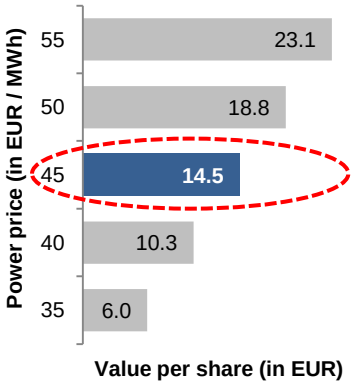
		ROIC				
		3.0%	4.0%	4.9%	6.0%	7.0%
RR	6.0%	13.1	13.3	13.6	13.9	14.2
	8.0%	13.3	13.7	14.0	14.4	14.9
	10.2%	13.6	14.1	**14.5**	15.1	15.7
	12.0%	13.9	14.4	15.0	15.7	16.4
	14.0%	14.2	14.9	15.5	16.4	17.3

Figure 65: Influence of changed CO_2 prices on value per share



Source: Analyst's estimates

Figure 66: Influence of changed power prices on value per share



Source: Analyst's estimates

As stated before, the DCF valuation of Verbund's main operations in the 'Electricity and 'Grid' segments makes the final price per share highly dependent on the terminal growth rate *g* and its constituents. Our assumption of *g* being 0.5% implies a reinvestment rate (RR) of 10%, given our ROIC of 4.9% for the last projected period 2020E.[28] Therefore, we firstly analyzed the sensitivity of our final fair value per share on changes in either the RR or the ROIC. Table 12 shows that within our selected sensitivities, the final share price ranges between EUR 13.1 and EUR 17.3. Furthermore, we see that if Verbund would be able to generate the same ROIC with a slightly higher RR of 14%, for instance, the fair value of the stock would increase by 7%.

Secondly, we will confirm that Verbund's intrinsic value is dependent on the level of pool power prices. We do so by analyzing changes in the long-term achieved market power price for Verbund in our base scenario and the resulting influence on our probability-weighted value per share (thus keeping the output of the worst case scenario constant). Figures 65 and 66 illustrate the so-established relationship.

The figures show that a 10% decrease in the price for carbon (which indirectly lowers the power price) would reduce our fair value per share by 1.6%. Overall, a 10% decrease in power prices would lower the final value per share in our model by approx. 27%. Both relationships, of course, hold also the other way around with the respectively same effect.

Consequently, the here shown correlation concludes our equity story of Verbund as a pure play on German power prices. We believe the market is not yet fully pricing in the gloomy outlook for power prices in Central Europe and therefore reinforce our Sell recommendation with a 10.5% downside to our YE13 target price of EUR 14.50.

[28] The terminal growth rate *g* is composed by the product of ROIC and the reinvestment rate, which itself is simply the difference between 1 and the payout ratio.

