UBS

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European Utilities

Expect a smart grid boom: c15% sector EPS uplift

Equities

Europe including UK

Utilities

Alberto Gandolfi
Analyst
alberto.gandolfi@ubs.com
+44-20-7568 3975

Patrick Hummel, CFA
Analyst
patrick.hummel@ubs.com
+41-44-239 79 23

Stephen Hunt
Analyst
stephen-s.hunt@ubs.com
+44-20-7567 0716

Hugo Liebaert
Associate Analyst
hugo.liebaert@ubs.com
+44-20-7568 8895

Why smart grids: renewables integration, energy efficiency, cost effectiveness

Smart grids are the combination of 'smart' hardware components (meters, cabins, substations, transformers, sensors, wifi) and software which overlay the conventional grid. We believe SG serve five purposes: (1) better integration of renewables and thus better grid stability, (2) boost energy efficiency, (3) implement demand response and peak shaving, (4) reduce the cost to serve customers, (5) less backup-capacity needs.

Benefits about 2x the Costs: the economics support a Smart Grids boom

Our cost/benefit analysis shows annualized costs of c€25bn (opex & annualized capex). This compares with benefits of c€50bn pa, via (1) lower consumption and peak shaving, (2) reduction in losses/thefts, (3) lower opex and maint-capex, (4) lower backup needs and avoided replacement of thermal capacity, (7) lower CO2 emissions.

Capex pool €290bn: c15% EPS uplift for €-integrated; Enel the main beneficiary

We estimate that developing power distribution smart grids could cost c€500-1300/customer, depending on the type/amount of technology deployed. Thus, the capex pool could be c€290bn, on a mid-range basis. Assuming 7% ROA (and full-cost-savings pass-through), we estimate c15% average LT EPS uplift (vs 2014) for €-integrated utilities. Enel – which enjoys the largest distribution business in EU – would be the main winner, with c25% LT EPS uplift. On timing, our conversations with companies and industry experts suggest a steep capex pick-up as of 2016-17.

The sector investment thesis is attractive, but we see limited valuation upside

Following the recent re-rating, only a few names offer upside to fair value. Yet, sector multiples could continue to be supported by three factors (1) sector earnings should bottom in 2014 and grow an estimated 4-5% pa thereafter, (2) BYs are well below mid-cycle and utilities are increasingly regulated (c70% of EPS by 2016), (3) dividends are increasingly relevant and the sector offers a sustainable c5% DY. We retain a preference for quality, especially if characterized by restructuring or good dividends: Enel, EDP, SEV, REE, SSE.

Figure 1: EPS upside from deploying smart grids :c15% on avg, c25% for Enel

	Customers (m)	Capex (€ bn)	EBITDA uplift (€ bn)	Net income uplift (€ bn)	% of 2014 EPS
Enel	47.5	37.8	4.5	0.7	24%
Iberdrola	14.1	12.1	1.5	0.3	12%
GAS	3.8	3.3	0.4	0.1	5%
EDP	6.7	5.8	0.7	0.1	15%
EON	14.3	12.3	1.5	0.3	16%
RWE	10.0	8.6	1.0	0.2	12%
EDF	35.0	30.0	3.6	0.6	15%
Total					14%

Source: UBSe

Contents

Alberto Gandolfi
Analyst
alberto.gandolfi@ubs.com
+44-20-7568 3975

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Analyst
patrick.hummel@ubs.com
+41-44-239 79 23

Stephen Hunt
Analyst
stephen-s.hunt@ubs.com
+44-20-7567 0716

Hugo Liebaert
Associate Analyst
hugo.liebaert@ubs.com
+44-20-7568 8895

Why read this report

We believe smart grids will be a key LT growth driver for integrated utilities, especially for those with a large exposure to European power distribution. We estimate the smart grid capex pool for power distribution at c€290bn, or almost 2/3 of the Pan European sector market cap. This could drive c15% average EPS uplift for €-integrated utilities over the longer run (10-20y). The main beneficiary would be Enel, as we estimate c25% EPS uplift, over the longer run.

Smart grids capex pool €290bn: c15% LT EPS uplift (c25% for Enel)

Why haven't smart grids happened yet?

So far, there hasn't been a major pick up in these investments. This was mostly due to the fact that, at the height of the crisis, smart grids were perhaps perceived as 'nice to have' and governments preferred to delay additional investments. From here though, momentum is likely to improve, as suggested by several papers published by the EU during 2013 and given the ongoing commitment to build renewables. Although it is hard to precisely assess the timing, our conversations with companies and industry experts pinpoint 2016-17 as the likely inflection years for SG capex.

