Application Study: European Utilities

Scope Ratings ('Scope') applied its rating criteria for European utilities on a peer group of more than 50 corporates. While the credit quality of European utilities varies widely – particularly regarding financial risks – around 70% of Scope's sector peer group indicate investment grade ratings. Ten such corporates shall be introduced in this study.

The structural transformation of the European utilities landscape, with its strong focus on the decentralisation and decarbonisation of power generation, continues to take its toll on the vast majority of corporates in the sector. Utilities with a high share of high-carbon power plants still face pressure from market overcapacities and shrinking wholesale prices which are not expected to recover in the next two years. Only utilities operating in markets with persistent undercapacities or high shares of non-European cash flow, remain at ease. While regulated grid/network operators do not face such pressures, investment requirements from grid expansion still prove a burden, with consequences on free cash flows and debt financing.

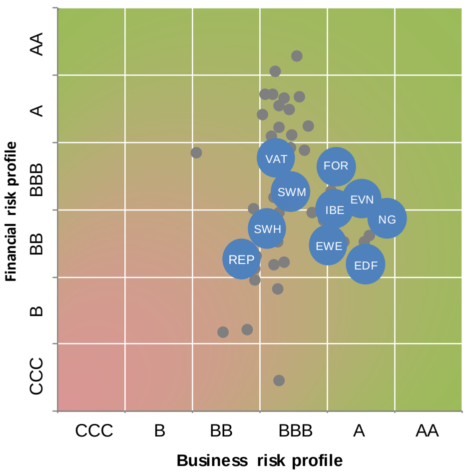
Scope notes that utilities particularly burdened by falling margins and EBITDA increasingly take measures against a further erosion of credit quality, mostly by keeping control on debt through more restrictive capex programmes, dividend cuts and asset rotation which focuses on regulated infrastructure segments.

Credit quality of assessed corporates

Despite the challenges, the sector is rated comparatively high. While the standalone credit quality of the assessed corporates varies widely, in Scope's peer group of more than 50 European utilities, around 70% of indicative standalone ratings are investment grade. Ten of these utilities shall feature in this application study. The peer group covers major utility segments – such as power generation, transmission/distribution and trading – and corporates of different sizes, from small regional operators to very large international incumbents. As Scope has not yet rated these companies, the indicative credit assessment is derived using public information, and without projecting into the future.

Scope notes credit quality is not necessarily linked to size. While large multinational and multisegment utilities can attain solid investment grade ratings, also smaller regulated utilities can show a high creditworthiness. However, utilities exposed to high merchant risks or high price volatility – causing weak debt service coverage – are seen as non-investment grade. Figure 1 shows Scope's indicative credit assessment of selected European utilities.

Figure 1: Indicative credit assessment* of selected corporates in a wider peer group



* Indicative ratings exclude rating impact from potential shareholder support.

Source: Scope Ratings

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Related Research

Rating Methodology: European Utilities, December 2015

Deutsche Stadtwerke: Finanzierung auf dem Prüfstand, October 2015

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The European utilities industry

Scope defines utilities as companies that collect the majority of their total revenues and cash flows through the generation, storage, transmission and/or distribution of electricity, heat and/or gas from facilities it owns and/or operates.

European utilities landscape varies widely

Business models in the European utilities industry vary greatly, in terms of size, operational exposure to regulated and non-regulated infrastructure segments, horizontal diversification and vertical integration. The industry is highly fragmented and ranges from large pan-European incumbents displaying a high degree of vertical integration and covering multiple business segments, such as exploration, power generation, storage, transmission/distribution, to small, regional or local utilities, which show limited integration and control few infrastructure assets. The degree of fragmentation depends strongly on a country's level of decentralisation: more centralised energy markets including France, Norway, Finland, Italy and Spain are dominated by few power generators and distributors; more decentralised markets such as Germany, Austria and Switzerland show a high degree of fragmentation with many regional or local utilities controlled by municipalities (i.e. German 'Stadtwerke') or regional sub-sovereign authorities.

Often government related

Given the public importance of infrastructure services, many utilities receive state support with sovereigns or sub-sovereigns as the main shareholder. Such support is normally provided through capital support, tariff setting by regulatory authorities or laws, or, most importantly, guarantor liabilities, which raises the chances of a bail-out. This support may materially reduce default risk and improves conditions for debt financing compared to other industries and therefore may make a significant difference between a stand-alone credit rating and a final Corporate Issuer Credit Rating (CICR).

An overview of Scope's general rating criteria on European utilities is in Appendix 1.

Corporate size and market share not critical rating drivers

Contrary to other industries, Scope notes that European utilities' corporate size and market share – although relevant – are not overly important for the credit quality of such corporates. While large multinational companies naturally benefit from diversification, which improves the robustness of cash flow generation, smaller-sized utilities may also show a very high credit quality if business and cash flow generation is protected by a monopolistic position in the relevant service territory or by long-term tariff structures.

Investment grade-rated utilities

Parameters which qualify a utility for an investment grade rating are: strong cash flow protection with low pricing risks through stable regulation and strong market position across different service territories; a well-diversified asset and customer base anchored strongly in non-cyclical business segments; solid profitability patterns with low volatility; highly predictable cash flows; overall resulting in sound and robust credit metrics.

Non-investment grade-rated utilities

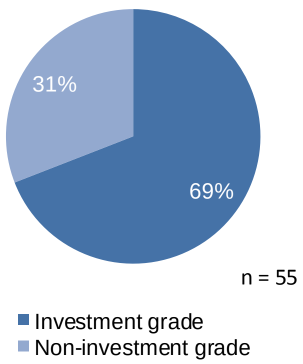
In contrast, high merchant and substitution risks due to challenging or unstable regulations or government interferences; a comparatively small and less diversified asset portfolio that is vulnerable to event risks; a strong cyclical exposure in power generation, exploration or supply signal a sub-investment grade rating. Other indicators of credit quality in the sub-investment grade bracket are high exposure to chronically loss-making infrastructure segments, such as public baths or public transport, that require continuous financial support or cross-subsidising from other activities. Such business risks may be coupled with less predictable and volatile cash flows in conjunction with weaker financial measures.

Ratings of utilities can reach up to higher investment grade categories, driven mostly by the degree of business protection, which may stem from a supportive and stable regulatory environment or a monopolistic position, a very well-diversified geographic footprint or a strong link to potential government support in case of a bail-out.

Comparatively highly rated sector

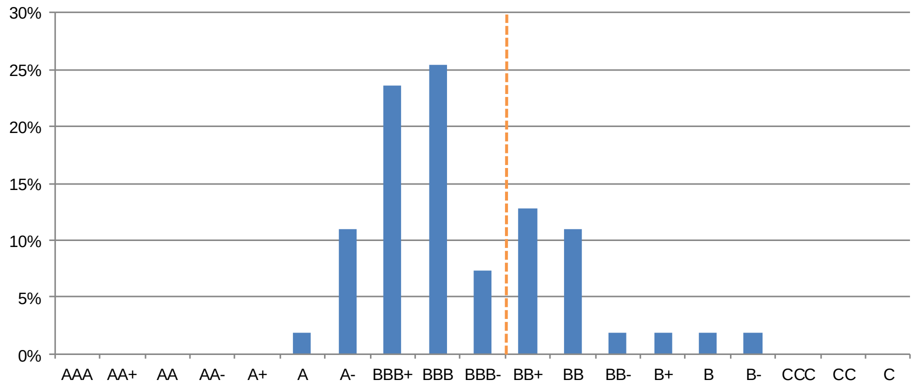
Although the credit quality of European utilities has suffered strongly over the last few years, Scope notes that utilities on average are still solidly financed and are more stable than companies in cyclical industries. Utilities are reacting to persistent pressures on profitability and market shares by controlling leverage and strengthening robust business areas such as networks and renewables activities. Scope's peer group of more than 50 European utilities, with widely ranging business models from small local players to larger pan-European incumbents, covers all infrastructure segments. Almost 70% of indicative standalone ratings are investment grade.

Figure 2: Ratings distribution between IG and NIG



Source: Scope Ratings

Figure 3: Distribution of indicative standalone* ratings



* Indicative ratings exclude rating impact from potential shareholder support.

