

## CREDIT OPINION

30 August 2019

### Update

 Rate this Research

#### RATINGS

##### Yara International ASA

Domicile	Norway
Long Term Rating	Baa2
Type	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) 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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## Yara International ASA

### Update following H1 2019 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 energy and agricultural commodity markets.

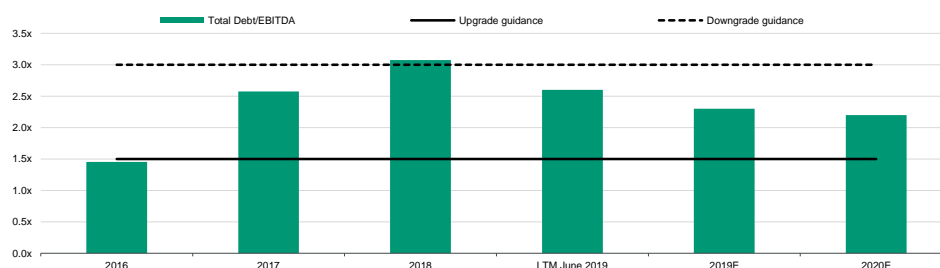
In the context of its integrated business model, we view Yara's strong distribution capabilities as a stabilising factor that outweighs their dilutive effect on its EBITDA margin. The focus of Yara's product offering on premium-priced complex fertilisers (such as NPK) also helps mitigate its inherent exposure to the cyclicality affecting the global nitrogen fertiliser sector.

With urea prices under pressure in supply-driven markets in 2017-18 and high capital spending and acquisition-related cash outflow, Yara generated high negative free cash flow (FCF) in recent years. As a result, Yara's financial profile deteriorated and its key credit metrics were at the weak end of our guidance for the Baa2 rating in 2018, with total debt/EBITDA at 3.1x and retained cash flow (RCF)/total debt at 26%. However, rising production levels, improving urea prices, significantly falling natural gas prices and reduced capital spending, since the beginning of 2019, have already had a positive impact on Yara's earnings and cash flow generation, thereby positioning the company more solidly in the Baa2 rating category.

In 2019-20, we expect further gains from efficiency-improvement initiatives and rising production from recent acquisitions and at plant expansion projects, alongside gradually improving fertiliser prices, to support a continued recovery in Yara's operating profitability under a range of price scenarios. Combined with reduced investments and the maintenance of a prudent shareholder distribution policy, this should allow Yara to turn its FCF positive and increase the headroom in its credit metrics relative to our rating guidance.

Exhibit 1

#### Leverage metrics and upgrade/downgrade guidance



Source: Moody's Financial Metrics™

## 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 conservative funding policies and strong track record of integrating acquisitions
- » Robust balance sheet, with relatively low leverage over the cycle

## Credit challenges

- » Cyclical fertiliser business, subject to capacity additions, and demand and pricing trends in agri commodities
- » Past urea capacity additions negatively impacted nitrogen pricing and profitability, although mitigated by efficiency-improvement initiatives; nitrogen prices started to recover in H2 2018
- » Negative FCF and weaker credit metrics in 2018 as a result of large investments, although positive FCF is expected in 2019-20

## Rating outlook

The stable outlook reflects our expectation that contributions from efficiency initiatives and the ramp-up of growth projects will continue to support the recovery in Yara's cash flow and credit metrics over the next 12-18 months.

