



Knowledge grows

# Yara's GRI Report 2017



# Contents

<b>CEO message</b>	3
<b>Company presentation</b>	6
About Yara	6
Worldwide presence	7
Key figures	8
Products and services	9
Our value chain	9
Suppliers	10
Workforce	10
Key impacts, risks and opportunities	12
Significant changes in 2017	13
<b>Materiality</b>	14
Defining materiality	14
Our material topics	16
Material topics, GRI aspects and boundaries	16
Changes from previous reports	17
Report boundaries	17
<b>Stakeholder engagement</b>	18
Our approach	18
Key stakeholder groups	18
Commitments and endorsements	19
Memberships and associations	19
Key concerns raised in 2017	19
Stakeholder engagement in 2017	20
<b>Governance</b>	22
Governing bodies	22
Corporate functions	22
External assurance	23
Report details	23
<b>Management approach</b>	24
Economic management approach	24
Environmental management approach	26
Human Resources management approach	31
Health and safety management approach	34
Ethics and compliance management approach	37
Product stewardship management approach	40
Mining management approach	44
<b>Performance</b>	46
Economic performance	46
Environmental performance	50
Labor practices and decent work	59
Human rights performance	64
Society performance	67
Product responsibility performance	69
<b>Auditor's report</b>	70

# CEO Message

## Improving operations and remaining curious in challenging markets

*Curiosity and imagination were in particular focus at Yara in 2017, when we celebrated the 150th anniversary of our founding father, the innovator and visionary scientist Kristian Birkeland. Combining genuine curiosity and research, he invented a process to extract nitrogen from the air and the ability to produce mineral fertilizers.*

Curiosity and imagination were also instrumental in the collaboration developing Yara Birkeland, a fully electric and autonomous vessel. This project reminds me of Albert Einstein's words, "Logic can get you from A to B – imagination will take you everywhere".

### Yara Improvement Program

When markets are challenging like in 2017, we have no alternative, but to look at ourselves and rise to the occasion. Hence, last year was an excellent opportunity to focus on our innovative capabilities. To innovate, we need ideas, and developing new ideas are rooted in our curiosity. But 2017 was also about ambition, and in particular how to grow and develop Yara, even as over-capacity and weaker demand for fertilizers globally have impacted our business.

In response to a challenging market environment, we have launched the Yara Improvement Program which targets a minimum USD 500 million EBITDA improvement by 2020 in 2015 terms. We are ahead of plan, and as an example, we have improved reliability at our plants over the last two years, increasing our total production volume by 729,000 tonnes, effectively adding the equivalent of a medium-sized production plant to Yara's portfolio and contributing over USD 100 million EBITDA impact.

I also want to congratulate Yara's procurement function, for having contributed substantially to the success of our Improvement Program. This is the new way of working, making Yara fit for the future and ready for leveraging market growth.

We want every single Yara employee to ask themselves "what can I do to make our operations smarter, more efficient and better". Visiting a number of plants during 2017, I have seen the broad involvement of our organization, and have been truly impressed by the commitment shown by everyone at Yara.

### Focus on safety

Yara's Safety Culture is unrivalled in our industry, but we are not yet where we want to be – Safe by Choice. 2017 was a year of contrasts showing us that life is vulnerable. As CEO, it is difficult to accept that we lost three contractors. Three lost lives are nothing but tragic, leaving family, friends and colleagues filled with sorrow. These tragic accidents should remind us that we need to show how much we appreciate the people we share our lives with.

On the other hand, Yara has never been safer. Since 2012, the number of working hours have doubled, while the probability of accidents have more than halved, due to our relentless focus on safety.

As a result, close to all of our colleagues stayed clear of injuries last year, as Yara achieved a record low TRI<sup>1</sup> of 1,8 in 2017 compared with 5.0 in 2012. However, behind the statistics are real people, mothers and fathers, husbands and wives, daughters and sons. We must never forget this.

<sup>1</sup>TRI: Number of Total Recordable Injuries per million hours worked, contractors included.



## The right kind of business

As a global business, we have an obligation to not only live up to our own standards, but also send a message to authorities, organizations and other businesses that we are interested in doing business only if it's done in a transparent manner and according to our high standards.

And throughout 2017 we have continued to work hard and meticulously with our local organizations. Through training and exercises, we are better equipped to meet future incidents with the right response. Our Ethics & Compliance standards are non-negotiable and form our license to operate. We never compromise on them.

## Delivering growth in challenging markets

Global urea prices increased during 2017 primarily due to higher coal prices and production cost in China. However, as significant capacity additions outside China have reduced the need for Chinese exports, global urea markets are more volatile as price floors of also the non-Chinese producers' are tested.

In this situation, reliability and operational improvements are key focus areas at Yara, to increase profitability through improved operational efficiency. We delivered significant results in 2017, reflected through increased deliveries of finished fertilizer by 4%, compared with 2016. We also realized improved margins, with nitrate prices around 3% higher than in 2016.

## Growing our digital offering

Yara Crop Nutrition consistently pursues its crop roadmap, delivering not only volume growth, but value growth. Going into 2018 we are integrating our Indian business, following up on and executing our growth strategy. By combining scale, knowledge and a farmer centric approach, Yara has a unique opportunity to extend the consistent growth we have seen through our crop nutrition business in India.

We also started realizing our ambitious digital agenda, initiating Yara Digital Farming. While many perceive digitalization as a threat to their business, we see endless opportunities. While travelling in Thailand, I met a farmer growing Chinese Cabbage. At first he seemed to use simple means. Hand pumping the water for irrigation, manually distributing the fertilizer, no heavy equipment. But he carried a smartphone and could receive advice from Yara's agronomists – and as a result he had increased his yields and profitability. To me this was a true eye-opener of how new applications and platforms can make it easier for farmers, regardless of their locations, to gain new knowledge. Our digital strategy in crop nutrition is a logical expansion of our farmer centric strategy, aiming to provide farmers with digital solutions that will make a real difference on the yield, quality and sustainability of their fields.

## Growing the AdBlue emission abatement business

The Industrial segment delivered record underlying financial results in 2017. Improved results has been delivered across the main industrial businesses, driven by the improving economy, but also Yara's differentiation enabled by our sales excellence program and solution concepts. In particular the deliveries of AdBlue by Yara delivered very well, realizing 14% higher sales volumes compared with 2016.

In 2017 we finalized the upgrade of our Brunsbüttel plant, developing the world's largest AdBlue production facility. At the inauguration I met with our business partners who told me how important this facility was to their businesses. Now more than ever, we are able to serve our business partners with unprecedented flexibility, reliability and quality. The production from Brunsbüttel will remove NOx equaling the emissions from the transport sectors in Germany, Austria and Switzerland combined. Yara Industrial truly responds to our Mission. By increasing sales, we decrease the pollution caused by the automotive sector.

## Building new capabilities

Knowledge and innovation moves the world forward. And innovation with a purpose is the real game changer. Yara has during 2017 increased our long-term innovation focus with dedicated resources.

We believe in creating ecosystems of change where the contributors are considered as partners, rather than customer and supplier. We are a strong believer in system innovation and proactively look for collaboration with new partners such as research institutes, academia and other corporations to make our industry greener, smarter and more efficient. Some examples are the PACE platform for Circular Economy, the SINTEF Innovation Lab and Yara Birkeland where the collaboration with Kongsberg and Marin Teknikk are key to make it a reality.

Inspired by our founder – a true innovator – we remain curious building a future Yara answering our mission to *“Responsibly feed the world and protect the planet”*.

## Business with a purpose

At Yara, you are part of creating shared value – value that is not only restricted to our shareholders – it is value created for the society. A guiding framework, we are committing to the UN Global Compact’s principles in the four areas of human rights, labour, environment and anti-corruption.

In this regard, I was inspired by the Chairman and CEO of BlackRock, one of the world’s most important investment banks, Mr. Larry Fink, who said in his annual letters to CEOs: *“Society is demanding that companies, both public and private, serve a social purpose. To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society.”*

I fully agree. This is Yara’s value proposition to our employees, our business partners and owners. We have a greater desire than just go to work. Through our work we are part of changing the world for the better.

For the last two years, I have served as commissioner in the Business & Sustainable Development Commission (BSDC), where we set ourselves two goals: To identify business opportunities in the 17 United Nations Sustainable Development Goals (SDGs) and explore how businesses can contribute to achieving the SDGs.

In a world of inequalities, we believe more sustainable and inclusive economic models can realize a range of new opportunities, particularly in the agriculture sector. Initiated by the BSDC, the Food and Land Use Coalition will continue the work to develop sustainable food value chains reflecting the global challenges we face, and provide sustainable solutions that looks beyond conventional business models by engaging in cross sectoral partnerships.

The SDGs are at the core of our business strategy because it’s financially right – it’s morally right, and if you take a closer look at Yara’s Mission – it’s our responsibility. And if we could’ve asked Kristian Birkeland, he would give us a thumb up.

I am proud of my colleagues, for taking responsibility, for contributing to making us a better company and for being innovative. By continuing to use our imagination and curiosity – we can get anywhere we want.



Svein Tore Holsether  
President and CEO Yara

# About Yara

Yara's knowledge, products and solutions grow farmers', distributors' and industrial customers' businesses profitably and responsibly, while protecting the earth's resources, food and environment.

Our fertilizers, crop nutrition programs and technologies increase yields, improve product quality and reduce the environmental impact of agricultural practices. Our industrial and environmental solutions improve air quality by reducing emissions from industry and transportation, and serve as key ingredients in the production of a wide range of goods. We foster a culture that promotes the safety of our employees, contractors and societies.

Founded in 1905 to solve emerging famine in Europe, today Yara has a worldwide presence, with 15,500 employees and sales to about 160 countries.

## Our mission

*Responsibly feed the world and protect the planet*

## Our vision

*A collaborative society;  
a world without hunger;  
a planet respected.*

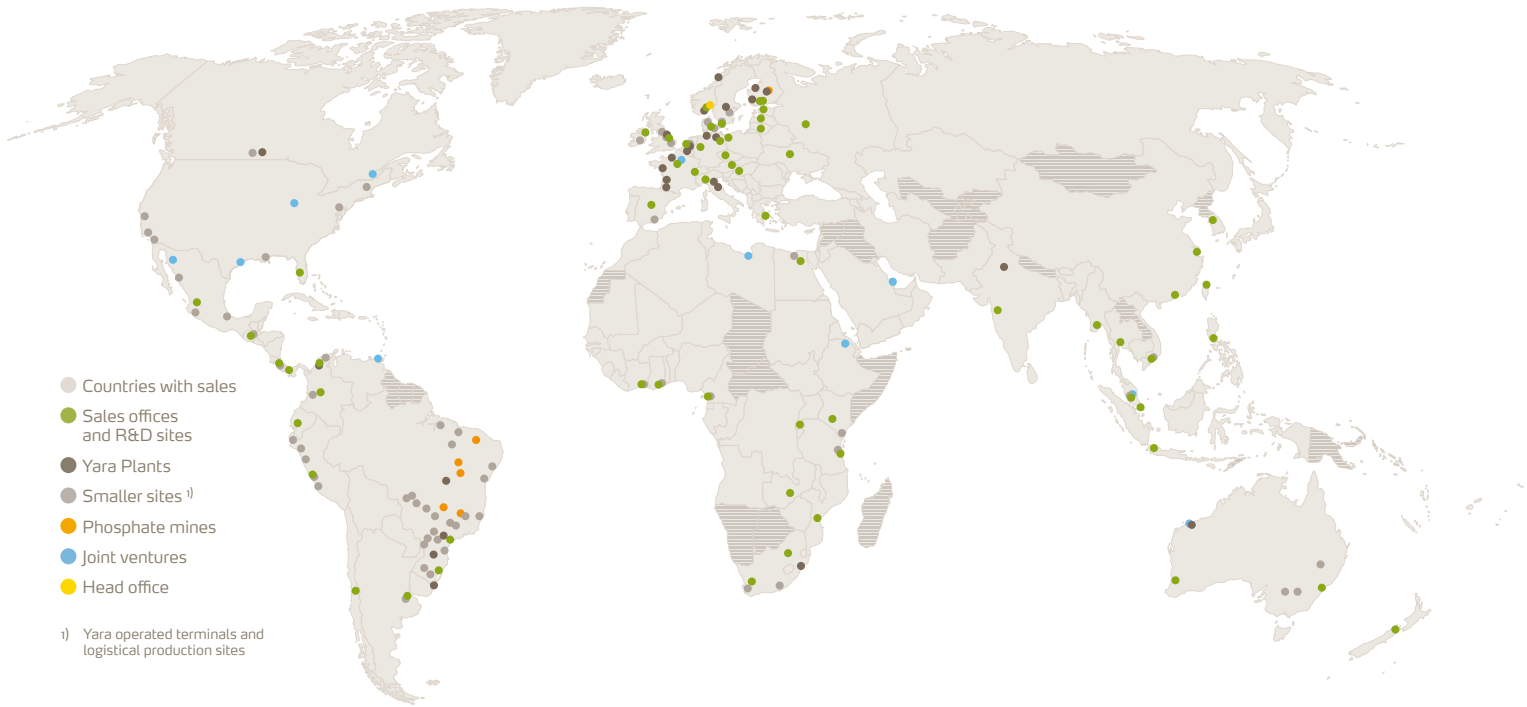
## Our values

*Ambition  
Curiosity  
Collaboration  
Accountability*



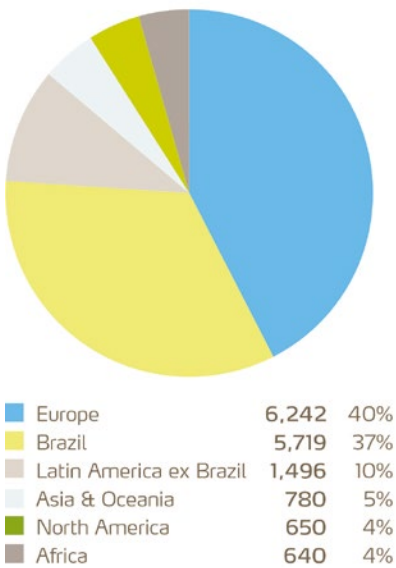


## Where we are

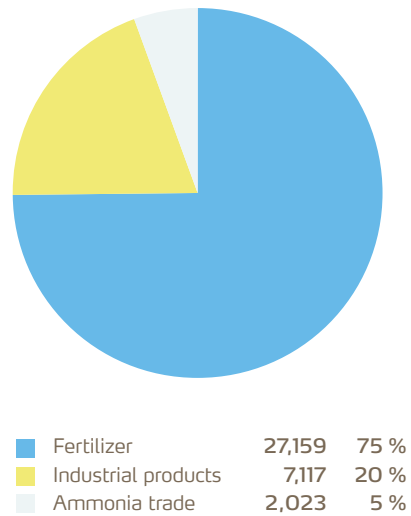


## Key figures

**Employees by region**  
Share of total Yara employees

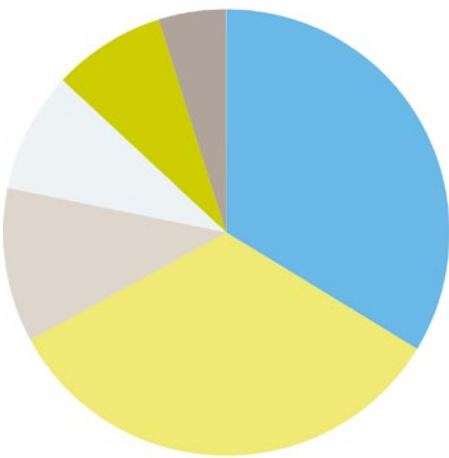


**Sales by product**  
Thousand tonnes



## Fertilizer sales by region

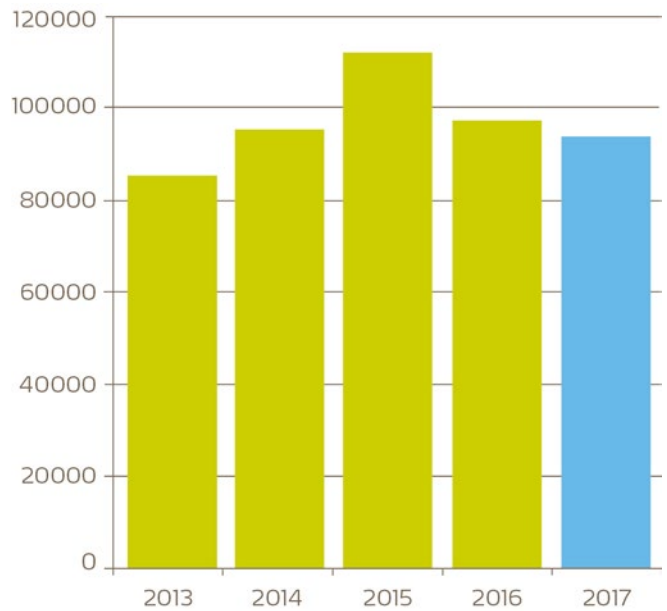
Thousand tonnes



Europe	9,159	34%
Brazil	9,044	33%
North America	3,034	11%
Latin America ex Brazil	2,373	9%
Asia & Oceania	2,221	8%
Africa	1,328	5%