Source: Scope Ratings

Outlook: regulated infrastructure is key

Challenging market environment with a strong impact on credit profiles of utilities …

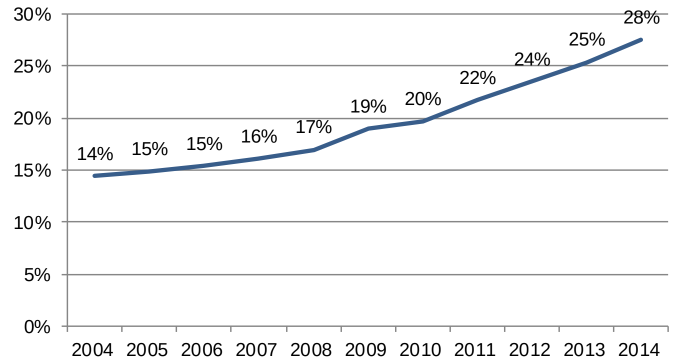
Scope expects the credit trends of European utilities to develop in different directions over the next few years. While the environment for utilities will remain challenging, it will be very important for utilities to pursue strategies against a further deterioration in credit quality. Scope notes that many companies already pursue business and financial strategies which help keeping credit quality in investment grade territory.

… but adequate measures against a further erosion of credit quality increasingly executed

Moreover, not all utilities are affected similarly by the challenging market environment. While unregulated utilities continue to suffer from the ongoing energy transition, utilities with core exposures to regulated infrastructure, such as grid/networks and operators of renewable energy power plants, are better off. Scope sees that business risk and financial risk profiles of utilities will be affected mainly by the following factors:

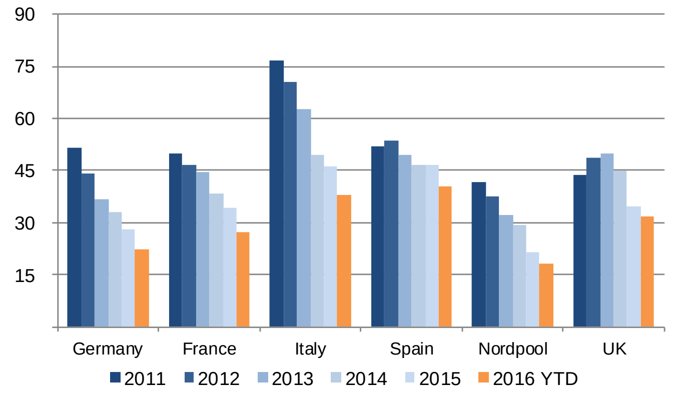
- Further crowding out of conventional through renewable power generation capacities (see Figure 4), volatile commodity markets and a lack of capacity remuneration continue to disrupt the profitability of conventional- and unregulated hydro-power plants;
- The resulting erosion in EBITDA will encourage more asset disposals among unregulated power generators to control debt levels;
- Increasing indebtedness of regulated grid and network operators to be balanced by higher transmission and distribution fees;
- Conservative financial policies to roll back debt, often with the help of asset disposals (or even entire business lines) or dividend cuts;
- Reallocating investment budgets to reshape business profiles, with a greater focus on more robust business segments and regaining market shares.

Figure 4: EU-28 share of electricity generation from renewable energy sources



Source: Eurostat, Scope Ratings

Figure 5: Baseload electricity wholesale prices 1Y forwards (EUR/MWh)



Source: Scope Ratings

Credit metrics for conventional power production and gas supply to remain under pressure

Conventional electricity production among unregulated power producers remains at risk in the absence of capacity remuneration, with the negative effects on electricity wholesale prices from the ongoing energy transition (i.e. the renewables share reached 32% in Germany in 2015) and the persistently low prices for oil, coal and CO_2. Only few operators of conventional power plants capable for peak loads were able to contract remuneration for the provision of generation capacity. Forward prices for 2016 and 2017 are continuously trending downward across almost all power markets (see Figure 5), mostly in Germany and Scandinavia, while the prices in southern Europe, the UK and France fare slightly better. The resulting margin squeeze is unlikely to ease over the next two years. Consequently, utilities strongly exposed to such volatile and often cash-burning generation capacities need to urgently prevent further erosion in their credit quality.

While smaller utilities, such as German ‘Stadtwerke’, may mothball thermal activities in the short term, larger utilities are unlikely to receive decommissioning allowances for loss-making thermal power plants and are therefore continuously burdened by operating losses. As such utilities have little headroom to raise debt for new investments, they require a more conservative financial policy, including dividend cuts and asset rotation, with cash from disposals invested in more robust infrastructure segments such as renewables or networks/grids.

Credit metrics of regulated businesses expected to be stable or even improve slightly

While operators of regulated grids and networks have to cope with tariff reductions and the need for cost efficiencies, the effects of these are negligible to the price and volume risks of unregulated utilities. Credit metrics among utilities with a high share of renewables are even expected to improve slightly, as strong operating cash flows from installed generation capacities can easily justify higher debt and negative free cash flows.

Unless measures are taken, Scope expects the key credit metrics of unregulated power utilities, such as financial leverage and fixed-charge coverage, to deteriorate further. Leverage among utilities with a high renewables share are expected to reduce and improve. Credit metrics of regulated transmission/distribution utilities in markets with a timely cost recovery through regulated tariffs are expected to remain stable.

M&A to focus on renewables

While the sector has historically been driven by M&A focused on expanding power generation portfolios and extending geographical outreach, future M&A is expected to focus on selected infrastructure segments and more homogenous business models. The split-offs of German utilities E.ON and RWE underpin a reversion to a focus on core markets and balance sheet protection. Acquiring regulated assets such as renewables is expected to be a main focus of M&A (i.e. Enel Green Power) in order to catch up in the energy transition and acquire assets with quick cash conversion.

Indicative credit quality assessment of selected utilities

In the following section Scope's rating methodology on European construction corporates has been applied to 10 companies, selected from a wider peer group of more than 50 European utilities.

Scope's methodology applied to a wide range of utilities

Companies in the peer group focus on all kinds of utility segments, including regulated and unregulated infrastructure, also ranging from small, national corporates to large, pan-European utilities.

Figure 6: Selected utilities in this application study

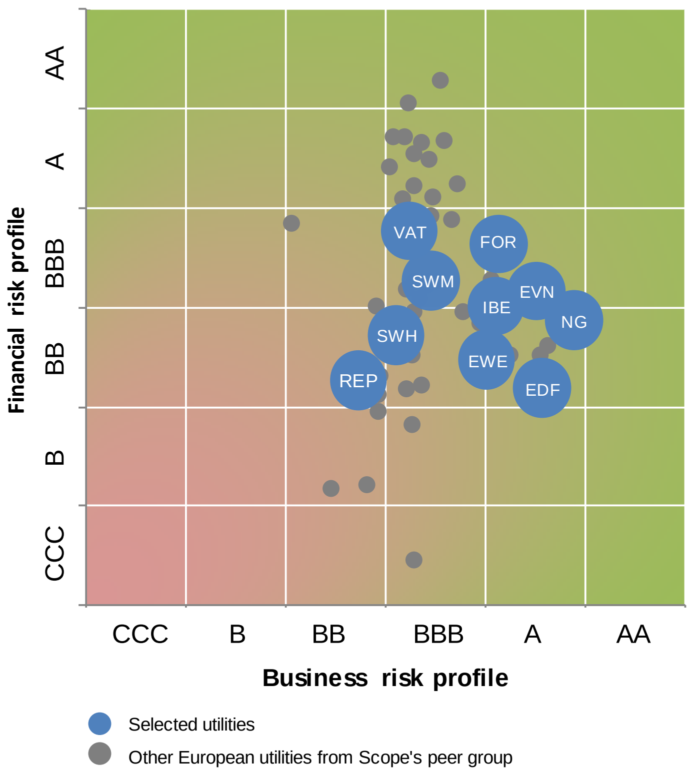
Company	Country of origin	Annual revenues	SEGMENTS			
			Regulated grid/networks	Power generation (electricity/heat)	Supply and trading	Other infrastructure
Électricité de France ('EDF')	France	75,006 EURm	Other material activities	Core sales activities	Other material activities	
EVN ('EVN')	Austria	2,136 EURm	Core sales activities	Other material activities	Other material activities	Other material activities
EWE ('EWE')	Germany	7,820 EURm	Other material activities	Other material activities	Core sales activities	Other material activities
Fortum ('FOR')	Finland	3,459 EURm	Other material activities	Core sales activities		
Iberdrola ('IBE')	Spain	31,419 EURm	Other material activities	Core sales activities	Other material activities	
National Grid ('NG')	United Kingdom	15,201 GBPm	Core sales activities			
Repower ('REP')	Switzerland	1,838 CHFm	Other material activities	Other material activities	Core sales activities	
Stadtwerke Hannover ('SWH')	Germany	2,275 EURm	Other material activities	Other material activities	Core sales activities	
Stadtwerke München ('SWM')	Germany	6,095 EURm	Other material activities	Other material activities	Core sales activities	Other material activities
Vattenfall ('VAT')	Sweden	164,510 SEKm	Other material activities	Core sales activities	Other material activities	Other material activities

Core sales activities
Other material activities

Source: Scope Ratings

None of the companies are publicly rated by Scope. Credit quality was therefore assessed using public information. Scope assessed historic information, adding its view on the future fundamental developments of these corporates, but without drawing up cash flow projections into the future. The following figure shows Scope's indicative credit quality assessment of selected European utilities.

