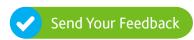


CREDIT OPINION

11 June 2025

Update



RATINGS

Norsk Hydro ASA

Domicile	Oslo, Norway
Long Term Rating	Baa2
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Norsk Hydro ASA

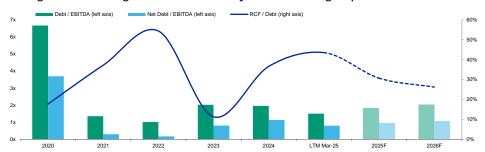
Update to credit analysis

Summary

Norsk Hydro ASA's (Hydro) Baa2 rating reflects the benefits of its integrated business profile including cost-competitive upstream operations with integration into raw materials and energy, and its downstream market leadership position in the Extrusions segment. It also continues to reflect the company's conservative financial framework and strong liquidity profile. Still, the aluminium sector remains volatile and capital-intensive; additionally, Norsk Hydro is exposed to commodity price and exchange rate fluctuations.

The company's 2024 profitability, leverage and cash flow generation were mostly flat as compared to 2023, somewhat pressured by both cost and weak prices of aluminium and demand in core end markets. Norsk Hydro's performance somewhat strengthened in the first quarter of 2025 mostly on the back of strong pricing environment in the Bauxite and Alumina segment while Extrusions experienced reduced demand. We expect the pricing environment to moderate over the course of 2025 but we believe, the company's credit metrics will remain consistent with its rating category. Moody's-adjusted debt/EBITDA declined to 1.5x for the twelve months ending March 2025 from 2.0x in 2024. We expect it to remain below 2.0x in the next twelve months. Still, Norsk Hydro is also continuing to make substantial investments while distributing significant cash flow to shareholders which is pressuring the company's free cash flow.

Exhibit 1
Leverage and cash flow generation metrics likely to remain strong despite weak market



All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer. Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

Credit Strengths

» Competitive and integrated upstream business benefiting from favourable position on industry's cost curves and stable access to low cost energy sources

- » Leading market position in Extrusions segment
- » Resilient cash flow generation despite exposure to volatile aluminium market
- » Conservative financial framework, solid metrics and robust liquidity profile
- » Comprehensive hedging programme and integrated nature mitigate some of the sector volatility

Credit Challenges

- » Exposure to a single metal, aluminium, and a capital and energy intensive sector
- » High sensitivity of EBITDA to volatile aluminium prices and exchange rates such as NOK/USD and USD/BRL
- » Persistent challenging operating environment in the global aluminium markets exacerbated by the uncertainty around US trade policy and tariffs
- » High levels of growth investments and shareholder returns from cash flow

Rating Outlook

The stable outlook reflects our expectation that credit metrics are likely to remain within the expectations for the Baa2, specifically leverage below 2.5x, through a reasonable range of market conditions.

Factors that Could Lead to an Upgrade

An upgrade would require maintaining an EBIT margin sustained around at least 10% and debt to EBITDA below 1.0x, with retained cash flow (RCF) to debt above 40% and consistent positive FCF generation.

Factors that Could Lead to a Downgrade

Negative pressure would result from a prolonged deterioration in operating profitability and cash flow generation resulting in negative FCF, weakening liquidity and deterioration in leverage metrics. More specifically, RCF to debt below 25% or debt to EBITDA rising above 2.5x would result in negative pressure. Any weakening of the company's conservative financial policy would also likely pressure the ratings.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Norsk Hydro ASA

(in \$ billions)	2020	2021	2022	2023	2024	LTM Mar-25	2025F	2026F
Revenue	12.2	17.4	21.7	18.4	18.9	19.6	19.5	18.6
EBIT Margin	0.1%	13.6%	15.2%	6.7%	6.0%	9.6%	7.8%	6.8%
Debt / EBITDA	6.7x	1.4x	1.0x	2.0x	2.0x	1.5x	1.8x	2.0x
(EBITDA - CAPEX) / Interest Expense	1.0x	15.2x	18.5x	2.9x	2.2x	5.0x	2.8x	2.0x
RCF / Debt	17.7%	37.2%	54.3%	11.3%	36.6%	43.5%	30.7%	26.2%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

Profile

Headquartered in Oslo, Norway, Norsk Hydro is a fully integrated aluminium producer with operations throughout the aluminium value chain, including bauxite and alumina production. The company is also involved in a range of energy businesses, including hydropower production for its own energy-intensive operations and other renewable power.