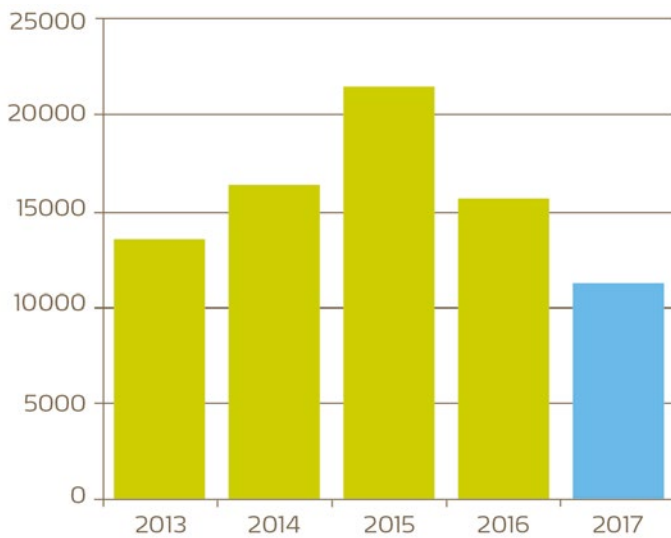
## Revenue and other income 2013-2017

NOK million

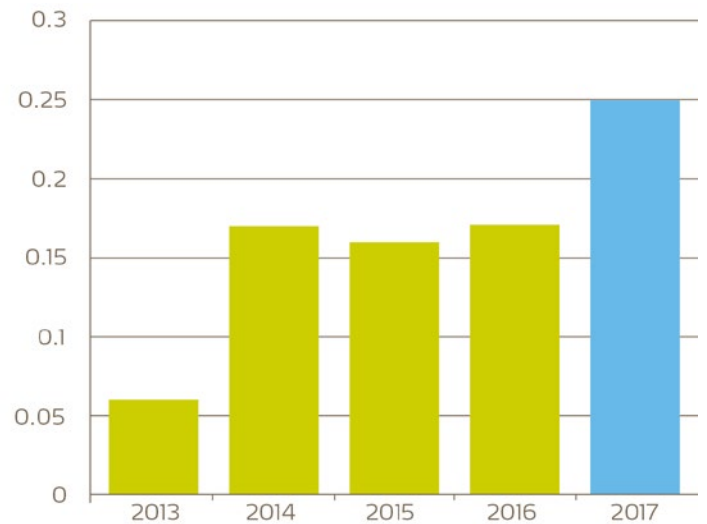


## EBITDA 2013- 2017

NOK million



## Debt/equity ratio 2013-2017





## Products And Services

*Our operations are based on efficient conversion of energy, natural minerals and nitrogen from the air into essential products for agriculture and industry. As the leading global provider of nitrogen fertilizers and industrial applications, we leverage our experience and knowledge to tailor solutions to local needs.*

### Crop nutrition

The aspiration of Yara's Crop Nutrition segment is to be the leading provider of sustainable crop nutrition solutions, supporting farmer profitability through knowledge, quality and productivity.

Our portfolio ranges from single-nutrient fertilizers to complex compounds and micronutrients for all kind of crops. Unlike most fertilizer companies, Yara offers a complete range of crop nutrition products. We can do this because we are a market leader and a crop nutrition expert.

Our fertilizers range from those based on the most widely needed nutrients – N, P and K – to those incorporating growth and quality enhancing nutrients, such as calcium and magnesium, to micronutrients that help prevent or cure deficiencies resulting from particular soil or crop conditions.

If crops lack any of these nutrients, yield and profitability are reduced. That's why Yara offers not only a product range that meets all crop nutrition needs, but also crop-specific advice and a number of digital services and fertilizer management tools. Our goal is to be the global digital leader in crop nutrition, delivering scale and reach to farmers globally, making a real difference in the field and allowing the farmer to conveniently obtain highly relevant knowledge and information.

### Industrial solutions

Yara's Industrial segment converts energy, natural minerals and nitrogen from the air into essential products for industrial applications and environmental solutions. As a leading urea and ammonia producer, Yara offers reliability through our control of the supply chain. This allows us to support our customers with the right solutions at the right time for their businesses. We understand and interact with our industrial clients to adapt applications that meet their needs and help them reach their full business potential.

Industrial chemicals include urea, ammonia, nitrates, calcium nitrate and nitric acid. For the mining industry, Yara delivers technical ammonium nitrate, which is a raw material for explosives.

Also serving the world's farmers is Yara's product range of animal nutrition: high-quality feed phosphates, feed grade urea and feed acidifiers.

Being Yara's fastest growing business unit, Environmental Solutions delivers several solutions to the market. Yara is the leading provider of Adblue, also called DEF in the US and Brazilian markets. This catalyst fluid reacts with harmful NOx emissions in diesel engines' exhaust, cleansing the emissions. Yara NoxCare is a complete portfolio of technology, reagents, after-treatment processes and services for nitrogen oxide emissions abatement, delivered to industrial plants. Environmental solutions also delivers to the maritime sector, water utilities and wastewater treatment plants.

For a full account of our offering, please refer to our website [yara.com](http://yara.com)

## Our Value Chain

*Yara's value chain starts with mining operations and sourcing of raw materials and extends to distribution of crop nutrition and industrial solutions to customers worldwide. Our business model and unique worldwide presence provides scale advantages, operational flexibility and global optimization.*

### Raw materials

Ammonia is the basis for all nitrogen fertilizers. It is produced by reacting nitrogen from the air with hydrogen, which is most often harvested from natural gas. Roughly 3/4 of the natural gas consumed to produce ammonia is used as feedstock, while the remainder is used as energy for process heat. Other crop nutrients, first and foremost phosphate and potash, are mined and transformed into products that can be taken up by plants. See also *Suppliers* page 10.

### Manufacturing

Yara pioneered the production of nitrogen fertilizer a century ago and today controls 26 major production sites worldwide, most of them in Europe, which represents our largest market. We also have significant production in North and Latin America, Australia and from January 2018 also in India, with joint ventures in Trinidad and Qatar adding to our global production capacity. Along with securing access to low-cost natural gas, we put great emphasis on perfecting our production processes to maximize energy efficiency and minimize greenhouse gas emissions.

## Marketing, shipping and storage

Yara's products and solutions are marketed and sold to about 160 countries. With our global marketing, distribution and storage network, we ensure reliable product deliveries and knowledge transfer worldwide. While our fertilizers are mainly sold to growers through local agents and wholesalers, our industrial solutions are largely distributed directly to our customers.

## Suppliers

*A large part of Yara's overall costs are variable and related to sourcing. We source a wide variety of goods and services from more than 20,000 suppliers worldwide. Close to 80% of Yara's operating expenses are related to purchases of raw materials, energy costs and freight expenses. In 2017, such purchases amounted to NOK 70 billion.*

Sourcing of natural gas and nutrients constitute the most important element of our purchases and operating expenses.

## Natural gas

Natural gas is produced in many regions across the world. Yara sources natural gas, and in a few cases other forms of hydrocarbons, for production of nitrogen fertilizers and industrial products. The largest suppliers are: Statoil, Gazprom, BP, ENI, NGC (Trinidad) and Quadrant Energy.

## Phosphate

Phosphorus (P) occurs in natural geological deposits of phosphate rock, which is mined from the earth's crust. The largest deposits of phosphate rock are located in North Africa, China, India, the United States, Brazil, Australia and Russia. Yara sources P to produce granular and feed phosphates and NPK fertilizers. The largest suppliers are: OCP, Phosagro, Mosaic, ICL, Vale, Galvani (60% Yara owned), Eurochem, Foskor, Maaden and Yara Siilinjärvi (100% Yara owned mine). Their main geographical production footprints are Morocco, Russia, USA/Brazil, Israel, Brazil, Russia, South Africa, Saudi Arabia and Finland, respectively.

## Potash

Potassium salts, or potash (K), are mined from naturally occurring ore bodies that were formed as seawater evaporated. Only 12 countries mine potash; in 2002, six of those countries (Canada, Russia, Belarus, Germany, Israel and Jordan) produced nearly 90% of the world's aggregate production of approximately 24 million tonnes, measured as K<sub>2</sub>O. Yara sources K for NPK fertilizers mainly from nine suppliers: BPC, Uralkali, K+S, ICL, Canpotex, SQM, Kemira and Tessenderlo. Their main geographical production footprints are Belorussia, Russia, Germany, Israel, Canada, Chile, Sweden and Belgium, respectively.

## Other

Yara sources ten additional crop nutrients. All ten are sourced in smaller volumes and with a combined volume below that of potash.

For more on how we manage our relationships with suppliers, please refer to Ethics and compliance, p. 37.

## Workforce

*As a global company operating in more than 60 countries, Yara has a highly diverse workforce. We see this diversity as a strength. Our aim is to secure the best talents we can in all our markets and to create a global talent pool of people of diverse nationalities, backgrounds and cultures.*

At the end of 2017, Yara had 18,988 employees worldwide, of which 13,775 permanent employees. This is an increase of 377 (3%) compared to the previous year. The largest increase in the permanent workforce was in Brazil (increased by 330), mainly due to a reclassification from seasonal/third party/union contractors to permanent employees.

In 2017, there is an increase in the non-permanent workforce excluding contractors and consultants. In December 2017, 3,461 3rd party employees (consultants and contractors) were delivering services for Yara. The biggest share was in Europe (1,726) followed by Galvani (828) and Yara Brazil (572).

In 2017, Yara announced the acquisition of Tata Chemicals' fertilizer plant in India, which will significantly increase the headcount of the Asia region as of January 2018.

The figures in this section include all employees in Galvani, Brazil (Yara's ownership share is 60%). The employees of Yara Marine Technologies AS (Yara ownership share 63,3%) are included in the total number of employees but not in the remaining indicators in the Labour Practices. The reason is that the business was not integrated into Yara's HR system in 2017.

The table below does not include Lifeco employees. Lifeco, Libya is reported as an equity-accounted investee, and has 1,027 permanent employees at the end of 2017 – 1,010 males and 17 females. Out of the 1,010 male employees, there are 113 international assignees, mainly Indians, Filipinos and Bangladeshi. The company has two male temporary employees.

The chemical industry is historically a male dominated industry. In Yara, the share of female permanent employees has remained around 20% over the past few years.

## Yara's workforce

Employment Type	Gender	Africa	Asia	Brazil	Europe	Latin America	North America	Grand Total
Permanent	Female	79	174	814	1259	342	104	2772
	Male	408	560	3986	4591	957	501	11003
Permanent Total		487	734	4800	5850	1299	605	13775
Non-permanent	Female	19	21	222	113	77	17	469
	Male	134	25	697	279	120	28	1283
Non-permanent Total		153	46	919	392	197	45	1752
<b>Yara employees Total</b>		<b>640</b>	<b>780</b>	<b>5719</b>	<b>6242</b>	<b>1496</b>	<b>650</b>	<b>15527</b>
3rd Party employees	Female	3	25	289	383	31	22	753
	Male	35	72	1111	1343	63	84	2708
3rd Party employees Total		38	97	1400	1726	94	106	3461
<b>Grand Total</b>		<b>678</b>	<b>877</b>	<b>7119</b>	<b>7968</b>	<b>1590</b>	<b>756</b>	<b>18988</b>



## Key Impacts, Risks and Opportunities

*Yara runs large-scale production activities and uses significant amounts of energy and resources. At the same time, our products and knowledge allow us to contribute to solving some of the most pressing global challenges of our time, as we pinpoint in our mission: Responsibly feed the world and protect the planet.*

Yara's most material risks are covered in the risk chapter of the annual report, while opportunities also arising from the sustainability topics are covered in the Report of the Board of Directors. Please refer to Yara Annual Report 2017, available at our [Investor Relations web site](#).

### Short term impacts Environment

The production processes for N fertilizers and chemicals are energy-intensive, with most of the energy being derived from natural gas. Use of energy and emission of greenhouse gases (GHG) during ammonia and nitric acid production represent a major environmental impact related to Yara's activities. Our large chemical manufacturing sites are classified as industrial activities with potential major accident hazards. The plants are, however, not considered to represent a risk to the local environment, except if a major accident should occur.

Yara is dedicated to excellent performance in terms of environmental impact. Our operations are covered by global, regional and local energy and greenhouse gas regulations, and we enforce a strict control regime over our processes, based on the ISO 14001 standard.

Climate change is recognized as a strategic risk by Yara, with implications for regulations, markets and operations. Yara is positioned by having developed a N<sub>2</sub>O catalyst technology as well as investing into energy efficiency, cutting our GHG emissions nearly in half. Significant resources are put into developing the "Plant of the Future" in order to meet the expected environmental requirements.

Use of nitrogen fertilizers represents both a substantial part of the indirect energy consumption and the potential environmental impact of farming. We support the FAO's goal of sustainably increasing agricultural productivity and the concept of sustainable intensification. This is defined as helping growers produce more crops on the same land with less environmental impact. Yara is differentiated by delivering better performing quality products, alongside agronomic knowledge and advice as well as precision farming technology. Such balanced crop nutrition solutions assist farmers in optimizing the use of fertilizers, ensuring high yields while reducing losses to the environment.

For more on our management of environmental issues, please refer to p. 26.

### Health and safety

Yara's production sites are large industrial plants, and many of Yara's raw materials, intermediates and products are classified as substances harmful to health. Such a working environment presents various potential occupational health and safety risks to employees and contractors working on site. While Yara's raw materials are often dangerous chemicals, the final fertilizers typically are not classified as hazardous, and the occupational health and safety risks for end users are minor.

Yara is committed to proactive and effective risk management to mitigate adverse effects on our operations and to identify and explore business opportunities. Ultimately, risk management contributes to achieving our long-term strategies and short-term goals.

For more on our management of health and safety issues, please refer to Health and Safety, p. 34, and Product Stewardship, p. 40.

