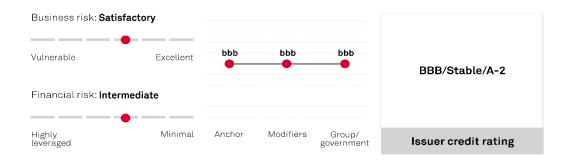


November 17, 2023

Ratings Score Snapshot



Primary contact

Lena Liacopoulou Staad

33-14-420-6739 lena.liacopoulou @spglobal.com

Secondary contact

Elad Jelasko, CPA

London 44-20-7176-7013 elad.jelasko @spglobal.com

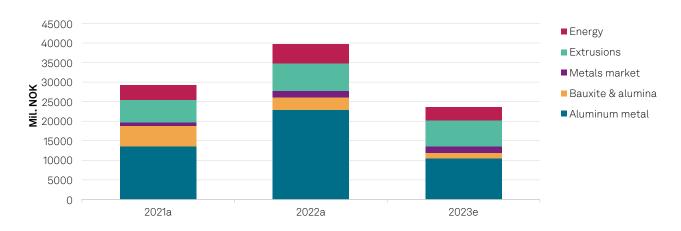
Credit Highlights

Overview

Key strengths	Key risks
Tenth-largest producer of primary aluminum globally (2.1 million metric tons [mmt] annually), fully integrated into bauxite, alumina, power, and downstream operations.	Exposure to volatile aluminum industry conditions, with current macroeconomic concerns around high energy prices, inventory levels and flow of metal from China.
Aluminum smelters are positioned in the second quartile of the industry's cost curve.	High cash flow volatility, mainly driven by the cyclicality of aluminum prices.
Important stake in energy assets and long-term contracts that mitigate the current energy scarcity in Europe.	
Limited debt and a conservative financial policy.	

S&P Global Ratings expects Norsk Hydro ASA's EBITDA to be cut almost in half to about Norwegian krone (NOK) 25 billion in 2023. After a staggering S&P Global Ratings-adjusted EBITDA of NOK42 billion in 2022, aluminum players experienced softer conditions in 2023. Some of the reasons include declines in aluminum prices (about 20% to \$2,300 per ton) pressure on profitability due to inflation and higher energy prices, as well as sluggish demand from manufacturers and destocking trends. Not all the company's divisions felt the same pinch.

Norsk Hydro's Underlying EBITDA by division for 2021a-2023e



a--Actual. e--Estimate. NOK--Norwegian krone. Source.: S&P Global Ratings and company reports. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

- Aluminum metal --Lower aluminum and premiums prices and higher carbon costs.
- Bauxite and alumina--Expected to show the greatest year-on-year change, declining over 50%, mainly due to lower sales prices.
- Extrusions: Has been balancing between weakened demand from the construction and industrial segments and strengthening demand from auto manufacturers.
- Energy: Has experienced lower Nordic power prices and significant price area differences, which are lower in 2023-to-date compared to last year.

We expect EBITDA to be flat next year, with slight upside despite the slowdown of European economies. Extrusions and energy are also expected to contribute to more stable profitability going forward.

Limited debt and a prudent financial policy remain key features of the rating. Norsk Hydro's financial policy consists of two pillars, adjusted net debt to EBITDA below 2x over the cycle and adjusted net debt of NOK25 billion. We believe that these can support a higher rating over time. As of Sept. 30, 2023, the company's reported net debt was NOK13.8 billion, up from a net cash position of NOK1.3 billion at year-end 2022; equivalent to NOK26 billion and NOK11.5 billion of S&P Global Ratings-adjusted debt respectively Despite the increase in net debt and the sharp drop in EBITDA, we expect leverage to remain minimal in 2023, with S&P Global Ratings-adjusted debt to EBITDA of 1.0x expected at year end.