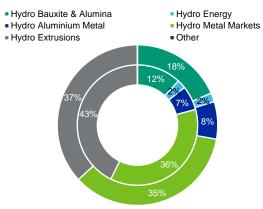
Norsk Hydro is listed on the Oslo stock exchange with a market capitalisation of NOK112 billion as of 6 June 2025. It is 34.3%-owned by the <u>Government of Norway</u> (Aaa, stable) and accordingly falls within the scope of Moody's rating methodology for Government Related Issuers (GRIs), although without uplift.

The company produced 2.0 million metric tonnes (mt) of primary aluminium in 2024, including the contribution from Hydro's 50% interest in Qatalum (co-owned by <u>QatarEnergy</u>, Aa2 stable, and Qatar aluminium Manufacturing Company), a low-cost smelter in Qatar, which has its own gas-based power production.

Norsk Hydro's business is divided in five operating segments including:

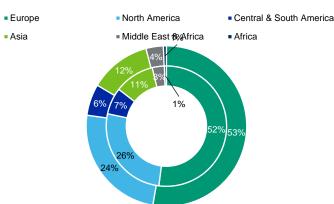
- » Bauxite & Alumina includes the group's bauxite mining activities comprised of the Paragominas mine, located in Brazil, as well as Norsk Hydro's 62% interest in the Brazilian alumina refinery, Alunorte (with 30% owned by Glencore plc (A3 stable) and 8% owned by minority interests). These activities also include Hydro's long-term sourcing arrangements and alumina commercial operations;
- » Aluminium Metal consists of the group's primary aluminium production, remelting and casting activities at its wholly owned smelters located in Norway, and Norsk Hydro's share of the primary production in partially-owned companies located in Slovakia, Qatar, Australia, Canada and Brazil;
- » Metal Markets includes all sales and distribution activities relating to products from the group's primary metal plants, as well as metal sourcing and trading activities that include 12 recyclers with an annual capacity of 1 mt;
- » Extrusions division produces and sells 1.0 mt (2024) extruded aluminium products, such as the aluminium building systems and precision tubing activities mainly used in construction, transportation and engineering industries; and
- » Energy segment is responsible for managing Norsk Hydro's captive hydropower production in Norway, external power sourcing arrangements for the aluminium business, which requires high energy consumption and identifying and developing competitive energy solutions for Hydro worldwide. The segment also includes a range of new initiatives, such as Rein (renewable energy).

Exhibit 3
Revenue breakdown by business segments



Inner circle: 2023 results; outer circle: 2024 results. *Source: Norsk Hydro*

Exhibit 4
Revenue breakdown by customer locations



Inner circle: 2023 results; outer circle: 2024 results. *Source: Norsk Hydro*

Detailed Credit Considerations

Integrated business profile counterbalanced by exclusive focus on volatile aluminium market

Norsk Hydro's operations are fully integrated and span most of the aluminium value chain. Its primary aluminium smelter portfolio holds a 20th percentile cost position in the sector benefiting from its cost-efficient primary aluminium facilities and structural cost improvements in recent years.

Norsk Hydro's cost position is further underpinned by the 12th percentile cost position of its large integrated Alunorte refinery and Paragominas bauxite mine. Additional 30% of Alunorte's bauxite requirements are sourced under long term off-take agreements from Glencore's (A3 stable) 45% interest in the MRN bauxite mine. Alumina is also purchased from a number of external sources including a long-term supply contract with Rio Tinto (A1 stable) for 900,000 mt of alumina p.a. until 2030 from the Yarwin refinery. At the same time substantial bauxite and alumina volumes are sold externally.