Figure 7: Distribution of indicative standalone ratings

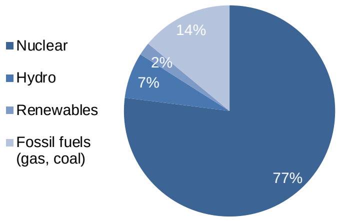


Source: Scope Ratings

Électricité de France S.A. ('EDF')

The French group EDF is the world's largest electricity generator. It is fully integrated, covering all power-related areas from generation and trading to transmission grids.

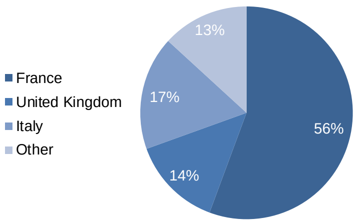
Low carbon generation portfolio



Business risk profile

Scope assesses industry risks to be low at A-, characterised by the medium exposure to cyclicality, high entry barriers and low substitution risks. However, moves to further liberalisation of the French energy market should reduce entry barriers over time.

Geographical outreach by revenues 2015



EDF's credit quality clearly benefits from the incumbents size and diversification as Europe's largest utility with a power generation capacity of 28 GWp, over 600 TWh of generated electricity, and a transmission/distribution grid spanning over 100,000 km. While it is the dominant incumbent in France, Scope views positively its expansion to other European markets such as the UK, Italy, Poland and Belgium. This is particularly important given the rising pricing pressures for electricity supply in France. The fuel mix – mainly comprising low-carbon power plants with relatively low marginal power-generation costs, such as nuclear and hydro plants – safeguards its position in the relevant merit order systems, even with lower wholesale prices.

Historically very robust profitability

Yet EDF's robust profitability with an EBITDA margin persistently above 20% is expected to change over time due to ongoing market liberalisation, stronger fluctuations of French wholesale prices, and the group's growing exposure to more-volatile markets.

Financial risk profile

Comparatively weak credit metrics

EDF's comparatively high financial leverage – measured as net adjusted debt/EBITDA – is lifted strongly to 6.6x in 2015 through provisions to decommission nuclear and thermal power plants (4.0x in 2014 excluded these). Nevertheless, the incumbent displays a very robust fixed-charge coverage of above 5.0x, which is expected to remain at this comfortable level, even with a further rise in leverage which is expected to stem from the heavily debt-financed capex programme.

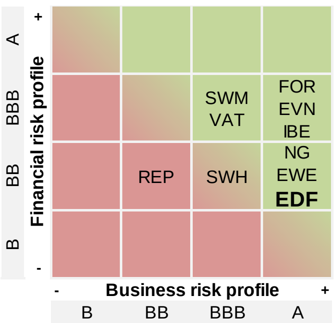
Adequate liquidity

Liquidity measures are adequate, with a EUR 4.2bn cash pillar at YE 2015, unused credit facilities totalling EUR 11.4m and less than 5% of outstanding financial debt maturing before 2018.

State-owned group

EDF is state-owned as the French government holds 84.5%. France's higher credit quality and EDF's importance to the domestic power supply makes it probable that Scope gives credit for potential parent support.

Risk map



Key financial data (EUR m)

	2011	2012	2013	2014	2015
Revenues	65,307	72,178	71,916	73,383	75,006
EBITDA	14,824	15,998	16,099	17,279	17,601
Cash flow from operations	8,497	9,924	10,865	10,625	12,730
Free cash flows	-677	-6,841	-3,287	-4,324	-7,855
Adjusted debt	95,347	109,767	104,113	110,877	121,211
Cash and cash equivalents	5,743	5,874	5,096	4,701	4,182
EBITDA margin	23%	22%	22%	24%	23%
Adjusted debt/adjusted EBITDA	6.4x	6.9x	6.5x	6.4x	6.9x
Adjusted net debt/adjusted EBITDA	6.0x	6.5x	6.2x	6.1x	6.6x
EBITDA/fixed-charge coverage	6.5x	6.3x	7.1x	7.7x	5.7x
Liquidity*	177%	113%	141%	168%	147%

* excluding committed undrawn credit lines

Source: EDF, Scope Ratings

EVN AG (Energieversorgung Niederösterreich) (‘EVN’)

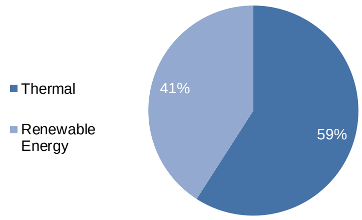
EVN Group is the second-largest Austrian utility with a fully integrated business model. Besides electricity and gas infrastructure the group is also exposed to environmental services such as water treatment and waste management.

Business risk profile

Low industry risks due to high exposure to regulated infrastructure

EVN’s wide range of infrastructure services creates manifold industry risks. Yet overall industry risks are seen as low, given the high exposure to regulated activities from grid/network operations or renewables/environmental services with low cyclicality, as well as high entry barriers and low substitution risks. Industry risks are heightened, however, from exposures to unregulated power generation and energy trading.

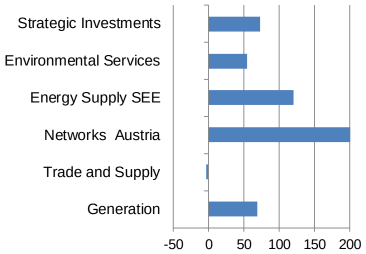
High renewables exposure (volume split FY 2014/15)



Despite EVN’s small size compared to other pan-European utilities, Scope assesses business risks to be comparatively low and widely diversified through its i) fully integrated business model in electricity, focused strongly on robust regulated infrastructure, ii) diversification across different markets in central and southeastern Europe and iii) other low-risk non-energy infrastructure segments, such as TV/cable networks, drinking water supply and heat generation.

The group strongly benefits from its monopoly over regional distribution grids (35% of EBITDA in FY 2014/15). However, price and volume risks exist in thermal power generation, though mitigated partly by its early move into forward compensation models for reserve capacities.

Segment split: EBITDA 2014/15



Margins in EVN’s infrastructure segments differ widely. Less robust segments such as trading and power generation generally dilute overall profitability. However, Scope believes that the core regulated segments in Austria can largely absorb such swings from the volatile business activities.

Financial risk profile

Scope views positively the group’s deleveraging, as a result of its asset disposals and EBITDA recovery, which led to a leverage of 3.1x in FY 2014/15. Given EVN’s investment strategy focusing on low-risk assets and limited downside to EBITDA, it should maintain a low leverage, signalling a solid investment grade. The same applies to the fixed-charge coverage of above 6.0x.

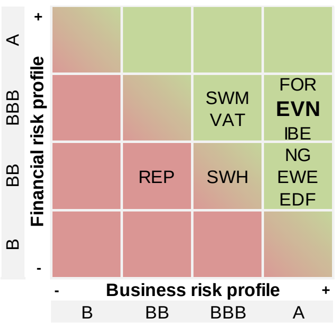
Credit metrics and liquidity measures signal solid investment grade

Liquidity measures are strong: EVN has broad access to bank and capital market financing; debt maturities are well-spread over the next 15 years; and over EUR 400m of operating cash flows are expected to fully cover short-term debt maturities.

