MOODY'S INVESTORS SERVICE

CREDIT OPINION

11 September 2020

Update

Rate this Research

RATINGS

| Yara international ASA | Yara I | nternational ASA | |
|------------------------|--------|------------------|--|
|------------------------|--------|------------------|--|

| Domicile | Oslo, Norway |
|------------------|--------------------------------|
| Long Term Rating | Baa2 |
| Туре | LT Issuer Rating - Fgn 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.

Contacts

Peter Firth +44.20.7772.5222 Associate Managing Director peter.firth@moodys.com

Sven Reinke +44.20.7772.1057 Senior Vice President sven.reinke@moodys.com

Yara International ASA

Update following H1 2020 results

Summary

Yara International ASA's (Yara) Baa2 rating is underpinned by the significant scale and high degree of integration of its operations, its leading position in the nitrogen fertiliser markets, both as a producer and a distributor, and its global footprint, but only with a limited presence in North America. These positives are tempered by the relatively high cyclicality of the fertiliser industry, as well as Yara's high exposure to the energy and agricultural commodity markets. In the context of its integrated business model, we view Yara's strong distribution capabilities as a stabilising factor that outweighs their dilutive effect on its EBITDA margin. The focus of Yara's product offering on premium-priced complex fertilisers (such as nitrogen, phosphorus, and potassium (NPK)) also helps mitigate its inherent exposure to the cyclicality affecting the global nitrogen fertiliser sector.

With urea prices under pressure in supply-driven markets in 2017-18 and substantial capital spending, Yara generated high negative free cash flow (FCF) and its financial profile deteriorated, thereby positioning it weakly in the Baa2 rating category. However, increasing production levels, a steeper decline in natural gas prices than in urea prices and reduced capital spending over the last 18 months had a positive impact on Yara's earnings and cash flow. Accordingly, Yara's key credit metrics improved, with total debt/EBITDA at 2.1x and retained cash flow (RCF)/total debt at 29% in the 12 months that ended June 2020, thereby positioning the company solidly in the Baa2 rating category. For the next 12-18 months, we expect further gains from efficiency-improvement initiatives, rising production from recent plant expansion projects and stabilising fertiliser prices to offset the projected rise in energy prices. Largely stable operating profitability combined with a relatively low level of investments and the maintenance of a prudent shareholder distribution policy should keep Yara's FCF positive, although at a reduced level, and maintain the headroom in its credit metrics relative to our rating guidance.

Exhibit 1 Leverage metrics and upgrade/downgrade guidance Yara is currently well positioned in the Baa2 rating category



Sources: Moody's Financial Metrics™ and Moody's Investors Service estimates

Credit strengths

- » Resilient business model, underpinned by significant scale and leading positions in fertiliser markets, as well as an extensive global distribution network and sizeable marketing operations of nitrogen chemicals
- » Flexible growth strategy, tempered by a conservative financial policy and strong track record of integrating acquisitions
- » Robust balance sheet, with relatively low leverage over the cycle; financial metrics improved strongly in 2019

Credit challenges

- » The cyclical fertiliser business is subject to capacity additions, and demand and pricing trends in agricultural commodities.
- » Nitrogen prices started to decline in H2 2019, fully offset by efficiency-improvement initiatives and particularly lower natural gas prices; a rebound in gas prices would lower Yara's profit margin.
- » Credit metrics are unlikely to improve notably in 2020-21 partially because of higher shareholder remuneration.

Rating outlook

The stable outlook reflects that Yara is currently solidly positioned in the Baa2 rating category as well as our expectation that the company's profitability and key credit metrics will remain largely stable over the next 12-18 months.

Factors that could lead to an upgrade

Yara's ratings could be upgraded if:

- » the company continues to improve its profitability and cash flow generation, leading to a permanent reduction in financial leverage
- » its Moody's-adjusted total debt/EBITDA is maintained at around 1.5x and RCF/total debt remains in the high-30s in percentage terms throughout the cycle

An upgrade of the ratings would also require Yara's commitment to a financial profile consistent with a higher rating.