Backward integration into energy production benefits upstream activities, because energy cost accounts for 25% - 35% of bauxite, alumina and primary aluminium operating cash cost over the cycle. About half of Norsk Hydro's power needs for its Norwegian primary aluminium smelters are covered by its own hydropower assets while the other half is secured under wind- and hydropower contracts until around 2030. For its joint venture smelters power arrangements vary, but Qatalum benefits from its own captive power while most others are also under secured contracts until at least 2027. However, Norsk Hydro has also not been immune to the difficult conditions in Europe and shut down its Slovalco smelter because of energy cost pressures and also reduced some production in Norway to adjust to weakening demand. Its Bauxite & Alumina business is also, until 2025, transitioning from fuel oil and coal towards gas and electrical boilers supported by Hydro Rein, which will improve cost and its emissions profile. The benefits of its integrated model also result in increased profit from energy sales during lower aluminium production periods and can offset cost pressures or lower aluminium price environments.

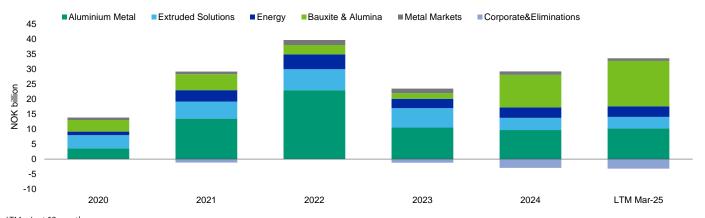
Downstream, Norsk Hydro is the world's largest extruded solutions provider, enjoying market leadership in North America and Europe. Peers include <u>Arsenal AIC Parent LLC</u> (B1 stable), <u>Novelis Inc.</u> (Ba2 stable) and <u>Constellium SE</u> (Ba3 stable).

Still, Hydro's business profile remains constrained by its exposure to the highly cyclical, capital and energy-intensive commodity sector with a focus on a single metal, aluminium. Despite its integrated business model, Hydro historically derived most its earnings from its upstream bauxite & alumina and primary aluminium metal businesses although contributions from other businesses such as Extrusions are increasing, as Exhibit 5 shows.

Exhibit 5

Most segments contribute meaningfully to EBITDA

Company EBITDA by business segment



LTM = Last 12 months. Source: Norsk Hydro

Persistent volatility in the aluminium market poses a risk

The main end markets for the downstream business are transportation and construction sectors, which account for around half of global aluminium demand. There is emerging demand for lower emission and recycled products which Norsk Hydro is well-positioned to address given its integrated structure. Over time, the company seeks to grow this low carbon and recycled portion of its business to reduce volatility from the upstream element of the sector.

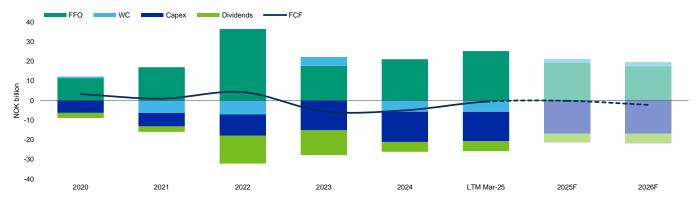
While Bauxite and Alumina segment performed strongly in Q1 2025, alumina prices moved down over the course of the quareter on the back of increased capacity in China driving higher exports. While aluminium prices were largely range-bound in the first quarter of 2025, US premiums increased sharply in response to tariffs on aluminium imports. At the same time, European premiums declined in anticipation of redirected US trade flows and overall muted demand. Downstream demand for extruded products has weakened in Q1 2025 as industrial and construction demand remained flat while automotive demand reduced.

Strong financial profile helps weather uncertainty with metrics likely to remain strong in different price scenarios, supported by structural cost improvements

Following the strong recovery from the pandemic characterised robust credit metrics, Norsk Hydro experienced a decline in its coverage and free cash flow ratios, although the company's leverage remained conservative below 2.0x on a Moody's-adjusted basis. The dip in coverage reflects primarily higher interest rates post pandemic and in the aftermath of the Russia-Ukraine conflict while negative free cash flow is a result of a material ongoing investment programme coupled with significant shareholder returns. We expect the company to continue maintaining a conservative leverage profile and reduce its negative free cash flow through lower shareholder remuneration (calculated as 50% of net income). Still, we anticipate Norsk Hydro's coverage ratio to be somewhat constrained.

Norsk Hydro mitigates some of the sector's volatility through a comprehensive hedging programme that has, together with the company's integrated nature, contributed to reduce volatility. Cash flow generation has also been helped by a measure of countercyclical working capital cash flow, as Exhibit 6 shows.