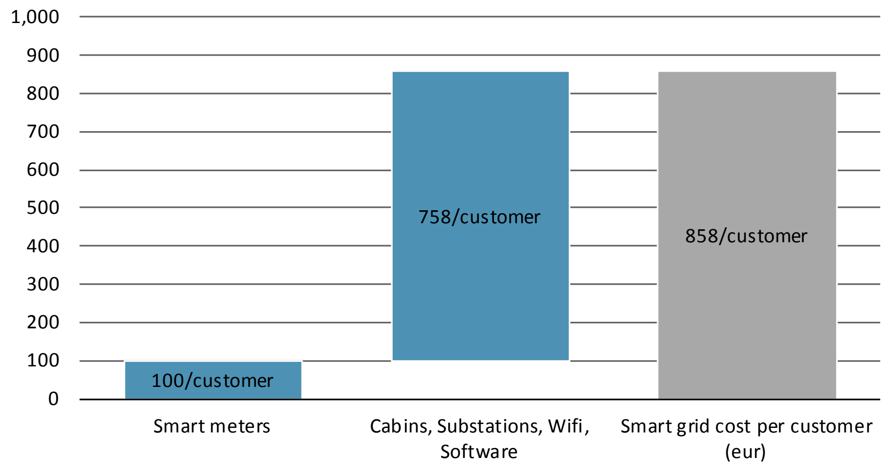
Limited focus on SG during the crisis, but capex inflection point in 2016-17

SG a €290bn capex opportunity, and UBS cost analysis

We estimate that developing power distribution smart grids could cost c€850 per customer. Of this, just over 10% relates to installing smart meters. The rest will be destined to upgrade cabins, substations, transformers, install sensors, deploy broadband connections across the grid and have software programs capable of managing and processing all the new data observed.

Capex €500-1300/customer

Figure 2: Smart grids – we estimate investments of c€850 per customer (€)



Source: UBSe

In Europe there are some 336 million households. On our analysis, smart grids could cost from €500/customer up to €1300/customer, depending on the equipment utilized and on 'how intelligent' the network is going to be. At the lower end, the 'bear minimum' investments relate to the installation of a smart meter, plus the upgrade in cabins/substations and new software. If we included sensors throughout the grid, displays that allow consumers to monitor consumption, and energy boxes which automatically manage the utilization of electrical appliances, then the estimate would surge to the upper end.

Applying the mid-range capex estimate of €858/customer, we calculate total investment needs of c€290bn. These could take place over the coming 10-20y and could imply annual investments of €14bn, and additional opex of c€9bn pa.

Figure 3: Smart Grids – cost analysis implies €13-35bn pa (€m)

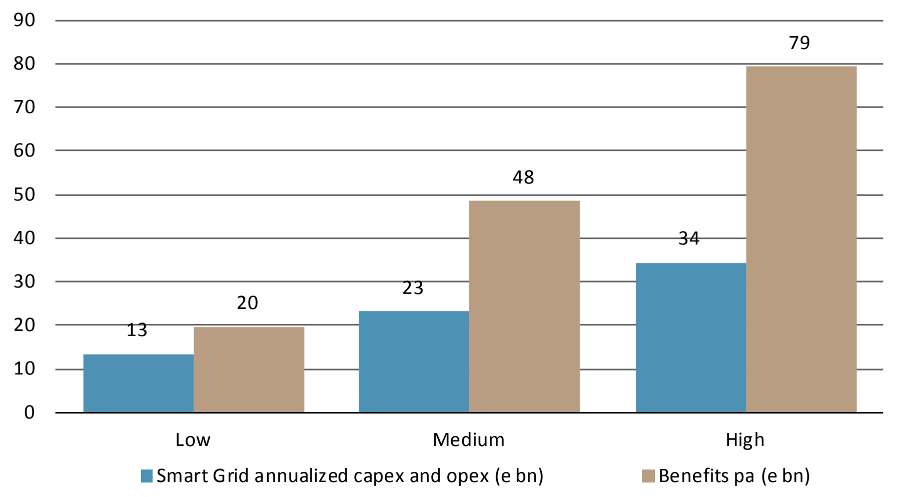
	Low	Medium	High
Distribution costs per customer (euros)	500	858	1280
Households (m)	336	336	336
Tot capex (eur bn)	168	288	430
Capex pa over 20y (eur bn)	8	14	22
Smart grids opex at 3% (eur bn)	5	9	13
Annualized costs (eur bn)	13	23	35

Source: UBSe

Smart grids benefit analysis: 2x larger than the costs

When estimating the benefits from smart grids, we identify eight main factors, which could allow for c€50bn annual savings for the power system, or twice the annualized costs of SG, as the following Figure 4 shows. We should stress that these are 'external' benefits, ie to the system (consumers, society) as opposed to benefits for Utilities. As already explained, we only assume Utilities will earn a 7% ROA and will pass through all their savings. Clearly, governments/regulators could ultimately decide to remunerate utilities differently. For instance, instead of a return on investments, Utilities could be allowed to retain all the savings achieved.