Factors that could lead to a downgrade

Downward rating pressure could develop if the company were to:

- » suffer a severe and sustained deterioration in its operating results and cash flow generation
- » embark upon a more aggressive acquisitive strategy
- » experience a pronounced weakness in its credit metrics, including debt/EBITDA increasing above 3.0x and RCF/debt falling in the low-20s in percentage terms for a prolonged period

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

Key indicators

Exhibit 2

Yara International ASA

| USD Billions | Dec-15 | Dec-16 | Dec-17 | Dec-18 | Dec-19 | LTM (Jun-20) |
|----------------------------------|--------|--------|--------|--------|--------|--------------|
| Revenue | 13.4 | 11.3 | 11.4 | 12.9 | 12.9 | 12.2 |
| Net Property Plant and Equipment | 6.6 | 7.5 | 8.4 | 8.9 | 8.6 | 7.9 |
| EBITDA Margin % | 18.7% | 17.8% | 13.0% | 12.3% | 15.7% | 17.4% |
| Debt / EBITDA | 1.1x | 1.5x | 2.6x | 3.1x | 2.2x | 2.1x |
| RCF / Debt | 56.0% | 37.7% | 22.1% | 26.2% | 34.2% | 28.9% |
| EBITDA / Interest Expense | 15.2x | 12.2x | 9.3x | 7.0x | 9.1x | 9.8x |
| EBIT / Avg. Assets | 10.9% | 7.6% | 3.9% | 3.7% | 6.5% | 7.1% |

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

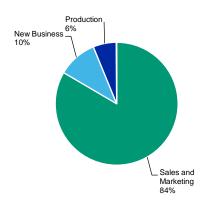
Profile

Headquartered in Oslo, Norway, Yara International ASA (Yara) is the largest European producer and marketer of nitrogen fertilisers, with revenue of \$12.1 billion and Moody's-adjusted EBITDA of \$2.1 billion in the 12 months that ended June 2020. In 2019, it produced around 30.5 million tonnes and sold around 38.0 million tonnes. As of 10 September 2020, Yara's market capitalisation was around \$10.5 billion.

Yara has broad operational and geographical diversification and its largest markets are Europe (33% of revenue in 2019), Brazil (28%), Asia (14%) and North America (12%). Yara is the world's largest producer of nitrates and NPK complex fertilisers and is the second-largest producer of ammonia, after <u>CF Industries Holdings, Inc.</u> (Ba1 stable). Yara is also a market leader in nitrogen applications for industrial use and air pollution abatement solutions.

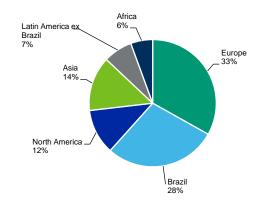
Exhibit 3

2019 external revenue and other income by operating division



Sources: Company's filings and Moody's Investors Service

Exhibit 4 2019 revenue by region



Sources: Company's filings and Moody's Investors Service

In 2019, the group's activities were organised around three operating segments:

- » Sales and Marketing, which includes the sales, marketing and distribution of fertilisers worldwide as well as the sale of base chemicals and industry reagents
- » New Business, which contains the business unit's environmental solutions, mining applications, animal nutrition and industrial nitrates
- » Production, which operates the chemical production units as well as the mining activities

Starting from the second half of 2020, Yara will move from a segment structure to a regional organisational structure. The company's operations will comprise four profit centers, of which three are regional units (Europe, Americas, and Africa and Asia) and a fourth unit for global production plants and operational excellence including health and safety. In addition, Yara will establish a new global Farming Solutions function, which will develop both existing and new solutions including premium products, digital business, food value chain collaboration and climate-neutral solution.

Detailed credit considerations

Yara's integrated business model and global network help buffer earnings volatility

As the world's largest producer of nitrogen fertilisers, Yara's business profile is underpinned by the significant scale and high degree of integration of its operations, its diversified and distribution-focused business model, and its leading positions in global fertiliser markets. These positives are tempered by the relatively high earnings volatility characterising its core nitrogen-based fertiliser business, which is affected by periodic market imbalances resulting from extended periods of investments for capacity additions, the seasonality and cyclicality of agricultural markets, as well as the company's exposure to swings in energy and raw material costs.

