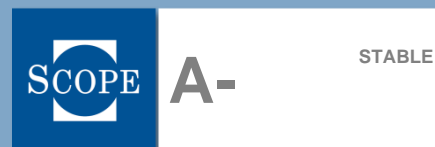


# Lyse AS

## Norway, Utilities



### Key metrics

Scope credit ratios	2021	2022	Scope estimates	
			2023E	2024E
Scope-adjusted EBITDA/interest cover	19.8x	23.9x	12.9x	10.7x
Scope-adjusted debt/EBITDA	1.6x	1.1x	1.8x	2.1x
Scope-adjusted funds from operations/debt	48.5%	67.9%	23.5%	24.0%
Scope-adjusted free operating cash flow/debt	25.2%	49.4%	-9.9%	-4.2%

### Rating rationale

The upgrade of Lyse's issuer rating to A-/Stable from BBB+/Stable reflects our view that Lyse can sustain a strong financial risk profile throughout a period of significant growth in its telecommunications division. The issuer rating reflects a standalone credit assessment of BBB+ and a one-notch uplift for government-related entity status.

Lyse's business risk profile (assessed at BBB+) continues to benefit from its diversified business model with exposure to volatile but highly profitable hydropower generation in combination with robust infrastructure segments such as monopolistic power distribution, fibre broadband and mobile networks. Lyse's financial risk profile (up to BBB+ from BBB-) has benefited greatly from elevated power prices in 2022, which more than offset the negative impact initially expected on credit metrics from the NOK 5.8bn acquisition of Ice, with Scope-adjusted debt/EBITDA decreasing to 1.1x at end-2022 (from 1.6x in 2021). Based on the cushion provided by 2022 results and prospects of power prices in southern Norway remaining supportive, worries about the large capex programme have somewhat abated. As a result, it now seems more likely that Lyse can carry out its significant investment plans while keeping a strong financial risk profile.

### Outlook and rating-change drivers

The Stable Outlook reflects Scope's view that Lyse will maintain its diversified business model within hydropower generation, monopolistic power distribution and stable telecommunications. It further anticipates that Lyse will maintain strong liquidity, Scope-adjusted debt/EBITDA below 3x, and an unchanged ownership structure.

A positive rating action is currently remote but could be warranted if Lyse significantly improved its business risk profile by increasing its production capacity and expanding its geographical reach while keeping credit metrics at current strong levels, or if Scope-adjusted debt/EBITDA moved towards 1x on a sustained basis.

A negative rating would be possible if Lyse's financial risk profile weakened with Scope-adjusted debt/EBITDA reaching 3x or above. This could materialise if power prices significantly and unexpectedly dropped without being counterbalanced by lower capex, or, in the event of large debt-financed transactions or investments.

### Rating history

Date	Rating action/monitoring review	Issuer rating & Outlook
31 Mar 2023	Upgrade	A-/Stable
01 Apr 2022	Affirmation	BBB+/Stable
04 May 2021	Affirmation	BBB+/Stable

### Ratings & Outlook

Issuer	A-/Stable
Short-term debt	S-1
Senior unsecured debt	A-

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### Related Methodologies

[General Corporate Rating Methodology](#);  
July 2022

[European Utilities Rating Methodology](#); March 2023

[Government Related Entities Methodology](#); May 2022

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## Rating and rating-change drivers

Positive rating drivers	Negative rating drivers
<ul style="list-style-type: none"><li>• Diversified business model in hydropower generation, monopolistic power grids and telecommunications</li><li>• Profitable and environmentally friendly hydropower production (3g CO<sub>2</sub>e/kWh) with annual mean volume of around 7.1 TWh after accounting for equity shares</li><li>• Leading market positions in Norway within fibre broadband infrastructure and fibre-related television services under the Altibox brand</li><li>• Predictable cash flow from monopolistic power grid operations</li><li>• Long-term committed municipality owners leading to a one-notch uplift based on government-related entity status</li></ul>	<ul style="list-style-type: none"><li>• Volatility of achievable prices in power generation</li><li>• Telecoms business currently in a relatively large investment phase, which puts pressure on cash flows</li><li>• Some execution risks relating to growth in telecom, particularly in the mobile segment</li><li>• Limited diversification by geographical pricing market</li></ul>
Positive rating-change drivers	Negative rating-change drivers
<ul style="list-style-type: none"><li>• Significant improvement of business risk profile by increasing its production capacity and expanding its geographical reach, while keeping credit metrics at current strong levels</li><li>• Scope-adjusted debt/EBITDA moving towards 1x on a sustained basis</li></ul>	<ul style="list-style-type: none"><li>• Weakened financial risk profile with Scope-adjusted debt/EBITDA reaching 3x or above on a sustained basis</li></ul>