### Social and economic impacts

It is estimated that half the proteins consumed by humans originate from fertilizers. Enabling global food security is a main result of our industry. As fertilizers boost farm productivity, purchasing Yara's products is a profitable investment for commercial farmers. Nonetheless, agriculture and the use of fertilizers carry potential risks to social and economic development at a local level. Farmers risk soil mining if the fertilizer products used are not of the right type, applied in the appropriate way and in the volumes needed. Correct quality, labelling and application is decisive in increasing yields and avoiding crop failure. Challenges on market and soil conditions can deprive farmers from returns on their investments in fertilizer and impact their profitability.

Yara subscribes to the approach of sustainable agriculture to mitigate the social and economic risks related to fertilizer use. This approach is based on three pillars:

- **Profitable production: The economic dimension**  
Agriculture must provide sufficient financial reward to farmers, enable them to make a decent living, encourage production and conservation of the environment.
- **Protected environment: The environmental dimension**  
Agriculture shall minimize the use of non-renewable resources, replenish tapped resources, protect and enhance the environment and natural resources
- **Prosperous communities: The societal dimension**  
Agriculture shall contribute to thriving and viable local communities, to economic and social development, including the provision of healthy food.

Our main approaches to supporting farmer profitability are knowledge sharing and providing holistic solutions. This is done according to local conditions. In Europe, we provide expert advice and precision farming tools, supporting the farmers in optimizing – and often reducing – the fertilizer consumption while increasing yields. In developing economies, we engage with farmers face to face, explaining how to use the right products in an optimal way. We also engage in partnerships to improve access to markets and finance. This helps foster a positive, enabling framework for agricultural development.

### Long term trends: strategic risks and opportunities

Yara is positioned as a leading company in our industry regarding environmental stewardship and low GHG emissions. The increasing societal and political emphasis on improved sustainability performance of value chains should prove to be supportive for Yara's competitive position.

Economic and population growth drives demand for food as well as feed, fiber and biofuel. This supports long-term growth in demand for fertilizers, which represent our largest market. Yara actively pursues opportunities to improve the company's competitive advantage through building market and stakeholder interest in low carbon footprint and climate smart agriculture. This is done by providing farmers crop and location specific advice to increase efficiency and optimize land use, building internal capacity on measuring and calculating carbon footprints, doing life cycle assessments and working with external stakeholders to embed such methodologies into tools available for farmers and the food industry. In addition, our Crop Nutrition concept offers a large portfolio of differentiated fertilizer products which typically have a higher use efficiency than most of the commodity fertilizers. While regulatory risk on fertilizer application is present to a certain extent, we consider this to be a modest risk. Lower fertilizer use is associated with reduced productivity in agriculture, which in most cases is an undesired development.

The fertilizer market is a global one. Therefore, looking at the regional and local perspective, there are risks involved if regulatory actions add costs for only parts of the industry. The EU has through its Emission Trading System (ETS) regulated industry emissions, including the fertilizer industry. As just above half of Yara's ammonia capacity is covered by the ETS, this constitutes a risk relative to global competitiveness.

Environmental Solutions is one of Yara's fastest growing business units and a part of the Industrial business segment. Backed by a century of experience in nitrogen applications for industry, Environmental Solutions leverages our knowledge of nitrogen chemicals to offer complete solutions for abatement of nitrogen oxides (NO<sub>x</sub>) and hydrogen sulfide (H<sub>2</sub>S), and for water treatment. We also provide scrubber technology for reducing SO<sub>x</sub> emissions to the maritime sector. We help our clients meet increasingly stringent standards around the world. Yara's environmental solutions are already cleaning NO<sub>x</sub> emissions equal to the total emissions in France.

### Significant Changes In 2017

*No significant changes were made effective during the 2017 reporting year.*

In March 2017, Yara announced plans to close its operations in Pardies, France. At the time the site had 85 employees, and at year end the operations were scheduled to cease in October 2018. The process is described in the stakeholder section of this report.

In May 2017, Yara launched a co-determination process for a smaller production site in Helsingborg, Sweden. In November it was clear that production at the site was to be terminated, with gradual transfer of production to the Kokkola, Finland site. There will be a two years transition period.

For further details on key business initiatives in 2017, please see the Report of the Board of Directors along with note 4 in Yara Annual Report 2017, available at our [Investor Relations web site.](#)

# Materiality

## Defining Materiality

*Yara's materiality assessment builds on the thorough process to identify and prioritize material sustainability topics ahead of our 2015 reporting. The assessment has been reviewed annually to improve the transparency and relevance of our sustainability reporting.*

### 2015 foundation

The 2015 process for defining our material sustainability topics and reporting content was initiated and led by Yara's Head of Sustainability Management, supported by Harvard professor Robert Eccles. We used the Sustainability Accounting Standards Board's (SASB) standards for chemicals and mining industries as a starting point, asking key people from our four business segments and the expert organization to determine material issues in a survey.

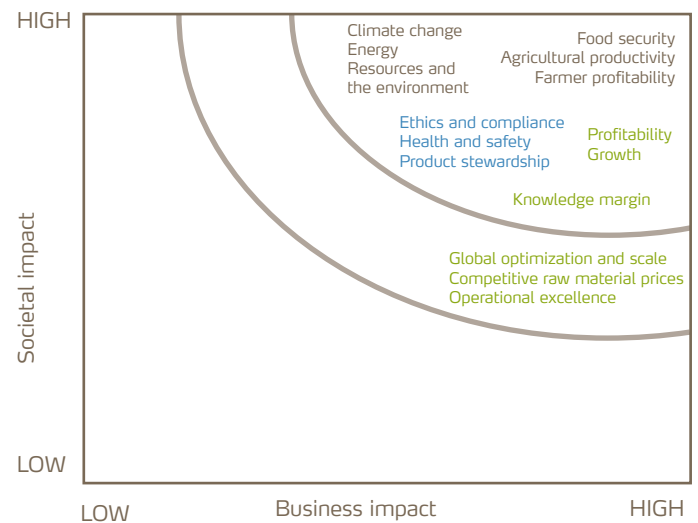
The outcome of the survey was then discussed in a series of workshops and in-depth interviews with senior representatives from each segment and key corporate units. The workshops and interviews also covered stakeholder views. External stakeholders were not directly involved in the materiality process, but rather represented through internal knowledge of the ongoing stakeholder dialogue and large multi-stakeholder tools such as the UN Sustainability Development Goals (SDGs) and UN Global Compact principles.

### Annual reviews

The follow-up process in 2016 involved key representatives from each business segment and key corporate units, who reviewed the materiality matrix presented in 2015 and assessed the business relevance of the SDGs. The review led to changes in terminology to increase transparency, along with the inclusion of key financial topics.

In 2017, the materiality analysis formed part of the basis for a strategy update process, initiated by Yara's CEO and Board of Directors. Through this process, Yara aims to define strategic goals for the company, including sustainability goals. A framework was presented for the Board in December 2017, and further workshops with the Board and Management are being conducted.

## Our Material Topics



This report covers material topics related to Yara's sustainability work and performance, as listed and presented below. Material topics related to the company's financial performance and competitiveness are accounted for in Yara's Annual Report 2017.

### Profitability and growth

Profitability is materially important for any business. Growth is the foundation for maintaining or improving the competitiveness of a company.

### Food security

The increased demand for food drives Yara's markets. By reaching out to smallholder farmers with our products and knowledge, we support local food production and inclusive growth. We are committed to developing the agricultural sector, also in the African continent where we have a strong and long-standing presence.

### Agricultural productivity

Sustainable intensification of agriculture is needed to provide food for a growing world population. Yara's core business includes developing knowledge, tools and solutions for improved farming practices, supporting increased yields and better-quality crops, with less waste and environmental impact.



## Farmer profitability

Sustainable business success for Yara depends on farmers' profitability. In 2016, Yara launched its renewed Crop Nutrition strategy, making it farmer centric. Yara's aspiration is to be the leading provider of sustainable crop nutrition solutions, supporting farmer profitability through knowledge, quality and productivity.

## Climate change

Climate change is a major global challenge and a serious threat to agricultural productivity in many regions around the world. Yara has a leading industry position on GHG emissions and solutions for climate smart agriculture, adding to our competitive edge in a society dedicated to decrease emissions. However, regional differences in emission regulations may raise risks if regulatory actions do not ensure fair competition.

## Energy

Energy is fundamental to societal development and wellbeing, but energy use is also a significant cause of GHG emissions. Energy, mostly in the form of natural gas, is Yara's main raw material for nitrogen fertilizers and its main cost. Affordable access to natural gas is therefore a competitive advantage, and improving energy efficiency reduces costs for Yara and increase resource efficiency for society at large.

## Resources and the environment

Arable land, nutrients and water are resources of limited supply and must be carefully managed. Continued land use change leads to substantial GHG emissions. Yara works continuously to use resources more efficiently, with an emphasis on land use, energy, nutrients and water. Also, we are actively researching opportunities for contributing to and benefitting from a more circular economy.

## Knowledge margin

Yara's diverse staff, with their deep insights and analytic capacity, is one of the key drivers for our leading position in the industry. Innovation is recognized as a strategic capability, and Yara dedicates resources to protecting and advancing our knowledge margin. Yara's combined knowledge differentiates us in a wide range of aspects, including agronomy, sustainable agriculture, market insights, process safety and efficiency, product stewardship and environmental solutions.

## Ethics and compliance

Success can only be celebrated when it is achieved in the right way. Our manner of conducting business defines who we are as a company. Through consistent integrity, fair treatment of people and partners and by respecting universal rights, we create trust both internally and externally.

## Health and safety

We value our employees, and safety is therefore a key priority in Yara. Our employees represent a knowledgeable and diverse workforce, and every one of them has the right to a safe working environment. A safe and healthy workplace is good for business. We believe that all accidents are preventable and our goal is zero injuries.

## Product stewardship

Ensuring that the right product with the right quality arrives safely to the farmer is fundamental to building trust. Through our Product Stewardship principles and a dedicated Security function, Yara carries out extensive work to determine the best and safest way to transport, store and apply fertilizers and industrial products. Our work on monitoring, quality review and handling of our products is the foundation of industry standards.

## Competitive edges

Yara's competitive edge 'Knowledge margin' has a strong people dimension, which is perceived as significant for society. The remaining three sources of Yara's competitive edge are not perceived as significant from a societal point of view. The topics of 'Global optimization and scale', 'Competitive raw material prices' and 'Operational excellence' are described in the report of the Board in the annual report.

## Material topics, GRI topics and boundaries

The table below provides a value chain understanding of our material sustainability topics. It describes how they relate to the disclosures of management approach in this report, as well as the sustainability topics defined in the GRI Standards reporting framework. Colored cells indicate the boundaries for our reporting on the material topics.

Yara material topics	Raw materials	Manufacturing	Marketing, shipping and storage	Application	Management approach	GRI topics
Food security					Economic, p. 24	NA
Agricultural productivity					Economic, p. 24	305 Emissions 417 Marketing and labelling
Farmer profitability					Economic, p. 24	201 Economic performance 203 Indirect economic impacts
Climate change					Environmental, p. 26	305 Emissions
Energy					Environmental, p. 26	302 Energy
Resources and the environment					Environmental, p. 26 Mining, p. 44	301 Materials 303 Water 304 Biodiversity 305 Emissions 306 Effluents and waste 307 Environmental compliance 308 Supplier environmental assessment
Knowledge margin					Human resources, p. 31 Mining, p. 44	401 Employment 404 Training and education 405 Diversity and equal opportunity MM Labor management
Ethics and compliance					Ethics and compliance, p. 37	205 Anti-corruption 206 Anti-competitive behavior 406 Non-discrimination 407 Freedom of association and collective bargaining 408 Child labor 409 Forced or compulsory labor 412 Human rights assessment 413 Local communities 414 Supplier social assessment 415 Public policy 419 Socioeconomic compliance
Health and safety					Health and safety, p. 34	403 Occupational health and safety 410 Security practices
Product stewardship					Product stewardship, p. 40	416 Customer health and safety 417 Marketing and labelling
Mining related					Mining, p. 44	411 Indigenous rights MM Local communities MM Closure planning 201 Economic performance 202 Market presence

## Changes from previous reports

As of the reporting year 2017, Yara has transitioned from using the GRI G4 reporting framework to adopting the GRI Standards framework. Whereas Yara's material topics remain unchanged from 2016, the application of GRI Standards has resulted in some changes in the reporting, most notably:

- The report includes a disclosure of management approach for Yara material topics *Food security, Agricultural productivity and Farmer profitability*.
- The reporting on grievance mechanisms and cases reported is integrated in the management approach disclosures, in accordance with GRI Standards.
- GRI Standard 305 Emissions: In certain products, mainly urea, CO<sub>2</sub> is used as feedstock in the production process. The CO<sub>2</sub> is emitted upon fertilizer application. In accordance with the GHG Protocol, Yara has included these CO<sub>2</sub> volumes in its reporting of scope 1 emissions. Historic data have been recalculated accordingly.
- The JV Lifeco no longer fulfils the IFRS 11 requirements, and is no longer covered in the disclosures. Historic data have been updated accordingly to allow direct comparison, which explains variations between figures provided in the 2016 and the 2017 reports.
- Yara refined its calculations in 2017 by stricter reporting of own, by-product electricity generation. Therefore, the previous location-based figure published in 2016 (1.3 million tonnes) is not directly comparable.
- Yara is implementing the GRI Mining and Metals Sector Supplement.

## Report boundaries

Consolidated data within this report covers the reporting year 2017, unless otherwise noted. Reporting boundaries mainly reflect IFRS accounting principles. For a full account of entities included in Yara's consolidated financial statements, please refer to the Yara Annual Report 2017, note 2.

Readers should take note of the following changes and limitations to the scope and boundaries of the reporting:

- Environmental performance data covers Yara's major chemical production and mining sites.
- Joint ventures are included where Yara is in control, according to IFRS 11 requirements. For the 2017 report this includes Yara's joint ventures in Trinidad and Pilbara, Australia.
- Labor indicators cover Yara sites with five employees or more, except for potential cases filed through Ethics & Compliance which cover the entire organization.



# Stakeholder engagement

## Our approach

*Yara has a wide range of stakeholders both locally and globally. We engage with our stakeholders directly or indirectly through industry associations. The engagement, through dialogue and cooperation, relates to challenges relevant to our business, often linked to global issues.*

Good relations with Yara's large and varied group of stakeholders is considered a benchmark of success. We engage our key stakeholders to build knowledge, develop relations, find solutions and invite to cooperation. We are part of several networks and partnerships, including membership in industry associations and other relevant organizations and initiatives.

Yara engages extensively in global dialogues related to major global challenges, and the interconnection of food security and climate change is a prioritized topic. Agriculture is often perceived as an environmental problem. Fortunately, our view that it can also be part of a solution has become increasingly widespread.

Yara is committed to actively changing the benchmarks of the fertilizer industry, improving standards and performance. We take an active role in our industry associations and in relations with regional bodies and regulatory authorities. The most prominent industry bodies are the International Fertilizer Industry Association (IFA) and Fertilizers Europe (FE). Yara is a corporate member of both.

## Key stakeholder groups

### Employees

Yara had 15,527 employees at the end of 2017 and operations in more than 60 countries worldwide, representing great diversity and knowledge. Yara strives for a corporate culture of openness and accessibility to senior management, engaging employees in corporate matters through several channels and surveys, including "Yara Voice".

Yara values its good relationship with employees and their organizations and engage them on a regular basis. In 2017, about 73% of Yara employees were covered by collective bargaining agreements.