Potential government support

The Lower Austrian government holds 51% in EVN. Scope believes that EVN is important to the federal state, meaning the rating might benefit from parent support. However, EVN’s high non-Austrian exposure could make the parent less willing to provide support.

Risk map



Key financial data (EUR m)

	2010/11	2011/12	2012/13	2013/14	2014/15
Revenues	2,729	2,847	2,755	1,975	2,136
EBITDA	475	458	458	184	583
Cash flow from operations	522	444	562	546	478
Free cash flows	-61	37	106	303	405
Adjusted debt	2,027	2,120	2,107	2,099	1,816
Cash and cash equivalents	143	162	259	218	255
EBITDA margin	17%	16%	16%	9%	26%
Adjusted debt/adjusted EBITDA	4.3x	4.6x	4.6x	11.4x	3.1x
Adjusted net debt/adjusted EBITDA	3.8x	4.3x	3.9x	9.0x	2.5x
EBITDA/fixed-charge coverage	6.0x	5.2x	4.6x	1.9x	6.4x
Liquidity*	424%	207%	1472%	218%	474%

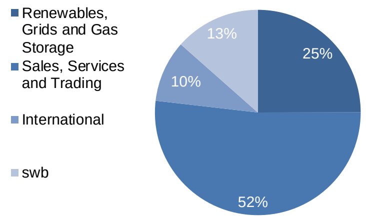
* excluding committed undrawn credit lines

Source: EVN, Scope Ratings

EWE AG (‘EWE’)

EWE is a fully integrated regional utility in Germany. Besides electricity and gas supply, it is also active in other infrastructure segments such as water and telco services. EWE is the full owner of Stadtwerke Bremen.

Segment split: revenues 2015

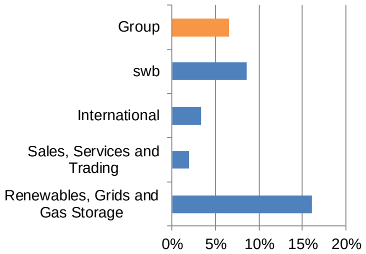


Business risk profile

EWE’s low industry risks stem from low cyclicality and high entry barriers in regulated infrastructure segments (over 50% of group’s EBITDA), though this is partly offset by an exposure to more-cyclical segments like conventional power generation and energy trading. Scope therefore assesses industry risks at BBB+.

With its fully integrated business model, EWE’s credit quality strongly benefits from a monopoly over its grid/network activities (92,000 km of electricity and 70,000 km of natural gas networks in northwestern and eastern Germany) as well as water distribution and telecommunication networks. These regulated businesses strongly contribute to the group’s robust cash flow profile. Rising risks from EWE’S conventional power generation (about 1 GWp of thermal power plants) are offset by its core business and growing presence in renewables – particularly for onshore and offshore wind. Overall low business risks from the established position in Germany are further mitigated from the diversification into other markets such as Turkey and Poland – albeit at only roughly 10% of revenues.

EBIT margin 2015 of different segments



Scope notes that EWE’s cash flow volatility and margin dilution can be attributed strongly to its trading activities. While comparatively high margins in regulated segments tend to relatively robust, EWE’s trading segment – over 50% of preliminary revenues in 2015 – strongly impacts overall margins (EBIT margin of 6.5% in 2015).

Financial risk profile

Credit metrics expected to improve with sale of VNG

EWE’s leverage of 5.1x in 2014 and EBITDA/fixed-charge coverage of 2.4x appear relatively high despite its core exposure to regulated activities. Proceeds from the envisaged sale of a 74.2% share in VNG, an energy trading company, will likely be used for share buybacks and partial debt redemptions.

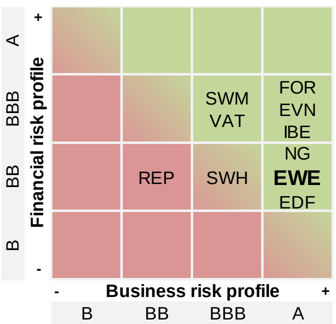
Adequate liquidity

The group’s liquidity is deemed adequate with EUR 436m at June 2015 and access to more than EUR 800m from unused credit lines. After the successful refinancing of the company’s 2004/14 bond, EWE does not have other capital markets debt maturing before 2019.

Fully government-backed in the future

EWE is majority-owned (74%) by two associations representing local authorities and municipalities in the Ems-Weser-Elbe region. EWE’s credit quality assessment is likely to benefit from parent support, which agreed to acquire the remaining 26% from EnBW by means of share buybacks (10%) and a share purchase (16%).

Risk map



Key financial data (EUR m)

	2010	2011	2012	2013	2014
Revenues	6,970	7,452	8,588	8,863	8,134
EBITDA	698	468	955	948	830
Cash flow from operations	399	356	661	406	770
Free cash flows	-259	-220	251	-120	100
Adjusted debt	3,501	3,614	4,029	4,572	4,397
Cash and cash equivalents	328	259	847	727	327
EBITDA margin	11%	7%	11%	11%	11%
Adjusted debt/adjusted EBITDA	4.6x	7.3x	4.1x	4.7x	5.1x
Adjusted net debt/adjusted EBITDA	4.2x	6.8x	3.3x	3.9x	4.7x
EBITDA/fixed-charge coverage	2.3x	1.6x	3.1x	3.0x	2.4x
Liquidity*	2168%	755%	1755%	91%	127%

* excluding committed undrawn credit lines

Source: EWE, Scope Ratings

Fortum Oyj ('FOR')

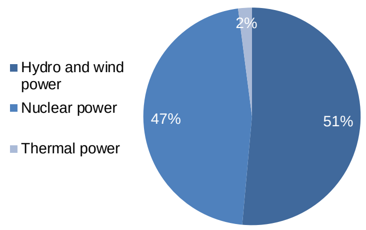
Fortum is a Finnish utility focusing on Nordic and Baltic countries, Poland and Russia. It operates power plants to generate electricity, heat and steam.

Business risk profile

Increased industry risks due to high price elasticity

Industry risks in Fortum's major markets are assessed at BB+. This includes Scope's view on high price elasticity due to cyclicality and water reservoirs; medium entry barriers in the oligopolistic Scandinavian utility market; and low substitution risks.

Dominating position with a low-carbon power generation mix

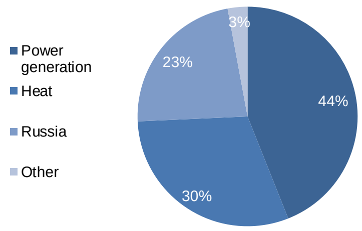


Even after divesting low-risk electricity distribution assets, Fortum's business risks are still lower than for other utilities in Europe. Being the second-largest power generator in the Nordic region after Vattenfall and covering almost 15% of electricity consumption in the region, the company holds a dominant position. Moreover, its 13.6 GWp electricity and heat generation portfolio is well diversified across low-carbon, (mainly) hydro, and nuclear power plants, allowing it to comfortably generate enough operating cash flows, even at current Nordpool prices.

Profitability measures are however pressured by the low electricity wholesale prices persisting in the Nordic region, a growing presence in Russia and unfavourable EUR/RUB fluctuations.

Financial risk profile

Segment split: revenues 2015



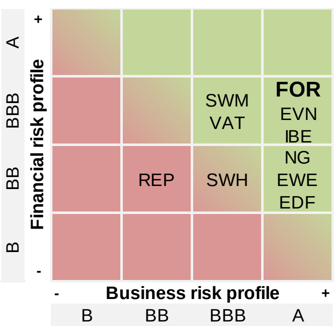
Fortum obtained a net cash position after disposing Swedish power distribution assets in 2015, resulting in a very comfortable net leverage of -1.1x in at the end of 2015. The company will likely use cash reserves for compelling investment opportunities or extra dividend payouts, Fortum's management guides for a leverage target of 2.5x (adjusted net debt/EBITDA) which is still outstanding among European utilities. Given the limited indebtedness, fixed-charge coverage stands comfortably above 5.0x, in line with a solid investment grade rating.