## Factors that could lead to an upgrade

While currently unlikely, considering the recent pressure on Yara's operating profitability and its higher leverage resulting from a period of sustained investments, a rating upgrade could be considered should:

- » a sustained upturn in its operating profitability and cash flow lead to a permanent reduction in financial leverage
- » total debt/EBITDA is sustained at around 1.5x and RCF/total debt remain in the high-30s in percentage terms throughout the cycle

## Factors that could lead to a downgrade

Downward pressure on the Baa2 rating could arise should:

- » Yara suffer a severe and prolonged deterioration in its operating results and cash flow generation
- » Yara embark upon a more aggressive acquisitive strategy
- » there be a pronounced weakness in its credit metrics, including debt/EBITDA rising above 3.0x and RCF/debt remaining in the low-20s in percentage terms for an extended 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.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Yara International ASA

Yara International ASA	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	LTM (Jun-19)
Revenue (USD Billion)	15.1	13.4	11.3	11.3	12.9	13.3
Net Property Plant and Equipment (USD Billion)	6.5	6.6	7.5	8.4	8.9	8.9
EBITDA Margin %	18.3%	18.7%	17.8%	13.1%	12.3%	13.7%
Debt / EBITDA	1.3x	1.1x	1.5x	2.6x	3.1x	2.6x
RCF / Debt	55.0%	56.0%	37.7%	22.1%	26.2%	31.6%
EBITDA / Interest Expense	17.5x	15.2x	12.2x	9.3x	6.9x	7.5x
EBIT / Avg. Assets	11.2%	10.9%	7.6%	3.9%	3.7%	5.0%

[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™

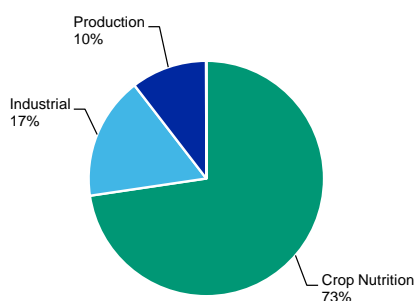
## Profile

Headquartered in Oslo, Norway, Yara International ASA (Yara) is the largest European producer and marketer of nitrogen fertilisers. In 2018, it produced around 30.2 million tonnes and sold around 38.6 million tonnes. It reported revenue of \$12.9 billion and EBITDA before special items of \$1.53 billion, equivalent to a margin of 11.8%. As of 27 August 2019, Yara had a market capitalisation of around \$11.2 billion.

Yara has a broad operational and geographical diversification within the nitrogen fertiliser sector, and has maintained its leadership as the world's largest nitrogen fertiliser producer by revenue. It holds number one positions in nitrates and NPK complex fertilisers globally, and is the world's second-largest producer of ammonia, after [CF Industries Holdings, Inc.](#) (Ba2 stable). Also, Yara is a market leader in nitrogen applications for industrial use and air pollution abatement solutions.

Exhibit 3

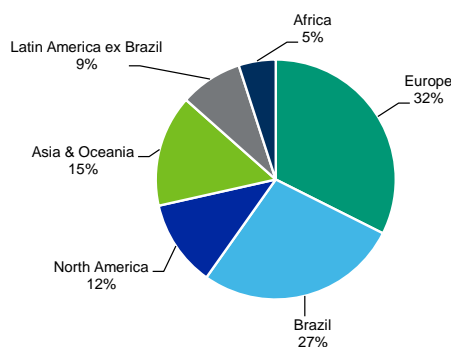
### 2018 external revenue and other income by operating division



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

Exhibit 4

### 2018 revenue by region



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

In 2018, the group's activities were organised around three operating segments, supported by a global supply chain function:

- » Production runs a large-scale production of nitrogen-based products.
- » Crop Nutrition is responsible for the sales, marketing and distribution of crop nutrition products worldwide.
- » Industrial develops and markets nitrogen applications for industrial use and environmental solutions.

From 2019, Yara has changed its segmental structure comprising the following three segments: (1) Sales and Marketing, which includes the previous Crop Nutrition segment and some operations of the previous Industrial segment; (2) New Business, containing the existing business units, environmental solutions, mining applications, animal nutrition and industrial nitrates, as well as a number of new business units; and (3) Production.