Proportion of employees covered by collective bargaining	2017	2016
Africa	24.8%	22.2%
Asia & Oceania	14.3%	17.8%
Brazil (including Galvani)	98.8%	99.9%
Europe	80.7%	83.7%
Latin America (excl. Brazil)	6.5%	6.5%
North America	30.5%	33.1%
<b>Yara</b>	<b>72.5%</b>	<b>74.00%</b>

The 2017 figures include both permanent and temporary employees, which explains the decrease from last year in most regions. The 2016 figures cover only permanent employees.

Yara runs employee engagement surveys on a regular basis. A survey run in 2017 confirmed that Yara employees have a generally high engagement and a strong pride in their work. For further details on the survey, please refer to the Human Resources management approach section, p. 31.

### Customers

Yara has a wide range of customers worldwide, including those who use our products, distributors and agents. We engage our customers in various ways in different markets, such as through farmer meetings, digital platforms and satisfaction surveys. Yara spends significant resources on providing concise and useful informational material and total solutions tailored to the customers' needs.

### Investors

Yara engages continuously with its owners through investor relations, based on principles of openness and the equal treatment of all shareholders.

### Suppliers

Yara stays in regular contact with a wide range of suppliers, from global suppliers of raw materials to local service providers. Our engagement with suppliers corresponds with our commitment to Product Stewardship. We make sure that suppliers and partners comply with the principles defined in our Business Partner Code of Conduct, covering HESQ standards and ethical guidelines.

## Influencers

Yara has a global presence. That positions us to contribute to the global agenda in issues corresponding to our core business, as well as contributing to the countries and communities in which we operate. We cooperate with a variety of agencies and organizations and several national authorities and international or regional bodies, presenting our products and solutions and sharing our knowledge.

## Commitments and endorsements

Yara is a UN Global Compact (UNGC) signatory. We are therefore committed to their ten principles covering human rights, labor rights, environment and anti-corruption. We have also endorsed the UNGC Caring for Climate initiative, the CEO Water Mandate and the Call to Action: Anti-Corruption. Furthermore, Yara is a founding participant of the voluntary Food and Agriculture Business Principles (FABs).

We are committed to international standards by supporting the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the United Nations Guiding Principles on Business and Human Rights, the International Bill of Human Rights, the core conventions of the International Labor Organization (ILO) and the OECD Conventions on Combating Bribery. Our approach, the precautionary principle, is defined in Yara's Health, Environment, Safety and Quality Policy.

To read the full policy, please refer to our [Yara HESQ Policy web page](#).

## Memberships and associations

Yara is a corporate member of the two leading fertilizer industry associations, the International Fertilizer Industry Association (IFA) and Fertilizers Europe, as well as the Fertilizer Institute (TFI). Yara is also part of the European Industrial Gases Association (EIGA) and the European Chemical Industry Council (CEFIC).

Yara's CEO Svein Tore Holsether is a commissioner on the Business and Sustainable Development Commission (BSDC). Our CEO is also a member of the Executive Committee of the World Business Council on Sustainable Development (WBCSD), where Yara is a member. In the WBCSD, Yara is active in the workstreams of Climate Smart Agriculture, Food Reform Endeavour for Sustainability and Health (FRéSH), the Global Agriculture Alliance (GAA) and the circular economy program called Factor10.

Through 2017, Yara was a key stakeholder in establishing the Food and Land use coalition (FOLU), a cross sectoral platform which drives science based policy dialogues for transforming food and land use systems in support of the Paris agreement and the UN Sustainable Development Goals. Yara holds a position in the FOLU management team.

Yara also participates in the International Federation of Industrial Energy Consumers (IFIIEC), where we currently hold the Presidency and chair the working group on gas. Yara has also signed up to the Global Alliance for Climate Smart Agriculture (GACSA) and holds a position in its Strategic Committee.

Yara is an active member of the Private Sector Mechanism of the UN Committee of World Food Security (CFS). Through IFA, Yara is part of the International Agri-Food Network (IAFN) at the CFS, the Business & Industry Major Group to the UN, the Global Business Alliance in New York and the multi-stakeholder coalition Farming First. Yara is an associated member of the Zinc Nutrient Initiative and a regular partner of the Water Footprint Network. Yara remains engaged with the Business and Industry Advisory Committee to the OECD (BIAC) on specific issues relevant to its industry.

Yara is an Industry Partner of the World Economic Forum (WEF) and part of the New Vision for Agriculture and the related Grow Africa and Grow Asia partnerships. We are one of eight partners committed to the Farm to Market Alliance, a global public-private consortium seeking to transform food value chains in emerging markets. Since 2016, we have also been a partner in the Tropical Forest Alliance 2020.

## Key concerns raised in 2017

No significant concerns were raised at the corporate level in 2017. At a local level, communities adjacent to production facilities have raised concerns regarding noise and dust.

### Pilbara, Australia

For Yara's plants in the Pilbara region of Australia, an Australian Senate Committee handed down a report into the protection of Aboriginal rock art of the Burrup Peninsula. The Committee's report provided several different points of view with respect to the rock art. In 2017, Yara conducted rock art monitoring in partnership with heritage experts and local Aboriginal traditional owners, and Yara continues to work closely with the traditional owners regarding rock art monitoring and preservation.

### Closure of Pardies, France

In March 2017, Yara announced its plans to close operations in Pardies, France. Operations are scheduled to cease in October 2018. At the time of the announcement, the site had 85 employees. The closure process is supported by a social plan to compensate for job losses. The plan is allocated a budget to provide for a range of supportive actions. The plan fulfills both legal requirements and agreements with trade unions.

Some of the main elements are:

- Revolving doors job policy; staff may leave their positions on short notice for new job opportunities, but with an open return to Yara Pardies as long as its operating.
- Monthly alignment meetings with trade unions.
- Paid leave when searching for a new job.
- Temporary compensation if the new job has a lower salary.
- Support to establish own business or training/ education.

In addition to the internal budget, another budget is allocated through a private-public arrangement under public governance.

## Stakeholder engagement in 2017

### Precision farming in European agriculture

In 2017, the European Commission proposed several changes in the Common Agricultural Policy (CAP). The proposed changes followed a broad consultation on the future of the policy beyond 2020. One of the key proposals is enhancing the CAP's role in tackling climate change and preserving the environment. Another is encouraging the use of modern technologies. The concept of precision farming matches these priorities well. This has been recognized by the European Commission, and the CAP makes provisions for applying precision farming to close the gap between research and practice, including for rural and smallholder farmers.

Yara has advocated the benefits of precision farming for years and continued to do so through 2017. We have thoroughly documented how precision farming tools in combination with nitrate fertilizers help increase productivity and sustainability, improve quality and reduce environmental impact.

In May 2017, Yara presented the benefits of precision farming at our Hanninghof R&D Center in Dülmen, Germany. The event attracted over 70 experts, farmers and representatives from the industry, EU institutions and member states' governments, widely agreeing that precision farming is key to developing European agriculture sustainably and making it attractive to youth.

Following this event, we sponsored a workshop organized by Euractiv in Brussels in June. The topic was the future of precision farming in European agriculture. The workshop gathered representatives from various institutions within the EU, along with NGOs, scientists and industry experts.

In November, Yara presented the benefits of precision farming at the Agriculture & Food Summit in Paris. POLITICO gathered farmers, policymakers and industry experts to discuss the challenges and opportunities of sustainable food production. We sponsored the event and gave the keynote speech to open the panel on Agriculture, Sustainable land use and Climate change.

### Food systems engagement

Yara is involved in multiple dialogues about the systemic changes to how food is grown and delivered. Yara's believes that sustainable intensification can support a growing demand for food without driving land expansion, thereby reducing GHG emissions substantially and supporting farming economy through resource optimization.

In January 2017, Yara hosted a roundtable discussion in Oslo, Norway, with key representatives from the cocoa related industries, academia and NGOs. The workshop led to the formation of the CocoaSoils initiative. The initiative considers sustainable intensification and integrated soil fertility management for cocoa growers.

In November 2017, Yara hosted a session on food systems in Oslo, with keynotes from Yara's CEO Svein Tore Holsether and the former Mexican President, Felipe Calderón. Yara's CEO also spoke at the launch of the Food and Land Use Coalition (FOLU) in the UN during the UN General Assembly week, and at an event on accelerating the 2030 Agenda.

In September 2017, the CEO also presented a positive view on Africa's agricultural potential at the African Green Revolution Forum (AGRF), the continent's leading platform for food and agriculture exchanges.

At the COP23 side events, Yara presented how it cooperates with farmers in both developing and developed markets to improve performance through knowledge sharing, tools and technology.

## Norway

Headquartered in Norway, Yara engages actively with Norwegian stakeholders in agriculture, industry, politics and academia, particularly on the sustainability and innovation agendas. In 2017, Yara Porsgrunn hosted the Norwegian Prime Minister and the Minister of Trade and Industry for the launch of the Government's white paper "A greener, smarter and more innovative industry". We also partnered with the Confederation of Norwegian Enterprise (NHO) to launch the Business and Sustainable Development Commission's (BSDC) report "Better Business, Better World" for a Norwegian audience, continuing our support to put the SDGs on the agenda. Yara also participated at other NHO events, along with NGO and investor conferences. The Yara CEO held presentations at several of these events.

2017 also marked the 150th anniversary of Yara founder Kristian Birkeland. The anniversary was celebrated with conferences, exhibitions and profiling all over Oslo, including an innovation conference attended by several government representatives.

## Customers

Our business units in Crop Nutrition ran several satisfaction surveys in their respective markets throughout 2017. Phone interviews were a central component of many of the surveys to get feedback from farmers and distributors on service and product quality. We also ran local initiatives to collect feedback, such as online surveys, focus groups, phoning customers shortly after delivering our products, engaging in social media, and meeting farmers and distributors directly at farmer meetings, crop clinics, field days, demonstration trials, training sessions and tradeshows.

Generally, Yara is recognized for its high-quality products and the application of knowledge across all markets. Complaints about product quality occur from time to time. These are often linked to storage issues at local distributors or farms. The complaints are handled according to procedure to analyze and solve the issues. In Europe, all complaints are logged in a database and we usually follow-up and investigate individual complaints with a visit to share our best practices.

Some of the other topics raised in our surveys and through our engagement with farmers and distributors in 2017 include:

- Brazil: Improve sales force training and the frequency of interaction. Also, confirm delivery dates by phone
- Asia: Improve in-store navigation in retail outlets
- Europe: Improve confirmation of delivery dates and digital follow-up after delivery

Every third year, Yara conducts a global brand survey to assess brand awareness. The survey also helps us understand our customers preferences in seeking out information about our company, products and solutions.



# Governance

## Governing bodies

The President and CEO constitutes a formal corporate body, according to Norwegian corporate law. The CEO is responsible for day-to-day management of the company. In Yara, the division of functions and responsibilities has been defined in greater detail in the Rules of Procedures established by the board, who helps set the corporate governance direction. Yara has written a set of directives and processes that help regulate the performance of management and business processes, called the Yara Steering System.

The President and CEO appoints management to assist in his or her stewardship duties delegated by the board and in day-to-day management, including the organization and operation of the company. The President and CEO determines the instructions for management after prior discussion with the board. The instructions for management and the function descriptions and authorizations issued to each member of management reflect a joint obligation for these members to safeguard the overall interests of Yara and to protect Yara's financial position.

Yara strives to improve diversity in both corporate management as well as board composition. During 2017, Yara's Executive Management Team consisted of twelve members. Three were female and three were non-Norwegians (Belgian, Brazilian).

Yara does not have a corporate assembly, and the shareholders' representatives on the Board of Directors are therefore elected directly at the Annual General Meeting. The board's internal rules of procedure establish in more detail the board's role in relation to managing the company and the other corporate bodies. The President and CEO's authority and responsibilities are defined to allow the board to concentrate on the company's strategy and organization. The board's work follows an annual plan, and it conducts an evaluation every year of its work and procedures.

The board of Yara consists of eight members, of whom five are elected by the shareholders, and three are elected by and among the employees.

At the year end of 2017, females represented 21% of Yara's workforce and held 15% of the 170 critical positions. We have initiated various activities at corporate and business segment level to increase gender diversity and ensure inclusion.

## Corporate functions

### Corporate affairs

Yara's sustainability work is led by the Corporate Affairs team, organized as part of the Corporate Strategy & Business Development, which is represented in the Yara management team by the Executive Vice President. The main responsibility for the sustainability function is to drive processes to ensure the company responds adequately to external expectations, as well as to work with the business and external stakeholders to leverage the company's performance on sustainability aspects as a competitive advantage. In 2017, processes were initiated to improve Yara's ESG management as well as updating the company long term strategy.

### Corporate Human Resources (HR)

Yara's Corporate HR function is responsible for executing our People and Organization Framework, which was launched in 2016. The Corporate HR organization consist of three small central HR teams responsible for compensation & benefits, talent and leadership and HR operations. Furthermore, a network of local specialists supports the implementation of global policies and executes standard processes within their respective segments. The Corporate HR function is headed by the Executive Vice President of HR, Communications and Brand.

### Health, Environment, Safety and Quality

Yara's HESQ maximizes value creation for Yara by ensuring that the company operates to industry-leading standards related to health, occupational safety, process safety, environment, quality, product stewardship, security and emergency handling & preparedness. It is a prerequisite for achieving a sustainable operation as it takes care of all employees and stakeholders involved in the life cycle of our plants and our products. The Head of Corporate HESQ reports directly to the CEO.

## Ethics and Compliance Department

Yara's Ethics and Compliance Department coordinates and oversees the company's ethics and compliance work. The central department is supported by a team of full-time Regional Compliance Managers who are embedded into the business and tasked with implementing the Compliance Program day to day. The Chief Compliance Officer reports directly to the CEO, reporting to the full Board of Directors twice per year and the Board's Audit Committee each quarter.

## Chemical Compliance

Yara Chemical Compliance is a central function responsible for assisting other Yara units in achieving and maintaining compliance with chemical regulations and product labelling worldwide. Yara Chemical Compliance reports to Corporate HESQ.

## External assurance

Yara has decided to seek external assurance of its reporting to the GRI reporting framework. A third party, Deloitte AS, has conducted a review in accordance with attestation standard ISAE 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information" established by the International Auditing and Assurance Standards Board. This provides a limited level of assurance on the Yara – GRI Reporting 2017. Deloitte is independent from Yara. Deloitte also audits Yara's financial records. The external assurance is presented to Yara's management team.

The auditor's report is presented in the final section of this report.

## Report details

Yara has prepared this report in accordance with the GRI Standards 'Core' option, as confirmed by the independent auditor Deloitte (see above).

Yara reports on an annual basis, and the reporting period covers the calendar year, unless otherwise specified in the individual responses to the GRI indicators. Our most recent previous GRI report was published in March 2017.

## GRI Content Index

The GRI Content Index is published on [yara.com](https://www.yara.com): GRI Content Index [link to <https://www.yara.com/this-is-yara/sustainability/sustainability-reporting/gri-index/>] Previous reports are available in the Sustainability section of our website [yara.com](https://www.yara.com)

Any queries about Yara's sustainability performance or reporting can be directed to

Bernhard Stormyr  
Head of Sustainability Management  
[bernhard.stormyr@yara.com](mailto:bernhard.stormyr@yara.com)

# Economic management approach

## Materiality

Our corporate strategy is based on profitable and sustainable growth, which is material to our long-term success as a listed company. We believe that by offering a positive value proposition to our customers over time, we can deliver attractive returns to our shareholders while also creating value for society – creating shared value.