The incumbent's liquidity profile is very strong with a EUR 8.2bn cash cushion at YE 2015, solid free cash flows, access to EUR 2.2bn of undrawn committed credit facilities and just EUR 2bn debt maturing by the end of 2018. The cash position and large headroom to its leverage guidance places Fortum in a good position to scale back debt or to carry out equity-based M&A if compelling investment opportunities arise.

Potential government support

The Finnish state holds 50.76% of Fortnum and, given the parent's presumably higher credit quality, Scope might give credit for potential parent support.

Risk map



Key financial data (EUR m)

	2011	2012	2013	2014	2015
Revenues	6,161	6,159	5,309	4,751	3,459
EBITDA	2,395	2,373	2,234	1,878	1,154
Cash flow from operations	1,613	1,382	1,548	1,762	1,381
Free cash flows	-100	-634	-284	3,601	6,512
Adjusted debt	8,692	9,750	10,032	7,970	6,910
Cash and cash equivalents	731	963	1,250	2,766	8,202
EBITDA margin	40%	40%	39%	40%	33%
Adjusted debt/adjusted EBITDA	3.6x	4.0x	4.9x	4.2x	6.0x
Adjusted net debt/adjusted EBITDA	3.3x	3.6x	4.3x	2.7x	-1.1x
EBITDA/fixed-charge coverage	7.7x	7.3x	6.2x	6.8x	5.6x
Liquidity*	253%	218%	133%	411%	920%

* excluding committed undrawn credit lines

Source: Fortum, Scope Ratings

Iberdrola S.A. ('IBE')

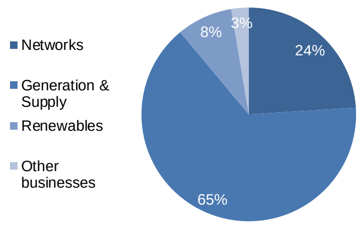
Iberdrola is the leading fully integrated Spanish utility. Operations extend to many other markets, including the UK through Scottish Power, the US through regulated grids and networks, and power generation in Latin America.

Business risk profile

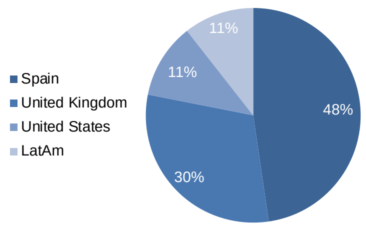
Comparatively low industry risks

Iberdrola's main exposure to regulated activities from networks and renewables (over 70% of EBITDA in 2015) creates high entry barriers and low cyclical exposures, meaning industry risks are rather low. However, this is offset by the incumbent's exposure to liberalised power generation and energy supply. Industry risks are therefore assessed at BBB+.

Segment split: revenues 2015



Geographical revenue split 2015



As a vertically integrated utility in all power-related infrastructure segments, Iberdrola's credit risk profile benefits strongly from regulated network activities in all its major markets (Spain, the UK and the US), backed by monopoly-like structures and adequate cost recovery through regulated tariffs. The robust and reliable cash flow from such operations greatly stabilises Iberdrola's credit profile. Creditworthiness is enhanced further by the extensive generation activities from renewables such as hydro (around 48 TWh in 2015), which provide almost 40% of total electricity generation, making Iberdrola one of the largest producers of renewable energy worldwide. While the exposure to liberalised power generation and supply (31% of EBITDA in 2015) adds cash flow volatility, Scope notes that the negative effects from volatile power prices on conventional power plants are less severe in Spain and the UK, as opposed to in Central and Eastern Europe or Scandinavia. Iberdrola generates over 50% of revenues outside its core market of Spain, establishing a strong international footprint in independent power markets.

Iberdrola's profitability of 20-30% – measured as EBITDA margin – is regarded as robust, with strong contributions from networks (EBITDA margin 2015: 45%), renewables (56%), and generation and only diluted by the generation and supply business (11%).

Financial risk profile

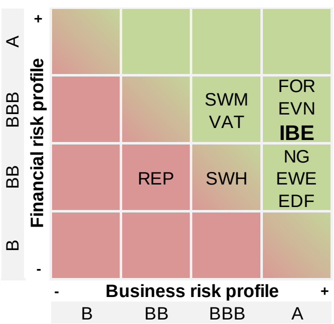
Leverage and fixed-charge coverage in the cross over area

Iberdrola's net leverage is roughly steady at around 4.0x, which stands at the edge of a non-investment grade rating. With the envisaged capex programme for 2016-2020 of EUR 24bn, focusing mainly on regulated infrastructure, the group aims at slightly improving leverage to 3.6x (net debt/EBITDA) by 2018. The fixed-charge coverage of 4.0x in 2015 is rather low for an investment grade level; however, Scope positively highlights the controlled investment policy which tackles positive free cash flows.

Strong liquidity measures

Liquidity measures are strong, with positive expected operating cash flows in 2016, EUR 1.1bn of cash and undrawn loans/credit facilities of EUR 7bn. The company should easily refinance/redeem its roughly EUR 5bn of debt maturing in 2016-17.

Risk map



Key financial data (EUR m)

	2011	2012	2013	2014	2015
Revenues	31,648	34,201	31,077	30,032	31,419
EBITDA	7,650	7,728	6,757	6,965	7,306
Cash flow from operations	6,112	6,980	5,805	6,800	6,260
Free cash flows	1,734	3,394	3,014	4,261	1,665
Adjusted debt	35,619	35,729	30,582	30,371	33,064
Cash and cash equivalents	2,091	3,044	1,332	1,806	1,153
EBITDA margin	25%	23%	22%	24%	24%
Adjusted debt/adjusted EBITDA	4.6x	4.5x	4.4x	4.3x	4.5x
Adjusted net debt/adjusted EBITDA	4.3x	4.2x	4.2x	4.0x	4.3x
EBITDA/fixed-charge coverage	2.8x	3.0x	3.2x	3.2x	4.0x
Liquidity*	244%	225%	203%	204%	152%

* excluding committed undrawn credit lines

Source: Iberdrola, Scope Ratings

National Grid plc ('NG')

National Grid is an English electricity and gas transmission and distribution company operating in the UK and northeastern US.

Business risk profile

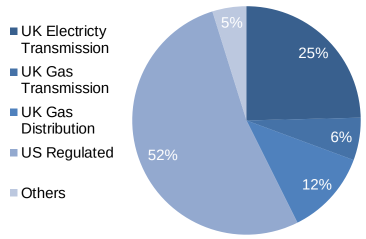
Increased industry risks due to high price elasticity

Industry risks are in line with a high investment grade, characterised by a low exposure to cyclicality; high entry barriers in markets with transparent and stable regulations; and low substitution risk.

Monopolistic business model

NG strongly benefits from its monopoly over gas and electricity transmission (8,600km and 7,660km in the UK) and distribution, serving over 14m UK and US households. Moreover, cash flows are relatively predictable and robust owing to the established and transparent regulatory frameworks in the UK and the US. Fluctuations in cash flow stem from weather and volume effects rather than from pricing or cost.

Segment split: revenues FY 2014/15



Due to its monopoly over regulated business, NG's geographical outreach (almost evenly spread between the UK and US) and limited vertical integration are of minor importance for a rating. Nevertheless, Scope believes that NG's decision to dispose a majority stake in UK gas distribution will slightly weaken its business risk profile; this might be offset, though, if proceeds are reinvested in other robust infrastructure segments or if leverage reduces significantly.

Scope assesses profitability, hovering around 35%, as very strong. This is due to the highly robust business under supportive regulatory frameworks in both jurisdictions in which NG operates.

Financial risk profile

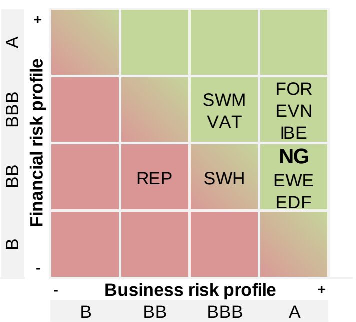
Indebtedness strongly backed by value of regulated asset base

With steadily improving operating results over recent years, adjusted leverage reduced to 5.1x in FY 2014/15. While seemingly still high, the regulated asset base of GBP 37bn largely offsets the incumbent's adjusted net debt position of GBP 27.5bn. With the envisaged disposal of its stake in UK gas distribution, NG is expected to speed up investment, provide extra dividends to shareholders and, potentially improve leverage further. The fixed-charge coverage which sustainably exceeds 3.5x is seen as moderate. Scope also notes that the planned rise in its capex programme (GBP 3.7bn in FY 2015/16 after GBP 2bn in 2014/15) can be covered largely by operating cash flows and asset disposals.