## Detailed credit considerations

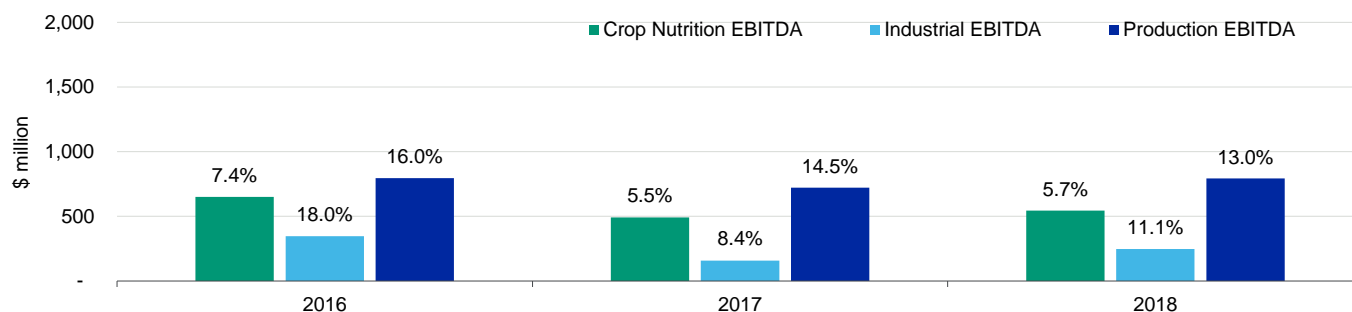
### Yara's integrated business model and global network help buffer earnings volatility

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 chronic market imbalances resulting from extended periods of investments for capacity additions, the seasonality and cyclical nature 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 materially exposed to feedstock costs, particularly natural gas, which account for 50%-80% of the total input costs for urea production (depending on gas prices). Its European operations are disadvantaged relative to its North American peers in terms of access to low-cost natural gas. In this context, we expect Yara to continue to manage its capacities (particularly commodity plants in Europe) with the intent of maximising its profitability.

Exhibit 5

#### 2016-18 reported EBITDA and EBITDA margin by segment



Sources: Company's reports, Moody's Investors Service

In 2014-16, Yara benefited from falling energy costs, reflecting the decline in both the European spot prices for gas and oil-linked products, and ammonia-linked gas costs outside Europe. However, this trend started reversing in 2017, when the company's average gas cost increased by 22% annually, equivalent to around \$1 per metric tonne British thermal unit (mmBtu) because of higher European spot prices and a contractual gas price step-up in Yara's Pilbara ammonia plant in Australia. 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 in H2 2018 and H1 2019 because of a recovery in urea and nitrate prices, supported by the company's production growth and efficiency improvements. Yara's adjusted EBITDA before special items rose slightly in 2018 to \$1.53 billion, but the margin remained low at 11.8%. This positive trend accelerated in H1 2019, supported by sharply falling gas prices in Europe. Yara's reported EBITDA before special items increased to \$1.01 billion in H1 2019 from \$698 million in H1 2018, with energy prices (a positive impact of \$107 million), currency tailwinds (\$67 million), volume (\$49 million) and product prices (\$42 million) as the key drivers for the improvement.

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.

Yara's management has recently 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 generate EBITDA benefits of \$600 million by 2023, compared with the 2018 base level. Yara also targets to free up to \$300 million of working capital by reducing working capital days by 12 days.

We expect the recovery in nitrogen fertiliser prices to continue in 2019-20, but only gradually, as annual urea capacity additions continue to fall back from the peak of 2017 to levels more in line with consumption growth. However, we expect natural gas prices to increase from their currently very low levels. However, higher energy costs will offset only some of the benefits stemming from higher nitrogen fertiliser prices, Yara's efficiency gains from the YIP and rising production levels as projects ramp up. Overall, we forecast that EBITDA will rise to \$2.0 billion-\$2.1 billion in 2019-20 from \$1.6 billion in 2018.

### **Yara balances growth objectives with financial discipline, potential IPO of the industrial nitrogen operations**

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 and industrial products. For example, Yara took full ownership of the Australia-based Pilbara ammonia plant in October 2015 to strengthen its position in Asia.