Figure 4: Smart Grids benefits are about 2x the costs (€bn, annualized)



Source: UBSe; Note (analysis on a nominal basis)

(1) **Losses & Thefts.** We estimate losses and thefts to amount to 2-7% across Europe. Smart meters and Smart grids more in general would help identify right away thefts, and would lower network losses. We assume savings ranging from 1pp to 3pp.

(2) **Lower consumption (energy efficiency).** Most industry-expert reports and case studies in the US seem to indicate power demand savings of 2-4%. If we also add demand response measures – which SG would allow to implement more effectively – then we could see power demand savings of up to 8%.

(3) **Peak shaving**. Helping consumers understand the pricing difference between peak and base hours could lower peak consumption. Considering that peak wholesale power prices are c€10/MWh higher than baseload, and assuming peak shaving of 10-50%, savings could be sizeable.

(4) **Lower backup needs**. Better network stability, better flow management and lower consumption would also imply less backup-capacity needs. This would allow capacity closures, which would in turn lead to opex savings, or would allow to lower power generation subsidies (capacity payments).

(5) **Avoided replacement of power plants**. As for the previous point, the need for replacements would also fall substantially (22-88GW).

(6) **Lower CO2 emissions**. Lower power consumption would imply lower production from thermal plants and thus lower carbon emissions.

(7) **Lower opex on legacy grid.** Automatized grids, the presence of sensors/wifi, and the larger use of tablets/smart applications would allow utilities to reduce their workforce and save of general & administrative expenses.

(8) **Lower maintenance capex on legacy grid.** The availability of millions of real-time data and the availability of new technologies (tablets for workers for instance) would allow targeted pre-emptive interventions on the grid and an immediate identification of faults (sometimes right before they actually happen), which should allow for savings in maintenance capex.

Figure 5: Smart grids detailed benefit analysis (€bn pa)

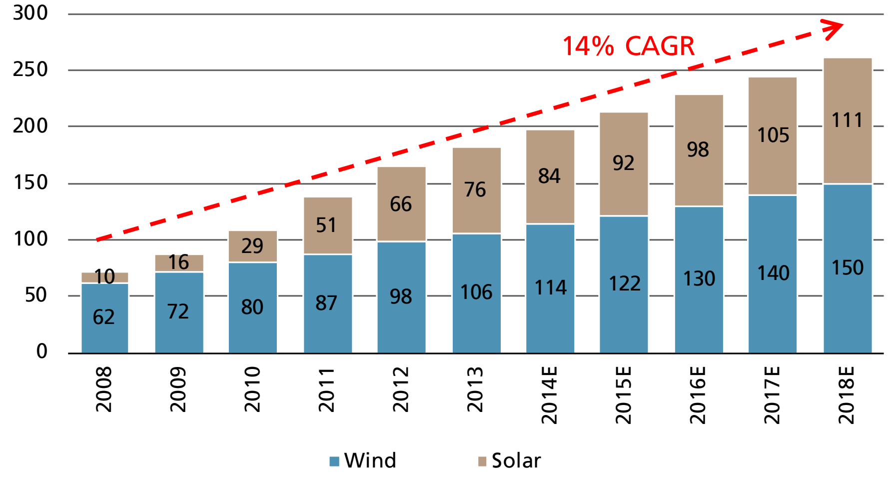
	Low	Medium	High
Losses & Thefts (1%-2%-3% reduction)	5	10	15
Lower consumption (2%-5%-8% reduction)	10	25	41
Peak shaving (10%-25%-50% drop in peak consumption)	1	3	5
Lower backup needs (22GW-55GW-88GW closures)	0	1	2
Avoided replacement power plants cost (GWs from previous point)	0	1	2
Savings from lower CO2 emissions (32mt-81mt-129mt)	0	1	3
Lower opex (5%-15%-25% drop in cost to serve)	2	5	8
Lower capex (5%-15%-25% drop in maint capex)	1	2	3
Total Benefits pa (eur bn)	20	48	79

Source: UBSe

Why smart grids: renewables, energy efficiency, savings

- **Better integration of renewables and thus better network stability.** The steep increase in intermittent output (Figure 6) has made the management of the grid more and more difficult. The quick inversion in flows – think of solar PV production during a sunny summer day, which suddenly becomes cloudy – and the need to maintain constant frequency throughout the grid makes necessary the introduction of new devices that grant better stability and better management of flows.