Yara's extensive global distribution network and sizeable marketing operations of nitrogen chemicals add flexibility to its management of volume and margins through the cycle. Nevertheless, the company's profitability remains volatile. It is exposed to fluctuations in urea prices. In addition, Yara's revenue reflects nitrate and NPK premiums, which are influenced by crop prices that drive farmers' demand. Yara is also significantly exposed to feedstock costs, particularly natural gas, which account for 50%-80% of the total input costs for urea production (depending on gas prices).

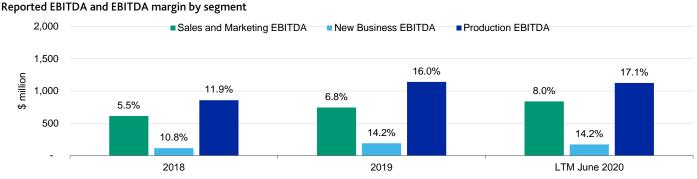
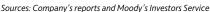


Exhibit 5



After three years of high profit generation during 2014-16 supported by falling energy costs, Yara suffered from the increase in energy prices in 2017 when the company's average gas cost increased by 22% annually, equivalent to around \$1 per metric million British thermal unit (MMBtu) because of higher European spot prices. This contributed to a decline in Yara's reported EBITDA before special items to \$1.43 billion in 2017 from \$1.72 billion in 2016, with the margin dropping to 12.6% from 15.2% over the same period. However, Yara's earnings started to increase since H2 2018 because of a recovery in urea and nitrate prices, supported by the company's production growth and efficiency improvements. Despite the recent decline in urea and nitrate prices, Yara's EBITDA continued to increase in 2019 and H1 2020 as energy prices fell substantially, with spot natural gas prices at only \$1.7/MMBtu in Q2 2020 in Europe and the US, respectively. This represents a 60% decline in gas prices in Europe and a 34% decline in the US from those in Q2 2019.

Accordingly, Yara's adjusted EBITDA before special items increased strongly in 2019 to \$2.17 billion from \$1.53 billion in 2018, with its EBITDA margin improving to 16.7% from 11.7% in 2018. This positive trend continued in H1 2020 when Yara's reported EBITDA before special items increased to \$1.09 billion from \$1.01 million in H1 2019, with energy prices (a positive impact of \$240 million), currency tailwinds (\$78 million) and volume (\$103 million) more than offsetting the impact of the decline in product prices (a negative impact of \$300 million).

Yara benefits from a relatively low level of fixed cash costs (around 10%-15%) and has a leading cost position in Europe, underpinned by the significant economies of scale of its operations. The favourable logistics of its ammonia facilities in Europe and the relatively low capital intensity of its distribution-focused business model help defend its profitability during downturns.

In 2019, Yara's management decided to extend the Yara Improvement Programme (YIP) and set new targets for 2023. As of year-end 2018, the programme that was launched in 2016 achieved EBITDA benefits of around \$355 million, driven by a number of initiatives to improve productivity and efficiency in the production process. The extended YIP aims to keep fixed costs largely flat despite a targeted 15% increase in the ammonia production volume compared with 2019 and a 14% targeted increase in the finished products volume in 2023 compared with 2019. Yara also targets to free up to \$300 million of working capital by reducing working capital days by 25 days in 2023 versus 2019.

We expect the recent decline in nitrogen fertiliser prices to abate over the next 12-18 months as nitrogen capacity additions will likely be below demand growth in 2020-21. However, we expect natural gas prices to increase from their currently very low levels. Higher energy costs will be offset by Yara's efficiency gains from the YIP and increasing production levels. Overall, we forecast that Moody'sadjusted EBITDA will remain largely flat at \$2.0 billion-\$2.1 billion in 2020-21 which, however, compares favourably with the EBITDA of \$1.5 billion-\$1.6 billion during the last industry downturn in 2017-18.

Yara balances organic growth projects with bolt-on acquisitions in order to expand its value-added products offering

Yara's growth strategy leverages its integrated business model by undertaking some organic projects (including expansion/reconfiguration of existing facilities, greenfield projects), as well as through establishing partnerships and making bolt-on acquisitions. In recent years, Yara's growth strategy has spanned the whole fertiliser value chain including building large-scale, cost-advantaged production facilities, securing access to low-cost raw material supplies, and growing its sales of premium fertiliser products and industrial products.