Strong liquidity and long-term financing

Liquidity is considered strong, with robust operating cash flows of above GBP 4bn on average and strong access to capital market financing (bonds and commercial paper). The group can also comfortably cover upcoming debt maturities of GBP 5.5bn over the next three years. Scope highlights the well-balanced debt profile, in which more than 66% of outstanding debt facilities have a long-term maturity of over five years and an average maturity of 13 years.

Risk map



Key financial data (GBP m)

	2010/11	2011/12	2012/13	2013/14	2014/15
Revenues	14,343	13,832	14,359	14,809	15,201
EBITDA	4,845	4,777	5,034	5,080	5,274
Cash flow from operations	4,858	4,228	3,750	4,019	5,007
Free cash flows	-774	851	-3,190	1,630	1,735
Adjusted debt	26,567	26,819	32,529	28,991	28,166
Cash and cash equivalents	384	332	671	354	119
EBITDA margin	34%	35%	36%	36%	35%
Adjusted debt/adjusted EBITDA	5.4x	5.5x	6.2x	5.5x	5.2x
Adjusted net debt/adjusted EBITDA	5.3x	5.5x	6.1x	5.4x	5.2x
EBITDA/fixed-charge coverage	3.7x	3.5x	3.8x	3.7x	4.3x
Liquidity*	152%	130%	122%	147%	155%

* excluding committed undrawn credit lines

Source: National Grid, Scope Ratings

Repower AG ('REP')

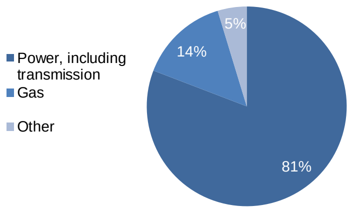
Swiss Repower is an integrated utility operating in Switzerland and Italy. While the group covers all power segments (generation, transmission, supply) it focuses on trading.

Business risk profile

High industry risks

Given Repower's core exposure to energy trading and supply, Scope assesses industry risks at BB. Industry risks are positively impacted by the medium exposure to cyclicality, low entry barriers and low substitution risks; though reduced in part by its exposure to electricity transmission in Switzerland.

Segment split: revenues 2015



Repower's competitive position is strongly affected by its energy trading activities. The group generates less than 20% of its traded 17.7 GWh (2015). Moreover, Repower sells 2.5bn m^3 of natural gas either in the market (B2B) or to end-customers. As a result, it is strongly exposed to price fluctuations from energy procurement and supply in the highly competitive trading business. While its focus on the Swiss and Italian energy markets (36% and 63% of revenues in 2015) provides some geographical diversification, the persistently strong Swiss franc adds more volatility to cash flows. High business risks from energy trading are partly mitigated by activities in regulated energy transmission in Switzerland and renewables power generation. Scope positively acknowledges the company's newly defined business strategy to increase the share of robust infrastructure services, such as operating third-party grids and power plants.

Profitability hit by power prices and strong Swiss franc

Repower's margin development – measured as EBITDA margin, which dropped from 9.0% in 2011 to 2.5% in 2015 – underscores its difficult market situation under decreasing prices and a strong Swiss franc. Although Repower hedges foreign exchange volatility to some extent, it remains largely dependent on external, non-manageable factors. While the new strategic focus helps to reduce such dependence, profitability is likely to remain pressured over the next few years due to the high share of mid- and long-term procurement contracts (roughly 50% of its traded volume).

Financial risk profile

Comparatively weak key credit metrics

The strong EBITDA contraction over the past years has led to a very high gross leverage of 14.4x in 2015 (up from 2.8x in 2011). While the high cash position reduced net leverage to 5.5x in 2015, Scope notes that this cash is required for energy trading, hence, it might not be fully available. The fixed-charge coverage of 2.1x also points to a weak financial risk profile compared to the utilities industry.

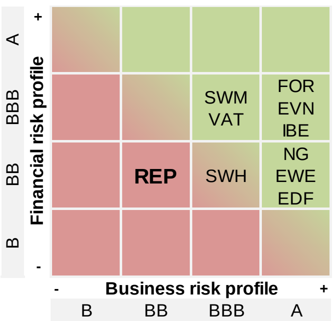
Adequate liquidity

The financial risk profile is improved by the company's liquidity measures and access to open credit lines (CHF 320m at YE 2015). Despite the challenging business environment, the company can cover its upcoming debt maturities of CHF 216m in 2016-17.

Canton Graubünden: major shareholder

Repower's rating might benefit from its shareholder structure, as the local government (Canton Graubünden) holds 58.3% of shares. However, the parent's willingness for a bail-out might be affected by Repower's high exposure to non-Swiss markets.

Risk map



Key financial data (CHF m)

	2011	2012	2013	2014	2015
Revenues	2,467	2,330	2,325	2,231	1,838
EBITDA	221	147	74	77	46
Cash flow from operations	138	54	69	85	4
Free cash flows	20	-73	33	-103	158
Adjusted debt	634	612	589	683	675
Cash and cash equivalents	341	267	273	404	412
EBITDA margin	9%	6%	3%	3%	3%
Adjusted debt/adjusted EBITDA	2.9x	4.2x	8.0x	8.9x	14.6x
Adjusted net debt/adjusted EBITDA	1.3x	2.3x	4.3x	3.6x	5.7x
EBITDA/fixed-charge coverage	7.1x	5.3x	3.5x	3.7x	2.1x
Liquidity*	988%	724%	911%	581%	203%

* excluding committed undrawn credit lines

Source: Repower, Scope Ratings

Stadtwerke Hannover AG (cons) ('SWH')

Stadtwerke Hannover ranks among Germany's largest municipal utilities. The group covers a large variety of infrastructure services, which include power generation and distribution, as well as the supply of electricity, gas, water and district heating under its brand 'enercity'.

Business risk profile

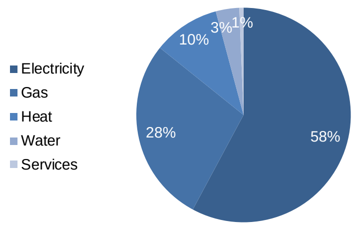
Industry risks afftected by the cyclical and uncyclical infrastructure segments

Industry risks of SWH are medium, reflecting the business mix of cyclical and non-cyclical business areas. While energy trading and unregulated power generation are generally attached to high industry risks, these are softened by less cyclical segments like energy distribution, and heat and water supply.

Strong diversification across infrastructure segments

SWH is strongly integrated, given it generates roughly 20% of its 14 TWh distributed electricity from its own renewable and thermal power plants, and covers almost the whole spectrum of municipal infrastructure services. While such integration generally improves the credit quality of a utility, SWH's exposure to the operation of thermal power plants currently, and in the future, weakens its creditworthiness due to operating losses from dissatisfactory capacity utilisation. Business risks are, however, mitigated by its exposure to regulated and quasi-regulated activities in energy and water distribution, where it enjoys the benefits of a quasi-monopoly, as well as through its shareholdings in wind parks. While the group faces stiff competition in the liberalised market for electricity and gas trading in its core service territory, Scope acknowledges that it increasingly gains ground with new customers outside its core market.

Segment split: revenues 2015



SWH's profitability is largely affected by the volatility of energy trading and production, and the potential mismatch between energy procurement and sales prices. As a result, overall margins fluctuate between 5% and 11%.

Financial risk profile

Key credit metrics in the cross over territory

Due to the impact of power generation and trading on cash flow generation, financial leverage and fixed-charge coverage remain volatile. 2015 credit metrics – measured as 4.3x leverage and 6.1x fixed-charge coverage – indicate a credit quality in the crossover territory. Negative free cash flows continuously need to be covered by external financing.