Appendix

Appendix 1: Transaction Summary and Project Pipeline

Table 13: Verbund's project pipeline

Planned Projects										
Area	Name	Descpiption	Investment (EUR mn)	Status	Constr. Begin	Planned Comm.	MW	EUR/ MW	Exp. Generation p.a. (in MWh)	Exp. Load Factor
Pumped Storage	Reisseck II	New; coop. With KELAG (45%), Energie AG (10%)	385	Construction	2010	2014	430	0.9	n.a.	n.a.
Pumped Storage	Riedl	New; coop. with E.ON and Rhein-Main-Donau AG (together 50%)	350	Planning	2015	2019	300	1.2	n.a.	n.a.
Pumped Storage	Limberg III / Salzburg	New; start dep. on completion of 380kV Salzburg line to Kaprun	355	Planning	n.a.	2020	480	0.7	n.a.	n.a.
Storage	Zillertal	Repowering / Revitalisation	55	Construction	n.a.	2015	32	n.a.	n.a.	n.a.
Run-of-river	Kalsdorf	New; coop. with Energie Steiermark	75	Construction	2009	2013	19	4.0	81,200	49%
Run-of-river	Pernegg	Repowering / Revitalisation	65	Construction	2010	2013	19	3.4	109,100	66%
Run-of-river	Ashta (Albania)	New; 35-year concession	200	Construction	2010	2012	53	3.8	240,000	52%
Run-of-river	Gars	Repowering / Expansion	20	Construction	2011	2013	5	4.0	13,700	31%
Run-of-river	Inn Joint-Vernute power plant	New; coop. with TIWAG (36%) and Engadiner Kraftwerke (14%)	410	Planning	2014	2018	89	4.6	414,300	53%
Run-of-river	Gratkorn	New; coop. with Energie Steiermark	70	In Approval	2014	2017	11	6.4	54,200	56%
Run-of-river	Gries	New; coop. with Salzburg AG	60	In Approval	2014	2017	9	6.7	42,000	53%
Run-of-river	Stegenwald	New; coop. with Salzburg AG	90	In Approval	2016	2018	14	6.4	72,000	59%
Run-of-river	Stuebing	New; coop. with Energie Steiermark	70	Planning	2017	2020	12	5.8	57,800	55%
Run-of-river	Ybbs-Persenbeug	Repowering / Revitalisation; one generator per year	144	Construction	2012	2020	18	8.0	60,000	38%
Wind	Hollern II	New	24	Construction	n.a.	2014	15	1.6	37,200	28%
Wind	Petronell-Carnuntium II	New	33	Construction	n.a.	2014	21	1.6	53,300	29%
Wind	Bruck-Goettlesbrunn	New	37	Development	n.a.	2015	21	1.8	57,969	32%
Wind	Casimcea (Romania)	102 MW in construction (comm.:2013); 82 MW planned (comm.: 2014)	232	Construction	n.a.	2014	184	1.3	562,000	35%
Grid	380 kV Duernrohr-Vienna SE	To connect wind power plants in Eastern AT; upgrade to existing line	n.a.	Planning	2013	n.a.	-	-	n.a.	n.a.
Grid	380 kV St-Peter - Fed. border	Border to DE; connects wind power in the North to storage in AT	n.a.	Planning	2015	2016	-	-	n.a.	n.a.
Grid	380 kV Salzburg line	Part of 380 kV Austrian Ring; replacement for existing 220 kV line	n.a.	Construction	2010	n.a.	-	-	n.a.	n.a.

Source: Company data; Analyst's research

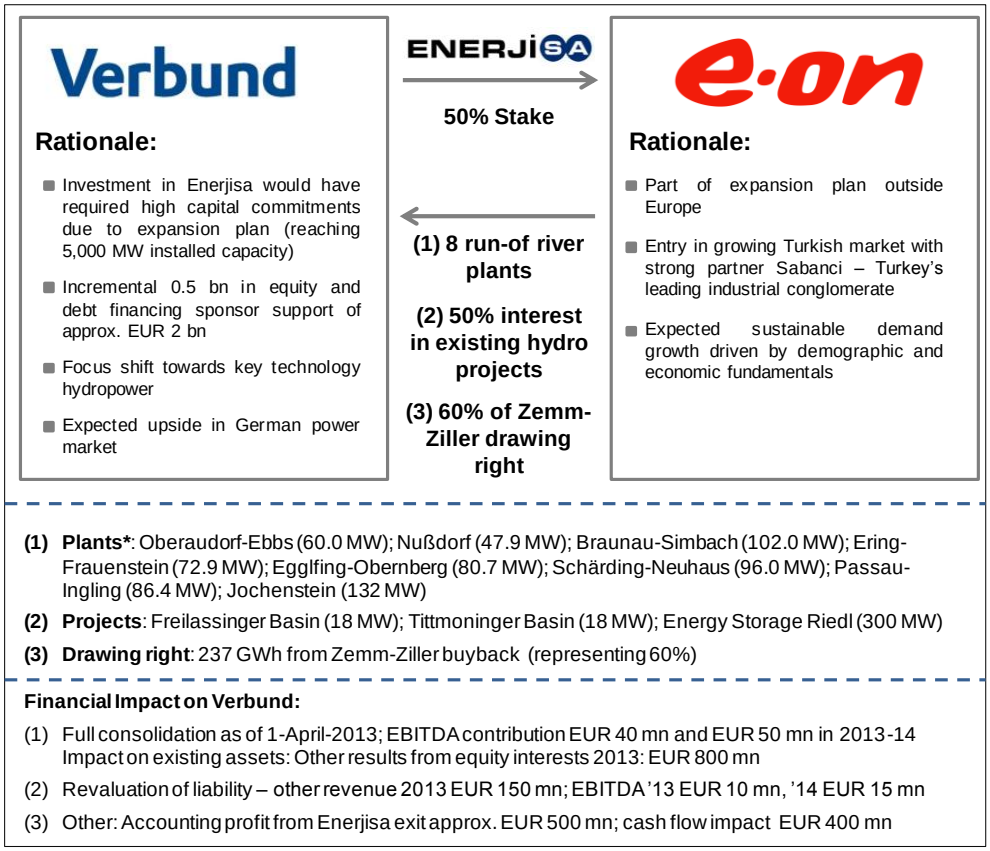
Table 14: Verbund's most important transactions 2006-13