Meanwhile, Yara has grown its presence in the strategically important Latin American markets. In 2013, it acquired the fertiliser mixing and distribution capabilities of Bunge in Brazil, which helped double its deliveries to the continent. This was followed by the acquisition of Colombian OFD Holdings in October 2014, which added some production capacity in Colombia and further distribution capabilities across Latin America. However, to address the imbalance of its Latin American operations that were largely focused on mixing and distribution activities, Yara acquired a 60% stake in Galvani in December 2014, which gave it access to phosphate resources and fertiliser capacity in Brazil. This was followed by the launch of the \$575 million development of the Salitre greenfield phosphate mining and processing project in 2016. In 2018, Yara bought out the Galvani family who still owned a minority stake in the assets and now owns 100% of the asset. The company invested \$229 million in the project in 2019 and expects it to be completed during H2 2021, when it shall operate with an annual production capacity of around 1-1.2 million tonnes of phosphate rock and 1 million tonnes of finished fertiliser.

Also, Yara decided to invest around \$275 million in the Rio Grande plant expansion project, which will double the site's current 0.8 million tonnes annual fertiliser production and blending capacity. However, the completion of the project has been postponed from Q2 2020 to year-end 2020 but might be pushed back further depending on the impact of the coronavirus pandemic on construction activity. In January 2018, Yara acquired <u>Tata Chemicals Limited</u>'s (Ba1 stable) urea business in India for \$421 million on a debt- and cash-free basis, which gave it an integrated position in the world's second-largest fertiliser market. In May 2018, Yara also purchased the Vale Cubatão Fertilizantes complex in Brazil for an enterprise value of \$255 million, which further strengthened the company's footprint in Brazil.

Yara also undertook several brownfield expansion projects in the Nordic countries and the Netherlands. In the US, where Yara remains underrepresented in terms of production, it teamed up with <u>BASF (SE)</u> (BASF, A3 stable) to build a \$600 million ammonia plant (owned 68% by Yara and 32% by BASF) with an annual capacity of 750,000 tonnes, which started production in April 2018. Although Yara's capital investments have fallen materially in 2019 after having peaked in 2018 and the company guides for significantly lower investments for 2020-21 at around the 2019 level, it still has four expansion projects under execution, including the on-hold Dallol Sulphur of Potash mine project in Ethiopia.

Significantly, around 50% of the group's total deliveries are now derived from value-added products such as calcium nitrate (CN), compound fertiliser (NPK), which contains all three major plant nutrients (that is nitrogen [N], phosphorus [P] and potassium [K]), and differentiated products (for example, calcium ammonium nitrate [CAN] and ammonium nitrate [AN]), for which Yara has solid price premiums. This step-up in contribution from premium products somewhat reduces the group's earnings volatility compared with historical measures.

Yara has recently evaluated strategic options for its non-core operations and considered holding an IPO for a large part of the former Yara Industrial segment. However, the company decided during the IPO evaluation to retain the industrial operations because it has identified organic growth opportunities that can be captured in a Yara-owned model but it also benefits from a more autonomous setup in an industrial holding.

Improving earnings and lower capital investments led to return to positive FCF

As Yara invested heavily in a number of organic growth projects, its Moody's-adjusted capital spending averaged \$1.5 billion annually in 2017-18, most of which was spent on growth, cost and capacity improvement projects. In addition, Yara acquired assets for around \$0.7 billion in 2018, mainly related to the acquisition of Tata Chemicals Limited's Indian urea business and the fertiliser asset in Brazil (which we do not include in its Moody's-adjusted capital spending). Yara offset some of the pressure on its cash flow generation by having cut its dividend payout to \$321 million in 2017 and \$219 million in 2018, compared with \$489 million in 2016. Nevertheless, the high investment level, alongside the significant EBITDA decline in 2017-18, resulted in a significant cumulative negative Moody's-adjusted FCF of \$1.6 billion in 2017-18.