## Corporate profile

Lyse AS is a Norwegian utility company owned by 14 municipalities in southwestern Norway. The company operates in three business areas: Energy, Power grids, and Telecommunications. After the transaction with Hydro's RSK assets in late 2020, Lyse has a mean consolidated annual hydropower generation of around 9.7 TWh (and around 7.1 TWh when accounting for equity shares), mainly through Lyse Kraft DA, of which it owns 74.4%. Within its energy segment, Lyse is also responsible for market operations for the power portfolio in Lyse Kraft DA. In its monopolistic power grid segment, the company operates the regional and distribution power grids within its service territory in southern Norway and serves 162,300 customers. Within telecommunications, Lyse owns and operates extensive fibre network infrastructure and provides fibre broadband and content services to around 829,000 customers in Norway and Denmark via various brands and partnerships (e.g. Altibox). With the acquisition of Ice in 2022, the company established itself as a full-fledged telecoms provider. At end-2022, Lyse (through Ice) had 757,305 mobile customers and 57,453 mobile broadband customers. We classify Lyse as a government related entity.



## Financial overview

				Scope estimates		
Scope credit ratios	2020	2021	2022	2023E	2024E	2025E
Scope-adjusted EBITDA/interest cover	6.8x	19.8x	23.9x	12.9x	10.7x	9.4x
Scope-adjusted debt/EBITDA	4.9x	1.6x	1.1x	1.8x	2.1x	2.4x
Scope-adjusted funds from operations/debt	12.9%	48.5%	67.9%	23.5%	24.0%	21.9%
Scope-adjusted free operating cash flow/debt	-10.2%	25.2%	49.4%	-9.9%	-4.2%	-3.5%
<b>Scope-adjusted EBITDA in NOK m</b>						
EBITDA <sup>1</sup>	2,853	8,751	16,237	11,574	10,717	9,760
Other items <sup>2</sup>	0	-1,150	-3,773	-2,136	-1,768	-1,391
<b>Scope-adjusted EBITDA</b>	<b>2,853</b>	<b>7,601</b>	<b>12,463</b>	<b>9,437</b>	<b>8,949</b>	<b>8,369</b>
<b>Funds from operations in NOK m</b>						
EBITDA	2,853	8,751	16,237	11,574	10,717	9,760
less: (net) cash interest paid	-430	-379	-500	-733	-839	-889
less: cash tax paid per cash flow statement	-652	-368	-2,450	-4,755	-3,600	-2,989
Other items <sup>3</sup>	40	-2,091	-3,987	-2,136	-1,768	-1,391
<b>Funds from operations</b>	<b>1,810</b>	<b>5,912</b>	<b>9,299</b>	<b>3,950</b>	<b>4,510</b>	<b>4,490</b>
<b>Free operating cash flow in NOK m</b>						
Funds from operations	1,810	5,912	9,299	3,950	4,510	4,490
Change in working capital	-87	79	1,663	-615	-500	-500
less: capital expenditure (net)	-3,161	-2,922	-4,201	-5,000	-4,800	-4,700
Other items	0	16	-20	0	0	0
<b>Free operating cash flow</b>	<b>-1,438</b>	<b>3,086</b>	<b>6,740</b>	<b>-1,665</b>	<b>-790</b>	<b>-710</b>
<b>Net cash interest paid in NOK m</b>						
Net cash interest per cash flow statement	411	379	518	727	833	883
Change in other items	6	5	3	6	6	6
<b>Net cash interest paid</b>	<b>417</b>	<b>384</b>	<b>521</b>	<b>733</b>	<b>839</b>	<b>889</b>
<b>Scope-adjusted debt in NOK m</b>						
Reported gross financial debt	17,924	17,933	21,656	19,683	20,603	21,249
less: cash and cash equivalents	-4,106	-6,466	-8,862	-3,750	-2,707	-1,670
add: non-accessible cash	97	694	829	829	829	829
add: pension adjustment	104	38	2	2	2	2
Other items	18	23	63	63	63	63
<b>Scope-adjusted debt</b>	<b>14,036</b>	<b>12,222</b>	<b>13,688</b>	<b>16,827</b>	<b>18,791</b>	<b>20,473</b>