Exhibit 6
Cash flow has been less volatile than profit
Historical and projected cash flow



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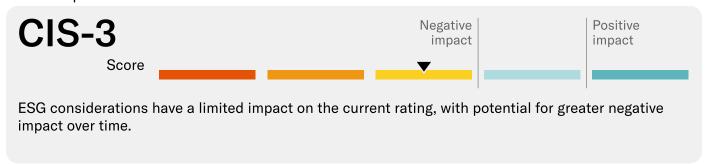
Sources: Moody's Financial Metrics[™] and Moody's Ratings forecasts

We consider Norsk Hydro's financial policy as conservative taking into account its commitment to "maintaining investment-grade credit rating" and an adjusted net debt to adjusted EBITDA of below 2.0x over the cycle, although the latter leaves some flexibility for weaker metrics. The company also has a net debt target of NOK25 billion through the cycle which it has met consitently.

ESG considerations

Norsk Hydro ASA's ESG credit impact score is CIS-3

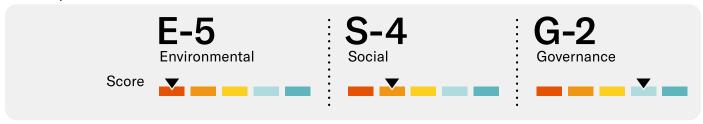
Exhibit 7
ESG credit impact score



Source: Moody's Ratings

Norsk Hydro's **CIS-3** indicates that ESG considerations have a limited impact on the current credit rating with potential for greater negative impact over time. The score reflects significant environmental and social risks in line with the sector. This is mitigated by strong corporate governance and risk management policies, low financial leverage and a well-defined dividend policy.

Exhibit 8 ESG issuer profile scores



Source: Moody's Ratings

Environmental

The **E-5** score reflects exposure to a range of sector-wide natural capital, waste and pollution, water management and physical climate risk exposures given the significant impact on land and water usage of its mining and smelting operations. The company operates a bauxite mine and alumina refinery, with associated residue and tailings storage facilities, and primary aluminium smelters. More positively, we note the substantial use of hydroelectric energy in the production, leading to emissions that are much lower than those of its peers, and the strategic objective to reduce greenhouse gas emissions, waste and protect biodiversity in the areas in which Norsk Hydro operates. For example, Norsk Hydro is in the process of switching its energy consumption to gas and electricity for its large Alunorte alumina refinery, which will significantly reduce emissions, and is actively building out its recycling and renewables capacity to offer premium low carbon aluminum.

Social

The **S-4** score reflects high sector wide exposure to health & safety and responsible production risks and to a lesser extent human capital. The company's track record has strengthened after the 2018 incident at its Alunorte alumina refinery, supported by various initiatives, but this incident also illustrated the importance of engagement with the local community.

Governance

The **G-2** score reflects Norsk Hydro's prudent financial policy, for example characterized by low leverage and a comprehensive hedging program, and its substantial track record. The board composition is fully independent and it is aligned with best practices for the industry. Compliance and reporting are strong, illustrated by the handling of the cyberattack in 2019 and its regular and comprehensive quarterly disclosures.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity Analysis

Norsk Hydro's liquidity position is strong. As at March 2025, Norsk Hydro had cash balances of NOK18.9 billion and NOK2.9 billion of short-term investments. Its \$1.6 billion revolving multicurrency credit facility maturing in December 2026 was fully undrawn. In addition, the company renewed its additional \$1.0 billion undrawn revolving credit facility in February 2024 for two years with a one year extension option.

The company also had NOK13.1 billion of short-term bank loans maturing within 12 months, including some bonds.

Rating methodology and scorecard factors

The principal methodology used in these ratings was Mining. We also use the Government Related Issuers methodology. The scorecard-indicated outcome is below the actual rating as a result of current weak price and demand environment.

Norsk Hydro's Baa2 rating combines: (i) the company's standalone credit quality, or Baseline Credit Assessment (BCA) of baa2 and; (ii) Moody's assessment of the low default dependence and low probability of extraordinary support from the Norwegian government.