Yara's FCF turned positive in 2019 and H1 2020, driven by increasing funds from operations (FFO) and significantly reduced capital spending, which fell to \$1.2 billion on a Moody's-adjusted basis in 2019 and remained low in H1 2020. Yara reduced its spending for maintenance investments and cost and capacity improvements by around \$0.3 billion in 2019 compared with 2017-18. It is worth noting that higher declared dividend payments have not yet significantly affected the company's FCF in 2019, but we project annual dividend payments will increase to around \$400 million annually in 2020-21 from around \$200 million in 2019.

Nevertheless, we forecast continued positive FCF in 2020-21 although at a lower level from that in 2019 as higher dividend payments in 2020-21 and increasing capital investments in 2021 cannot be fully compensated by slightly higher FFO. The divestment of Yara's 25% stake in Qatar Fertiliser Company for \$1 billion as well as its decision to buy back 5% of its outstanding shares (both treated outside of our definition of FCF) for around \$560 million at the current share price will have a net positive impact on the company's net debt position. While we have not included additional cash returns outside the ordinary dividend in our projections, we do note that the company stated that such additional shareholder remuneration will be considered in connection with its results in Q3 and Q4 2020.



Recent improvement in the financial profile increases Yara's headroom within the Baa2 rating category

Yara's financial profile deteriorated notably in 2017-18, driven by a combination of earnings decline and high capital investments, which contributed to Yara's negative FCF generation. Yara's Moody's-adjusted debt increased to \$4.9 billion in 2018 from \$2.9 billion in 2016. As a result, Yara's Moody's-adjusted financial metrics deteriorated in 2018, with total debt/EBITDA rising to 3.1x and RCF/total debt falling to 26% from 1.5x and 39% in 2016, respectively. However, the recent earnings recovery and cash flow generation improvement has positioned the company strongly in the Baa2 rating category. Yara's Moody's-adjusted debt/EBITDA improved to 2.1x in the 12 months that ended June 2020 and RCF/total debt increased to 29%.

Based on our projection of largely stable EBITDA and FFO generation and despite higher dividend payments, we forecast that Yara's key credit metrics will remain similar to the levels achieved as of the end of June 2020 over the next 12-18 months. A potentially weaker financial performance than currently expected by us would have a negative impact on the company's financial profile, but we positively view Yara's continued commitment to a Baa2 rating and the associated financial policy, which should ensure that Yara will make its financial policy decision in a way that protects its current Baa2 rating.

Environmental, social and governance considerations

Yara's ratings also factor in the following environmental, social and governance factors:

First, commodity chemicals is among the 11 sectors we have identified as those with a high exposure to environmental risk. The sector is exposed to increasing regulations, particularly related to water, soil and air pollution caused by large manufacturing plants and facilities. Agriculture accounts for 23% of the global CO_2 emissions and Yara's production process is very energy intensive, with 17.1 million tonnes of CO_2 equivalent greenhouse gas emissions in 2019. However, Yara has already reduced the CO_2 intensity of its production process to 3.0 tonnes CO_2 per tonne of fertiliser produced in 2019 from 5.4 tonnes in 2005, and targets a further 10% reduction by 2025 from the 2018 baseline. The company's ultimate goal is to become climate neutral by 2050.

Second, the rapid and widening spread of the coronavirus pandemic, deteriorating global economic outlook, falling oil prices, and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus pandemic as a social risk under our ESG framework, given the substantial implications for public health and safety. However, we positively note the resilience in demand for fertilisers even during the current crisis, given their criticality for the food supply chain. As a consequence, Yara's operations have been running without significant disruption and the company only experienced some weakness in demand from industrial customers. Nevertheless, the situation is highly uncertain and the visibility for the future quarters is reduced.

Third, Yara's ratings factor in its prudent financial policy, which remains conservative despite a recent increase in the targeted ordinary dividend payout ratio to 50% of net income from the previous 40%-45% on average through the cycle (which included a minimum of 30% of net income in the form of ordinary dividends, with share buyback making up the balance). We note positively Yara's confirmed commitment to a Baa2 rating and its capital structure targets, with a low medium- to long-term net debt/EBITDA range of 1.5x-2.0x (as calculated by the company).