Figure 6: Wind and solar capacity additions over 2008-18E in Europe (GW)



Source: UBSe

- **Boost energy efficiency**. The EU has a 20% energy efficiency target by 2020 (20% energy consumption reduction vs business as usual). The application of smart grids is proven to lower consumption, as seen in several pilot tests in the US. This would allow achieve these targets more easily.

- **Implement demand response and peak shaving**. The implementation of demand response and the reduction of consumption during peak hours (made possible thanks to smart grids) could be better alternative to a wide introduction of capacity payments. The combination of lower demand and less demand at peak would imply the possibility to close more plants, and would reduce the needs for asset replacement.

- **Reduce the cost to serve customers.** As shown earlier, the deployment of smart grids would lead to a meaningful reduction in operating costs and maintenance capex on the existing grid.

What is a smart grid – meters, cabins, wifi and software

The strong increase in intermittent generation sources and the rising penetration of distributed energy (e.g., solar PV) have highlighted the need to upgrade the role of power networks, particularly in medium and low voltage (distribution).

Key issues to address include actively managing distributed energy, improving the network stability and implementing demand response/energy efficiency programmes. The required upgrade would turn power grids from 'passive' into 'active', and the process would give birth to what is commonly known as 'smart grids'. A smart grid is the combination of hardware components (smart meters, new cabins/substations, new sensors, broadband connection devices) and software upgrades which allow managing the rising data-flow. A smart grid is obtained by overlaying these items on the existing conventional network. Key elements of smart grids are:

- **Smart meters** to allow for real-time reading in the usage of power from consumers. In the future, this element will be key to implement demand response/energy efficiency measures.
- **Equipment installed in houses.** These include displays that show real time electricity costs and increase customer awareness. It could also include energy boxes which manage domestic appliances and optimize consumption profiles.
- **Upgraded primary and secondary cabins/substations** to help maintain network parameters (voltage, frequency) within acceptable ranges throughout the grid, regardless of the volumes produced from renewables.
- **Sensors**, to be deployed throughout the grid and to gather real-time information.
- **Wi-Fi connections** to allow real-time data gathering from the grid and from final consumers.
- **New software** to manage the grid to aggregate and interpret the data acquired, and to provide real time information to consumers, to modulate consumption accordingly.
- **Additional items,** could include equipment to prepare houses for the integration of electric vehicles, which we decided to ignore in this analysis, as we don't see their widespread viability within a reasonable timeframe.

Meaningful EPS upside risk for integrated utilities

15% EPS uplift (vs 2014)

Even though the mid-range investment needs in SG of c€290bn could take place over 10-20 years, the earnings upside potential would be sizeable. More importantly, it would open up a growth avenue for a sector that, until not long ago, was perceived as entirely ex-growth. We estimate a potential LT EPS upside risk of c15%. Enel would be the main beneficiary.

Identify the winners: most integrated names but Enel above all

Enel c40% EBITDA from distribution

To identify the main winners, we firstly have to understand which Utilities have a meaningful exposure to power distribution. For €-integrated utilities, the exposure to this activity is c25%, measured on an EBITDA basis. Enel is well above average, as these activities account for c40% of group EBITDA.

Figure 7: EBITDA from power distribution (2014 €m)

	EU distribution 2014 EBITDA	*% of group*	EBITDA (2014)
Enel	5,838	*38%*	15,481
Iberdrola	2,112	*32%*	6,660
GAS	589	*12%*	4,969
EDP	709	*21%*	3,451
EON	2,300	*25%*	9,315
RWE	2,287	*29%*	7,862
EDF	3,793	*22%*	17,313
Total	17,628	*25%*	65,051

Source: UBSe

15% LT EPS uplift (c30% for Enel)

To assess the earnings upside, we assumed (i) capex at €858/customer (more on this later in the report), (ii) 7% return on investments, (iii) useful life for these projects of 20 years, (iv) cost of debt at 4%. On this basis, we estimate an average 15% EPS accretion for €-integrated utilities. Enel – which, as already said, enjoys the largest power distribution business in Europe – would be the main beneficiary (c30% EPS accretion potential).