Date	Target	Bidder	Seller	Deal Value (EUR mn)	Value per MW installed
Dec.12	Steweag Steg GmbH (34.57% Stake)	Energie Steiermark AG	Verbund AG	270	n.a.
Dec.12	EnerjiSA Power Generation Co.y (50% Stake)	E.ON AG	Verbund AG	Asset swap	n.m.
Nov.12	Kärntner Restmüllverwertungs GmbH (42.9% Stake)	KELAG-Kärntner Elektrizitäts-AG	Verbund AG	11	4.27
Oct.12	Energie Klagenfurt GmbH (49% Stake)	Stadtwerke Klagenfurt AG	Verbund AG	70	n.m.
Aug.12	Five Wind Parks in Germany	Verbund AG	juwi Holding AG	n.a.	n.a.
May.12	Gletscherbahnen Kaprun AG (45% Stake)	Kaprun Tourismus Holding GmbH	Verbund AG	18	n.m.
Jul.11	Poweo Direct Energie	Impala SAS	Verbund AG	36	n.a.
Jul.11	Poweo ENR group	AXA Private Equity; Direct Energie Neoen SAS	Verbund AG	50	0.42
Jun.11	Verbund-Innkraftwerke GmbH (26% Stake)	EVN AG,Wien Energie GmbH	Verbund AG	n.a.	n.a.
Dec.10	Poweo Production S.A.S (60% Stake)	Verbund AG	Poweo SA	120	n.a.
Jun.09	Kraftwerksgruppe Inn GmbH	Verbund AG	E.ON AG	1,431	4.58
Nov.08	Bruck a.d. Leitha / Hollern / Petronell Carnuntum Wind Park	Verbund AG	Private Investors	55	1.12
Mar.07	EnerjiSA Power Generation Company (49.99% Stake)	Verbund AG	Haci Omer Sabanci Holding AS	246	1.33
Feb.06	Austrian Power Vertriebs GmbH (APC)	Verbund AG	Istrabenz Energetski Sistemi	n.a.	n.m.
Jan.06	Poweo Productions S.A.S (40% Stake)	Verbund AG; Poweo SA	JV	59	n.a.

Source: Thomson Reuters, Mergermarket, Analyst's research

Appendix 2: Overview asset swap with E.ON

Figure 67: Overview Enerjisa transaction



Source: Verbund, E.ON company data, Analyst's research

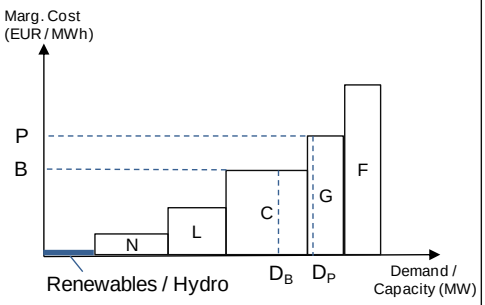
Appendix 3: Merit Order System

Figure 68: Electricity price building under the merit order system

Price Building under the Merit Order System

1. Generators offer electricity from their plants at the exchange
2. At the exchange, all offers are sorted by their price
3. Electricity generators generally offer at their marginal cost
4. The marginal cost is the lowest at wind/PV plants, followed by hydro, nuclear, lignite, coal and gas (depending on the level of CO_2 prices, gas might be cheaper than coal)
5. If demand increases, power plants with higher costs will be put into operation (and vice versa)
6. The most expensive power plant that is needed to cover the current demand – the so-called marginal plant - then determines the price in the market
7. (2) Illustrates the effect of increased renewables capacity (through additions of new plants or improved wind/sun/hydro conditions); since renwables/hydro plants produce at a marginal cost close to zero, a power plant with higher/lower marginal cost will dictate the spot price depending on the availability of wind/sun; as a consequence, there would be a shift to the right in the merit order, more expensive gas plants would be out of the system and overall power prices decrease (given that electricity demand remains stable)

