Axpo Holding AG Swiss Confederation, Utilities



Key metrics

			Scope estimates		
Scope credit ratios	FY 2021	FY 2022	FY 2023E	FY 2024E	
Scope-adjusted EBITDA/interest cover	4.2x	3.1x	6.4x	5.3x	
Scope-adjusted debt/EBITDA	2.9x	7.5x	1.8x	1.8x	
Scope-adjusted free operating cash flow/debt	0%	-55%	68%	21%	
Liquidity	425%	292%	290%	322%	

Note: Axpo's financial year (FY) starts the 1st of October (t) and ends the 30th of September (t+1)

Rating rationale

The assignment of a S-1 short-term debt rating reflects the strong credit quality of the issuer, supported by the good business risk and financial risk profiles of Axpo Holding paired with the group's status as a government-related entity, which guarantees strong and extensive public support amid potential liquidity needs (as occurred in 2022). The assigned rating is also based on a solid liquidity profile of the issuer, signalled by robust expected liquidity and good access to external funding from banks, the capital market and other funding channels.

Axpo Holding AG provides an unconditional and irrevocable guarantee to the newly started Negotiable EUropean Commercial Paper (NEU CP) Program of Axpo International SA, promoted by the Banque de France.

Rating history

Date	Rating action/monitoring review	Rating
8 Dec 2022	New Rating	S-1

Ratings & Outlook

Short-term debt

Corporates

Analyst

Marco Romeo +39 02 94758 456 m.romeo@scoperatings.com

Related Methodologies

General Corporate Rating Methodology; July 2022

European Utilities Rating Methodology; March 2022

Government Related Entities Rating Methodology; May 2022

Related Research

ESG considerations for the credit ratings of utilities; April 2021

European utilities: liquidity improves; guarantees show state support vital; Sep 2022

Scope Ratings GmbH

Lennéstraße 5 10785 Berlin

Phone +49 30 27891 0 Fax +49 30 27891 100

info@scoperatings.com www.scoperatings.com

in ¥

Bloomberg: RESP SCOP



Swiss Confederation, Utilities

Rating and rating-change drivers for the underlying issuer rating

Positive rating drivers	Negative rating drivers
 Vertically integrated business model with leadership in Switzerland for unregulated power generation (nuclear and hydro) Solid competitive position in domestic market for energy supply and good presence throughout Europe (one of the main European players in energy trading) Government-related entity status: wide public support, both from Swiss government and cantons (only in case of need), due to its role as a 'systemically-relevant' utility in Switzerland Strong hedging that helps to weather adverse pricing conditions Adequate historical profitability, mostly sustained by power generation business Overall solid financial and liquidity profile, despite a temporary deterioration in FY 2022 due to pressure on working capital One of the main European players in the field of renewable energy (5,000 MW of total power generation capacity), with an increasing 	 Blended industry risk profile, mainly constrained by significant exposure to non-regulated power generation (especially nuclear and hydropower) due to industry-inherent volatility of achievable power prices Limited growth opportunities in the domestic market for power generation (nuclear phase-out and saturation of hydropower) and retail (competition with two players) Deterioration of profitability and leverage in FY 2022, but deemed temporary (due to energy prices trend) Limited geographical diversification outside Switzerland Exposure to power generation from nuclear assets poses some regulatory, environmental and political risks (ESG factor) considering the potential phasing out of such technology in Switzerland and the EU (in the long term) Comparatively weak debt protection in FY 2021 and FY 2022, due
capacity and an overall comparatively low CO_2 footprint for its power generation fleet (ESG factor)	to temporary margin decline and higher interest paid on rising financial debt
Positive rating-change drivers	Negative rating-change drivers
 Leverage (Scope-adjusted debt/EBITDA) sustained at around 2.0x, along with a further strengthening of the business risk profile, driven by increasing diversification and improved profitability 	 Leverage (Scope-adjusted debt/EBITDA) exceeding 4.0x on a sustained basis Any change affecting the current public support framework