Yara's board of directors consists of 11 members, of which seven are elected by the shareholders, and four are elected by and among the employees. Five board members are female, and six are male. Neither the president and CEO nor any other member of the executive management is a director of the board. Yara reviews its corporate governance annually and reports corporate governance in accordance with the Norwegian Accounting Act § 3-3b and the Norwegian Code of Practice for Corporate Governance. This code contains stricter requirements than mandated by the Norwegian law.

Liquidity analysis

We view Yara's liquidity as good. Following the issuance of a \$750 million 10-year bond, Yara had a cash balance of \$547 million as of the end of June 2020. The company continues to have access to a long-term committed revolving credit facility of \$1.1 billion maturing in July 2024, with two one-year extension options. The facility is currently undrawn and has a maximum net debt-to-equity ratio as the sole financial maintenance covenant. The maximum ratio is not to exceed 1.50:1 and Yara remained comfortably in compliance with the covenant with a ratio of 0.45:1 as of the end of June 2020.

In addition to the long-term committed facility, in April 2020, Yara entered into a new \$350 million one-year revolving credit facility and extended the maturity of the existing \$250 million revolving credit facility to May 2021.

The current liquidity buffer will enable Yara to meet total debt maturities of \$446 million due in the 12 months that end in June 2021 including lease liabilities, as well as to repay the NOK700 million bond that matures in December 2021.

Methodology and scorecard

The principal methodology used in rating Yara is our Chemical Industry rating methodology. Our Chemical Industry scorecard indicates a Baa2 rating for the 12 months that ended June 2020 as well as for the forecast period.

Given its 36% ownership by the <u>Government of Norway</u> (Aaa stable), Yara falls within the scope of our Government-Related Issuers rating methodology. Under this methodology, we continue to assume low dependence, considering Yara's broadly diversified international footprint and the modest operational and financial links between the company and the government. Furthermore, our assumption of low support from the Norwegian government reflects the absence of guarantees or formal obligations on behalf of the Norwegian government to support Yara's obligations; the government's track record of supporting capital raising, jointly with other shareholders; no precedent of direct government intervention; and the relative importance of Yara to the domestic economy. While recent steps to broaden Yara's international profile diversify and strengthen its standalone credit quality, they further reduce its domestic concentration in Norway. Based on our assumptions of low dependence and low support, the Baa2 rating does not currently incorporate any uplift from the Baa2 BCA.

Exhibit 7 Rating factors Yara International ASA

Yara International ASA Chemical Industry Scorecard [1][2] Current Moody's 12-18 Month LTM 6/30/2020 **Forward View** As o<u>f 8/10/2020 [3]</u> Factor 1 : Scale (15%) Measure Score Score Measure a) Revenue (USD Billion) \$12.2 Baa \$12.2 - \$12.8 Baa b) PP&E (net) (USD Billion) \$7.9 Baa \$8 - \$9 А Factor 2 : Business Profile (25%) a) Business Profile Baa Baa Baa Baa Factor 3 : Profitability (10%) a) EBITDA Margin 17.4% Baa 16.6% - 17.2% Baa b) ROA (Return on Average Assets) 7.1% Ва 6.9% - 7.1% Ba Factor 4 : Leverage & Coverage (30%) a) Debt / EBITDA 21xBaa 2x - 21xBaa b) RCF / Debt 28.9% Baa 29% - 33% Α c) EBITDA / Interest Expense 9.8x Baa 9.9x - 10.2x Baa Factor 5 : Financial Policy (20%) a) Financial Policy Baa Baa Baa Baa Rating: a) Scorecard-Indicated Outcome Baa2 Baa2 b) Actual Rating Assigned Baa2 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

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 06/30/2020.