Exhibit 9
Rating factors
Norsk Hydro ASA

Mining Industry Scorecard	Curre LTM Ma		Moody's 12-18 Mon	th Forward View		
Factor 1 : Scale (15%)	Measure	Score	Measure	Score		
a) Revenues (\$ billions)	19.6	Baa	19.5	Baa		
Factor 2 : Business Profile (30%)						
a) Business Profile	Baa	Baa	Baa	Baa		
Factor 3 : Profitability and Efficiency (10%)						
a) EBIT Margin	9.6%	Caa	7.8%	Caa		
Factor 4 : Leverage and Coverage (25%)						
a) Debt / EBITDA	1.5x	Α	1.8x	А		
b) (EBITDA - CAPEX) / Interest Expense	5.0x	Baa	2.8x	Ва		
c) RCF / Debt	43.5%	Baa	30.7%	Baa		
Factor 5 : Financial Policy (20%)		-				
a) Financial Policy	Baa	Baa	Baa	Baa		
Rating:						
a) Scorecard-Indicated Outcome		Baa3		Baa3		
b) Actual Rating Assigned				Baa2		
Government-Related Issuer	Factor					
a) Baseline Credit Assessment	baa2	·				
b) Government Local Currency Rating	Aaa	·				
c) Default Dependence	Low	·				
d) Support	Low					
e) Actual Rating Assigned	Baa2					

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Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

Appendix

Exhibit 10

Peer comparison Norsk Hydro ASA

		sk Hydro ASA Baa2 Stable		South32 Limited Baa1 Stable		Alcoa of Australia Limited Baa3 Stable			Alcoa Corporation Ba1 Stable			
	FY	FY	LTM	FY	FY	LTM	FY	FY	FY	FY	FY	FY
(in \$ millions)	Dec-23	Dec-24	Mar-25	Jun-23	Jun-24	Dec-24	Dec-21	Dec-22	Dec-23	Dec-22	Dec-23	Dec-24
Revenue	18,355	18,948	19,585	5,646	5,479	6,095	3,116	3,699	3,183	12,451	10,551	11,895
EBITDA	2,127	2,092	2,838	1,447	675	1,232	-	-	-	2,319	339	1,503
Total Debt	4,462	3,872	4,404	1,937	1,808	1,957	-	-	-	2,120	2,290	3,122
EBIT Margin	6.7%	6.0%	9.6%	14.0%	0.5%	10.9%	23.8%	22.0%	8.0%	13.3%	-3.2%	6.9%
EBIT / Avg. Tangible Assets	6.7%	6.2%	10.1%	5.1%	0.2%	4.7%	-	-	-	11.2%	-2.4%	5.9%
EBIT / Interest Expense	5.1x	3.8x	6.3x	6.6x	0.2x	5.9x	85.8x	63.6x	10.7x	11.7x	-2.5x	4.3x
Debt / EBITDA	2.0x	2.0x	1.5x	1.3x	2.7x	1.6x	0.1x	0.1x	0.3x	0.9x	6.8x	2.1x
(EBITDA - CAPEX) / Interest Expense	2.9x	2.2x	5.0x	4.5x	-3.6x	2.1x	-	-	-	-	-1.8x	4.6x
RCF / Debt	11.3%	36.6%	43.5%	15.9%	65.7%	71.6%	-	-	-	-	14.3%	33.1%
Total Debt / Book Capitalization	28.8%	28.2%	28.9%	16.8%	16.5%	17.3%	4.3%	5.4%	5.3%	23.8%	27.5%	37.7%
(CFO - Dividends) / Debt	21.3%	23.6%	31.1%	9.7%	53.1%	61.9%	247.7%	-31.7%	202.0%	20.0%	2.1%	16.9%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Source: Moody's Financial Metrics™

Exhibit 11 Moody's-adjusted debt reconciliation Norsk Hydro ASA

(in NOK millions)	2020	2021	2022	2023	2024	LTM Mar-25
As reported debt	29,559	28,418	32,774	36,089	34,749	37,171
Pensions	19,167	9,621	8,252	9,222	9,226	9,226
Moody's-adjusted debt	48,726	38,039	41,026	45,311	43,975	46,397

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Source: Moody's Financial Metrics™