Figure 8: EPS upside from deploying smart grids :c15% on avg, c25% for Enel

	Customers (m)	Capex (€ bn)	EBITDA uplift (€ bn)	Net income uplift (€ bn)	% of 2014 EPS
Enel	47.5	37.8	4.5	0.7	24%
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EDP	6.7	5.8	0.7	0.1	15%
EON	14.3	12.3	1.5	0.3	16%
RWE	10.0	8.6	1.0	0.2	12%
EDF	35.0	30.0	3.6	0.6	15%
Total					14%

Source: UBSe

We should point out that our analysis is based on a regulated return on investments, without accounting for the effectiveness of the investment itself. Clearly, there may be efficiency criteria that could increase/lower these returns accordingly.

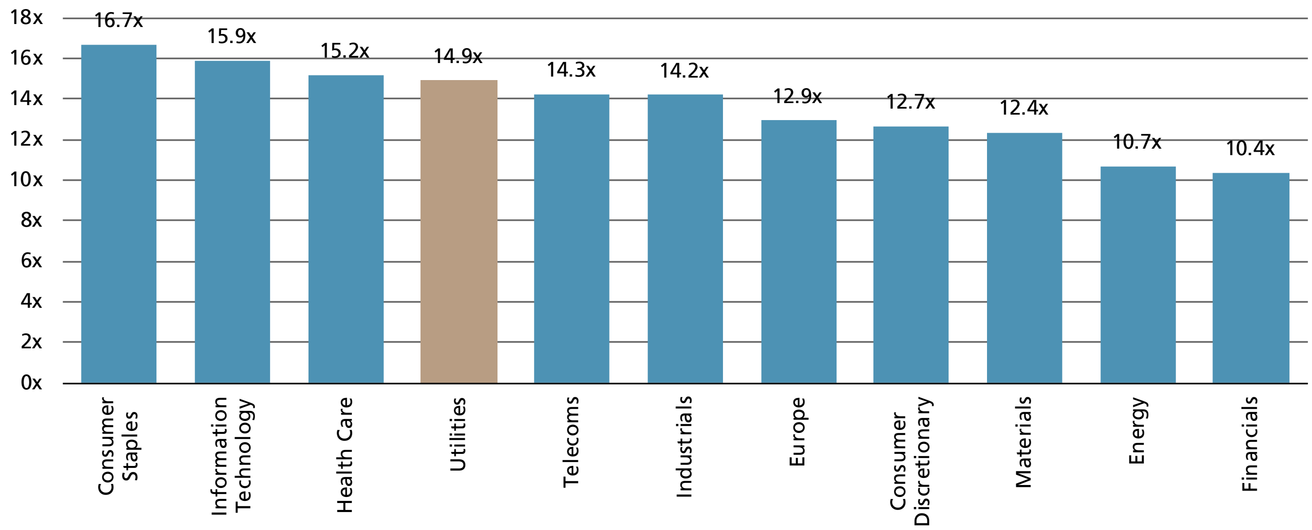
Also, it appears clear that smart grids would lead to sizeable savings, as already detailed. To avoid the creation of excess profits, we assume that Utilities would have to pass through to final customers all the costs saved thanks to SG. However, governments/regulators could decide not to remunerate these investments. Instead, utilities could be allowed to retain all their savings.

Sector valuation full: only BYs can drive it higher from here

Sector PE already above mid-cycle

Following the c70% re-rating in €-integrated names, the sector now trades on 15x PE, on a 2014 basis. This is in line with the overall European equity market. Although 2014 is a trough year for the sector and even if we see c4-5% annual EPS growth post 2014, the near-term valuation seems to suggest limited upside to fair value for the sector as a whole, especially if we think that the LT mid-cycle PE has been 13.5x. In our view, multiples could continue to expand, but this would have to be function of sustainably low bond yields.

Figure 9: Utilities PE vs the rest of the market (2014)



Source: UBSe

The Utilities "story" remains attractive

Sector inv-thesis is attractive though

If we simply reflect on the sector investment thesis and think of valuation separately, we would say that Utilities look attractive, on three reasons.

- **Sector earnings should bottom in 2014**, five years after the overall market, and show c4-5% annual growth thereafter, until 2018E.
- **Utilities are increasingly regulated**, as c70% of EPS will come from networks, renewables and contracted generation by 2016.
- **Dividends at c5%,** and sustainable thanks to improving free cash flows. As the markets become more expensive and sovereign yields remain so low, we believe the hunt for yield will help utilities' performance.