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 in 2016, by the launch of the \$575 million development of the Salitre greenfield phosphate mining and processing project, which was completed in 2018.

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 on completion in Q2 2020. More recently, in January 2018, Yara acquired [Tata Chemicals Limited's](#) (Ba1 stable) urea business in India for \$421 million on a debt- and cash-free basis, which gives 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 strengthens its 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 following its failed merger discussions with CF Industries in 2014, it teamed up with [BASF \(SE\)](#) (BASF, A1 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 peaked in 2018 and the company guides for materially lower investments from 2019 onwards, it currently has seven expansion projects under execution, including two newly built plants.

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 enjoys solid price premiums. This step-up in contribution from premium products and a sustained short position in ammonia in Europe should somewhat reduce the group's earnings volatility compared with historical measures.

Yara has recently decided to evaluate strategic options for its non-core operations and considers holding an IPO for a large part of the former Yara Industrial segment. The new company would be an integrated industrial nitrogen company, which comprises 10%-15% of Yara's current EBITDA generation, and Yara intends to retain a significant ownership in the new company. Yara plans to make a final decision on the scope of the potential demerger in early 2020.

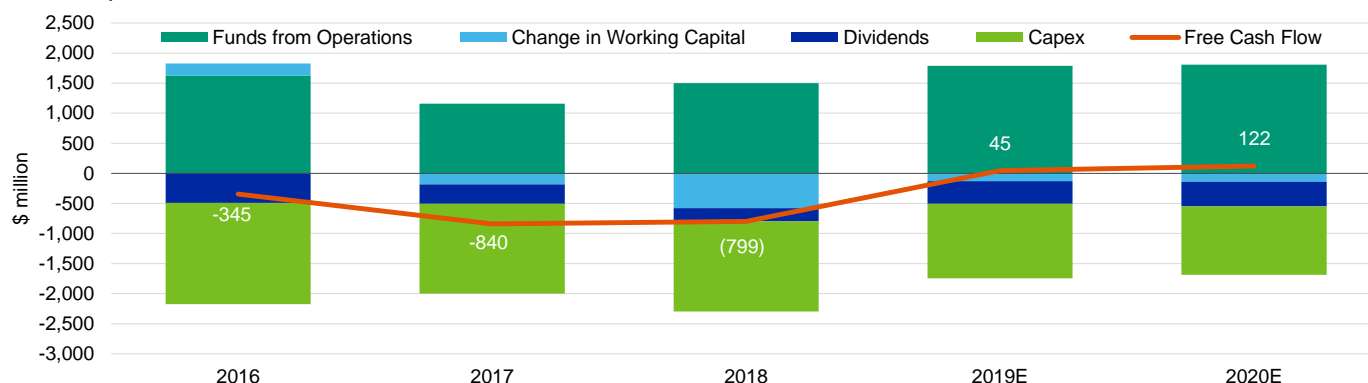
### Improving earnings and lower capital investments pave the way to return to positive FCF

As Yara continued to invest heavily in a number of organic growth projects, its Moody's-adjusted capital spending averaged \$1.5 billion annually over the last two years, 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 material EBITDA decline in 2017-18, resulted in a significant cumulative negative Moody's-adjusted FCF generation of \$1.6 billion in 2017-18.

Driven by our projection of improving earnings, we also expect funds from operations to recover to around \$1.8 billion annually in 2019-20, up from \$1.5 billion in 2018. Having completed most of its growth projects, Yara guides for a material reduction in its capital spending and acquisition-related cash outflow to \$1.2 billion-\$1.3 billion annually in 2019-20, from \$2.2 billion spent in 2018. Higher funds from operations, combined with lower capital investments and the maintenance of a prudent shareholder distribution policy (although we do project higher dividend payments, in line with the targeted ordinary dividend payout ratio of 50% of net income), should allow Yara to return to positive FCF in 2019-20.