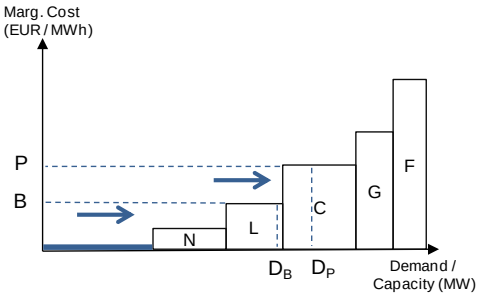
(1) Merit Order System (simplified)



N = Nuclear L = Lignite
C = Coal G = Gas F = Fuel

B = Price Baseload P = Price Peakload
D_B= Demand Baseload D_P= Demand Peaload

(2) Effect of added renewables capacity



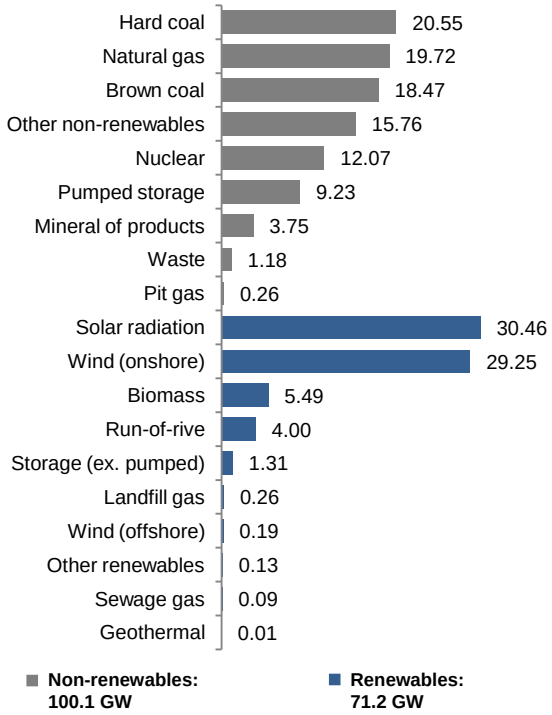
Note – Important definitions:
Baseload = Electricity that is generated as cheap as possible to cover the consistent demand that persists also at nights or at weekends; base load plants are characterized by high fixed costs and low variable costs.
Peakload = Electricity that is generated during high demand hours; plants are generally designed to be very flexible in their usage (i.e. they can be turned on / off quickly when needed); usually peak load plants are characterized by low fixed and high variable costs.

Source: Bundesnetzagentur, Analyst's research

Appendix 4: Market overview Germany

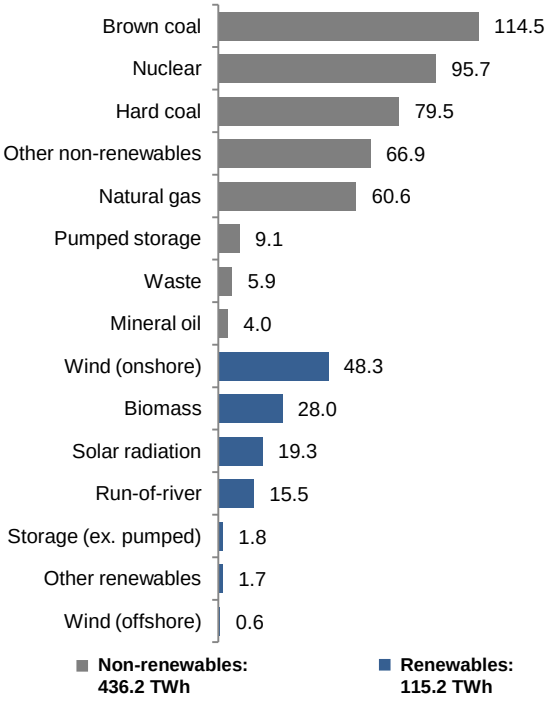
- There are four major players in the German power generation market: E.ON AG, RWE AG, Vattenfall AB and EnBW AG
- Electricity prices have been liberalized since 2007; when compared to neighbouring countries retail prices are quite high; the reason for that is that approx. 40% of prices are fees paid to reach certain environmental targets
- The government decided to phase out all nuclear capacity in the country by 2020
- While renewables contributed around 21% to the power generation in 2011 (higher than nuclear), the market is still dominated by coal generation (35%)
- An annual demand of approx. 550 TWh make Germany the largest energy market in Europe; industry accounts for about 40% of demand
- Climate targets include a 35% share in renewables generation and 18% of primary energy use by 2020; by 2050 80% of energy generation is planned to come from renewables
- The Energy Concept 2010 aims for a reduction in electricity consumption of 10% by 2020 and 25% by 2050
- The German economic growth is somehow constrained by recessions in European periphery states, but GDP expected to increase by approx. 2.9% p.a. by 2016 (Source: IMF)