<sup>1</sup> Excluding gains and losses on power and currency contracts

<sup>2</sup> Includes adjustment for Hydro's 25.6% stake in Lyse Kraft DA

<sup>3</sup> Includes net cash effect from power generation outflow – non controlling interest (Hydro's 25.6% ownership in Lyse Kraft DA)

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**Environmental, social and governance (ESG) profile<sup>4</sup>**

Environment	Social	Governance
Resource management (e.g. raw materials consumption, carbon emissions, fuel efficiency)	Labour management	Management and supervision (supervisory boards and key person risk)
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)
Product innovation (e.g. transition costs, substitution of products and services, green buildings, clean technology, renewables)	Clients and supply chain (geographical/product diversification)	Corporate structure (complexity)
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)

**Strong ESG profile**

The Norwegian utilities sector is subject to regulatory and reputational risks. This became evident when in September 2022, the government announced its intention to impose a temporary windfall tax on hydropower producers. Lyse is directly impacted by these windfall taxes as most EBITDA is currently achieved through power production.

Considering the extraordinary circumstances in power markets, and the temporary nature of these windfall taxes, we do not consider this a shift in the regulatory environment. Historically, the regulatory environment has been very stable, something we do not expect to change. This stability is reflected through industry and market assessments.

In our assessment of regulatory and reputational risks under social factors, we have removed the green leaf, given in our affirmation of Lyse’s rating last year, based on in-advance compliance with regulatory frameworks in its reporting (e.g. EU taxonomy). Based on changed circumstances in Norway’s power sector due to higher price levels, which Lyse could not prevent or influence, we have therefore lowered the assessment.

As a hydropower producer, Lyse has a favourable ESG profile, highlighted by very efficient generation and industry-leading low carbon footprint of 3g CO<sub>2</sub>e/kWh in its production. We consider these as positive ESG factors and believe that Lyse’s position will support both current and future profitability, cash flows and access to funding. We have therefore granted Lyse a green leaf for resource management.

In sum, we acknowledge the company’s strong ESG profile and still stable regulatory environment, but recommend no additional notching, as these aspects are already captured in the assessment of the business risk profile.

<sup>4</sup> 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.

**Business risk profile: BBB+**

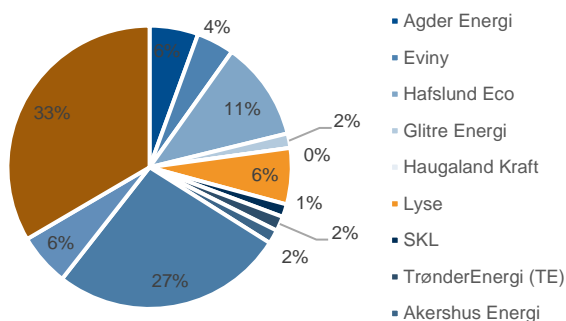
**Industry risk profile: BBB**

Lyse's three segments expose it to different industry fundamentals, which we blend by normalised EBITDA contributions. We apply a mostly forward-looking approach on its segment split and consider 50% of EBITDA from unregulated power generation (industry risk: BB), 10% from regulated grid operations (AA) and 40% from telecoms (A). These weights also consider Hydro's share of the hydropower business through its 25.6% ownership in Lyse Kraft DA. This results in a blended industry risk of BBB.