Corporate profile

Founded in 1914 as Nordostschweizerische Kraftwerke AG by Northeastern cantons of Switzerland, Axpo has become Switzerland's largest producer of renewable energy, as well as an international leader in energy trading and the marketing of solar and wind power. Axpo Group is defined as an 'integrated utility' that is engaged in several activities within the energy value chain (i.e. electricity production, electricity distribution, trading with electricity, natural gas, other commodities, certificates and energy-based financial products, as well as electricity sales and services). In particular, the company operates through three business segments: i) Generation & Distribution operates and expands the Axpo power plant portfolio in Switzerland and abroad; ii) Trading & Sales encompasses energy trading, risk and portfolio management, customer service and the deployment of the power plant portfolio; iii) CKW is a subsidiary that supplies energy to Central Switzerland and ensures optimal use of hydro power in this region through existing exchange agreements.

We define Axpo as a government-related entity in line with our Government Related Entity Rating Methodology. This is based on its fully public ownership (cantons like Zurich and Aargau, along with canton utilities) and the essential public services provided in Switzerland by the group, which can also be underpinned by the classification as a systemically-relevant utility.



Financial overview

			Scope estimates			
Scope credit ratios	FY 2020	FY 2021	FY 2022	FY 2023E	FY 2024E	FY 2025E
Scope-adjusted EBITDA/interest cover	6.8x	4.2x	3.1x	6.4x	5.3x	8.9x
Scope-adjusted debt/EBITDA	2.8x	2.9x	7.5x	1.8x	1.8x	1.0x
Scope-adjusted free operating cash flow/debt	3%	0%	-55%	68%	21%	3%
Liquidity	334%	425%	292%	290%	322%	328%
Scope-adjusted EBITDA in CHF m						
EBITDA	1,168	1,126	(579)	1,232	1,042	1,702
Operating lease payments	-	-	-	-	-	-
Management adjustments (for one-off items)	-	(247)	1,343	-	-	-
Disposal proceeds fixed assets	17	(157)	(166)	-	-	-
Share of result of partner plants and other associates	(70)	(74)	(103)	(66)	(47)	(47)
Associate dividends received	62	47	79	66	47	47
Scope-adjusted EBITDA	1,177	696	574	1,232	1,042	1,702
Free operating cash flow in CHF m						
Funds from operations	960	403	140	873	706	1,199
Change in working capital	(352)	(2,748)	(7,894)	1,190	574	(311)
Non-operating cash flow	(187)	2,820	5,796	(36)	13	5
less: capital expenditure (net)	(304)	(448)	(397)	(498)	(895)	(819)
less: lease amortisation	(19)	(19)	(19)	(19)	(19)	(19)
Free operating cash flow	98	7	(2,374)	1,510	379	55
Net cash interest paid in CHF m						
Net cash interest per cash flow statement	91	84	100	108	112	108
Interest expense pensions	-	0	(0)	0	0	0
Interest component operating leases	-	-	-	-	-	-
Interests attributable to asset retirement obligations	81	82	83	83	83	83
Net cash interest paid	172	167	183	192	196	192
Scope-adjusted debt in CHF m						
Reported gross financial debt	5,029	4,492	7,745	5,536	5,274	4,867
less: cash and cash equivalents	(2,216)	(2,559)	(3,917)	(3,872)	(3,990)	(3,657)
add: asset retirement obligation (net)	399	59	478	478	478	478
add: pension adjustment	67	-	-	59	59	59
add: operating lease obligations	-	-	-	-	-	-
Other items (contingencies)	52	21	9	9	9	9
Scope-adjusted debt	3,330	2,013	4,314	2,209	1,829	1,755