All in all, we retain our Neutral sector stance, with a clear preference for quality integrated names, which offer a restructuring angle: Enel, EDP, SEV, REE and SSE remain our top picks.

Our two top picks: Enel and EDP

Enel (Buy, PT €4.25) – Despite the risks highlighted in this report, we remain buyers on (1) fastest growing EPS amongst peer group: c8% EPS CAGR in 2014-18E, (2) dividends to double during the plan: 2018E DY c6.5%, and (3) valuation at unjustified discount to peers: c11x PE in 2016E. Our PT reflects the average of target DY, target PE, and target EV/EBITDA valuations.

EDP (Buy, PT €3.40) - We favour EDP as one of our top picks, on: (1) strengthening balance sheet, once adjusted from regulatory receivables and work-in-progress (ND/EBITDA drops from c5.0x to c3.5x, and falling); (2) organic growth thanks to new investments coming on stream in attractive areas such as Brazil, and renewables; and (3) rising FCF yield, which should support deleveraging, growth and a cash DY at c5.5%.

Figure 10: Sector multiples

	Price (LC)	M. Cap €m	PT (LC)	Rating	P/E 2014E	P/E 2015E	P/E 2016E	P/E 2017E	EV/EBITDA 2014E	EV/EBITDA 2015E	EV/EBITDA 2016E	EV/EBITDA 2017E	Dividend Yield 2014E	Dividend Yield 2015E	Dividend Yield 2016E	Dividend Yield 2017E	EPS 2014E-16E CAGR	EBITDA 2014E-16E CAGR
Integrated																		
RWE	27.2	16,693	20.7	S	12.4x	13.8x	17.4x	15.5x	6.8x	6.9x	7.2x	7.0x	3.7%	2.9%	2.9%	2.9%	-14%	-4%
EON	13.7	26,197	12.0	S	15.9x	15.6x	15.2x	12.9x	7.1x	6.9x	6.9x	6.4x	3.6%	3.6%	3.6%	3.6%	2%	1%
EDF	29.0	53,617	26.0	N	13.7x	13.6x	13.1x	12.8x	7.2x	7.2x	6.9x	6.9x	4.5%	4.5%	4.5%	4.5%	2%	4%
GSZ	19.9	48,112	19.0	N	14.6x	14.4x	13.8x	13.1x	7.9x	7.7x	7.5x	7.2x	5.0%	5.3%	5.2%	5.4%	3%	3%
Enel	4.08	38,401	4.25	B	12.5x	12.2x	11.4x	10.1x	6.3x	6.3x	6.4x	6.2x	3.2%	4.1%	4.8%	5.9%	5%	1%
EDP	3.36	12,301	3.40	B	14.9x	12.9x	10.6x	9.4x	9.1x	8.5x	7.9x	7.4x	5.5%	5.5%	5.5%	5.6%	19%	7%
PGE	20.18	9,024	15.50	N	16.1x	14.6x	14.9x	12.3x	6.9x	6.5x	6.5x	5.8x	4.3%	4.8%	4.7%	5.7%	4%	4%
TAU	5.07	2,125	4.60	N	7.5x	6.8x	6.0x	4.1x	5.5x	6.3x	6.3x	5.1x	8.9%	3.7%	4.1%	6.1%	-5%	7%
Energa	18.06	1,789	17.50	B	9.7x	12.5x	11.2x	9.7x	5.4x	6.2x	6.1x	5.8x	6.7%	7.0%	7.4%	7.6%	-7%	9%
CEZ	585.00	11,459	450.00	S	11.3x	13.9x	15.6x	15.8x	7.5x	8.1x	8.4x	8.5x	5.1%	4.3%	4.3%	4.3%	-15%	-6%
GAS	20.32	20,146	16.00	S	14.7x	15.9x	15.9x	12.9x	7.5x	7.6x	7.4x	6.6x	4.4%	4.5%	4.7%	5.1%	-4%	-2%
IBE	4.85	29,755	4.80	N	13.9x	13.4x	11.9x	11.3x	7.6x	7.4x	6.9x	6.7x	5.6%	5.6%	5.7%	5.9%	8%	5%
SSE	1,502.00	17,413	1,475.00	B	12.0x	11.2x	10.8x	10.2x	7.6x	7.2x	7.0x	6.6x	6.0%	6.2%	6.5%	6.7%	5%	6%
CNA	345.00	21,621	280.00	S	13.8x	14.4x	13.0x	12.2x	6.0x	6.1x	6.0x	5.8x	5.2%	5.4%	5.6%	5.8%	3%	1%
BKW	30.75	1,192	32.00	N	10.0x	9.1x	9.0x	8.7x	5.9x	5.5x	5.2x	4.9x	3.9%	3.9%	3.9%	3.9%	5%	4%