**Around 10 TWh annual hydropower production in Lyse Kraft DA**

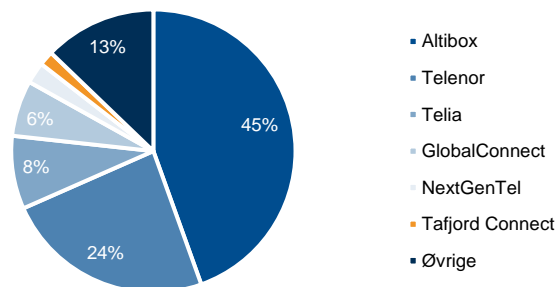
Lyse's consolidated annual mean power generation is 9.7 TWh and around 7.1 TWh when adjusting for equity stakes (i.e. Hydro's share of Lyse Kraft DA). This makes Lyse relatively small compared to international power generators. Nevertheless, the company is a major power generator in Norway and within the Nordpool market. Including Lyse Kraft DA, its annual production from hydropower plants makes it Norway's third largest power generator with a share of about 6.4% of national power generation in 2021 (Figure 1). More importantly than size, the company's hydro plants are favourably placed in the Nordic market's merit order system, thanks to the comparatively low marginal costs of hydropower generation. Lyse has a high share of reservoir capacity, which when running at full capacity equates to 6.8TWh or two-thirds of the company's annual hydropower production. This is viewed as credit positive, since it ensures flexibility of power generation and enables the company to optimise its power sales, particularly during peak-load times when prices are advantageous. Lyse is also responsible for water management and market activities for the 9.7 TWh hydropower portfolio in Lyse Kraft DA.

**Figure 1: Lyse's market position in power generation in Norway (% of total in 2021)**



Sources: Companies, Scope (estimates)

**Figure 2: Lyse's market share of fibre broadband in Norway**



Sources: Norwegian Communications Authority, Scope

**Full-fledged telecom provider in Norway with solid market position**

Within the telecommunications business, the Lyse group and its partners are together the largest supplier of fibre broadband in Norway. The group covers around 45% of the market and had around 829,000 active customers at end-2022. Lyse also offers television services through fibre technology. Further, the March 2022 acquisition of Ice (Norway's third largest mobile operator with 757,305 customers at end-2022) expanded the telecoms segment and made Lyse a full-fledged telecoms provider. Through Ice and Altibox, Lyse holds around 36% of all 4G and 5G frequencies in Norway, and in July 2022 it announced plans to build a national 5G network, involving upgrading 3,200 base stations and installation of around 3,900 new base stations. This expands Lyse's reach to customers who are not financially viable to link to its fibre network. In sum, Lyse holds a strong market position within telecommunications in Norway, which we believe was strengthened after the combination with Ice, as the company can now benefit from synergies between its extensive fibre and mobile networks, paired with a large customer base.

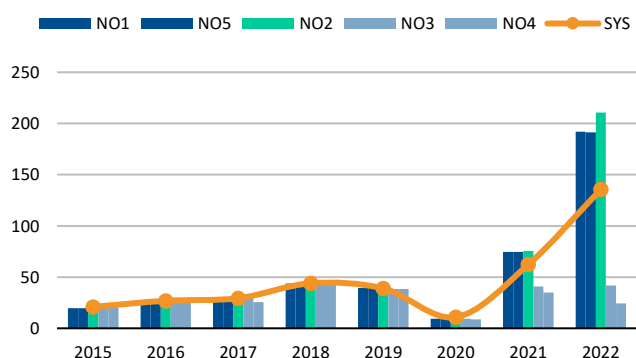
**Monopolistic power grid operations remain supportive**

Lyse's market position is enhanced by the protected and robust cash flow contribution from monopolistic power distribution in southwestern Norway. In total, Lyse's grid subsidiary, Lnett AS, serves 162,300 customers, making it the fifth largest distribution system operator (DSO) in Norway. Norway's tariff setting and regulatory framework for DSOs is well-established and reliable. Tariffs are reviewed regularly and based on a two-year backward-orientated approach, ensuring timely pass-through of an increased cost base, while operators are also granted a defined return on invested capital.