Figure 69: Installed capacity Jul-12 (in GW)



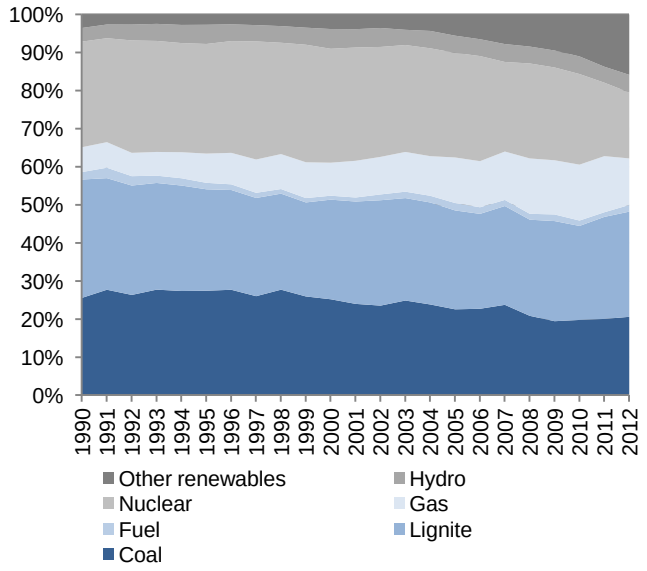
Source: Bundesnetzagentur (BNA)
Note: The BNA does not consider pumped storage as a renewable energy source

Figure 70: Electricity generation 2011A (in TWh)



Source: Bundesnetzagentur (BNA)

Figure 71: Evolution of gross electricity generation by source



Source: BMWi

Appendix 5: Valuation Benchmarking

Table 15: Benchmarking versus industry peers

Company	in EUR mn		EV / EBITDA		EV / EBIT		P / E		Div. Yield		ND / EBITDA
Name	Equity Value	Enterprise Value	2013E	2014E	2013E	2014E	2013E	2014E	2013E	2014E	2013E
Integrated Utilities											
Fortum OYJ	13,235	20,999	8.6x	8.7x	11.9x	12.4x	9.8x	11.7x	6.9%	6.9%	3.1x
Alpiq Holding AG	2,541	5,781	9.0x	10.1x	14.2x	16.5x	12.8x	14.3x	2.1%	1.7%	3.3x
Endesa SA	23,947	27,384	4.1x	4.1x	6.4x	6.5x	9.8x	9.4x	4.1%	4.4%	0.3x
Enel SpA	44,003	100,651	6.3x	6.3x	10.4x	10.5x	8.9x	8.7x	4.6%	5.1%	2.6x
Iberdrola SA	27,685	53,994	7.2x	7.0x	12.2x	11.7x	9.5x	10.3x	7.2%	4.1%	3.6x
Electricite de France SA	37,246	79,440	5.0x	4.7x	9.2x	8.5x	9.7x	9.1x	6.6%	7.1%	2.9x
EVN AG	2,038	3,895	8.3x	7.9x	17.9x	16.7x	15.0x	8.3x	4.5%	4.7%	4.0x
CEZ AS	11,393	18,344	5.7x	6.0x	8.6x	9.8x	6.6x	8.6x	7.9%	7.3%	1.9x
PGE SA	7,982	7,271	4.6x	4.7x	8.5x	8.7x	11.6x	12.3x	6.0%	4.8%	n.m.
E.ON SE	30,075	49,922	4.8x	4.7x	8.0x	7.9x	11.5x	9.7x	5.5%	5.7%	2.4x
RWE AG	21,065	35,735	4.0x	4.2x	6.1x	6.8x	11.5x	7.9x	7.5%	7.5%	1.6x
EDP - Energias de Portugal SA	12,235	30,636	8.4x	7.9x	14.2x	13.1x	9.5x	8.9x	7.6%	7.5%	4.9x
Average			6.3x	6.4x	10.6x	10.8x	10.5x	9.9x	5.9%	5.6%	2.8x
Median			6.0x	6.2x	9.8x	10.2x	9.8x	9.2x	6.3%	5.4%	2.9x
Verbund (whole group)			9.7x	11.3x	13.4x	17.0x	16.8x	13.2x	6.87%	2.98%	3.5x
Premium to average			53%	78%	26%	58%	60%	33%	17%	-47%	25%
Transmission Operators											
National Grid PLC	33,226	59,482	9.4x	9.0x	12.8x	12.4x	12.6x	13.9x	5.3%	8.7%	4.4x
Red Electrica Corp SA	5,573	11,286	8.4x	8.0x	12.2x	11.5x	11.1x	10.1x	6.0%	5.9%	3.7x
Terna Rete Elettrica Nazionale	6,865	13,334	9.2x	9.0x	13.2x	13.0x	13.9x	13.8x	5.8%	5.9%	4.6x
REN - Redes Energeticas Nacion	1,143	3,779	7.3x	7.2x	12.2x	11.9x	10.2x	8.9x	7.5%	7.7%	5.1x
Elia System Operator SA/NV	1,937	4,848	9.7x	10.2x	14.0x	13.9x	12.4x	13.0x	5.3%	5.4%	6.4x
Average			8.8x	8.7x	12.9x	12.5x	12.0x	11.9x	6.0%	6.7%	4.8x
Median			9.2x	9.0x	12.8x	12.4x	12.4x	13.0x	5.8%	5.9%	4.6x
APG		2,045	14.6x	13.3x	27.7x	24.9x	n.a.	n.a.	n.a.	n.a.	n.a.
Premium to average			66%	53%	115%	99%	-	-	-	-	-