Mean					12.9x	13.0x	12.7x	11.4x	7.0x	7.0x	6.9x	6.5x	5.0%	4.7%	4.9%	5.3%	1%	3%
Weighted Avg					13.8x	13.7x	13.3x	12.2x	7.2x	7.2x	7.0x	6.7x	4.6%	4.7%	4.9%	5.1%	2%	2%
Generators																		
FUM	15.7	13,947	12.7	S	17.5x	16.4x	17.1x	18.1x	10.0x	9.9x	10.6x	11.1x	7.0%	4.8%	4.8%	4.8%	1%	-3%
DRX	753.0	3,683	920.0	B	19.6x	15.0x	13.3x	9.5x	10.9x	8.5x	7.5x	5.4x	2.5%	3.3%	3.8%	35.0%	22%	18%
VER	14.2	4,937	14.7	N	30.1x	22.7x	20.2x	19.4x	10.8x	9.7x	9.3x	9.1x	1.8%	2.6%	3.0%	3.1%	22%	5%
Alpiq	113.4	2,526	122.0	N	16.9x	19.3x	17.6x	16.8x	8.6x	9.3x	8.8x	8.3x	1.8%	1.8%	2.6%	2.6%	-2%	-5%
Mean					21.0x	18.4x	17.1x	15.9x	10.0x	9.3x	9.1x	8.5x	3.3%	3.1%	3.5%	11.4%	11%	4%
Weighted Avg					20.2x	17.7x	17.2x	16.9x	10.1x	9.6x	9.7x	9.6x	4.8%	3.8%	4.1%	8.7%	8%	1%
Regulated																		
REE	58.8	7,947	65.0	B	14.2x	13.5x	13.0x	12.7x	9.4x	9.7x	9.5x	9.3x	4.6%	5.2%	5.4%	5.9%	4%	3%
ENG	22.3	5,318	21.0	N	12.9x	15.5x	15.7x	16.0x	9.8x	10.6x	10.7x	10.7x	5.8%	4.8%	5.1%	5.2%	-9%	-5%
SRG	4.25	14,346	4.10	N	14.5x	14.4x	14.3x	13.9x	10.4x	10.2x	10.2x	10.1x	5.9%	5.9%	5.9%	5.9%	1%	3%
TRN	3.88	7,765	3.80	N	15.6x	14.8x	15.1x	14.6x	10.2x	9.8x	9.8x	9.5x	5.4%	5.5%	5.6%	5.8%	2%	3%
NG	824.0	36,767	780.0	N	15.6x	15.4x	14.9x	14.4x	10.2x	10.2x	10.0x	9.8x	5.3%	5.4%	5.6%	5.7%	3%	4%
SVT	1,782.0	5,143	1,885.0	N	20.6x	23.1x	21.8x	21.8x	10.9x	11.3x	11.1x	11.0x	4.8%	4.5%	4.8%	5.1%	-4%	0%
UU	769.5	6,390	775.0	N	17.6x	19.6x	18.8x	18.7x	11.7x	12.2x	12.1x	12.3x	4.9%	4.7%	4.9%	5.1%	-5%	0%
PNN	744.0	3,294	795.0	B	20.1x	16.4x	12.1x	11.6x	13.4x	12.1x	10.3x	10.3x	4.4%	4.6%	4.9%	5.2%	7%	7%
Mean					16.4x	16.6x	15.7x	15.5x	10.8x	10.8x	10.5x	10.4x	5.1%	5.1%	5.3%	5.5%	0%	2%
Weighted Avg					15.8x	15.8x	15.3x	14.9x	10.5x	10.5x	10.3x	10.2x	5.3%	5.3%	5.5%	5.6%	1%	3%
Renewables																		
EDPR	4.75	4,141	4.20	N	49.9x	26.1x	20.5x	16.8x	7.8x	6.4x	5.3x	4.8x	0.7%	1.3%	1.7%	2.1%	56%	11%
Mean					49.9x	26.1x	20.5x	16.8x	7.8x	6.4x	5.3x	4.8x	0.7%	1.3%	1.7%	2.1%	56%	11%
Weighted Avg					49.9x	26.1x	20.5x	16.8x	7.8x	6.4x	5.3x	4.8x	0.7%	1.3%	1.7%	2.1%	56%	11%
French Waters																		
VIE	14.35	7,269	13.00	N	31.8x	18.4x	15.2x	14.5x	8.4x	7.3x	7.0x	6.9x	4.9%	4.9%	4.9%	4.9%	45%	12%
Suez	14.62	7,440	16.30	B	18.3x	14.3x	12.5x	11.2x	8.2x	7.6x	7.2x	6.9x	4.4%	4.8%	5.5%	6.2%	21%	6%
Mean					25.1x	16.4x	13.8x	12.8x	8.3x	7.5x	7.1x	6.9x	4.7%	4.8%	5.2%	5.5%	33%	9%
Weighted Avg					25.0x	16.3x	13.8x	12.8x	8.3x	7.5x	7.1x	6.9x	4.7%	4.8%	5.2%	5.5%	33%	9%
Sector				Mean	16.9x	15.3x	14.4x	13.4x	8.5x	8.3x	8.1x	7.8x	4.7%	4.5%	4.7%	6.1%	6%	3%
				Weighted Avg	15.2x	14.6x	14.0x	13.1x	8.0x	7.9x	7.8x	7.5x	4.7%	4.8%	4.9%	5.4%	3.8%	3%
Utils ex Renwbls				Mean	15.8x	14.9x	14.2x	13.2x	8.5x	8.4x	8.2x	7.9x	4.8%	4.6%	4.8%	6.2%	4%	3%
				Weighted Avg	14.9x	14.4x	13.9x	13.0x	8.0x	7.9x	7.7x	7.5x	4.8%	4.8%	4.9%	5.5%	3.3%	2%