**Horizontally diversified business model partly offset limited geographical outreach**

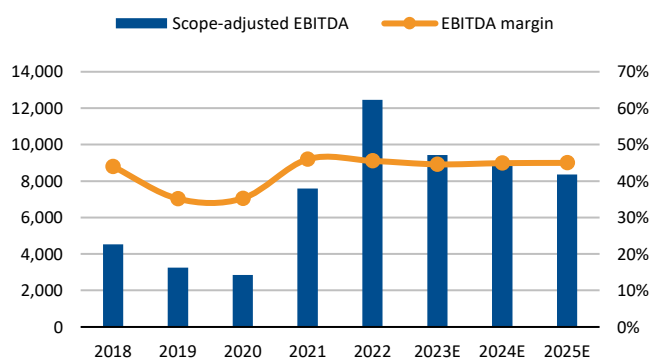
Lyse's lack of geographical outreach in its unregulated utility segments is partly offset by the protection provided by regulated operations in power distribution and by the higher diversification in its telecommunications business. Following the agreement with Hydro entered into in late 2020 to merge part of their hydropower production in southern Norway into a joint company (i.e Lyse Kraft DA), Lyse increased the number of power plants from 24 to 33 and thereby reduced potential vulnerabilities to specific power plants. While Lyse is only exposed to one pricing zone within the Nordpool market, the NO2, that zone is currently well placed with regard to achievable power prices when considering regional energy balances and transmission bottlenecks. This was illustrated in 2021-22 with significantly higher prices in southern zones of Norway, which also was driven by the opening of interconnectors to the UK and Germany during 2021. We believe increased connectivity to Europe broadens Lyse's international reach since its generated power has become more exposed to European prices.

**Figure 3: Nordic system price (SYS) and Norwegian power prices (EUR/MWh) by pricing zone**



Sources: Nordpool, Scope

**Figure 4: Scope-adjusted EBITDA (NOK m) and margin (%)**



Sources: Norwegian Communications Authority, Scope

**Stable profitability with EBITDA margins of 40%-50%**

Lyse has historically shown relatively stable EBITDA margins of around 40% despite the exposure to volatile power prices for its power generation due to the dilutive effect of its market activities within its energy division. However, in absolute terms, the EBITDA is more significantly impacted by achieved prices for produced power volumes. Based on continued stable and somewhat improving margins in telecommunications and power distribution, we expect that Lyse's profitability will remain around 45% throughout 2023-2025, which is approximately the level it achieved in 2021 and 2022. Further, we expect Lyse to maintain Scope-adjusted return on capital employed in the 15%-20% range going forward, which also supports our profitability assessment, in addition to a solid EBITDA margin. Considering also Lyse's highly cost-competitive power generation portfolio (mainly hydropower) which provides stable load factors and flexibility due to its high share of reservoir capacity, we consider Lyse to have above-average profitability and efficiency when compared to our peer group of integrated European utilities.

### Financial risk profile: BBB+

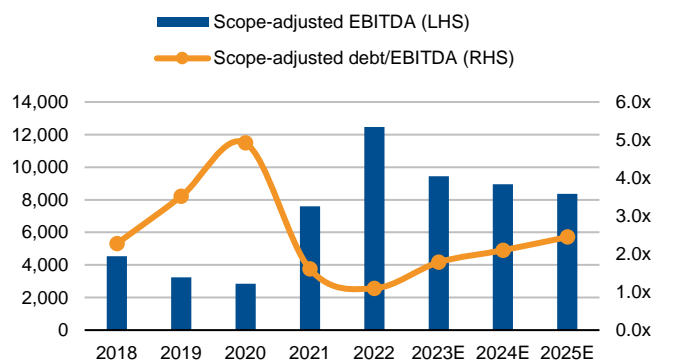
Lyse's financial risk profile has significantly improved during the past year and is upgraded by two-notches to BBB+, thanks to strong leverage and improved interest coverage, while its ambitious capex programme is now more palatable given higher normalised power prices. Further, we understand that the integration of Ice is progressing well, which provides more comfort around projected growth within the telecommunications division. We still expect telecoms to constitute most of the planned capex over the next years, including the plans to build a national 5G network.