This belief is reflected in our vision: *A collaborative society; a world without hunger; a planet respected.* Responding to global challenges corresponds closely with Yara's core business, with our operations and offerings. We develop knowledge and solutions that support increased yields and better-quality crops, with less waste and environmental impact. Through our farmer centric market model, and by engaging in value chain partnerships, we bring better farming practices to smallholder farmers in several regions. We help them to improve productivity and profitability, contributing to inclusive growth. This puts food security, agricultural productivity and farmer profitability at the center of our efforts to create shared value.

In 2017, Yara entered a strategy update process, which will define new and overarching sustainability goals for the company. Our materiality assessment, including the topics of food security, agricultural productivity and farmer profitability, form part of the basis for this process. The impact of our business on the three topics occur mainly locally and for individual farmers. That means that our impact is beyond our direct sphere of control, making it more difficult to measure than impacts stemming directly from our operations. Through the strategy update process, we explore how to establish goals relating to this, along with appropriate management approaches.

*The disclosures in this section relates to the following material topics, GRI topics and GRI disclosures:*

Yara material topic	GRI topics	GRI disclosures
Food security	NA	NA
Agricultural productivity	201 Economic performance	201-1, 201-2, 201-3
Farmer profitability	203 Indirect economic impacts	203-2

## Management approach

### Policies and commitments

Yara's ability to create shared value hinges on our economic performance and maintaining a sound financial capacity. We target a BBB credit rating from Standard & Poor's, and the Yara Board of Directors believes that more than half of Yara's earnings should be reinvested in the company. Our objective for returns to shareholders is to pay on average 40-45% of net income to shareholders in the form of dividends and share buybacks.

For a full account of our dividend policy and financial performance, please refer to the Yara Annual Report 2017 available on our [Investor Relations website](#).

Yara is committed to serving all shareholders and potential investors with consistent, open and prompt disclosure of relevant information. Our policy is to treat all stakeholders equally, a group that includes banks, analysts and institutional investors in addition to shareholders and others with a specific interest in the company.

Yara is committed to transparency and accountability, and adheres to international agreements and national legislation where it operates. We welcome initiatives to strengthen the governance in resource-rich countries by improving openness as to how wealth from natural resources is generated and used. As set forth in EU regulation 2013/34 and in the Norwegian Account Act, we produce a full country-by-country report in accordance with the new reporting requirements with effect from the financial year 2014 for extractive industries (including mining).

For our 2017 country-by-country report, please refer to our [Investor Relations website](#).

## Responsibilities

Yara's Group Accounting is responsible for the preparation of the Financial Statement and ensuring that it is compliant with laws and regulations and in accordance with adopted accounting policies. Our procedures for financial accounting and reporting are described in our Accounting Manual, which is continuously updated and revised for any changes related to IFRS and Yara's Accounting Policies. Our Internal Control function regulates the governance structure for Internal Control over Financial Reporting (ICFR), and manages and controls the systematic risk related to financial reporting.

Responsibility for the transparency and accountability of our Financial Statements ultimately rests with the Yara Board of Directors. The Audit Committee, comprised of three Board members, assists the Board of Directors in assessing the integrity of the company's financial statements, financial reporting processes and internal controls, risk management and performance of the external auditor. The Audit Committee further evaluates plans and internal audits performed by the Internal Risk and Audit department within the areas of financial reporting and control.

## Training and awareness

Yara's Steering System is one of the pillars of Yara's internal control system. It aims to ensure that all Yara employees act in a consistent manner and in line with quality standards and business needs. Provision of training to key stakeholders such as CFOs, financial managers, accounting personnel in local units as well as Group Accounting is defined as a KPI in the steering system.

## Grievance mechanisms

Yara is committed to proactive and effective risk management to mitigate adverse effects on our operations and to identify and explore business opportunities. To this end, we have implemented continuous and systematic risk management. Our ability to create shared value depends on the efficient management of strategically important risks and opportunities relevant to our industry, arising from our business environment and major global challenges.

For more on Yara's risk management, please refer to the Yara Annual Report 2017. [Latest Annual Report](#)

All Yara employees are encouraged to raise questions or issues about company practices with line management or through alternative reporting channels, including our Ethics Hotline.

For further details, please refer to the Ethics and Compliance management approach, see p. 37.

## Evaluation

Yara experiences a rising demand for environmental, social and governance (ESG) disclosures from investors and other stakeholders. We report to several ESG disclosure and rating initiatives, including the CDP and EcoVadis. To the extent that their data is publicly available, we use their assessments to benchmark our own performance and pinpoint areas for improvement.

Within Yara, all bodies and functions involved in the company's financial reporting monitor and evaluate the need for corrective actions related to financial and operational risk within their area of responsibility. The Audit Committee, which consists of three Board members, review the quarterly and annual financial statements. The internal and external auditors participate in these meetings. The Board of Directors receives regular performance reports, ahead of our publicly available quarterly and annual reporting.

Yara Internal Risk and Audit supports Yara Management and the Board of Directors in terms of evaluating the effectiveness and efficiency of internal controls and gives an independent view on risk management. The Chief Internal Risk and Audit Executive reports functionally to the Board of Directors and administratively to the Chief Financial Officer. Yara Internal Risk and Audit has no direct operational responsibility or authority over any of the activities it reviews. The unit has unrestricted access to all functions, records, physical properties and personnel relevant to the performance of its tasks.

For the Board of Directors' assessment of Yara's financial performance in 2017, please refer to the Yara Annual Report 2017. [Latest Annual Report](#)



# Environmental management approach

## Materiality

Yara has a leading position in our industry in reducing greenhouse gas (GHG) emissions and implementing environmental stewardship. While agriculture causes significant GHG emissions, it is also part of the solution to climate change and to meet the increasing global demand for food. We therefore continuously strive to reduce the environmental footprint of our operations, while at the same time develop and deliver solutions and knowledge to achieve sustainable intensification of crop production worldwide.

*The disclosures in this section relate to the following material topics, GRI topics and GRI disclosures, including relevant disclosures of the GRI Mining and Metals Sector Supplement (MM):*

Yara material topic	GRI topics	GRI disclosures
Climate change	305 Emissions	305-1, 305-2, 305-3, 305-4, 305-5
Energy	302 Energy	302-1, 302-3
Resources and the environment	301 Materials	301-1
	303 Water	303-1
	304 Biodiversity	304-1, 304-2, 304-3, 304-4, MM1, MM2
	305 Emissions	305-7
	306 Effluents and waste	306-1, 306-2, 306-3, MM3
	307 Environmental compliance	307-1
	308 Supplier environmental assessment and related disclosures:	308-1, 308-2

mitigate the potential harm to people or the environment and will always search for resource optimization opportunities. Ensuring energy efficient operations is our priority.

Yara is committed to complying with all applicable laws, rules, and regulations in the countries where we operate. We follow the strictest standards when making decisions, whether it be local or international laws and regulations, Yara's policies and procedures, or our Code of Conduct. We monitor, strive to comply with and exceed industry standards and applicable environmental laws and regulations.

Yara's environmental policy is described in the HESQ policy (latest version February 2017) and in the Code of Conduct (latest version January 2018), both approved by the Yara CEO Svein Tore Holsether and available on our website [yara.com](http://yara.com)

## Climate change

Connecting the issues of food security and climate change is a key approach when responding to global environmental issues. A major global challenge is to create green growth in a low-carbon economy, with a reduced carbon footprint. Today, agriculture causes about one quarter of global greenhouse gas (GHG) emissions, with land use change originating from agricultural expansion being the main culprit. The manufacturing of mineral fertilizers contributes to GHG emissions, but they are also vital in limiting the need to expand farmland.

Yara's most significant initiative to reduce GHG emissions so far is the development and installation of N<sub>2</sub>O catalyst technology at its nitric acid plants. This technology removes about 90% of the N<sub>2</sub>O emissions in Yara's plants, and is also commercially available to third parties. Due to the significant reductions in GHG emissions from our catalyst technology, Yara can offer low-carbon nitrate fertilizers.

Yara has assessed the Carbon Footprint of fertilizers through the fertilizer life cycle. By using our fertilizers and best farming practices, the carbon footprint from crop production can be significantly reduced while maintaining yields. Yara works to enable farmers to make more informed decisions to reduce their environmental impact. The benefits can be measured both in terms of sustainability and productivity.

## Management approach

### Policy and commitments

Yara's mission statement is "Responsibly feed the world and protect the planet." Yara is committed to excellent environmental performance, which is also crucial to the success of our business. Yara uses a precautionary approach to identify risks and take preventive measures to

European nitric acid and ammonia plants are covered by the European Trading System (EU ETS). The ETS system requires standardized and verified emission monitoring and reporting. The carbon price induces a criteria for improvement and investment decisions.

### **Our main climate change commitments and initiatives are:**

#### **In our businesses**

- We will link the carbon footprint of fertilizer production to that of agricultural products, to include all emissions and mitigation up to the harvested crop.
- We will continue to work with the farmers and other stakeholders in the food value chain to promote sustainable agriculture and at the same time increase profitability through higher yields and better quality

#### **In our operations**

- We will continue to optimize N<sub>2</sub>O abatement at our nitric acid plants and to reduce our CO<sub>2</sub> emissions by improving energy efficiency
- We will establish technology leadership in our core business by a portfolio of research projects that aim to develop break-through innovations
- The Plant of the Future concept is exploring more cost-effective and reduced-emissions production technologies. One of the major tasks in the project is to execute energy and emissions assessments in Yara's plants, identifying potentials in energy savings and emission reductions.
- The related Green Nitrates Platform is a concept for producing green nitrate products, based on hydrogen from green energy by electrolysis. This concept will require substantial improvements of today's production technologies.

## **Energy**

Energy is a key element in modern farming and food processing. Volatile energy pricing and, in many areas, a lack of infrastructure affect the value chain of food production and distribution. This includes the production of nitrogen fertilizers, which is a highly energy intensive process and dependent on fossil fuels as both a raw material and an energy source. Improved efficiency can be achieved throughout the food value chain, and the fertilizer industry can be a major contributor.

Yara is focusing on energy efficiency in our own production processes. Yara is continuously monitoring the energy efficiency of its production units, with specific energy KPIs for our ammonia and urea operations. Yara is regularly performing internal and external benchmarking. Energy efficiency diagnostics and audits are carried out leading to systematic improvement actions. A number of sites are covered by a certified Energy Management system. Energy efficiency improvement and reporting is required by the EU Energy Efficiency directive for the European sites.

In the fertilizer production, our focus is on optimizing the use of natural gas. Almost 90% of Yara's energy consumption takes place in ammonia production. In recent years, most of Yara's ammonia plants have been technically upgraded to improve energy efficiency. These efforts have paid off, and Yara's most efficient ammonia plants rank among the best quartile in the industry. Yara plants on average perform better than the world industry average, as confirmed by the most recent global benchmarking carried out by International Fertilizer Industry Association (IFA) based on 2013-2014 data vintage.

### **Our main energy efficiency commitments and initiatives in the operations are:**

- We will continue our systematic energy efficiency diagnostics process to identify the improvement potential and implement best available technology and practices efficiently.
- We will continue our efforts to improve energy efficiency at the ammonia plants by improving plant reliability.
- We will continuously drive energy efficiency at our production sites with the help of efficient energy management systems and digital solutions.

## **Resources and the environment**

Mineral fertilizers are made from naturally occurring raw materials. In addition to air and natural gas, Yara uses rock phosphate and potassium salts extracted from mined rock, as well as other crop nutrients that are sourced in smaller volumes. Recycled materials as sources for nitrogen, potash or phosphate are not yet used as raw materials on a material scale, but Yara explores opportunities for recycling nutrients. Today, we consider our work to improve agricultural productivity and nutrient efficiency as our main contribution to better resource management. We have also helped develop methods to reduce emissions deriving from the use of mineral fertilizer, including runoff into waterways.

Yara's strategy involves promoting agricultural productivity while minimizing environmental impact. This combines environmental stewardship with profitable farming and promoting the prosperity of local communities. Yara also works to help farmers improve agricultural productivity and use their land more effectively

Water is crucial for agriculture, and improved water use management is imperative in large parts of the world. Yara has assessed the life cycle aspects of water usage by calculating the water footprint of fertilizers. According to the results, the impact of water use during manufacturing of fertilizer is minor compared to the use phase. Water is essential in the production process, but most of it is used for cooling and returned unpolluted. Discharges to water from Yara's production are mainly nitrogen and phosphate. Control of emissions complies with each site's environmental permits, is monitored strictly and reported to the local environmental authorities.

Yara continues to investigate and quantify the effects of crop nutrition on water use efficiency through agronomic trials. Results show that nutrient supply should be adapted to the availability of water in order to maximize crop water productivity. We also develop and offer fertigation solutions, which combine irrigation and fertilizer application to help growers apply the right kinds of fertilizers, in the right amounts and at the right time, targeting the plant's root systems rather than the soil in general.

### **Our main commitments related to resources and the environment are:**

#### **In our businesses**

- We will strengthen our position as a global market leader for emissions abatement for NO<sub>x</sub>, SO<sub>x</sub> and other relevant pollutants in selected markets and segments.
- We will continue to engage in sustainable water consumption through R&D activities and active participation in the CEO Water Mandate and Water Footprint Network.
- We will provide knowledge-based solutions to improve agricultural productivity, at the same time addressing food security and climate change.
- Based on our Circular Economy R&D platform, we will actively research opportunities for contribution to a more circular economy.

#### **In our operations**

- We will ensure compliance and continuous improvement of our environmental performance by implementing Environmental Management Systems and Product Stewardship programs throughout our operations.
- We will target further reductions in our NO<sub>x</sub> emissions through renewal and optimization of specific DeNO<sub>x</sub> installations.
- We will work continuously to achieve our target of zero major process safety accidents.
- We will establish technology leadership in our core business by a portfolio of research projects aiming to break-through innovations.
- The Plant of the Future concept is exploring more cost-effective and reduced-emissions production technologies. One of the major tasks in the project is to execute energy and emissions assessments in Yara's plants, identifying potentials in energy savings and emission reductions.
- The related Green Nitrates Platform is a concept for producing green nitrate products, based on hydrogen from green energy by electrolysis. This concept will require substantial improvements of today's production technologies.

### **Responsibilities and resources**

The Head of HESQ, reporting to the CEO, has organizational responsibility for ensuring that appropriate environmental governance is in place all over the company. Yara's Board of Directors will ensure that policies and steering documents are in place, and is frequently informed about environmental governance, liabilities and risks.

Business units at all levels are accountable for the environmental performance of their operations, for compliance with legal and statutory requirements and requirements laid down in the Yara Steering System. Segments and production units have dedicated HESQ resources supporting the implementation and monitoring of HESQ performance. Units report about their environmental performance and potential environmental incidents to the segments and Yara headquarters, which is responsible for providing transparent and timely information to the public.

### **Implementation**

Yara requires for all manufacturing plants to be certified to the three widely recognized standards ISO 9001 Quality Management Systems, ISO 14001 Environmental Management Systems, and OHSAS 18001 Occupational Health and Safety Management Systems. We are also implementing externally certified Product Stewardship programs throughout our operations. For further details, please refer to Product Stewardship management approach, p. 40.

We are audited on a regular basis by third parties to ensure compliance with these standards and programs. The table on the next page provides an overview of certifications for our major manufacturing plants.