Supported by its strong balance sheet, expected working capital inflows, and proceeds from divestments, Norsk Hydro has increased its capital expenditure (capex) guidance for full-year 2023 to about NOK23.5 billion (including Hydro Rein) from the previous NOK19 billion. Given the attractive projects in the pipeline, we expect capex to remain elevated in the coming years.

The newly announced joint-venture with Macquarie Asset Management will see the latter take a 49.9% stake In Hydro Rein. The much-anticipated capital increase will bring \$332 million of equity into the business in the coming years, part for reimbursing Hydro's capex between now and closing, and the remainder supporting Rein investment needs post-closing. We expect no further capital injections from Hydro and any debt remaining nonrecourse to Hydro. Furthermore, Rein is expected to become self-funded further down the line through farm downs of existing projects. We don't expect any cash upstream in the coming years.

The company paid out dividends of NOK12.6 billion in 2023, in line with its dividend policy of a minimum of 50% of net income over the cycle, with a floor of NOK1.25 per share. In our base case, we also include share repurchases of NOK2.0 billion, in accordance with the share buyback program approved in May 2023.

So far in 2023, Norsk Hydro was very active on the merger and acquisition (M&A) front, although none of the investments will contribute meaningfully to EBITDA. Yet, we acknowledge the company's 30% divestment of its upstream mining operations (Alunorte) after unsatisfying returns over the past decade.

At year-end 2023 and 2024 we expect Norsk Hydro's reported net debt to reach about NOK13 billion-NOK17 billion, equivalent to about NOK26 billion-NOK30 billion on an S&P Global Ratingsadjusted basis. The company aims to keep adjusted leverage below 2x and adjusted net debt below NOK25 billion over the cycle (the company's definitions are slightly different from S&P Global Ratings' adjustments).

Norsk Hydro's green agenda is unfolding according to plan. The company is on track to reduce carbon emissions 30% by 2030 and achieve net zero by 2050, meeting the EU's long-term objective. The Alunorte fuel switch project, replacing heavy fuel oil with natural gas, is proceeding as planned, with full conversion expected by first-half 2024. Also, a power purchase agreement (PPA) was signed with Statkraft for the supply of renewable power over a 15-year period, partly securing Norwegian aluminum smelters' access to renewable energy until 2038. Other projects include:

- Renewables: Hydro Rein has a mix of solar and wind power projects at various stages of development totaling 6.9 gigawatts (GW) and located in Brazil and the Nordics: 1.7 GW under construction; 0.9 GW secured, and 4.4 GW in the pipeline. The majority are solar energy projects.
- Recycling: The company aims to increase its recycling capacity by 1 million tons by 2027. In Europe, the company purchased land in Torija (Spain) to construct a state-of-the-art aluminum recycling plant, which will produce 120 million tons annually. Also, its Navarra (Spain) and Sjunnen (Sweden) sites are ramping up recycling capacity by 20 million tons each. Furthermore, the company opened a HyForge casting line in Rackwitz (Germany) supplying

the auto industry. In North America, the greenfield recycling plant in Cassopolis, Michigan, is being ramped up and expected to be fully operational by second-quarter 2024.

Outlook

Our stable outlook reflects the ample headroom under the rating as macroeconomic conditions remain subdued for longer. We expect Norsk Hydro to weather any headwinds thanks to its own electricity production and prudent financial policy.

Under our base-case scenario, which incorporates an aluminum price of about \$2,430 per ton (/ton), we expect Norsk Hydro to report S&P Global Ratings-adjusted EBITDA of NOK23 billion-NOK25 billion in 2023 and NOK24 billion-NOK26 billion in 2024. Even assuming very generous return to shareholders, the company's credit metrics will remain very supportive.

We continue to view adjusted funds from operations (FFO) to debt of 45% or better through the cycle--together with positive discretionary cash flow (DCF)--as commensurate with the rating. During the low point of the cycle, FFO to debt could drop temporarily to 30% or slightly lower without putting immediate pressure on the rating. In our base case, we expect FFO to debt to be above 60% in both 2023 and 2024.