High power prices are the main driver for Lyse's improved financial risk profile, with the average NO2 price in 2022 ending at 213 Øre/kWh while Lyse's achieved price was 180 Øre/kWh. This compares to an achieved price of 68 Øre/kWh in 2021 and a historical average NO2 price of around 30 Øre/kWh before 2021. The high power prices in southern Norway in 2022 were driven by high European prices paired with a low hydrological balance in Norway. We expect that Lyse will continue to benefit from higher-than-historical power prices in the foreseeable future. At the same time, some gains are capped by a temporary surcharge (through 2024) introduced by the Norwegian government of 23% applicable to all power sales at prices above 70 Øre/kWh, and an increase of the effective resource rent tax rate from 37% to 45%. Combined, the surcharge and tax raise results in a high marginal tax rate for hydropower, particularly at price levels where the 23% surcharge is activated.

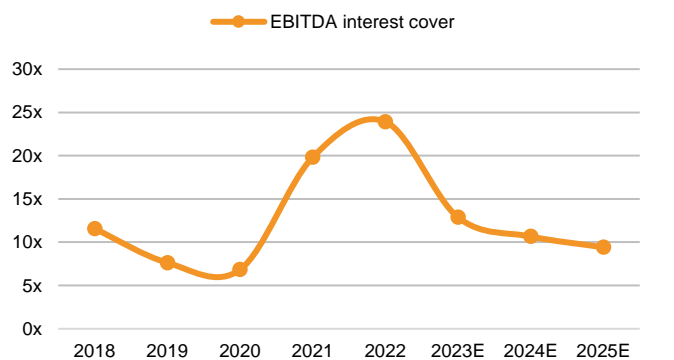
Leverage strongly reduced to 1.1x at end-2022, with levels between 1.8x-2.5x expected for the next three years

Leverage as measured by Scope-adjusted debt/EBITDA has been above our outlook expectation of 3x-4x in 2020 (4.9x) and well below in 2021 (1.6x), which demonstrated the volatility of power prices feeding through to Lyse's financial risk profile – something that is viewed as a credit constraint. The strong results in 2022 brought Lyse's leverage down to 1.1x at end-2022, more than offsetting the NOK 5.8bn acquisition of Ice which was seen as a risk to credit metrics previously. Given Lyse's strong position in the merit order and an increased energy demand in Europe (to which southern Norway is connected to via cables) as a consequence of the war in Ukraine, industry bodies expect normalised power prices to remain significantly above historical prices. Such high power prices are also visible in forward curves Scope uses and partly mitigate the volatility of power generation, while the increasing share of telecom EBITDA would act as a further mitigant in the future. Higher telecom EBITDA require a significant capex programme, which contributes to increasing leverage going forward, estimated at 1.8x-2.5x in 2023-2025. Those levels, well below the previous expectation of 3-4x, allow for an upgrade of the company's financial risk profile.

**Figure 5: Scope-adjusted EBITDA (NOK m) and leverage (x)      Figure 6: Interest cover**



Sources: Scope (estimates)



Sources: Scope (estimates)

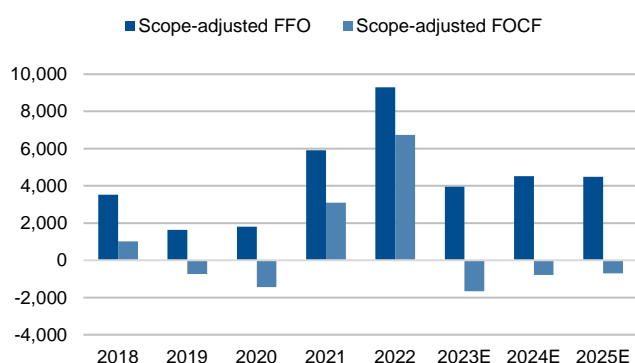
**Interest cover to remain above 10x for the next two years**

Debt protection as measured by the EBITDA interest cover remains very strong despite the increased debt levels as a result of the Ice transaction, reaching 24x at end-2022. With a more normalised EBITDA going forward based on lower expected power prices and despite a partially debt financed capex programme, we forecast levels above 10x for the next two years, applying further upside pressure to the financial risk profile.