Source: Bloomberg, Analyst's estimates

Appendix 6: WACC Computation

Table 16: Comparable companies and beta estimation

ELECTRICITY SEGMENT						
Company	**Beta (levered)**	**MCap** (EUR mn)	**BV Debt** (as proxy for MV)	**D/E Ratio**	**Local tax rate** *(Source: Deloitte)*	**Beta (unlevered)**
Fortum OYJ	0.91	12,899.1	7,814.0	60.6%	25.0%	0.62
Alpiq Holding AG	0.82	2,553.4	3,240.3	126.9%	24.5%	0.42
Iberdrola SA	1.07	26,349.6	26,308.6	99.8%	27.5%	0.62
EDF SA	1.05	32,392.1	42,194.0	130.3%	30.0%	0.55
Average	**0.96**	**18,548.6**	**16,751.2**	**104.4%**	**26.8%**	**0.55**
Median	**0.98**	**19,624.3**	**17,061.3**	**113.4%**	**26.3%**	**0.58**
GRID SEGMENT						
Company	**Beta (levered)**	**MCap** (EUR mn)	**BV Debt** (as proxy for MV)	**D/E Ratio**	**Local tax rate** *(Source: Deloitte)*	**Beta (unlevered)**
REN SA	0.22	1,188.1	2,635.8	221.8%	25.0%	0.08
Red Electrica SA	0.81	5,568.4	5,713.0	102.6%	27.5%	0.46
Terna SpA	0.37	2,260.4	1,287.2	56.9%	33.0%	0.27
National Grid PLC	0.23	33,754.0	25,686.0	76.1%	26.0%	0.14
Average	**0.41**	**10,692.7**	**8,830.5**	**114.4%**	**27.9%**	**0.24**
Median	**0.30**	**3,914.4**	**4,174.4**	**89.3%**	**26.8%**	**0.20**

Source: Bloomberg, Deloitte

Valuation methodology:

(1) Unlevered Beta:

$ß_U = \frac{ß_e}{1+\frac{D}{E}x\,(1-t)}$; with:

$ß_u$ = Unlevered Beta $ß_e$ = Beta of Equity E = Market Value of Equity
D = Market Value of Debt (in our case Book Value used as proxy) t = Corporate Income Tax Rate

Assumption: Beta of debt is equal to zero.