Production plant	ISO 9001	ISO 14001	OHSAS 18001	Product Stewardship	Others
Segment management: Production segment	x	x	x	x	
Australia Pilbara	In progress	In progress	In progress	In progress	
Belgium Tertre	x	x	x	x	
Brazil Ponta Grossa	-	-	-	-	
Brazil Rio Grande	x (partially)	x (partially)	x (partially)	x (partially)	
Brazil Paulinia	x (partially)	-	-	-	
Brazil Luis Eduardo					
Magalhaes	-	-	-	-	
Brazil Lagamar	-	-	-	-	
Brazil Angico dos Dias	-	-	-	-	
Canada Belle Plaine	x	x	-	x	
Colombia Cartagena	x	-	-	In progress	
Finland Kokkola	x	x	x	x	GMP +B2 (Feed safety)
Finland Siilinjärvi	x	x	x	x	
Finland Uusikaupunki	x	x	x	x	
France Ambès	x	x	x	x	ISO 50001
France Le Havre	x	x	x	x	ISO 50001
France Montoir	x	x	x	x	
France Pardies	x	x	x	x	
Germany Brunsbüttel	x	x	x	x	ISO 50001
Germany Rostock	x	x	x	x	ISO 50001
Italy Ferrara	x	x	In progress	x	ISO-FS 22000
Italy Ravenna	x	x	In progress	x	
Netherlands Sluiskil	x	x	x	x	ISO-FS 22000
Norway Glomfjord	x	x	x	x	
Norway Porsgrunn	x	x	x	x	ISO-FS 22000 ISO 50001
Sweden Köping	x	x	x	x	ISO 50001
Trinidad	x	x	x	x	

Yara's large chemical manufacturing sites are classified as industrial activities with potential major accident hazards. Their activities are covered by local environmental permits, and they are required to operate in accordance with strict procedures and management controls to prevent major process safety related accidents. Yara has a well-established process safety management system, including detailed technical standards and an extensive audit and inspection program. Systematic monitoring of environmental performance and process safety measures is in place, including process safety tools such as HAZOP (Hazard and Operability studies). Yara's plants are not considered to represent a risk to the local environment, except if a major accident should occur.

## Grievance mechanisms

Yara uses several channels to collect feedback from internal and external stakeholders related to environmental impacts, compliance and expectations. Each case shall be reported, analyzed and replied back to the original initiator. Corrective and preventive actions are considered and initiated when necessary. Cases are followed up at management level. The key mechanisms for environmental grievances are the following:

### Steering system non-conformity management

Non-conformities to steering documents and technical standards are reported to and handled by the Corporate HESQ function. Any deviations from mandatory requirements are subject to management approval beforehand.



## Incident reporting system

Yara has a company-wide system in place for reporting and handling of environmental incidents, accidental emissions, non-conformities like permit breaches and pursuant fines or other sanctions. The incident reporting system is managed by the Corporate HESQ function.

## Environmental complaint management

Local units have systems in place to manage complaints and other feedback coming primarily from neighbors and the local community. Grievances are handled locally at each individual site.

## Ethics hotline

Anyone – internal or external – that wishes to make a complaint related to Yara’s environmental performance can do so through our Ethics Hotline. For more on the hotline, please refer to Ethics and Compliance management approach, p. 37

## Grievances reported in 2017

Fifteen Yara sites received environmental grievances from neighborhoods or other stakeholders during 2017. A total of 165 environmental complaints and concerns were reported (compared to 252 in 2016). The cases were all addressed and investigated, and 95% of them were closed during the year. The cases were typically individual concerns raised by neighbors related to abnormal or sudden ammonia smell or dust.

Two cases involving environmental litigation are described in the notes to the Financial statements, both pending conclusions in the courts. Yara is part to the two cases due to the acquisition of Adubos Trevo from the Trevisa Group in the year 2000:

- Yara has together with other companies related to the Trevisa Group been sued by an association representing approximately 1,300 potential victims in two separate lawsuits. The lawsuits are related to mine and lead industry activities performed by the company Plumbum Comércio e Representações de Produtos Mineirais e Industriais (Plumbum) in the cities Santo Amaro da Purificação and Boquira in Bahia state in Brazil. Plumbum was formerly part of the Trevisa Group. Adubos Trevo has not been involved in any of the activities included in the lawsuits. The lawsuits include claims for various personal losses, damage to properties, institution of relief funds, environmental restoration and clean-up activities. The lawsuits were filed in 2011 and 2012 but are still in the initial phase. Yara denies liability for any potential damage caused by the activities of Plumbum and has not made any provision for the claims.
- Yara is together with 22 other companies, defendants in a lawsuit filed by São Paulo Public Attorney in 1985 with a claim for compensation for environmental damage related to former activities by the defendants in the Cubatão industrial district.

The defendants deny the claim on the basis that necessary actions have already been taken to recover potential damages from former activities. In September 2017, the court of first instance ruled against the defendants determining that the defendants were jointly liable to repair the damage. The nature of and amount of potential damages have not been determined and will be calculated by an expert. Yara has made a provision related to this case of NOK 12 million. Yara and the other defendants will appeal the decision.

## Evaluation

The effectiveness of Yara’s environmental management is evaluated frequently both internally and by third parties. Improvement actions are taken based on the feedback.

Yara Internal Audit has an important role in evaluating the management and performance of the company, including on environmental topics. An internal audit conducted in 2017 concluded that the reporting process was well established and structured, but saw a need for clearer integration of environmental risks in the Enterprise Risk Assessment (ERM) process. Improvements in the ERM process will be available for the next business planning period.

At the same time, Yara is running a strategy update process, which includes the development of strategic sustainability goals and the formalization of an environmental strategy with defined targets. Yara’s Board of Directors and the CEO are highly involved in this process, and a conclusion is expected in 2018.

Internal HESQ audits conducted in 2017 revealed some cases of individual gaps in the implementation of Yara Steering System. Local action plans were created to remediate the gaps and are being followed up by the Corporate HESQ function. Third party certification and follow-up audits related to Yara’s implementation of management standards and programs (ISO 14001) pointed to a need for more consistent criteria for determining material environmental aspects and objectives across different operational units. To this end, Yara has created an assessment template and implemented it into production segment, and continues the roll out to other segments.

The independent verification of Yara’s GRI Report 2016 spurred a process to ensure that Yara’s mining operations are better reflected in the sustainability reporting. As of the 2017 report, Yara has therefore implemented the GRI Mining and Metals Sector Supplement and identified material topics related to our mining operations. We have also worked on clarifying the reporting principles, assumptions, calculations, scope and uncertainties in the 2017 GRI Report.

Each year, Yara reports to numerous sustainability rating schemes, such as CDP Climate and CDP Water. Whereas we generally score high in external benchmarks, we also utilize the processes to improve our own performance and best practices.

# Human Resources management approach

## Materiality

*Knowledge grows* is the tagline of the Yara Brand, and our knowledge margin above competitors has been identified as both a materially important topic and a core competitive edge. Attracting and retaining the right talents enables Yara to maintain and strengthen its differentiated positioning in global markets.

Yara's mission, vision and values capture the essence of the company's purpose and provide direction and inspiration. Our values Ambition, Curiosity, Collaboration and Accountability are essential to improving the four areas that are critical to driving business outcomes; performance, engagement, retention and attraction.

Yara's People and Organization Framework sets the direction for the management and development of people across Yara. This framework bridges Yara's mission, vision and values, our HESQ policies and Ethics & Compliance, and our people systems and processes. It consists of five main elements: acquire talent, empower performance culture, develop employees and deliver effective and efficient Human Resources (HR) services – all while making sure that we have organizational agility to respond efficiently to changes in our business environment.

*The disclosures in this section relate to the following material topics, GRI topics and GRI disclosures:*

Yara material topic	GRI topic	GRI disclosures
Knowledge margin	401 Employment	401-1, 401-2, 401-3
	404 Training and education	404-1, 404-2, 404-3
	405 Diversity and equal opportunity	405-1, 405-2

## Management approach

### Policies and commitments

Yara is committed to promoting equal opportunities and fighting discrimination. A diversified employee base is a key success factor and means abundant opportunities to add value to our company. Our ambition is to increase the proportion of women in management positions and focus on gender diversity in key human resources processes like recruitment, talent management, employee development and succession planning.

The chemical industry has traditionally been male dominated, and Yara suffers from having too few female employees across all areas, except in administration. This is also replicated in the diversity level at leadership positions across Yara. Yara has decided to address the gender diversity imbalance more assertively, as we believe in creating an equal opportunity workplace and that gender diversity can help drive a high-performance organization.

All business units and organizations have defined their gender diversity ambitions for 2020, both for the overall population in the segment as well as for gender diversity in critical positions. Actions have been defined and progress is being followed-up on a quarterly basis.

As well as gender diversity, Yara has taken measures to improve inclusiveness and diversity related to visible differences such as age and ethnicity as well as fundamental differences such as religion, education or thinking styles.

The global HR policies in Yara are under continuous revision in order to ensure that they offer the right balance for both the local and global business environment which helps in achieving the desired outcome. The revision of our Global Mobility Policy was handled with strong involvement from a large part of the organization.

The employee engagement survey Yara Voice was executed in a successful way and the participation and the outcome were exemplary. Actions to further strengthen good engagement results and/or to improve weak results have been identified and are being followed up with regards to progress and completion.

### Responsibilities

Organizational responsibility for overseeing and follow-up of labor practices and performance quality lies with the Executive Vice President of HR, Communications and Brand. This is enabled through a structure of management forums which bring the HR leadership from all business sectors together, along with an annual global HR summit. A network of HR employees provide support across the globe in the implementation of the HR strategy, alignment with business priorities and efficient deployment of HR resources according to local needs. HR employees report directly to the business units they serve.

## Implementation

Development is formally discussed between managers and employees twice a year, once at the beginning of the year and once in the middle of the year. Apart from running two formal Performance & Development Discussions per year, managers are expected to frequently follow up, provide feedback, coaching and support for the employees' goal achievement and development activities.

In 2017, all Yara employees had the opportunity to take part in the Performance Management and Talent Development processes, either using the HR Information System (HRIS) as the main tool or completing the process on paper. All major people processes are run globally, on all levels of the organization, and are supported by Yara's HRIS. Both managers and employees have access to HRIS through Manager Self Service (MSS) and Employee Self Service (ESS), respectively.

Yara's interactive learning platform, Yara Learning, offers a single repository for all global learning programs and provides employees and contractors with opportunities to develop their competencies. The platform is available to all employees and contractors with access to Yara's internal systems. It contains a wide range of training material including e-learning courses, e-books and videos. The curriculum is continually developed and expanded based on the needs and priorities of the business.

Yara has developed and is running a Leadership Development program, to further develop and grow our leaders to leverage, inspire, build and deliver on Yara's ambitions over the long term.

Our goal is to equip Yara employees with the skills and competencies they need to be successful in their jobs, and to support the future success of the company. In addition, Yara's operations conduct many regional or local training activities, including mandatory training related to e.g. HESQ and leadership development activities adapted to local or regional needs.

## Grievance mechanisms

Yara strives to maintain a good working environment by encouraging open and direct communication between employees and their supervisors. All employees are free to voice their problems and views on work-related issues without fear of retribution. The company believes that a full discussion can, in most cases, facilitate the resolution of misunderstandings and preserve good relations between management and employees.

Employees who have work-related concerns, or feel that they have been treated unfairly, are encouraged to speak with their immediate supervisors. If the employee and supervisor are unable to resolve the issue, the employee is encouraged to go the next higher level of management, Ethics and Compliance team or to HR.

The company will make every effort to settle an employee's problem on a fair and equitable basis. Employees who use the resolution policy in good faith will not experience any retaliation.

Yara's Ethics and Compliance Department received a total of 151 notifications that were classified as 'People' matters during the reporting period. All 151 of these notifications were addressed, and 119 resolved, during the reporting period.

In 2017, Yara HR dealt with a total of 451 Labor Grievance cases. 445 were in Brazil, four in Africa, one in Latin America ex. Brazil and one in Europe.

Of the 451 cases, 124 were both reported and resolved in 2017. 150 cases were reported before 2017, but resolved during 2017.

In Brazil, most labor claims are related to one or more of the issues below:  
90%: Overtime  
65%: Break  
40%: Insalubrity

In Brazil, it is quite common to raise claims against the employer. Labor courts are considered to be a place for negotiation between the employee and employer.

## Evaluation

The Human Resources organization of Yara continuously strives to ensure the business needs and targets are met, with the most valuable resources – its employees. This function enables the right people for the right job at the right time. Yara's people processes are closely linked to Yara's overall strategy. The redefined Yara's people strategy followed the revision of the company's vision, mission and values. The new people framework connects our people and organizational priorities.

HR in Yara is working on strengthening the performance culture through professional performance management processes, improving the leadership development and reinforcing the talent management. Yara is committed to fostering diversity and open dialogue.

The engagement level of the employees positions Yara as one of the most engaged companies in IBM's global External Normative Benchmark. Yara Voice – Yara's employee engagement survey that ran in 2017 – defined the extent to which Yara employees are motivated to contribute towards our company's success and are willing to apply discretionary effort in accomplishing tasks that are important to the achievement of the strategy. It forms a solid basis for action planning and implementation. More than 10,000 employees answered the employee engagement survey, equating to a response rate of 76%. Overall engagement was 81% while 89% of respondents said they were proud to work for Yara, placing Yara in the top Quartile of IBM's External Normative Benchmark.

At Yara, we put great effort into creating a coaching and feedback culture; we also take feedback very seriously and strive for continuous improvement. Both external as well as internal feedback is delivered to the responsible unit and corrective actions are taken – provided the feedback is seen as relevant. Our goal is to continuously improve the performance of the company and the engagement of our employees.

# Health and Safety management approach

## Materiality

Yara has the ambition to lead and shape our industry by setting the standard for performance. We aim to minimize the exposure of workers and contractors to conditions that could negatively affect their health, security and safety. Securing safe and healthy working conditions is our highest priority. It is good for our employees and contractors, and it is good for business.

*The disclosures in this section relates to the following material topics, GRI topics and GRI disclosures:*

Yara material topic	GRI topic	GRI disclosures
Health and safety	403 Occupational health and safety	403-1, 403-2, 403-4
	410 Security practices	410-1

## Management approach

### Policy and commitments

Yara's ultimate ambition of zero injuries is clearly anchored in our Health, Environment, Safety and Quality (HESQ) Policy. Health and safety are always top priorities, and we continue to set challenging KPIs for personal and process safety. Our focus is on actions that will further develop the safety culture in Yara with the aim to reduce exposure to hazards through safety leadership and greater responsibility for oneself and others.

Yara is also committed to protect life and health, infrastructure and the environment we work in, information and reputation by understanding security risks and implement necessary mitigating measures through continuously improving processes in a preventive and proactive approach. Security is an obligation to our employees and forms part of our license to operate. Security service providers are expected to comply with our Business Partner Code of Conduct.

Yara's Health, Safety and Security policy is described in the HESQ policy (latest version February 2017) and in the Code of Conduct (latest version January 2018), both approved by the CEO and available on our website [yara.com](http://yara.com).

### Safe by Choice initiative

Yara believes every accident is preventable, and we strive for zero injuries. This ultimate goal is pursued by the Safe by Choice initiative, which has been established to instill a common safety culture and lead the company to safety excellence. The aim is to proactively improve Yara's safety culture further where everyone takes responsibility to be 'Safe by Choice'. This means an increased focus on responsibility for individual safety and the safety of colleagues., Our Safety Principles are aligned accordingly, and a set of actions have been defined, focusing on the application of safety leadership, tools and methods, with a steadily increasing level of quality and consistency through competence development and employee engagement.

### Responsibilities and resources

Health and safety issues are matters for management as well as for the workforce. Responsibility for these issues stretches from the boardroom to the factory floor. Yara's HESQ Team supports the organization by establishing goals and standards and carries out internal audits to ensure that corporate policies are followed. Management and Yara's Safety Committee review the work regularly and the Board of Directors oversees decisions and performance.