SCOPE

Swiss Confederation, Utilities

Table of Content

Key metrics 1			
Rating rationale 1			
Rating history 1			
Rating and rating-change drivers for the underlying issuer rating2			
Corporate profile 2			
Financial overview3			
Environmental, social and governance (ESG) profile			
Business risk profile6			
Financial risk profile8			
Supplementary rating drivers: +2 notch. 10			
Outlook and rating-change drivers for the			

underlying issuer rating 11

Environmental, social and governance (ESG) profile¹

Environment		Social		Governance		
Resource management (e.g. raw materials consumption, carbon emissions, fuel efficiency)	2	Labour management		Management and supervision (supervisory boards and key person risk)	1	
Efficiencies (e.g. in production)		Health and safety (e.g. staff and customers)		Clarity and transparency (clarity, quality and timeliness of financial disclosures, ability to communicate)	1	
Product innovation (e.g. transition costs, substitution of products and services, green buildings, clean technology, renewables)	2	Clients and supply chain (geographical/product diversification)		Corporate structure (complexity)	1	
Physical risks (e.g. business/asset vulnerability, diversification)		Regulatory and reputational risks		Stakeholder management (shareholder payouts and respect for creditor interests)		

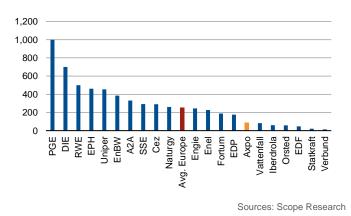
Legend

Green leaf (ESG factor: credit positive) Red leaf (ESG factor: credit negative) Grey leaf (ESG factor: credit neutral)

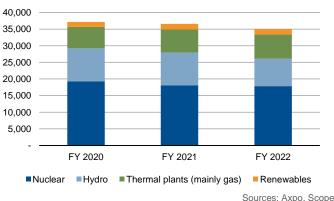
Credit-supportive leadership in renewables and comparatively low CO₂ footprint

Axpo is a leader in power generation from renewables in Switzerland, especially thanks to its experience and expertise in hydropower technology. Even at the European level, Axpo is one of the main energy companies engaged in renewables and one of the leaders for low carbon footprint among power generators, thanks to its high share of lowcarbon electricity production (nuclear and hydro). Axpo reported around 95 gCO2e/kWh in FY 2022, one of the lowest levels among main European power generators and widely below the average (255 gCO₂e/kWh in 2021), positioning itself as a leader in energy transition and showing a credit-supportive aspect from a ESG perspective.

Figure 1: Carbon footprint of power generation widely below European average (gCO₂e/kWh, 2021)







These evaluations are not mutually exclusive or exhaustive as ESG factors may overlap and evolve over time. We only consider ESG factors that are credit-relevant, i.e. those that have a discernible, material impact on the rated entity's cash flow and, by extension, its credit quality.



Potential ESG risk arising from large exposure to nuclear

Supportive investment strategy to enable the energy transition

At the same time, the group's large exposure to nuclear power generation (around 50% of total production) poses some regulatory, environmental and political risks. In the long term, the potential phasing out of such technology could represent a risk for the company (especially social, as highlighted in the table above) and a big challenge as Axpo aspires to shift its business model towards decarbonised power generation.

Axpo is highly committed to ESG goals, as demonstrated by the results achieved so far. Especially in relation to the environmental factor, Axpo is currently facing the challenge of energy transition, with strong planned investments on renewables – especially wind and solar – and new clean technologies (i.e. hydrogen, batteries), expected by us to stand at around CHF 3.0bn until 2027.



Blended industry risk profile

Solid competitive position in

low growth opportunities

domestic market, constrained by

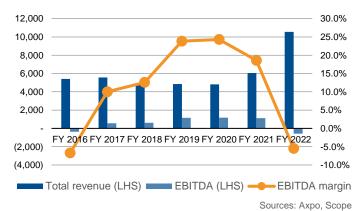
Swiss Confederation, Utilities

Business risk profile

Given Axpo's exposure to several utility segments, which are driven by different fundamentals (i.e. regulated versus unregulated and upstream versus downstream operations), our industry assessment reflects a blended industry risk. We apply a normalised segment split of 48-42-5-5 for 'non-regulated power generation'-'retail'-'trading'-'regulated power generation', based on historical EBITDA contribution. This assessment is constrained by the major exposure to nuclear power generation (non-regulated activity as well as a technology envisaged to be phased out in the medium-to-long term), even though increasing contribution from highly profitable and regulated power generation from renewables will likely sustain a stronger industry risk profile in the coming years.