(2) Relevered Beta:

$ß_r = ß_u + (1-t)\,x\,\frac{D}{E}\,x\,ß_u$; with:

$ß_r$ = Relevered Beta D / E = Target D/E Ratio (other same as (1))

(3) Cost of Equity Capital Asset Pricing Model (CAPM):

$r_e = r_f + ß_{sector,relevered} x ß_{country}(r_m - r_f)$; with: r_e = Cost of Equity (other same as previously mentioned)

(4) Cost of Debt:

r_d = *[probability of default x recovery rate + probability of no default x (1 + yield)] -1*

(5) Weighted Average Cost of Capital (WACC):

$WACC = \frac{D}{V}(1-t)r_d + \frac{E}{V}r_e$; with: $V = D + E$ (other same as previously mentioned)

Financial Statements

BALANCE SHEET							
(in EUR mn if not stated differently)	**2011A**	**2012A**	**2013E**	**2014E**	**2015E**	**2016E**	**2017E**
Goodwill	606	606	606	606	606	606	606
Other intangibles	26	56	56	56	56	56	56
Total intangibles	632	662	662	662	662	662	662
Property, plant and equipment	6,579	7,386	9,168	9,423	9,678	9,933	10,189
Investments and other non-current assets	844	691	868	801	788	798	789
Interests accounted for using the equity method	2,115	909	926	944	962	980	999
Total other equity interests	130	135	135	135	135	135	135
Total non-current assets	**10,300**	**9,782**	**11,758**	**11,964**	**12,225**	**12,508**	**12,773**
Inventories	107	129	86	78	73	76	80
Trade receivables	279	296	233	215	206	213	222
Receivables from affiliated companies	146	83	79	87	96	98	88
Other receivables and current assets	693	644	660	692	699	688	671
Trade receivables and other current assets	1,118	1,023	972	994	1,001	999	982
Cash and equivalents	333	122	236	261	288	248	231
Total current assets	**1,558**	**1,274**	**1,294**	**1,333**	**1,362**	**1,323**	**1,293**
Non-current assets helf for sale	**1**	**1,332**	**-**	**-**	**-**	**-**	**-**
TOTAL ASSETS	**11,859**	**12,387**	**13,052**	**13,297**	**13,587**	**13,832**	**14,066**
Share capital	347	347	347	347	347	347	347
Capital reserves	954	954	954	954	954	954	954
Retained earnings / other equity	3,617	3,798	4,917	5,011	5,327	5,576	5,793
Shareholder's Equity	**4,315**	**4,458**	**5,577**	**5,672**	**5,988**	**6,237**	**6,454**
Non-Controlling Interest	604	641	641	641	641	641	641
Financial liabilities	3,909	3,935	3,573	3,701	3,610	3,479	3,393
Provisions	633	654	833	829	857	915	979
Deferred tax liabilities	243	201	193	196	200	207	199
Contributions to building costs	574	650	703	720	740	756	766
Other liabilities	537	607	419	490	486	486	486
Non-current liabilities	**5,897**	**6,046**	**5,720**	**5,935**	**5,893**	**5,842**	**5,823**
Financial liabilities	325	386	338	287	313	330	331
Provisions	226	285	261	266	262	260	267
Other liabilities	493	571	515	497	489	522	550
Current liabilities	**1,044**	**1,242**	**1,114**	**1,050**	**1,064**	**1,112**	**1,148**
TOTAL LIABILITIES AND EQUITY	**11,859**	**12,387**	**13,052**	**13,297**	**13,587**	**13,832**	**14,066**

INCOME STATEMENT							
(in EUR mn if not stated differently)	**2011A**	**2012A**	**2013E**	**2014E**	**2015E**	**2016E**	**2017E**
Electricity	2,679	2,774	2,439	2,182	2,052	2,153	2,267
Gid	262	344	300	303	305	307	309
Other	87	57	78	82	83	77	78
Revenues	**3,028**	**3,174**	**2,818**	**2,567**	**2,441**	**2,537**	**2,654**
% growth	*(8%)*	*5%*	*(11%)*	*(9%)*	*(5%)*	*4%*	*5%*
EBITDA	**1,069**	**1,236**	**1,061**	**907**	**816**	**910**	**975**
% growth	*1%*	*16%*	*(14%)*	*(15%)*	*(10%)*	*12%*	*7%*
Depreciation & Amortization	(39)	(336)	(294)	(305)	(316)	(326)	(336)
EBIT	**1,030**	**900**	**767**	**602**	**500**	**584**	**639**
% growth	*24%*	*(13%)*	*(15%)*	*(21%)*	*(17%)*	*17%*	*9%*
Total interest income / expense	(186)	(146)	(153)	(136)	(138)	(136)	(131)
Result from participating interests	(175)	(74)	1,332	17	47	41	35
Other financial result	(23)	(20)	19	24	15	18	20
EBT	**645**	**660**	**1,965**	**508**	**424**	**508**	**564**
% growth	*2%*	*2%*	*198%*	*(74%)*	*(16%)*	*20%*	*11%*
Taxes on income	(180)	(161)	(491)	(127)	(106)	(127)	(141)
Net income	**466**	**499**	**1,474**	**381**	**318**	**381**	**423**
% growth	*(4%)*	*7%*	*196%*	*(74%)*	*(16%)*	*20%*	*11%*
Attributable to minorities	110	110	30	80	67	80	89
Attributable to Verbund shareholders	**356**	**389**	**1,444**	**301**	**251**	**301**	**334**
Dividends	(191)	(191)	(208)	(347)	(150)	(126)	(150)
Div. Paid to NCI	(61)	(68)	(63)	(104)	(45)	(38)	(45)
EPS	**1.02**	**1.12**	**4.16**	**0.87**	**0.72**	**0.87**	**0.96**
DPS - Ordianry	0.55	0.60	0.60	0.43	0.36	0.43	0.48
DPS - Special	-	-	0.40	-	-	-	-
DPS - Total	**0.55**	**0.60**	**1.00**	**0.43**	**0.36**	**0.43**	**0.48**
Weighted average number of shares outstanding	347	347	347	347	347	347	347