Source: UBSe

Statement of Risk

Utilities are driven by commodities, power prices, M&A, regulatory intervention and interest rates.

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Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 March 2014.
1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
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UBS Limited: Alberto Gandolfi; Stephen Hunt; Hugo Liebaert. **UBS AG:** Patrick Hummel, CFA.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Centrica[4, 14]	CNA.L	Sell	N/A	345p	17 Apr 2014
CEZ Group	CEZP.PR	Sell	N/A	Kc585.00	17 Apr 2014
Drax Group	DRX.L	Buy	N/A	753p	17 Apr 2014
E.ON[5, 16]	EONGn.DE	Sell	N/A	€13.73	17 Apr 2014
EDF[2, 4, 6]	EDF.PA	Neutral	N/A	€29.00	17 Apr 2014
EDP Renovaveis	EDPR.LS	Neutral	N/A	€4.75	17 Apr 2014
Enagas[5]	ENAG.MC	Neutral	N/A	€22.28	17 Apr 2014
Endesa	ELE.MC	Suspended	N/A	€26.34	17 Apr 2014
Enel[2, 4, 6, 16]	ENEI.MI	Buy	N/A	€4.08	17 Apr 2014
Energias de Portugal[2, 4, 6, 16]	EDP.LS	Buy	N/A	€3.36	17 Apr 2014
Fortum[5]	FUM1V.HE	Sell	N/A	€15.70	17 Apr 2014
Gas Natural Fenosa	GAS.MC	Sell	N/A	€20.32	17 Apr 2014
GDF Suez[5, 16]	GSZ.PA	Neutral	N/A	€19.94	17 Apr 2014
Iberdrola[2, 4, 5]	IBE.MC	Neutral	N/A	€4.85	17 Apr 2014
National Grid[4, 5, 16]	NG.L	Neutral	N/A	824p	17 Apr 2014
PGE	PGE.WA	Neutral	N/A	PLN20.18	17 Apr 2014
Red Electrica de España[13]	REE.MC	Buy	N/A	€58.75	17 Apr 2014
RWE[4, 5, 6, 24]	RWEG.DE	Sell	N/A	€27.16	17 Apr 2014
Snam[4, 22]	SRG.MI	Neutral	N/A	€4.25	17 Apr 2014
SSE PLC[2]	SSE.L	Buy	N/A	1,502p	17 Apr 2014
Suez Environnement	SEVI.PA	Buy	N/A	€14.62	17 Apr 2014
Terna[4]	TRN.MI	Neutral	N/A	€3.88	17 Apr 2014
Veolia Environnement[16]	VIE.PA	Neutral	N/A	€14.35	17 Apr 2014
Verbund AG	VERB.VI	Neutral	N/A	€14.21	17 Apr 2014

Source: UBS. All prices as of local market close.
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