Within this framework, Yara's plants and units maintain close control of their own health and safety performance, local employee involvement, compliance with national legislation, and adherence to Yara's high technical and operational requirements.

Accountability for security risk decisions lies with the business line. Every site manager shall ensure that all areas of security within his/her area of responsibility are being assessed.

Yara has established a Corporate Emergency response and security function. It highlights activities relevant for:

- Physical Security: protecting employees, equipment and information, restricting unauthorized access to facilities and protection against sabotage, intended damage and theft
- Personnel Security: protecting against people trying to exploit our employees for unauthorized or criminal purposes, including insider threat



- Travel Security: protecting and advising our business travelers, and provide guidance on how to behave in different cultural and security environments globally

## Implementation

Yara has strict requirements for reporting of incidents, accidents and injuries and we work continuously to improve safety practices and safety culture by systematically enforcing strict operating procedures and by developing the competence and hazard understanding of the employees and our contractors. Classification of personal injuries is aligned with OSHA requirements.

Yara’s employees are regularly trained in the conduct of safe operations and response in case of emergencies. Contractors are subject to the same scrutiny as employees, and managers carry out frequent safety walks around sites to ensure that standards remain high. Visible, safety-minded leaders are necessary to achieving the next level of safety performance. During 2017 we developed a new training platform for managers, all employees and main contractors under the label “together we learn”.

Our safety management system includes detailed operational standards and an extensive audit program. Non-conformities to the standards are monitored and followed up in detail by the management. Incidents are systematically investigated according to defined severity levels. Procedures are in place to have independent off-site experts perform investigations of the most severe incidents. Lessons learned from accidents and incidents are shared between all our plants. Important achievements in 2017 include a revision of the process safety indicators along with extensive process safety audits at selected sites.

Security management in Yara is designed to ensure that leaders can handle all security related issues and mitigate risks to the lowest level reasonably achievable. Security shall be integrated in all business processes. Yara’s global security system includes a standardized method for assessing security risks, developing a steering system for security, providing support and advice to all business units and further improving company’s emergency response practices. The purpose of security in Yara is to identify and protect against threats from criminals, activists, local population, terrorists, states and competitors and to implement necessary mitigating measures to reduce our vulnerability.

## Grievance mechanisms

Yara uses several channels to continuously monitor safety and security incidents. We seek to handle unwanted incidents proactively to reduce the potential impact for our employees and the company. Cases are followed up at management level. The key mechanisms for Health, Safety and Security grievances are the following:

### Steering system non-conformity management

Non-conformities to steering documents and technical standards are reported to and handled by the Corporate HESQ function. Any deviations from mandatory requirements are subject to management approval beforehand.

### Incident reporting system

Yara has a company-wide system in place for reporting and handling of occupational, process safety and security incidents, near misses and hazardous conditions, covering employees and contractors. The incident reporting system is managed by the Corporate HESQ function.

### Crisis Manager

Yara has a dedicated Crisis Manager on duty 24/7 who can be alerted about any severe and extraordinary situation (emergencies) or threats, and assists in handling any crisis, should one occur.

### International SOS

Yara has established an International SOS function to assist employees in incidents related to health, safety or security during travels.

### Ethics hotline

Anyone – internal or external – that wishes to make a complaint related to Yara’s health and safety performance or security situation, can do so through our Ethics Hotline. For more on the hotline, please refer to Ethics and Compliance management approach, p. 37.

## Evaluation

The effectiveness of Yara's Health, Safety and Security management is evaluated frequently both internally and by third parties. Improvement actions are taken based on the feedback.

In 2017, Yara conducted a global company-wide safety survey, which documented good progress from the previous survey in 2015. Scores improved across all main categories, and the overall safety barometer reached a high of 89% compared with the benchmark. Nevertheless, the 2017 survey identified cross-sharing of successful approaches between operating segments as one main area for improvements. This is being followed up to improve Yara's overall performance and create a shared perspective that can effectively drive improvements in the safety program.

In 2017 Yara conducted internal HESQ audits of 35 units in total, focusing on occupational safety or process safety. We emphasized lead auditor training to increase the quality of the performed and future audits. Management was informed about the findings from the audits and closing of non-conformities is being followed up.

Yara's pursues an ambition of obtaining global umbrella certification to the management standards OHSAS 18001, ISO 14001 and ISO 9001. In 2017, such umbrella certification was successfully obtained for the segment Production and its 21 units worldwide. These management standards ensure a systematic approach to managing all health and safety aspects in our operations, and independent third-party audits represent valuable evaluation mechanisms to assess and improve our performance.

Ahead of this report, we have also worked on establishing company-wide definitions for sick hours and work hours to eliminate inconsistencies between sites in the reporting of absence rates.

# Ethics and compliance management approach

## Materiality

With operations in more than 60 countries and sales to about 160 countries, Yara is exposed to different cultures and traditions, to different labor conditions and threats where our people work and travel. We are dedicated to responsible business conduct throughout our operations and activities. Ethical business conduct is a critically important response. This means respecting recognized labor and human rights, both in our operations and in our supply chain, and having safeguards in place for combating corruption and respecting laws and regulations. Responsible business conduct is decisive to earn the trust of our stakeholders and key to our success.

*The disclosures in this section relates to the following material topics, GRI topics and GRI disclosures:*

Yara material topic	GRI topic	GRI disclosures
Ethics and compliance	205: Anti-corruption	205-1, 205-2, 205-3
	206: Anti-competitive behavior	206-1
	308: Supplier environmental assessment	308-1
	406: Non-discrimination	406-1
	407: Freedom of association and collective bargaining	407-1
	408: Child labor	408-1
	409: Forced or compulsory labor	409-1
	412: Human rights assessment	412-1, 412-2, 412-3
	413: Local communities	413-2
	414: Supplier social assessment	414-1, 414-2
	415: Public policy	415-1
	419: Socioeconomic compliance	419-1

## Management approach

### Policies and commitments

Yara's Code of Conduct states a clear commitment to respecting internationally recognized human rights throughout our own operations, as well as in our supply chain. We support the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the International Bill of Human Rights, and the core conventions of the International Labor Organization (ILO). As a signatory to the United Nations Global Compact, Yara is firmly committed to its ten core principles, which cover human rights, labor rights, environment and anti-corruption.

In addition, Yara has developed a Business Partner Code of Conduct that takes into account internationally recognized and endorsed standards in key areas such as international human rights, business ethics and labor conditions. Yara is committed to working only with partners that fulfill the requirements of the Business Partner Code of Conduct.

Yara recognizes and respects the right to freedom of association and the right to collective bargaining within national laws and regulations, and we expect our business partners to uphold the same rights. A specific Human Rights focus in 2018 may lead to the implementation of mitigating actions in specific countries where these rights are limited through local legislation.

At Yara our mission is to responsibly feed the world and protect the planet. Our vision is of a collaborative society, a world without hunger, a planet respected. Knowledge grows is at the core of this endeavor. It's an integral part of who we are, what we do and why we are doing it. It fuels our ambition to provide sustainable solutions to some of the major global challenges of our time.

Our Compliance Program is an important element in how we achieve this. Yara's continued success is dependent on retaining and promoting our reputation and public trust. Knowledge grows responsible business conduct. Our Compliance Program fosters this by facilitating the flow of information through reporting channels, an extensive training program, and documents such as the Code of Conduct. It also promotes transparency and accountability throughout our work.

Yara's Code of Conduct expresses our commitment to being a positive force for innovative solutions while honoring responsible business conduct. Yara's Ethics and Compliance Department is responsible for upholding the Code of Conduct and the Compliance Program, providing guidance to all relevant stakeholders and performing specific activities for that purpose.

## Responsibilities

Yara's Ethics and Compliance Department has organizational responsibility to provide a best in class ethics and compliance program. The department plays a key role in the management of all risks related to human rights, corruption, fraud and business partner integrity. Ethics training of employees is a KPI followed by Yara's Board of Directors, amongst other compliance activities. The Chief Compliance Officer reports directly to Yara's President and CEO, and has a dedicated meeting structure for the full Executive Management team.

## Training and awareness

Yara's Code of Conduct is reviewed on a yearly basis. A new version was launched on 01 January 2018 and was approved by the Board of Directors. It applies to all of Yara's employees, whether full-time, part-time, permanent or temporary. It also applies to the members of the Board of Directors. The document has been translated into 15 languages and has been distributed globally.

The Code of Conduct documents Yara's position on a range of topics, including corruption, hospitality, gifts and expenses, antitrust and human rights. It outlines the key principles of Yara's Ethics and Compliance Program, which includes:

- An internal Ethics Portal with clear, practical guidance for all Yara employees
- Interactive e-learning videos on a range of ethical topics that are mandatory for employees
- Yara's Ethics Hotline, available in over 60 languages, that allows employees to share their concerns confidentially
- An interactive, face-to-face training program
- Mandatory introduction videos for all new employees

The Ethics and Compliance training program is carried out by eight full-time Regional Compliance Managers across the world. During 2017, about 3,740 people received face-to-face training in ethics and compliance matters, including human rights as a distinct topic. All training sessions include information about accessibility of reporting channels.

Yara employees are also required to study, observe and comply with the various guidelines laid down in Yara's Competition Compliance Manual. The manual is available for all employees and has been adapted to local law in seven jurisdictions and translated into seven languages. In addition to the mandatory e-learning, an interactive competition law training video is available for all employees in the Yara Learning portal.

## Reporting system

Yara has extensive reporting channels in place for anyone – internal or external – that wishes to raise a grievance or file a complaint on any topic related to human and labor rights, anti-corruption, compliance or other potential company malpractice. This can be done anonymously if one so chooses, subject to local legislation. Our Ethics Hotline is available in 60 languages 24 hours a day, seven days a week. Our website and intranet feature an option to send complaints by email. Additionally, there is the option to report issues through line management and most staff functions.

According to the “Yara International ASA – Reporting and Investigation Procedure for Ethics & Compliance Matters”, the prioritization of cases is made at the discretion of the Chief Compliance Officer, following specific criteria that consider factors like values involved in the allegation, seniority of people involved, risk categories, scope geographically and functionally and potential impact for Yara.

Notifications are also categorized. Categories are defined based on the nature of the allegation. During 2017 Ethics & Compliance adopted a new set of categories, which has been benchmarked against internationally accepted best practice. The table on the next page depicts the categories and sub-categories currently in use<sup>1</sup>:

The “Yara International ASA – Reporting and Investigation Procedure for Ethics & Compliance Matters” also defines the process that should be followed when handling notifications and conducting investigations. Upon receiving and accepting a notification, the process includes specific steps, such as categorizing and prioritizing the notification, followed by communicating with relevant stakeholders, planning and executing. Documenting evidences and issuing a final report finalize the process, which includes specific policies related to communicating the outcomes to the relevant people within the organization and most of all preserving a fair process, in which the subjects involved have the right to manifest their positions, defend themselves and show their evidences.

In general, high priority notifications are handled by Ethics & Compliance, frequently with the support of external counsel. Medium priority notifications are handled by Ethics & Compliance with the cooperation of relevant leadership, whereas low priority notifications are usually handled by Human Resources and/or other expert functions, depending on the allegation.

Main Category	Sub Category
1. Corruption	1.1. Conflicts of Interest
	1.2. Bribery
	1.3. Illegal gratuities
	1.4. Economic Extortion
	1.5. Facilitation Payments
	1.6. Antitrust
2. Asset Misappropriation	2.1. Theft of cash on hand
	2.2. Theft of cash receipts
	2.3. Fraudulent Disbursements
	2.4. Inventory and all other assets
3. Financial Statement Fraud	3.1. Overstatement
	3.2. Understatement
4. Human Rights	4.1. Child labor
	4.2. Forced labor
	4.3. Freedom of association and right of collective bargaining
	4.4. Human trafficking
5. People	5.1. Discrimination and Unfairness
	5.2. Harassment
	5.3. Inappropriate Behavior
	5.4. HESQ
	5.5. Drug and Alcohol
	5.6. Contracts
6. Data Privacy	6.1 Misuse of data
	6.2 Theft of data
	6.3 Improper or unlawful disclosure of data
7. Business Partner related processes	7.1. IDD's
	7.2. Contracts
	7.3 CVP
8. Gifts and Hospitality	8.1. Gifts
	8.2. Hospitality
9. Sponsorships and Donations	9.1. Sponsorships
10. Lobbying and political engagement	10.1. Lobbying
	10.2. Political Activity and Contributions
11. Other	Any of the subcategories above

## Integrity Due Diligence

Our Integrity Due Diligence (IDD) process includes screening for possible violations in our business partners. It requires any new business partner to undergo an initial assessment, in which Yara employees must evaluate whether or not the new partner is exposed to any of the four risk criteria:

- Country risk
- Agents & Intermediaries
- Strategic importance
- Red flag list
- Public tenders

If one or more of them are present, the Business Partner must complete a self-assessment and declaration covering key business information and compliance across many business and risk areas. This includes:

- Company data
- Anti-corruption and integrity
- Assessment of suppliers and partners
- Human resources, human rights and labor rights
- Health and safety
- Environment
- Declaration

If the self-assessment and declaration uncovers unacceptable risks, an In-Depth IDD may be required. Whether or not this is necessary will be agreed upon between the business unit and the Ethics and Compliance Department. Continued monitoring of Business Partners is also a part of the IDD process.

The IDD process and description of its use and steps is available to all employees on the Ethics and Compliance intranet pages. Complying with and understanding the IDD process is the responsibility of all employees.

## Evaluation

In the course of 2017 Ethics & Compliance received a record number of notifications, which indicates that awareness of the reporting mechanisms within the organization is increasing.

A new IDD system has been implemented, providing a more efficient process for the business and at the same time improving the quality of the process, including the allocation of more Ethics & Compliance resources.

A Human Rights approach guides the department's work recently, which is aligned with a shift from a 'rules-based' compliance through to values-driven culture building. With a background of a revitalized mission, vision and values, and incredibly high employee engagement, we are also revisiting our human rights program, which has already shown results recently with some specific projects and will be reflected in the department's activities going forward.



# Product Stewardship and Chemical Compliance management approach

## Materiality

Yara is committed to Product Stewardship. These operating standards help to ensure that fertilizers and their raw materials, additives and intermediate products are processed and manufactured, handled, stored, distributed and used in a safe way with regard to health, safety, environment and security.

Yara products and services related to the supply of fertilizers and chemicals are regulated by national and international chemical and product related codes, and Yara is fully committed to compliance with such regulations worldwide.

Yara constantly seeks to improve the quality of its products, operations and manufacturing processes, to maximize efficiency, and to ensure that our products are properly handled. Product stewardship provides a systematic, risk-based approach to monitoring and reviewing the quality of operations and products. It commits us to making sure customers and end-users get the right products, for the right purpose, with proper information about how to use them – thereby addressing concerns about the impact of modern farming.

*The disclosures in this section relates to the following material topics, GRI topics and GRI disclosures:*

Yara material topic	GRI topics	GRI disclosures
Product Stewardship	416 Customer health and safety	416-1, 416-2
	417 Marketing and labelling	417-1, 417-2

## Management approach

### Policies and commitments

Yara systematically monitors and reviews the quality, handling and use of all our products, ensuring that proper care is taken along the entire value chain. We will mitigate the risks associated with product misuse.