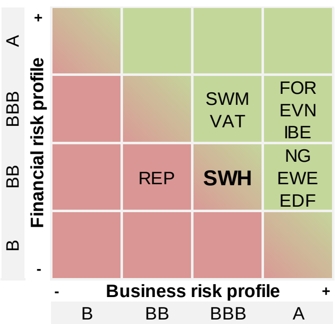
Liquidity without hard committed credit lines comparatively weak

Liquidity measures remain comparatively weak to other European utilities, mainly as a result of the group's weakening operating cash flows. At the end of 2015, SWH obtained additional open, albeit rolling, credit lines of more than EUR 270m. However, given its strong access to external financing with a variety of debt instruments, including bank loans, promissory loan notes and shareholder loans, it is expected to reliably refinance maturing debt positions.

Potential sub-sovereign support

The state capital of Hannover is SWH's ultimate parent through the holding company Versorgungs- und Verkehrsgesellschaft Hannover mbH, with which the utility holds a domination and profit transfer agreement. Consequently, an assigned credit rating might benefit from the ability and willingness of the parent to financially support the municipal utility.

Risk map



Key financial data (EUR m)

	2011	2012	2013	2014	2015
Revenues	2,627	2,631	2,421	2,301	2,275
EBITDA	155	146	266	117	202
Cash flow from operations	-89	-32	-144	-108	-40
Free cash flows	-52	-26	-7	-21	-13
Adjusted debt	1,034	1,016	1,037	1,025	1,166
Cash and cash equivalents	42	42	71	51	47
EBITDA margin	6%	6%	11%	5%	9%
Adjusted debt/adjusted EBITDA	4.5x	4.6x	3.0x	5.6x	4.3x
Adjusted net debt/adjusted EBITDA	4.3x	4.4x	2.8x	5.3x	4.2x
EBITDA/fixed-charge coverage	4.7x	4.4x	7.4x	4.0x	6.1x
Liquidity*	169%	114%	237%	145%	72%

* excluding committed undrawn credit lines

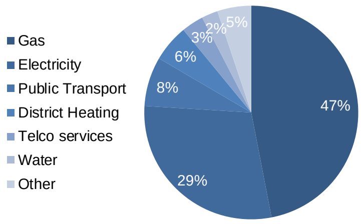
Source: Stadtwerke Hannover, Scope Ratings

Stadtwerke München GmbH ('SWM')

SWM is among Germany's largest municipal utilities, covering the whole range of local and regional infrastructure, which includes energy supply (electricity, gas and heat), distribution, water supply, public transport, telecommunications, and Munich's public swimming pools.

Business risk profile

Strong diversification across different infrastructure segments: revenue split 2014



Scope assesses industry risks to be low, given SWM's business mix of cyclical and non-cyclical business segments, high entry barriers, low substitution risks for major infrastructure services such as for water and heat and energy distribution.

In Scope's view, business risks are mitigated strongly by its coverage of all infrastructure segments. SWM benefits from the robust demand for products and services in its prosperous service territory. Demand in reliable cash generating segments such as power (electricity, gas and heat) and water distribution/supply can well buffer cash flow swings in volatile segments such as gas exploration or conventional electricity generation. SWM is already a leader in renewable energy production, from onshore and offshore wind to biomass power and different solar technologies in different European jurisdictions. As a result, the company already generates enough electricity from renewable energy power plants as is consumed by all private house-holds and the electrically powered public transport system in Munich.

Volatile gas exploration strongly affects profitability and cash flow stability

Although upstream integration in terms of commodity procurement can enhance credit quality of a utility, SWM's exposure to gas exploration in its Bayerngas division currently and in the mid-term future adds volatility to the group's profitability and cash flows. Scope notes that margin fluctuations of between 10-30% (EBITDA margin) primarily result from the gas and oil price swings as well as currency (EUR/NOK) volatility.

Financial risk profile

Key credit metrics in line with investment grade rating

Credit metrics are deteriorating, given the pressure on profitability and EBITDA as well as the rising indebtedness from the heavily debt-financed capex programme. The company's net adjusted leverage of below 3.0x, combined with a fixed-charge coverage of above 3.0x, are seen in line with a high non-investment grade rating. However, its financial risks have increases through its ambitious capex programme, resulting in persistently negative free cash flows.

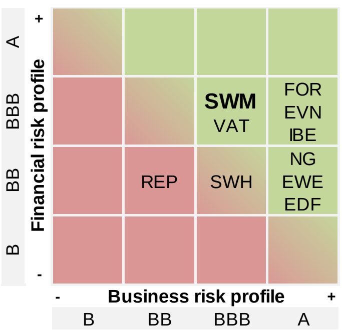
Strong liquidity measures

Yet liquidity remains very strong with a cash cushion of EUR 1.3bn at YE 2014, robust operating cash flows, excellent access to external financing as well as a well-diversified debt structure with low short-term refinancing needs.

City of Munich fully owns SWM

SWM's rating might benefit from its shareholder structure: the city of Munich owns 100% of SWM, along with a profit transfer agreement that exists between the two.

Risk map



Key financial data (EUR m)

	2010	2011	2012	2013	2014
Revenues	3,767	3,968	4,498	6,320	6,095
EBITDA	1,103	716	811	958	788
Cash flow from operations	589	675	657	794	488
Free cash flows	-660	-351	-399	-712	-642
Adjusted debt	2,097	2,774	3,708	3,074	3,327
Cash and cash equivalents	1,956	2,303	2,101	1,577	1,347
EBITDA margin	29%	18%	18%	15%	13%
Adjusted debt/adjusted EBITDA	1.9x	3.8x	4.5x	3.2x	4.1x
Adjusted net debt/adjusted EBITDA	0.1x	0.6x	1.9x	1.5x	2.5x
EBITDA/fixed-charge coverage	10.4x	5.5x	5.3x	4.8x	3.1x
Liquidity*	2459%	2632%	2015%	1895%	2135%

* excluding committed undrawn credit lines

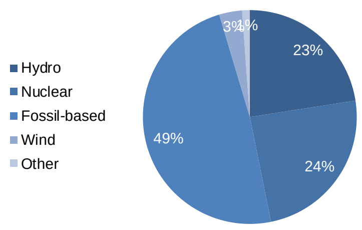
Source: Stadtwerke München, Scope Ratings

Vattenfall AB ('VAT')

Vattenfall is one of the largest fully integrated utilities in Europe, covering power generation (electricity and heat), gas supply, and transmission and distribution activities in different European markets (Sweden, Germany, UK, Poland and the Benelux).

Business risk profile

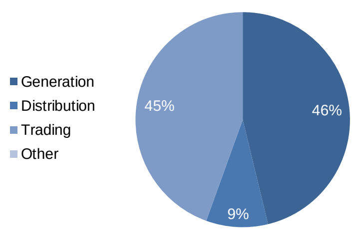
Power generation split 2015



Given the mix of unregulated and regulated activities, average industry risks for Vattenfall are assessed at BBB-. This includes Scope's view on the company's high price elasticity in core businesses, medium entry barriers and low substitution risks.

Vattenfall holds a dominant position among European utilities, with its strong share in power generation in its core markets, Scandinavia and Germany. The well-balanced power generation portfolio, with a mixture of low- and high-carbon generation capacities (producing more than 170 TWh a year), forms the backbone of its operations, contributing over 65% of EBITDA. While fluctuating electricity wholesale prices in the relevant markets provide naturally volatile cash flows in power generation, the incumbent's exposure to low-risk electricity/gas distribution and heat supply (34% of EBITDA in 2015) are major cash flow stabilisers.

Segment split: revenues 2015



Despite hedging large volumes of generated electricity (i.e. over 75%, one year ahead; over 50%, two years ahead), the generally volatile and currently negative price trends in its core markets Scandinavia and Germany pose a huge burden. Profitability measures are likely to remain pressured for at least the next two years, given that the two-year hedge prices are at least 10% lower than in 2015.

Financial risk profile

Strong credit metrics

Despite the downward trend in profitability, key credit metrics are still strong with an adjusted net leverage of 2-3.0x and a fixed-charge coverage above 7.0x, in line with a solid investment grade rating. Moreover, unlike other European utilities, Vattenfall is not yet under significant pressure to dispose its assets, as its free cash flows margins comfortably sit in positive territory. The company's current dividend freeze also helps to stabilise credit quality under the current and short-term market conditions and given the continued pressure on its EBITDA.