Axpo's business risk profile is based on its solid competitive position, especially in Switzerland, where the group is the largest producer of electricity accounting for roughly 40% of power generated in Switzerland as well as the leader in hydropower (roughly 30%) and in overall renewable energy. At the same time, overall business volumes are expected to be quite stable in the coming years, given limited domestic growth opportunities due to the saturation of the retail market and power generation technologies like nuclear and hydro, as well as intense competition from established utilities across Europe. Business development abroad is also subordinated to the shareholders' (political) strategic decisions.

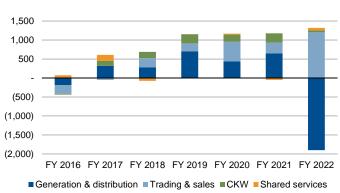
Figure 3: Reported revenue and EBITDA (CHF m) vs EBITDA margin reported



Fully diversified business model reducing cash flow volatility

Significant dependency on nuclear despite the growth of renewables

Figure 4: EBITDA breakdown by business segment (CHF m)



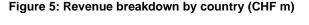
Sources: Axpo, Scope estimates

Axpo is fully integrated as it covers almost all parts of a power utility value chain from generation to distribution and B2C retail. As seen in our assessment of industry risks for the different utility sub-segments (non-regulated generation: BB; retail: BBB; trading: BB and regulated generation: AA), the underlying business fundamentals of the different segments are not fully correlated. The company's diversification across these segments is credit-supportive.

In FY 2022, Axpo generated about 50% of electricity from its nuclear power plants in Switzerland. Hydropower remains an important source albeit less reliable and predictable as it is affected by weather conditions. Overall, renewables are growing but still show a negligible contribution (roughly 5% of total production). The group is therefore significantly dependent on one major energy source, which comes with ESG-related risks and is already intended to be phased out in the medium term.



Wide and diversified customer base with relatively large outreach In relation to end-customer markets (B2B and B2C), Axpo directly supplies large companies, SMEs and energy resellers, as well as private households and agricultural businesses in Switzerland. The diversification of the group's customer base is credit-supportive.



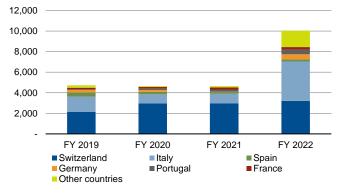
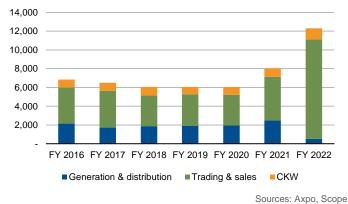


Figure 6: Revenues breakdown by business segment – aggregated figures (CHF m)



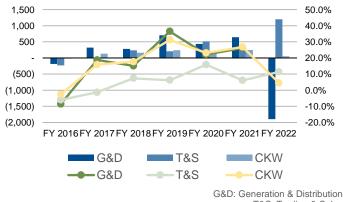
Sources: Axpo, Scope

Limited geographical diversification outside Switzerland despite good penetration of certain markets

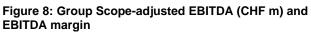
Profitability expected to improve in the coming years after some volatility Axpo operates in 32 countries and more than 40 markets, mainly in Europe. The domestic market remains dominant, representing more than 60% of revenue, whilst other important countries, especially Italy, Spain and the Nordics, mainly account for the remainder. Activities in other continents (primarily US and Asia) are negligible. Overall, despite a good penetration of certain European markets, the concentration in Switzerland is a moderate constraint in terms of geographical diversification.