Exhibit 6

#### FCF development



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

### Recent EBITDA recovery reduces negative rating pressure; we expect Yara to be more solidly positioned in the Baa2 rating category in 2019-20

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 rose 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. This positioned Yara relatively weakly in the Baa2 rating category. However, the recent earnings recovery has already positioned Yara more solidly in the Baa2 rating category. Yara's Moody's-adjusted debt/EBITDA improved to 2.6x in the 12 months ended June 2019 and RCF/total debt rose to 32%.

Based on our projection of gradually rising EBITDA generation, particularly because of the company's expected return to positive FCF generation, we forecast that Yara's key credit metrics will further improve over the next 12-18 months. Yara's Moody's-adjusted debt/EBITDA should fall to 2.2x and RCF/total debt should stay at around 30% as of year-end 2020. While these credit metrics would not result in positive rating pressure towards a Baa1 rating, they would indicate a solid position within the Baa2 rating category. However, the intended IPO of the industrial nitrogen operations could weaken Yara's credit profile depending on the structure of the transaction. Nevertheless, we positively view Yara's continued commitment to a Baa2 rating and the associated financial policy, which should ensure that Yara structures a potential IPO in a way that protects its current Baa2 rating.

### Environmental, social and governance considerations

Commodity chemicals is among the 11 sectors with an elevated credit exposure to environmental risk. The sector is exposed to increasing regulations, particularly related to soil and water pollution. Yara's production process is very energy intensive, and the company is a major CO<sub>2</sub> emitter, with 16.6 million tonnes of CO<sub>2</sub> equivalent greenhouse gas emissions in 2018. However, Yara has already reduced the CO<sub>2</sub> intensity of its production process to 3.0 tonnes CO<sub>2</sub> per tonne of fertilizer produced in 2018 from 5.4 tonnes in 2005, and targets a further 10% reduction by 2025. The company has the ambition to become climate neutral by 2050.

The rating also takes into consideration Yara's prudent financial policy, which remains conservative despite a recent increase in the targeted ordinary dividend payout ratio to 50% of net income from the previously 40%-45% over the business cycle (which included an ordinary dividend of a minimum of 30% of net income, with share buyback constituting the rest). We note positively Yara's confirmed commitment to a Baa2 rating and its newly set capital structure targets, with low net debt/EBITDA of 1.5x-2.0x as calculated by the company.

The board of directors of Yara consists of 11 members, of which seven are elected by the shareholders, and four are elected by and from among the employees. 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

Yara maintains a sound liquidity position. As of the end of June 2019, Yara had a cash balance of \$320 million. The company has two newly signed committed revolving credit facilities of over \$250 million maturing in May 2021 and over \$1.1 billion maturing in July 2024, with two one-year extension options. Both facilities are currently undrawn. Both credit facilities have a maximum net debt to equity ratio as the sole financial maintenance covenant. For the \$250 million facilities the maximum ratio is 1.40 : 1, but for the new \$1.1 billion facility the maximum ratio was raised to 1.50 : 1 to adjust for the introduction of IFRS16. Yara's remains comfortably in compliance with the covenant with a ratio of 0.44 : 1 at the end of June 2019.

The current liquidity buffer enables Yara to meet total debt maturities of \$607 million, falling due in H2 2019, as well as a further \$599 million in 2020. In addition, we project positive FCF generation in 2019-20.

## Rating methodology and scorecard factors

The principal methodology used in rating Yara is our Chemical Industry rating methodology. Our Chemical Industry rating scorecard indicates a Baa2 rating for 2018. For the forecast period, the scorecard also indicates a Baa2 rating.