CASH FLOW STATEMENT							
(in EUR mn if not stated differently)	**2011A**	**2012A**	**2013E**	**2014E**	**2015E**	**2016E**	**2017E**
Operating Gross Cash Flow							
EBITDA	**1,069**	**1,236**	**1,061**	**907**	**816**	**910**	**975**
less: Depreciation & Amortization	(39)	(336)	(294)	(305)	(316)	(326)	(336)
EBIT	**1,030**	**900**	**767**	**602**	**500**	**584**	**639**
less: Adj. Tax	(257)	(225)	(192)	(151)	(125)	(146)	(160)
plus: Tax adjustment	(18.5)	3.6	-	-	-	-	-
NOPLAT	**754**	**679**	**575**	**452**	**375**	**438**	**479**
plus: Depreciation & Amortization	39	336	294	305	316	326	336
Operating Gross Cash Flow	**793**	**1,015**	**869**	**756**	**691**	**764**	**815**
Capital Expenditures	(668)	(1,171)	(744)	(560)	(571)	(581)	(591)
less: Change in NWC	130	362	(76)	(57)	(37)	72	59
plus: Change in other operating liabilities	137	145	(135)	88	17	16	10
Operational Investing Cash Flow	**(401)**	**(664)**	**(955)**	**(529)**	**(591)**	**(494)**	**(522)**
Financial income	(162)	(56)	1,385	75	97	93	90
less: Tax	40	14	(346)	(19)	(24)	(23)	(22)
After-tax financial income	(121)	(42)	1,039	56	73	70	67
Change in Equity Interests	156	1,202	(17)	(18)	(18)	(18)	(19)
Total Investments	**34**	**1,160**	**1,022**	**38**	**55**	**52**	**49**
Change in other non-current assets	(105)	153	(177)	67	13	(10)	9
Change in other non-current Liabilities	28	38	147	4	29	62	64
Non-Operational Cash Flow	**(77)**	**191**	**(31)**	**71**	**41**	**52**	**73**
Change in assets held for sale	**(1)**	**(1,331)**	**-**	**-**	**-**	**-**	**-**
FREE CASH FLOW TO THE FIRM	**348**	**371**	**905**	**337**	**196**	**374**	**414**
Cash Flow from Financing							
Change in non-current financial liabilities	(358)	26	(362)	128	(91)	(131)	(86)
Change in current financial liabilities	96	61	(47)	(52)	26	17	1
Interest paid	(223)	(183)	(187)	(169)	(173)	(170)	(165)
Interest tax shield	56	44	47	42	43	42	41
Dividends paid	(252)	(259)	(271)	(452)	(196)	(163)	(196)
Changes in Equity	333	(59)	(84)	165	194	31	(10)
CASH FLOW FROM FINANCING	**(348)**	**(371)**	**(905)**	**(337)**	**(196)**	**(374)**	**(414)**
	(0)	0	(0)	0	(0)	(0)	0

Disclosures and Disclaimer

Research Recommendations

Buy	Expected total return (including dividends) of more than 15% over a 12-month period.
Hold	Expected total return (including dividends) between 0% and 15% over a 12-month period.
Sell	Expected negative total return (including dividends) over a 12-month period.

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