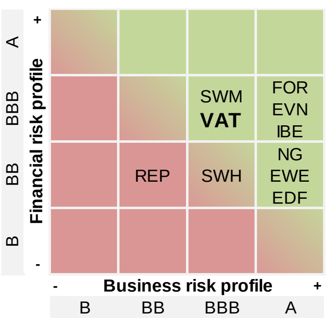
Strong liquidity

The average debt maturity of roughly four years at the end of 2015 shows a well-diversified debt structure. The strong liquidity measures are backed by low short-term refinancing needs, a high cushion of cash and cash equivalents, and strong access to external financing that includes around SEK 20m of committed, unused credit lines.

Likely parent support

Vattenfall is fully owned by the Swedish government. While Scope believes Vattenfall could sell non-Swedish infrastructure assets if it falls under financial distress, it could also get support from the state.

Risk map



Key financial data (SEK m)

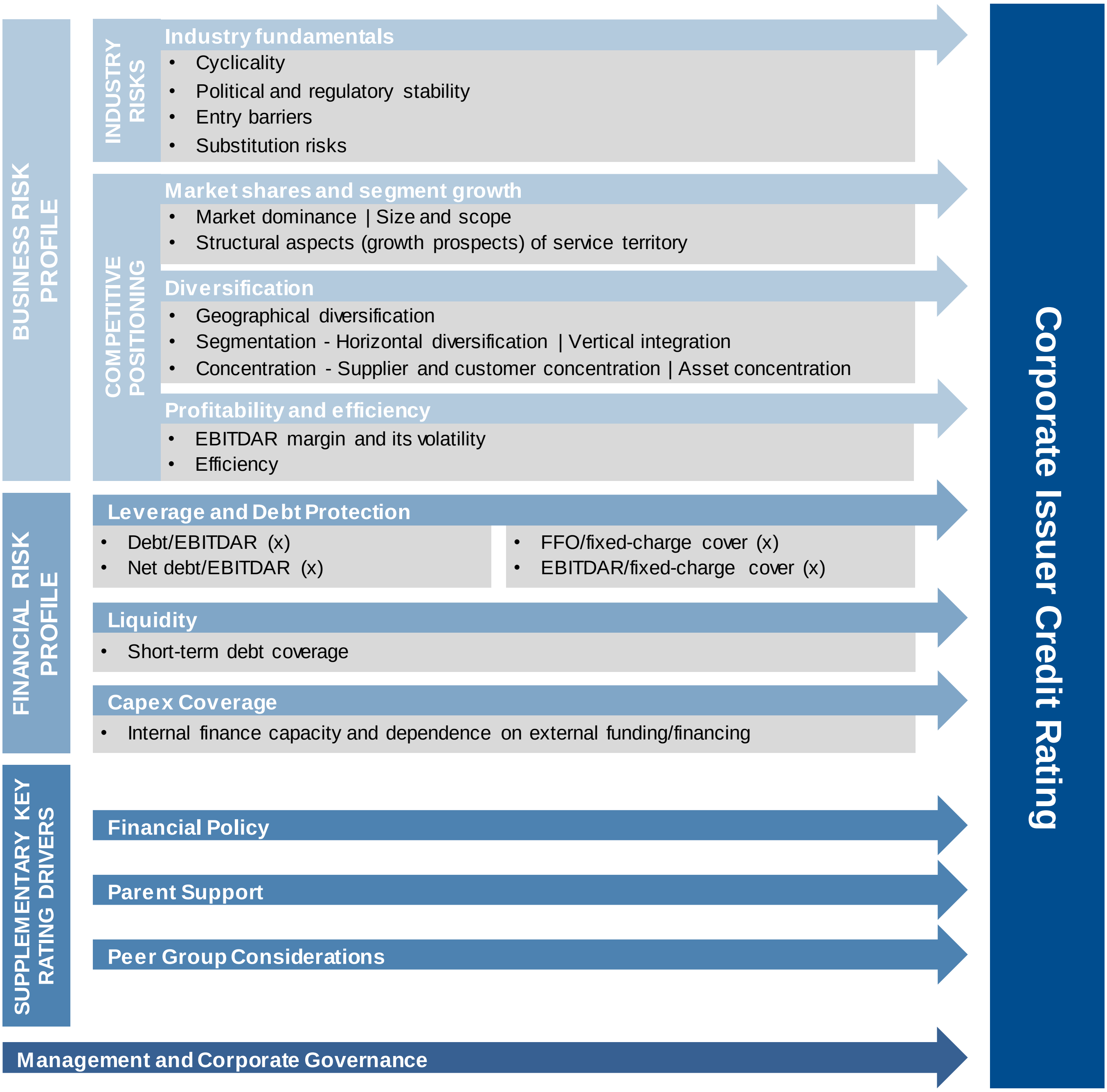
	2011	2012	2013	2014	2015
Revenues	181,040	167,313	171,684	165,945	164,510
EBITDA	56,217	54,663	43,027	41,513	40,000
Cash flow from operations	33,468	28,485	37,836	40,146	40,934
Free cash flows	5,965	17,095	3,870	22,586	14,126
Adjusted debt	230,291	222,935	206,525	182,273	162,989
Cash and cash equivalents	28,685	46,495	27,254	45,068	44,256
EBITDA margin	30%	33%	25%	26%	24%
Adjusted debt/adjusted EBITDA	4.2x	4.1x	4.8x	4.2x	4.1x
Adjusted net debt/adjusted EBITDA	3.7x	3.2x	4.1x	3.1x	3.0x
EBITDA/fixed-charge coverage	6.7x	6.7x	5.7x	8.2x	7.5x
Liquidity*	524%	191%	237%	181%	357%

* excluding committed undrawn credit lines

Source: Vattenfall, Scope Ratings

Appendix 1

Figure 8: Rating drivers for European utilities



Source: Scope Ratings

Appendix 2

Figure 9: Peer group

	Country of origin		Country of origin
badenova AG & Co . KG	Germany	RheinEnergie AG	Germany
Centrica plc	United Kingdom	RWE AG	Germany
CEZ, a.s.	Czech Republic	Snam S.p.A.	Italy
DONG Energy A/S	Denmark	SSE plc	United Kingdom
Dortmunder Stadtwerke AG	Germany	Stadtwerke Düsseldorf AG	Germany
Drax Group plc	United Kingdom	Stadtwerke Greifswald GmbH	Germany
DREWAG - Stadtwerke Dresden GmbH	Germany	Stadtwerke Hannover Aktiengesellschaft	Germany
Duisburger Versorgungs- und Verkehrsgesellschaft mbH	Germany	Stadtwerke Kiel AG	Germany
E.ON SE	Germany	Stadtwerke Leipzig GmbH	Germany
EDP - Energias de Portugal, S.A.	Portugal	Stadtwerke Lübeck GmbH	Germany
Électricité de France S.A.	France	Stadtwerke München GmbH	Germany
Elia System Operator SA	Belgium	Stadtwerke Münster GmbH	Germany
Enel S.p.A.	Italy	Stadtwerke Nordhausen - Holding für Versorgung und Verkehr GmbH	Germany
ENERVIE – Südwestfalen Energie und Wasser AG	Germany	Stadtwerke Oerlinghausen GmbH	Germany
Engie SA	France	Stadtwerke Osnabrück AG	Germany
Erlanger Stadtwerke AG	Germany	Stadtwerke Tübingen GmbH	Germany
EVN AG	Austria	Stadtwerke Weimar Stadtversorgungs-GmbH	Germany
EWE AG	Germany	Stadtwerke Weinheim GmbH	Germany
Fortum Oyj	Finland	Statkraft SA	Norway
Iberdrola SA	Spain	Steag AG	Germany
Infinis Energy plc	United Kingdom	SWP Stadtwerke Pforzheim GmbH & Co. KG	Germany
LECHWERKE AG	Germany	SWU Stadtwerke Ulm/Neu-Ulm GmbH	Germany
Mainova AG	Germany	TenneT Holding B.V.	The Netherlands
MVV Energie AG	Germany	Vattenfall AB	Sweden
National Grid plc	United Kingdom	Verbund AG	Austria
ovag Energie AG	Germany	WEMAG AG	Germany
Red Eléctrica de España S.A.	Spain	Zwickauer Energieversorgung GmbH	Germany
Repower AG	Switzerland		

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