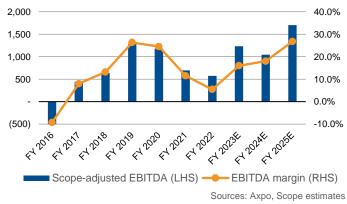
In recent years, Axpo has experienced some volatility in profitability, mainly due to a partial exposure to price swings, moving from the negative peak of -9.3% in FY 2016 EBITDA margin to the positive peaks recorded in FY 2019 and FY 2020 (25%-26%). In FY 2021, profitability was penalised by the sharp rise in energy prices and high volatility that strongly affected FY 2022 results, closed with a further erosion of profitability (Scope-adjusted EBITDA margin at 5.4%), mainly due to an accounting mismatch in Swiss production. In the coming years, higher power prices will likely sustain margin improvements, whilst profitability is expected to approach 20% in FY 2023 and FY 2024 (in line with historical averages), with a boost in 2024/25 towards 30%, benefitting from the current high prices hedged three years in advance (for around 60% of volumes).





T&S: Trading & Sales Sources: Axpo, Scope







Swiss Confederation, Utilities

Negative FOCF in FY 2022 amid unprecedented turmoil in energy markets

Internal financing capacity recovering in FY 2023

Financial risk profile

In FY 2022 Axpo reported a significant deterioration of cash flow, recording a negative FOCF of CHF 2.4bn, which resulted in a Scope-adjusted FOCF/debt of -55%. Such performance was mainly due to the significant cash absorption from working capital needs (CHF 7.9bn versus CHF 2.7bn in FY 2021), following the unprecedented boost and persistent volatility in energy prices, which increased the cash collaterals needed to match regulatory requirements for margining deposits. In order to reduce the burden on FOCF, Axpo's management undertook actions such as the disposal of non-strategic assets and the optimisation of planned investments amid the unexpected liquidity squeeze.

For FY 2023, we expect the return to a positive FOCF (about CHF 1.5bn), mainly sustained by the release of CHF 2.7bn from cash collaterals previously posted, reflected in a working capital positive change, along with a robust EBITDA. A similar trend is also envisaged for FY 2024 and FY 2025 albeit with a smaller magnitude, contributing to positive but declining FOCFs of about CHF 0.4bn and CHF 0.1bn respectively. Consequently, estimated Scope-adjusted FOCF/debt is positive and comfortable at around 68% in FY 2023. This trend, along with historical positive FOCF, shows the group's good capacity to generate sufficient cash flow to finance its capex needs internally.

Figure 9: Scope-adjusted debt (CHF m) versus Scopeadjusted debt/EBITDA

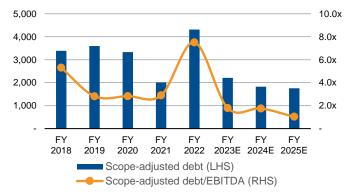
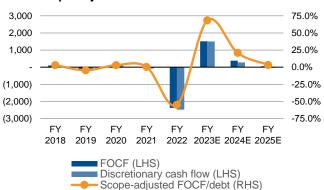


Figure 10: FOCF and discretionary cash flow (CHF m) versus Scope-adjusted FOCF/debt



Sources: Axpo, Scope estimates

Sources: Axpo, Scope estimates

Over the last three fiscal years (2017/18-2020/21), Axpo recorded a leverage (measured as Scope-adjusted debt/EBITDA) of slightly below 3.0x, overall presenting an adequate sustainability of debt and a balanced financial structure, despite the impacts of the Covid-19 pandemic on the energy sectors across Europe. As of September 2022 (fiscal year closing date), Scope-adjusted debt significantly increased to CHF 4.3bn (up CHF 2.3bn YoY) as a result of the above-mentioned negative performance of FOCF. Consequently, considering the temporarily depressed Scope-adjusted EBITDA at CHF 0.6bn, leverage as measured by Scope-adjusted debt/EBITDA reached 7.5x at the end of FY 2022, showing significant growth compared to September 2021 (2.9x). Nevertheless, such deterioration is deemed temporary and largely attributable to the unprecedented turmoil on European energy markets, which caused extremely high collateral requirements in order to fulfil margining calls on futures markets.