Exhibit 12 Moody's-adjusted EBITDA reconciliation Norsk Hydro ASA

(in NOK millions)	2020	2021	2022	2023	2024	LTM Mar-25
As reported EBITDA	15,070	27,787	42,553	22,696	22,227	30,636
Pensions	(214)	(20)	32	32	39	39
Interest Expense - Discounting	(98)	(146)	(192)	(289)	(446)	(446)
Unusual Items	(7,441)	535	(1,843)	(4,421)	658	658
Moody's-adjusted EBITDA	7,317	28,156	40,550	22,439	22,478	30,887

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Source: Moody's Financial Metrics™

Exhibit 13

Overview on selected historical and forecasted Moody's-adjusted financial data

Norsk Hydro ASA

(in NOK millions)	2020	2021	2022	2023	2024	LTM Mar-25	2025F	2026F
INCOME STATEMENT		•						
Revenue	114,291	149,654	207,929	193,619	203,636	213,185	209,972	200,052
EBITDA	7,317	28,156	40,550	22,439	22,478	30,887	26,108	23,523
EBIT	142	20,312	31,622	13,045	12,307	20,360	16,366	13,539
Interest Expense	1,112	1,400	1,599	2,551	3,227	3,211	3,341	3,341
BALANCE SHEET								
Cash & Cash Equivalents	21,729	29,686	33,978	27,259	18,516	21,888	21,555	19,352
Total Debt	48,726	38,039	41,026	45,311	43,975	46,397	47,832	47,832
Net Debt	26,997	8,353	7,048	18,052	25,459	24,509	24,476	24,878
CASH FLOW								
Funds from Operations (FFO)	11,264	16,960	36,466	17,686	21,098	25,193	19,168	17,430
Cash Flow From Operations (CFO)	12,170	10,680	29,393	22,220	15,374	19,434	21,186	19,525
Capital Expenditures	(6,260)	(6,864)	(10,913)	(15,168)	(15,356)	(14,982)	(16,801)	(16,801)
Dividends	2,628	2,822	14,179	12,574	5,015	5,015	4,500	4,317
Retained Cash Flow (RCF)	8,636	14,138	22,287	5,112	16,083	20,178	14,668	12,522
RCF / Debt	17.7%	37.2%	54.3%	11.3%	36.6%	43.5%	30.7%	26.2%
Free Cash Flow (FCF)	3,282	994	4,301	(5,522)	(4,997)	(563)	(115)	(2,185)
FCF / Debt	6.7%	2.6%	10.5%	-12.2%	-11.4%	-1.2%	-0.2%	-4.6%
(CFO - Dividends) / Debt	19.6%	20.7%	37.1%	21.3%	23.6%	31.1%	34.9%	30.6%
PROFITABILITY								
% Change in Sales (YoY)	-23.7%	30.9%	38.9%	-6.9%	5.2%	10.7%	3.1%	-4.7%
EBIT Margin	0.1%	13.6%	15.2%	6.7%	6.0%	9.6%	7.8%	6.8%
EBITDA Margin	6.4%	18.8%	19.5%	11.6%	11.0%	14.5%	12.4%	11.8%
INTEREST COVERAGE								
(EBITDA - CAPEX) / Interest Expense	1.0x	15.2x	18.5x	2.9x	2.2x	5.0x	2.8x	2.0x
EBIT / Interest Expense	0.1x	14.5x	19.8x	5.1x	3.8x	6.3x	4.9x	4.1x
EBITDA / Interest Expense	6.6x	20.1x	25.4x	8.8x	7.0x	9.6x	7.8x	7.0x
LEVERAGE								
Debt / EBITDA	6.7x	1.4x	1.0x	2.0x	2.0x	1.5x	1.8x	2.0x
Net Debt / EBITDA	3.7x	0.3x	0.2x	0.8x	1.1x	0.8x	0.9x	1.1x

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Sources: Moody's Financial Metrics[™] and Moody's Ratings forecasts

Ratings

Exhibit 14

Category	Moody's Rating
NORSK HYDRO ASA	-
Outlook	Stable
Issuer Rating -Dom Curr	Baa2
Senior Unsecured	Baa2

Source: Moody's Ratings

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