**Capex cover remains the weakest link given significant investment programme**

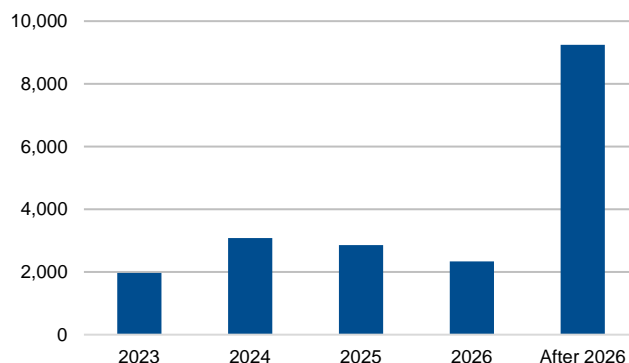
Capex coverage and free cash flow generation remains the weakest link in Lyse's rating. Lyse's elevated capex programme, predominantly driven by significant investment in telecoms and grid, is expected to weigh on free operating cash flow, after a stellar positive result in 2022 resulted in FOCF of NOK 6.7bn. Scope expects Lyse to spend NOK 4.8bn yearly for the next three years, rendering cash flows negative over that period. Volatility in Scope-adjusted FOCF/SaD also comes from time lags in taxes paid, with the exception of the windfall tax which is paid immediately. Nevertheless, we sustain our view of Lyse's internal financing capacity with neutral-to-lightly positive free operating cash flow across the investment cycle. Lastly, dividends are expected to be increased in periods of strong results.

**Figure 7: Scope-adjusted FFO and FOCF (NOK m)**



Sources: Scope (estimates)

**Figure 8: Maturity profile (NOK m) ex. operating leases**



Sources: Lyse, Scope

**Adequate liquidity**

At year-end 2022, Lyse had NOK 7.7bn in cash (of which NOK 829m restricted) plus NOK 1.1bn in short-term marketable securities and NOK 3.6bn in unused credit lines.

The company expanded its revolving credit facility with a syndicate of Nordic banks from NOK 1.5bn to NOK 3bn during 2022. This revolving credit facility expires in 2024 but we expect that the company will continue to have available credit lines after this. In addition, Lyse had committed credit lines and revolving credit facilities with two banks amounting to NOK 695m, of which NOK 633 was undrawn going out of 2022.

Comparing available liquidity of NOK 11.7bn to NOK 2.3bn in short-term debt (including lease payments), Lyse is more than adequately covered.

Balance in NOK m	2022	2023E	2024E
Unrestricted cash (t-1)	5,772	8,032	2,920
Open committed credit lines (t-1)	1,800	3,633	3,320
Free operating cash flow	6,740	-1,665	-790
Short-term debt (t-1)	1,482	2,253	3,360
<b>Coverage</b>	<b>966%</b>	<b>444%</b>	<b>162%</b>





**One notch uplift for municipality ownership**

**Supplementary rating drivers: +1 notch**

We continue to use our bottom-up approach to analyse Lyse's parent support and the one-notch uplift assigned for municipality ownership is unchanged. The reduction of municipality ownership in Lyse's production in 2021 occurred as a consequence of the Hydro acquisition, and did not trigger any change in the overall supplementary government-related entity rating adjustment for Lyse, still 100% owned by 14 municipalities. The owners are seen as one group, with a long-term, supportive and committed ownership. We make no adjustment for financial policy. However, we note positively that management targets a minimum credit rating of BBB+ and is thus aware of the credit ratios it needs to maintain. In addition, management's liquidity strategy includes the stated ambition that cash should cover operational and investment activities as well as debt maturities and dividends in the next six months.

**Senior unsecured debt: A-  
Short-term debt: S-1**

**Long-term and short-term debt ratings**

The senior unsecured debt rating was upgraded in line with the issuer rating to A-. We have also upgraded the short-term debt rating to S-1, still reflecting sufficient short-term debt coverage, and good access to both bank loans and debt markets which warrants a higher short-term rating given the upgraded issuer rating.



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