Given its 36% ownership by the Norwegian government, 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 operations and the modest financial and operational links between Yara and the government. Furthermore, our assumption of low support from the [Government of Norway](#) (Aaa, stable) reflects (1) the absence of guarantees or formal obligations on behalf of the Norwegian government to support Yara's obligations; (2) the government's track record of supporting capital raising, jointly with other shareholders; (3) no precedent of direct government intervention; and (4) 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

Chemical Industry Scorecard [1][2]

Current  
LTM 6/30/2019

Moody's 12-18 Month  
Forward View  
As of 8/19/2019 [3]

Factor 1 : Scale (15%)	Measure	Score
a) Revenue (USD Billion)	\$13.3	Baa
b) PP&E (net) (USD Billion)	\$8.9	A
Factor 2 : Business Profile (25%)		
a) Business Profile	Baa	Baa
Factor 3 : Profitability (10%)		
a) EBITDA Margin	13.7%	Ba
b) ROA (Return on Average Assets)	5.0%	B
Factor 4 : Leverage & Coverage (30%)		
a) Debt / EBITDA	2.6x	Baa
b) RCF / Debt	31.6%	A
c) EBITDA / Interest Expense	7.5x	Ba
Factor 5 : Financial Policy (20%)		
a) Financial Policy	Baa	Baa
Rating:		
a) Indicated Outcome from Scorecard		Baa2
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) Final Rating Outcome	Baa2	

Measure	Score
\$13.4 - \$14	Baa
\$8.8 - \$9.1	A
Baa	Baa
15% - 15.2%	Baa
6.6% - 6.9%	B
2.2x - 2.3x	Baa
30% - 30.5%	A
8.4x - 8.8x	Baa
Baa	Baa
	Baa2
	Baa2

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

[2] As of 06/30/2019.

[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

	Yara International ASA		Nutrien Ltd.		CF Industries Holdings, Inc.		Mosaic Company (The)		OCI N.V.	
	Baa2 Stable		Baa2 Stable		Ba2 Stable		Baa3 Stable		Ba2 Stable	
(in US millions)	FYE Dec-17	FYE Dec-18	FYE Dec-17	FYE Dec-18	FYE Dec-17	FYE Dec-18	FYE Dec-17	FYE Dec-18	FYE Dec-17	FYE Dec-18
Revenue	\$11,358	\$12,928	\$4,547	\$19,636	\$4,130	\$4,429	\$7,409	\$9,587	\$2,252	\$3,253
EBITDA	\$1,481	\$1,590	\$1,372	\$4,090	\$1,047	\$1,510	\$1,276	\$1,995	\$484	\$972
Total Debt	\$3,799	\$4,887	\$5,220	\$10,156	\$5,435	\$5,405	\$6,079	\$5,403	\$4,791	\$4,854
Cash & Cash Equiv.	\$520	\$150	\$116	\$2,314	\$835	\$682	\$2,154	\$848	\$231	\$461
EBITDA Margin	13.0%	12.3%	30.2%	20.8%	25.4%	34.1%	17.2%	20.8%	21.5%	29.9%
ROA - EBIT / Avg. Assets		3.7%		7.1%	0.4%	3.9%	2.8%	4.4%	1.9%	7.1%
EBITDA / Int. Exp.	9.3x	6.9x	5.5x	7.4x	3.0x	5.5x	7.2x	8.7x	1.6x	2.8x
Debt / EBITDA	2.6x	3.1x	3.8x	2.5x	5.2x	3.6x	4.8x	2.7x	9.9x	5.0x
RCF / Debt	22.1%	26.2%	17.3%	24.6%	11.3%	20.4%	18.4%	29.6%	4.7%	12.9%

All figures and ratios calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics

Exhibit 9

### Moody's-adjusted debt breakdown

Yara International ASA

(in US Millions)	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	LTM Ending Jun-19
<b>As Reported Debt</b>	<b>2,056</b>	<b>1,705</b>	<b>1,923</b>	<b>2,911</b>	<b>3,998</b>	<b>4,338</b>
Pensions	373	273	369	378	319	319
Operating Leases	597	644	648	510	570	0
Non-Standard Adjustments	1	0	0	0	0	0
<b>Moody's-Adjusted Debt</b>	<b>3,028</b>	<b>2,622</b>	<b>2,940</b>	<b>3,799</b>	<b>4,887</b>	<b>4,657</b>