Progressive normalisation of net debt, with leverage expected at around 2.0x

Temporary deterioration of leverage in FY 2022

As described above, the expected positive and robust FOCF mainly sustained by the envisaged cash collaterals release would lead to a normalisation of the financial structure. CHF 2.7bn of margining deposits are expected to be released from FY 2023,



with additional amounts to be settled in the following years. As a result, leverage is expected to approach 2.0x over the next two fiscal years (as displayed in figure 9), partly supported by improved margins.

Weaker debt protection, expected to remain below 10x over the next few years

Debt protection has weakened, with the ratio Scope-adjusted EBITDA/interest cover falling to 4.2x in FY 2021 and 3.1x in FY 2022 (Figures 11 and 12). This trend has been driven by the decrease of EBITDA in both fiscal years (to CHF 0.7bn and CHF 0.6bn, respectively) and by the rise in interest paid in FY 2022, attributable to the significant growth of financial liabilities. At the same time, the average cost of debt remains quite stable, within 2.0%-3.0%, aligned with the credit risk profile of the group and benefitting from the consolidated support of main banks. Interest paid is expected to be in line with historical levels (roughly CHF 0.12bn) due to the anticipated reduction of financial liabilities and almost stable interest rates. The EBITDA interest cover will therefore likely be sustained above 4.0x in FY 2023 (estimated at 6.4x), thanks to the expected recovery of EBITDA (CHF +0.7bn), which should support such ratio even in the following years.

Figure 11: Interest paid (CHF m) versus average interest rate

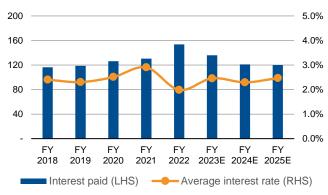


Figure 12: Scope-adjusted EBITDA (CHF m) vs debt protection



Sources: Axpo, Scope estimates



Solid liquidity profile amid temporary deterioration

Historically, Axpo's internal liquidity ratio has always been considerably above 110%, reflecting low amounts of short-term and long-term debt maturing every year compared to the usual large cash availability of the group. In FY 2022, the liquidity ratio significantly decreased, standing at 23% (first time below 200% over the period considered) due to the exceptionally high working capital absorption. We expect the internal liquidity ratio to return above 110% in FY 2023, standing at comfortable levels in the following years (always above 150%), even though the short-term portion of debt to be refunded each year will be high compared to past years. This is due to the expected improvement of cash flow, with the achievement of positive and robust FOCF, as well as available cash and cash equivalents constantly greater than CHF 2.0bn. Axpo also relies on the strong and wide financial support ensured by banks. When considering committed unused bank facilities, Axpo's overall liquidity profile is even more reassuring, with liquidity ratios always above 200%.



Figure 13: Debt composition as of September 2022

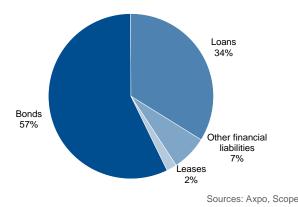
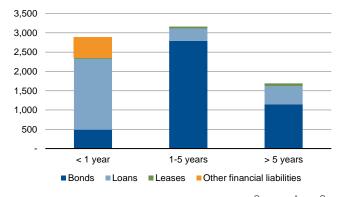


Figure 14: Maturity profile as of September 2022 (CHF m)