[3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Financial Metrics™

Appendix

Exhibit 8 Peer comparison Yara International ASA

| | | nternational A Baa2 Stable | SA | | Nutrien Ltd. Baa2 Stable | | | c Company (Th a3 Negative | ne) | | tries Holdings Ba1 Stable | , Inc. | | OCI N.V. a2 Negative | |
|--------------------------|---------------|-------------------------------|---------------|---------------|-----------------------------|---------------|---------------|------------------------------|---------------|---------------|------------------------------|---------------|---------------|-------------------------|---------------|
| (in USD millions) | FYE Dec-18 | FYE Dec-19 | LTM Jun-20 | FYE Dec-18 | FYE Dec-19 | LTM Mar-20 | FYE Dec-18 | FYE Dec-19 | LTM Mar-20 | FYE Dec-18 | FYE Dec-19 | LTM Mar-20 | FYE Dec-18 | FYE Dec-19 | LTM Mar-20 |
| Revenue | \$12,928 | \$12,858 | \$12,175 | \$19,636 | \$20,023 | \$20,490 | \$9,587 | \$8,906 | \$8,805 | \$4,429 | \$4,590 | \$4,560 | \$3,253 | \$3,032 | \$3,246 |
| EBITDA | \$1,590 | \$2,024 | \$2,121 | \$3,876 | \$3,834 | \$3,768 | \$2,045 | \$1,500 | \$1,264 | \$1,499 | \$1,707 | \$1,712 | \$972 | \$657 | \$697 |
| Total Debt | \$4,887 | \$4,355 | \$4,492 | \$10,156 | \$11,205 | \$15,559 | \$5,409 | \$4,823 | \$5,776 | \$5,405 | \$4,594 | \$5,102 | \$4,854 | \$5,078 | \$5,353 |
| Cash & Cash Equiv. | \$150 | \$265 | \$547 | \$2,314 | \$671 | \$3,182 | \$848 | \$519 | \$1,069 | \$682 | \$287 | \$753 | \$461 | \$601 | \$975 |
| EBITDA Margin | 12.3% | 15.7% | 17.4% | 19.7% | 19.1% | 18.4% | 21.3% | 16.8% | 14.4% | 33.8% | 37.2% | 37.5% | 29.9% | 21.7% | 21.5% |
| ROA - EBIT / Avg. Assets | 3.7% | 6.5% | 7.1% | 6.4% | 4.4% | 4.0% | 4.6% | 2.6% | 1.5% | 3.8% | 6.0% | 5.8% | 7.1% | 1.3% | 1.4% |
| EBITDA / Int. Exp. | 7.0x | 9.1x | 9.8x | 7.0x | 6.9x | 6.6x | 7.3x | 5.8x | 5.0x | 5.4x | 6.5x | 7.0x | 2.8x | 2.1x | 2.4x |
| Debt / EBITDA | 3.1x | 2.2x | 2.1x | 2.6x | 2.9x | 4.1x | 2.6x | 3.2x | 4.6x | 3.6x | 2.7x | 3.0x | 5.0x | 7.7x | 7.7x |
| RCF / Debt | 26.2% | 34.2% | 28.9% | 24.6% | 19.2% | 12.6% | 29.6% | 22.9% | 12.9% | 20.4% | 28.9% | 24.5% | 12.9% | 6.9% | 8.0% |

All figures and ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Exhibit 9 Moody's-adjusted debt breakdown Yara International ASA

| (in USD Millions) | FYE Dec-16 | FYE Dec-17 | FYE Dec-18 | FYE Dec-19 | LTM Ending Jun-20 |
|-----------------------|---------------|---------------|---------------|---------------|----------------------|
| As Reported Debt | 1,923 | 2,911 | 3,998 | 4,025 | 4,162 |
| Pensions | 369 | 378 | 319 | 330 | 330 |
| Operating Leases | 648 | 510 | 570 | 0 | 0 |
| Moody's-Adjusted Debt | 2,940 | 3,799 | 4,887 | 4,355 | 4,492 |

All figures and ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Exhibit 10 Moody's-adjusted EBITDA breakdown Yara International ASA

| (in USD Millions) | FYE Dec-16 | FYE Dec-17 | FYE Dec-18 | FYE Dec-19 | LTM Ending Jun-20 |
|--------------------------|---------------|---------------|---------------|---------------|----------------------|
| As Reported EBITDA | 1,854 | 1,430 | 1,225 | 1,934 | 1,685 |
| Pensions | 4 | -2 | 6 | 5 | 5 |
| Operating Leases | 221 | 170 | 190 | 0 | 0 |
| Unusual | -98 | -88 | 251 | 150 | 476 |
| Non-Standard Adjustments | 41 | -29 | -82 | -65 | -45 |
| Moody's-Adjusted EBITDA | 2,023 | 1,481 | 1,590 | 2,024 | 2,121 |