Downside scenario

Unless industry conditions reverse sharply in the coming months and Norsk Hydro deviates from its supportive financial policy, we do not view a downgrade as likely in the coming 12 months.

A negative rating action could be triggered by prolonged low alumina and aluminum prices or capacity curtailments caused by a severe recession in Europe, coupled with abandoning its current financial policy.

Other downgrade triggers include a large debt-funded acquisition. We view such a scenario as less likely because the company has a handful of organic projects, before pursuing inorganic growth.

Upside scenario

We see a higher rating on Norsk Hydro as unlikely in the coming 12-18 months. However, an upgrade would be supported by Norsk Hydro consistently achieving:

- Less cash flow volatility, supported by a shift from the legacy aluminum production (mining and primary aluminum production) to power generation and downstream activities.
- A financial policy commensurate with adjusted FFO to debt above 60% over the cycle (equivalent to adjusted debt to EBITDA below 1.5x), and above 45% at the bottom of the cycle. To date, Hydro's updated financial policy is consistent with such targets. However it lacks a longer track record.

Company Description

Norsk Hydro is the world's 10th-largest primary aluminum producer and is fully integrated. It is present through the global aluminum value chain, from energy to bauxite mining and alumina refining, primary aluminum, extrusions, and recycling.

At year-end 2022, Norsk Hydro's S&P Global Ratings-adjusted revenue and EBITDA totaled NOK218 billion and NOK42.1 billion respectively.

Its portfolio includes:

- Bauxite and alumina operations (8% of 2022 EBITDA) located in Paragominas, Brazil and refined into aluminum at Alunorte, meeting its own smelting needs, but also sold to other companies. Norsk Hydro's Alunorte refinery is in the first quartile of the global cash cost curve.
- Primary aluminum production (about 58%), encompassing 10 smelters with total capacity of 2.1 million tons. This division delivers low-carbon aluminum at competitive long-term costs, thereby enabling 17th percentile placement on the global primary aluminum cost curve in 2022. This is mainly because of the availability of low-cost energy, since more than 70% of electricity used in primary aluminum is from renewable sources via captive hydropower production in the hydro energy division.
- Hydro energy (12%) has power plants located mainly in the Nordic region and Brazil. This division is responsible for developing new business opportunities within renewable energy, green hydrogen, and batteries, and provides support to other business areas with contracts, security of supply, and energy framework conditions.
- Downstream business (22%), which consists of the recycling business unit as well as all commercial activities, including sales, marketing, distribution of the products, and recycling plants. The recycling business has several operating plants and various greenfield and brownfield projects under construction to provide customers with flexible, energy efficient, and tailor-made metal supply with a low-carbon footprint. This segment also includes the extrusion division, which has plants across 22 countries providing local expertise, a global network, and advanced research and development capabilities to offer everything from standard profiles to advanced solutions for most industries.

Environmental, Social, And Governance

We believe that Norsk Hydro's diversified operations across the aluminum value chain and multiple regions should enable it to avoid rating volatility from most one-off environmental, social, and governance events, such as a major environmental accident or the revocation of a license. The company's operational issues in Brazil in 2018 and the cyberattack on its downstream division in 2019 underscore the benefits of diversification. However, at the same time, Norsk Hydro's global reach complicates its ability to monitor and comply with local regulations.

We consider aluminum operations to be highly energy intensive. As a result, any future legislation and social pressure could have a material bearing on Norsk Hydro's activities. At the same time, aluminum is lighter and stronger than steel, and has better connectivity, making it advantageous, for example, to auto manufacturers, who are in a race to build lighter--and therefore more fuel-efficient--vehicles. Moreover, once produced, aluminum can be easily recycled at very low cost.

Norsk Hydro's strategy focuses on green initiatives, and it has clearly defined targets to become carbon-neutral from a lifecycle perspective by 2050. To ensure it meets this target, the company is investing in its recycling activities and carbon-free technology, among other things. Norsk Hydro currently meets about one-third of its energy needs with the hydroelectricity that it produces.