All figures and ratios calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics

Exhibit 10

### Moody's-adjusted EBITDA breakdown

Yara International ASA

(in US Millions)	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	LTM Ending Jun-19
<b>As Reported EBITDA</b>	<b>2,472</b>	<b>2,306</b>	<b>1,854</b>	<b>1,430</b>	<b>1,225</b>	<b>1,815</b>
Pensions	-15	7	4	-2	6	6
Operating Leases	238	236	221	170	190	95
Unusual	194	-72	-98	-88	251	-10
Non-Standard Adjustments	-125	39	41	-29	-82	-90
<b>Moody's-Adjusted EBITDA</b>	<b>2,764</b>	<b>2,516</b>	<b>2,023</b>	<b>1,481</b>	<b>1,590</b>	<b>1,816</b>

All figures and ratios calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics

Exhibit 11

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

In USD Million	2015	2016	2017	2018	LTM 06/2019	2019E	2020E
<b>INCOME STATEMENT</b>							
Revenues	13,424	11,340	11,358	12,928	13,282	13,428	14,087
EBITDA	2,516	2,023	1,481	1,590	1,816	2,040	2,138
EBIT	1,630	1,127	605	619	874	1,141	1,222
Interest Expense	166	166	160	230	243	244	244
Net Income	973	706	397	377	590	657	720
<b>BALANCE SHEET</b>							
Cash&Cash Equivalents	315	406	520	150	266	587	709
Total Debt	2,622	2,940	3,799	4,887	4,657	4,657	4,657
Net Debt	2,307	2,533	3,279	4,737	4,391	4,070	3,948
<b>CASH FLOW</b>							
Funds from Operations	2,060	1,626	1,159	1,499	1,673	1,789	1,809
Change in Working Capital items	(48)	202	(185)	(579)	(658)	(129)	(141)
Cash Flow from Operations	2,012	1,829	974	920	1,015	1,660	1,668
Capital Expenditures (CAPEX)	(1,391)	(1,684)	(1,493)	(1,500)	(1,312)	(1,240)	(1,140)
Dividends	(445)	(489)	(321)	(219)	(203)	(375)	(407)
Free Cash Flow (FCF)	176	(345)	(840)	(799)	(500)	45	122
Retained Cash Flow (RCF)	1,615	1,137	838	1,280	1,470	1,415	1,402
RCF / Total Debt	61.6%	38.7%	22.1%	26.2%	31.6%	30.4%	30.1%
RCF / Net Debt	70.0%	44.9%	25.6%	27.0%	33.5%	34.8%	35.5%
FCF / Total Debt	6.7%	-11.7%	-22.1%	-16.3%	-10.7%	1.0%	2.6%
<b>PROFITABILITY</b>							
EBIT Margin %	12.1%	9.9%	5.3%	4.8%	6.6%	8.5%	8.7%
EBITDA Margin %	18.7%	17.8%	13.0%	12.3%	13.7%	15.2%	15.2%
<b>INTEREST COVERAGE</b>							
EBIT / Interest Expense	9.8x	6.8x	3.8x	2.7x	3.6x	4.7x	5.0x
EBITDA / Interest Expense	15.2x	12.2x	9.3x	6.9x	7.5x	8.4x	8.8x
<b>LEVERAGE</b>							
Total Debt / EBITDA	1.0x	1.5x	2.6x	3.1x	2.6x	2.3x	2.2x
Net Debt / EBITDA	0.9x	1.3x	2.2x	3.0x	2.4x	2.0x	1.8x

All figures and ratios calculated using Moody's estimates and standard adjustments. Figures are converted to US dollar from Norwegian krone using Moody's currency exchange rates.

Source: Moody's Financial Metrics

## Ratings

Exhibit 12

Category	Moody's Rating
<b>YARA INTERNATIONAL ASA</b>	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured	Baa2

Source: Moody's Investors Service

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