All figures and ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Exhibit 11

Historical and projected Moody's-adjusted financial data Yara International ASA

| In USD Million | 2016 | 2017 | 2018 | 2019 | LTM 06/2020 | 2020E | 2021E |
|---------------------------------|---------|---------|---------|---------|-------------|---------|---------|
| INCOME STATEMENT | | | | | | | |
| Revenues | 11,340 | 11,358 | 12,928 | 12,858 | 12,175 | 12,162 | 12,777 |
| EBITDA | 2,023 | 1,481 | 1,590 | 2,024 | 2,121 | 2,090 | 2,122 |
| EBIT | 1,127 | 605 | 619 | 1,102 | 1,207 | 1,175 | 1,162 |
| Interest Expense | 166 | 160 | 228 | 223 | 215 | 211 | 208 |
| BALANCE SHEET | | | | | | | |
| Cash & Cash Equivalents | 406 | 520 | 150 | 265 | 547 | 987 | 723 |
| Total Debt | 2,940 | 3,799 | 4,887 | 4,355 | 4,492 | 4,363 | 4,229 |
| Net Debt | 2,533 | 3,279 | 4,737 | 4,090 | 3,945 | 3,376 | 3,506 |
| CASH FLOW | | | | | | | |
| Funds from Operations | 1,626 | 1,159 | 1,499 | 1,693 | 1,698 | 1,702 | 1,790 |
| Change in Working Capital items | 202 | (185) | (579) | 214 | 203 | (95) | (130) |
| Cash Flow from Operations | 1,829 | 974 | 920 | 1,907 | 1,901 | 1,607 | 1,660 |
| Capital Expenditures (CAPEX) | (1,684) | (1,493) | (1,500) | (1,174) | (1,026) | (1,053) | (1,253) |
| Dividends | (489) | (321) | (219) | (203) | (401) | (401) | (397) |
| Free Cash Flow (FCF) | (345) | (840) | (799) | 530 | 474 | 153 | 10 |
| Retained Cash Flow (RCF) | 1,137 | 838 | 1,280 | 1,490 | 1,297 | 1,301 | 1,393 |
| RCF / Total Debt | 38.7% | 22.1% | 26.2% | 34.2% | 28.9% | 29.8% | 32.9% |
| RCF / Net Debt | 44.9% | 25.6% | 27.0% | 36.4% | 32.9% | 38.5% | 39.7% |
| PROFITABILITY | | | | | | | |
| EBIT Margin % | 9.9% | 5.3% | 4.8% | 8.6% | 9.9% | 9.7% | 9.1% |
| EBITDA Margin % | 17.8% | 13.0% | 12.3% | 15.7% | 17.4% | 17.2% | 16.6% |
| INTEREST COVERAGE | | | | | | | |
| EBIT / Interest Expense | 6.8x | 3.8x | 2.7x | 4.9x | 5.6x | 5.6x | 5.6x |
| EBITDA / Interest Expense | 12.2x | 9.3x | 7.0x | 9.1x | 9.8x | 9.9x | 10.2x |
| LEVERAGE | | | | | | | |
| Total Debt / EBITDA | 1.5x | 2.6x | 3.1x | 2.2x | 2.1x | 2.1x | 2.0x |
| Net Debt / EBITDA | 1.3x | 2.2x | 3.0x | 2.0x | 1.9x | 1.6x | 1.7x |
| | | | | | | | |

All figures and ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Figures are converted to US dollar from Norwegian krone using Moody's currency exchange rates. This represents Moody's forward view, not the view of the issuer. Sources: Moody's Financial Metrics™ and Moody's estimates

Ratings

Exhibit 12

| Category | Moody's Rating |
|-----------------------------------|----------------|
| YARA INTERNATIONAL ASA | |
| Outlook | Stable |
| Issuer Rating | Baa2 |
| Senior Unsecured | Baa2 |
| Source: Moody's Investors Service | |

Source: Moody's Investors Service

© 2020 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS AND DRESS BY MOODY'S INVESTORS SERVICE CREDIT RATINGS, CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS AND PUBLICATIONS WITH THE EXPECTATION AND WARTINGS FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECUR

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1240287