We expect governments around the world, and especially in Europe, to implement increasingly stringent environmental regulations. The EU's long-term objective for the aluminum industry to produce low-carbon aluminum by 2050--while recognizing the importance of this metal in the energy transition--provides the framework for Norsk Hydro's existing and future initiatives. The company will benefit from the EU's decisions, but additional targets could come with a price tag.

Norsk Hydro's direct greenhouse gas emissions decreased about 6% in 2022, mainly due to the curtailment of the Slovalco plant and electric boilers for generating steam in Alunorte. As a step toward its 2025 strategy to strengthen its position in low-carbon aluminum, the company made the first commercial volumes of near-zero carbon product available in 2022.

After four years of no fatalities, in October 2023 one contractor passed away in the Alunorte refinery and another contractor was fatally injured in Qatalum. The company is currently investigating the root causes of the accidents.

Norsk Hydro has a large workforce with 32,014 employees as of Dec. 31, 2022, with a good diversity mix. Women occupy about 40% of senior management roles.

The majority of Norsk Hydro's operations are in lower-risk Western Europe but its mining operations are concentrated in higher risk Brazil.

Governance in terms of disclosure and board and management processes is at least on a par with other large metal and mining players that we rate.

Government Influence

We continue to view Norsk Hydro as a government-related entity (GRE) with a low likelihood of extraordinary state support. This view reflects the purely commercial nature of the company's business, being just one investment in Norway's diversified portfolio. Norsk Hydro invested in its mining assets in Brazil in 2011 and a new aluminum smelter in Qatar in 2007, the Qatalum joint venture. Moreover, the company's growth projects are outside Norway. This makes it more of a global player, with a smaller proportion of its total business connected to the Norwegian economy than previously. We also understand that the government does not plan to increase its current 34.3% stake in Norsk Hydro.

In our view, other Norwegian GREs for which we factor in one notch of uplift for extraordinary state support--such as Equinor ASA (67% government-owned) and Telenor ASA (54%)--benefit from a stronger link with or role for the Norwegian government. On the other hand, we see Norsk Hydro's Norwegian hydropower plants as an important factor differentiating it from other state-owned companies that we do not consider to be GREs, such as Yara International ASA (36%).

Rating Component Scores

Foreign currency issuer credit rating	BBB/Stable/A-2
Local currency issuer credit rating	BBB/Stable/A-2
Business risk	Satisfactory
Country risk	Low
Industry risk	Moderately High
Competitive position	Satisfactory
Financial risk	Intermediate
Cash flow/leverage	Intermediate
Anchor	bbb
Diversification/portfolio effect	Neutral (no impact)
Capital structure	Neutral (no impact)
Financial policy	Neutral (no impact)
Liquidity	Strong (no impact)
Management and governance	Satisfactory (no impact)
Comparable rating analysis	Neutral (no impact)
Stand-alone credit profile	bbb

Related Criteria

- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Criteria Corporates General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria Corporates Industrials: Key Credit Factors For The Metals And Mining Upstream Industry, Dec. 20, 2013
- Criteria Corporates Industrials: Key Credit Factors For The Metals And Mining Downstream Industry, Dec. 20, 2013
- Criteria Corporates Industrials: Methodology For Standard & Poor's Metals And Mining Price Assumptions, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria Corporates General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria Corporates General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

• General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Related Research

Enter Article Content Here

Ratings Detail (as of November 14, 2023)*

Norsk Hydro ASA

Issuer Credit Rating BBB/Stable/A-2

Issuer Credit Ratings History

19-Nov-2010 BBB/Stable/A-2 06-May-2010 BBB-/Watch Pos/A-3 20-Mar-2009 BBB-/Negative/A-3

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings credit ratings on the global scale are $comparable\ across\ countries.\ S\&\bar{P}\ Global\ Ratings\ credit\ ratings\ on\ a\ national\ scale\ are\ relative\ to\ obligations\ within\ that$ specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

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