Sources: Axpo, Scope

Balance in CHF m	FY 2022	FY 2023E	FY 2024E
Unrestricted cash (t-1)	2,559	3,917	3,872
Committed unused credit lines (t-1)	2,185*	2,948	2,948
Free operating cash flow (t)	(2,374)	1,510	379
Short-term debt (t-1)	812	2,890	2,237
Coverage	292%	290%	322%

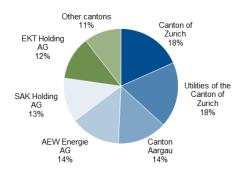
*Average amount of unused headroom available at September 2021 (CHF 1,435m) and at March 2022 (assumed ca. CHF 1,500m)

Credit-neutral financial policy Management's 'risk appetite' for discretionary spend

Management's 'risk appetite' for discretionary spending is low and reflects a prudent approach, as demonstrated by its dividend policy and by its M&A activity. Apart from investment dedicated to the development of renewables assets, no other debt-funded business acquisitions are expected. Furthermore, Axpo's management demonstrates its commitment to keeping credit metrics under control in order to maintain its investment grade profile. Based on these elements, the financial policy is deemed credit-neutral but supports our view that Axpo's future financial setup is likely to support the rating.

Axpo is a government-related entity in accordance with our Government Related Entities Rating Methodology. This is based on the full public ownership by Swiss cantons and the essential public services provided by the company, signalled by its status as a systemically relevant utility. Given the positive differential between Axpo's standalone issuer rating on the one hand and the Swiss Confederation's sovereign credit rating and the Canton of Zurich's sub-sovereign rating of AAA/Stable on the other, the capacity to provide financial support is high. In light of the strategic role played by Axpo in the Swiss energy market as a critical power generator and electricity supplier with a strong public interest, we deem the willingness of Swiss authorities to provide support as high, as also demonstrated by events in 2022 amid the energy crisis (i.e. CHF 4.0bn credit facilities granted by the Swiss Government). Based on the above arguments, we grant a two-notch uplift to the standalone rating.

Two-notch uplift due to wide public support from Swiss authorities





	Outlook and rating-change drivers for the underlying issuer rating
Outlook: Stable	The Stable Outlook reflects our expectation that Axpo's financial risk profile will recover in FY 2023, with Scope-adjusted debt/EBITDA declining towards 2.0x, bolstered by a release of working capital and robust free operating cash flow (FOCF). The Outlook is also based on our view that the Swiss authorities will remain supportive based on Axpo's ownership structure and its role as systemically critical utility in Switzerland.
Positive rating-change driver	A positive rating action could be considered if Scope-adjusted debt/EBITDA were sustained around 2.0x, along with a further strengthening of the business risk profile, driven by increasing diversification (e.g. higher presence outside Switzerland, lower concentration on nuclear) and improved profitability (i.e. EBITDA margin steady at around 20%).
Negative rating-change driver	A negative rating action could be triggered by a deterioration of credit metrics, with Scope-adjusted debt/EBITDA exceeding 4.0x on a sustained basis, or by any change that negatively affects our view of the current public support framework and potential shareholder support from public authorities.



Swiss Confederation, Utilities

Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5 D-10785 Berlin

Phone +49 30 27891 0

Oslo

Karenslyst allé 53 N-0279 Oslo

Phone +47 21 09 38 35

Scope Ratings UK Limited

London

52 Grosvenor Gardens London SW1W 0AU

Phone +44 20 7824 5180

info@scoperatings.com www.scoperatings.com

Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389 0

Madrid

Paseo de la Castellana 141 E-28046 Madrid

Phone +34 91 572 67 11

Paris

10 avenue de Messine FR-75008 Paris

Phone +33 6 6289 3512

Milan

Via Nino Bixio, 31 20129 Milano MI

Phone +39 02 30315 814

Disclaimer

© 2022 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Ratings UK Limited, Scope Fund Analysis GmbH, Scope Innovation Lab GmbH, Scope ESG Analysis GmbH and Scope Hamburg GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5 D-10785 Berlin.