Yara is committed to complying with all applicable laws, rules, and regulations in the countries where we operate. We follow the strictest standards when making decisions, whether it be local or international laws and regulations, Yara's policies and procedures, or our Code of Conduct. Statutory regulations shall always be complied with. In case of a difference between the statutory requirements and the Yara standard, the more stringent shall apply. We monitor, comply with, and strive to exceed industry standards and applicable product related laws and regulations.

Yara's Product Stewardship and Chemical Compliance policy is described in the HESQ policy (latest version February 2017) and in the Code of Conduct (latest version January 2018), both approved by the CEO.

Our key commitments and initiatives related to product stewardship and chemical compliance are as follows:

- All Yara's European Production, Crop Nutrition and Supply Chain units operating with sourcing and logistics shall comply with the Fertilizers Europe Product Stewardship Program, including certification requirements as defined by Fertilizers Europe.
- Our Non-European Production, Crop Nutrition and Supply Chain units shall comply with the IFA Protect & Sustain (P&S) program. A unit should be certified if a certificate is pursued by Yara or segment management or if it promotes Yara business.
- Units in the Industrial segment shall comply with the Product Stewardship management requirements to the level it is applicable for their operations. Certification requirement does not apply.
- Additionally, local programs are applied when relevant, like the Fertilizer Industry Assurance Scheme (FIAS) program in the UK
- Chemical compliance is referenced in Yara's core Procurement Process, and the operating procedure mandates all business managers to register all relevant substances with support from Yara Chemical Compliance

## Responsibilities and resources

Reporting directly to the CEO, the Head of HESQ has company-wide responsibility for ensuring chemical compliance and implementing product stewardship programs. Managers at all levels of the organization are accountable for the performance of their operations, for compliance with legal and statutory requirements and requirements laid down in the Yara Steering System.

### Yara units are responsible for:

- notifying and registering chemical substances in Yara products according to chemical regulations. A global Yara network is in place.
- securing legally correct labelling and packaging of all products in local markets, providing Safety Data Sheets and other relevant documents for Yara products to the customers and markets.
- informing customers and business partners about relevant product compositions, their correct uses and safe handling.
- maintaining up-to-date product data and informing Corporate HESQ about new products and changes in existing products or new initiatives.

### Yara HESQ is responsible for

- assisting the units in Product Stewardship activities.
- assisting the units in evaluating and responding to regulatory requirements within the field of Product Stewardship.
- establishing Product Stewardship requirements for the units by providing Yara Steering System documents for key areas and developing performance measures for Product Stewardship.
- supporting the units in authoring legally required product safety information such as Safety Data Sheets and chemical compliance requirements.
- initiating product safety, quality and security related research and development as agreed with Yara management.
- monitoring and reviewing Yara's activities on Product Stewardship on regular basis.
- coordinating and planning Product Stewardship certification activities for Yara units.

## Product Stewardship implementation

By implementing the product stewardship programs, Yara aims to ensure that proper care is taken along the whole fertilizer value chain from product development and purchase of raw materials, during production and storage, and in the distribution network right up to the end delivery and use on the farm. The product stewardship programs address product safety, environmental issues and safe food production, and security against theft and misuse.

We are audited according to Fertilizers Europe's Product Stewardship Program every three years by an independent third party. The latest audit, in June 2017, confirmed that Yara conforms to the program. Similarly, the Protect & Sustain product stewardship program set forth by the International Fertilizer Industry Association (IFA) requires regular audits.

Currently, all Yara's relevant European units and 21 non-European units – representing 75% of all relevant units across North and Latin America, Asia, Australia and Africa – are certified according to these product stewardship programs.

Yara's product stewardship programs have a risk-based approach to ensure that no chemical or product present unacceptable risks to people or the environment, and to reduce any existing risks to the lowest practical level. We consider both sourcing, production, storage and handling situations, as well as abnormal circumstances, such as spillages, accidents or criminal acts. Selection of consultants and vendors are done based also on health, environmental and safety criteria.

The product stewardship programs covers the safe handling of hazardous substances and waste, systematic efforts to reduce waste, emergency preparedness for every relevant step of the value chain, also including compliance to the EU Seveso directive for emergency prevention, response program and preparedness. Training for the latter is required at least on an annual basis.

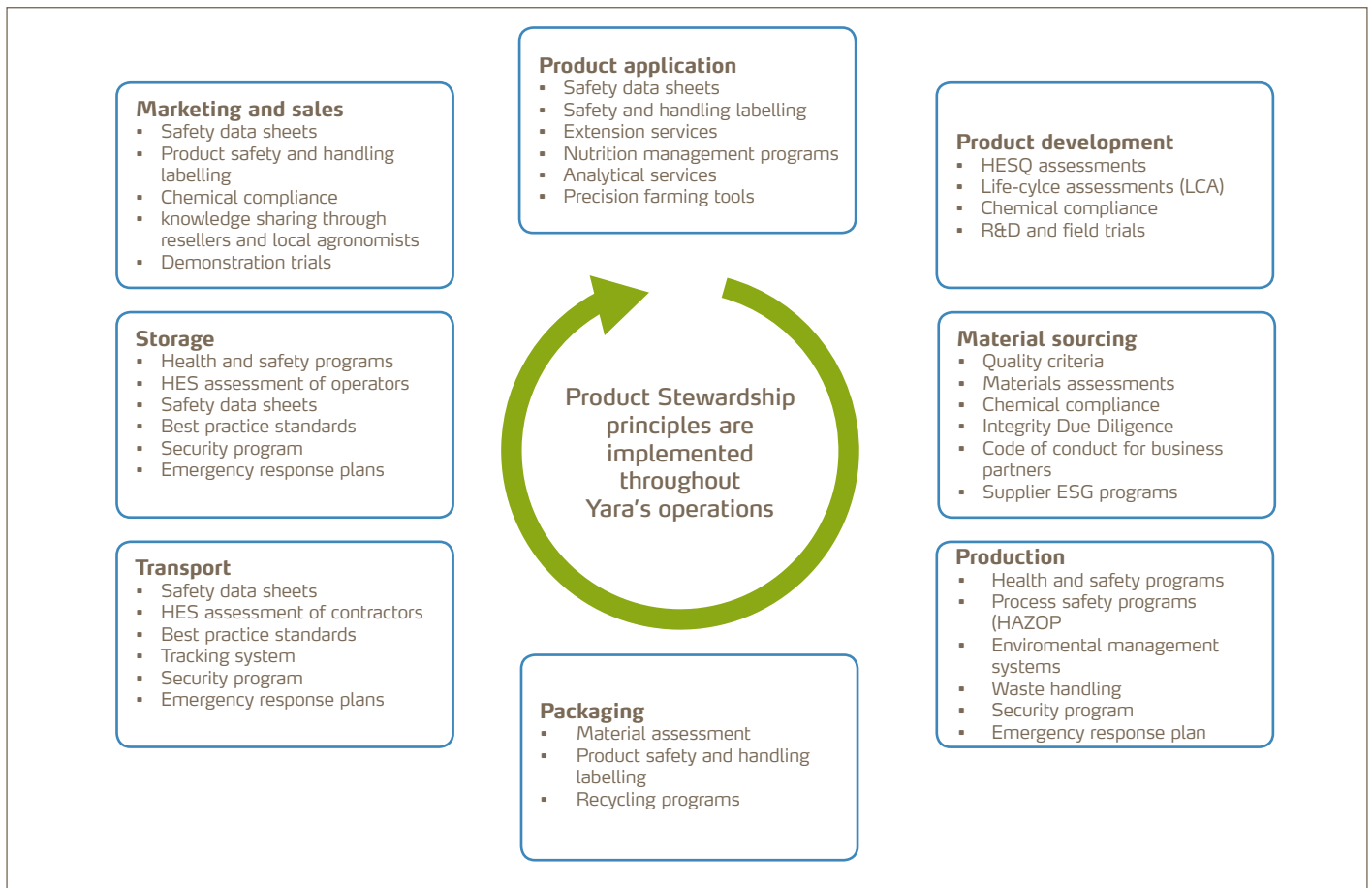
Security is considered throughout, including in production processes, storage, site security, transportation and handling of products. The structure of the two product stewardship programs set out by Fertilizers Europe and IFA both follow the product life cycle. For each step of the product lifecycle, a set of requirements need to be implemented.

To learn more about Fertilizer Europe's Product Stewardship program and IFA's Protect & Sustain program, please refer to:

[www.productstewardship.eu](http://www.productstewardship.eu)

[www.protectandsustain.org](http://www.protectandsustain.org)

The illustration below provides an overview of the most important programs and mechanisms.



### Chemical compliance implementation

Products in EU/EEA markets shall be in compliance with the European chemicals regulation REACH and the CLP regulation on classification and labelling of chemicals. The requirement of a formal chemical compliance check is embedded in the purchasing and sales processes.

Special care is taken if chemicals with serious hazard or subject to specific legislation are needed. This applies to chemicals classified as carcinogenic and mutagenic or toxic to reproduction (CMR), persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), and chemicals subject to authorization or restriction in the market, like REACH SVHC, Annex XIV and XVII chemicals. For these chemicals the following applies to all Yara business units:

- Procurement of such chemicals shall be avoided whenever possible.
- Existing use of such chemicals shall be identified, and they shall be substituted with other chemical agents or processes if feasible.
- The necessity of using such chemical agents shall be documented.

- All use of and potential exposure to such chemicals shall be assessed, and if substitution is not possible the risk shall be reduced to a minimum, primarily by engineering risk management measures e.g. closed systems.

For the sake of clarity, Yara's products and raw materials are inorganic commodity chemicals, like ammonia, inorganic acids and their inorganic salts. Organic chemicals of concern – like Persistent Organic Pollutants (POPs), Polyaromatic Hydrocarbons (PAHs), ozone depleting substances, pesticides or industrial chemicals like polychlorinated biphenyls or PCBs, are not raw materials, products or intermediate materials in Yara's production processes.

Since the REACH regulation came in force, Yara has identified ten chemical substances of concern. One chemical was granted an Authorization by the Commission, following which the substance was phased-out as scheduled.

The nine other substances are being tracked and managed by Yara Chemical Compliance, with defined responses according to the regulatory processes.

## Grievance mechanisms

Yara engages with the customers in a number of ways, such as through customer satisfaction surveys, local customer services and social media platforms, and by arranging local farmer meetings. Yara's local agronomists work with re-sellers and scientists to test fertilizers under local conditions and help disseminate knowledge and gather feedback from growers. Additionally, our country websites feature contact forms for anyone who wants to raise questions or provide feedback.

Furthermore, we have implemented mechanisms for handling of complaints, traceability and product recall in line with the product stewardship programs. These requirements include systems for:

- Complaint handling
- Batch traceability
- Product recall
- Emergency handling

## Evaluation

The effectiveness of Yara's Product Stewardship and Chemical Compliance management systems is evaluated frequently both internally and by third parties.

Improvement actions are taken based on the feedback. In 2017, Yara's European fertilizer activities were audited by an independent third party and found to conform with Fertilizers Europe Product Stewardship Program. The audit followed the triannual certification process and covered Yara's full portfolio of fertilizer products, their raw materials, intermediates and related solutions of fertilizer business units, supply & trade units and manufacturing plants operating in Europe. Yara's activities were found in overall good compliance with the program. Actions plans are in place to strengthen areas for improvement, and Yara HESQ is developing additional guidance documents to support the transfer of best practices across our units.

Outside Europe several operations were certified or recertified to the IFA Protect & Sustain program in 2017. Yara aims for all operational sites outside Europe to be certified to the IFA program by 2018 to drive our process of continuous improvement.

Additionally, Yara conducted internal HESQ audits focusing on product stewardship and chemical compliance in ten units in 2017.

# Mining management approach

## Materiality

Yara is a leading, global producer of nitrogen fertilizers. An important premium segment of the product portfolio is compound fertilizers, containing other crop nutrients of which phosphorous (P) and potash (K) are the main ones. Over time, we are seeking to increase the vertical integration of P and K, and our mining footprint has grown over the past years.

Consequently, Yara is implementing the GRI Mining and Metals Sector Supplement in our reporting. In 2017, Yara mapped materiality for the relevant indicators across mining projects and operational sites.

*The following disclosures were identified as materially important for at least one Yara site. What is considered material at a site level is not necessarily material at a Yara Corporate level:*

Yara material topic	GRI topic	GRI disclosures
Profitability and growth	201 Economy	201-2
Knowledge margin	202 Market presence	202-2
	MM Labor management	MM4
Resources and the environment	304 Biodiversity	304-2, MM1, MM2
	305 Emissions	305-7
	306 Effluents and waste	306-2, 306-3, MM3
NA	411 Indigenous rights	MM5
NA	MM Local communities	MM6, MM7
NA	MM Closure planning	MM10

## Management approach

### Policy and commitments

Yara employs the same set of policies and standards for mining operations and projects as for any other type of operation. Supporting our mission statement; “Responsibly feed the world and protect the planet,” Yara is committed to deliver excellent performance and follow responsible business conduct across the dimensions of environment, social and governance.

Yara uses a precautionary approach. We identify risks to take preventive measures to mitigate potential harm to people or the environment. Environmental and Social Impact Assessments (ESIAs) are conducted to evaluate the impact that mining operations have on local communities. None of our mining operations have been subject to significant dispute regarding land use or customary rights of local communities and indigenous peoples.

Management and personnel for all mining operations are recruited locally. Yara values its good relationship with employees and their organizations, and consult them on a regular basis. The freedom of association and the right to collective bargaining apply to all Yara’s operations, including mining operations. This is in accordance with the principles described in the Ethics and Compliance management approach disclosure. None of our mining operations had any strikes or lock-outs in 2017.

Generic closure plans are in place for all operational mines as part of their operational permits. To mitigate any negative impact on local communities, Yara refines the closure plans for mines where closure is pending.

Yara is committed to complying with all applicable laws, rules and regulations in the countries where we operate. We follow the strictest standards when making decisions, whether it be local or international laws and regulations, Yara’s policies and procedures or our own Code of Conduct.

Yara’s main steering documents are the HESQ policy (latest version February 2017) and the Code of Conduct (latest version January 2018). Both are approved by the CEO and available on our website [yara.com](http://yara.com).

The mining sites are subject to the same policy implementation, internal audits, training and awareness building and other procedures relating to implementation and evaluation of performance, as all operational Yara sites, as described in the management approach chapters.



## Overviews

Yara's mining projects per ownership share; whether the countries of operation are either candidate to or compliant with the Extractive Industries Transparency Initiative (EITI); and operational phase of the mining operation:

Site	Country	EITI status of country	Yara ownership	Phase of site
Yara Siilinjärvi	Finland	NA	100%	Operational
Serra do Salitre*	Brazil	NA	60%	Greenfield construction
Angico dos Dias*	Brazil	NA	60%	Operational
Irecê*	Brazil	NA	60%	Not operational. Company maintains recovery work and environmental controls.
Lagamar*	Brazil	NA	60%	Operational
Yara Dallol	Ethiopia	Member, not assessed against the 2016 standard	51.8%	Advancing to final investment decision

\*) Sites owned by the JV Galvani.

### Navigation and performance per indicator / topic:

Indicator / topic	Yara Siilinjärvi, Finland	Galvani sites, Brazil	Yara Dallol, Ethiopia
201-2: Payment to local communities for land use	NA	NA	NA in current phase
202-2	All Yara sites use local (domestic) management staff	All Yara sites use local (domestic) management staff	All Yara sites use local (domestic) management staff
MM4	No strikes or lock-outs	No strikes or lock-outs	No strikes or lock-outs
304 Biodiversity	Reported under the Environmental performance section, p. 51-52	Reported under the Environmental performance section, p. 51-52	Reported under the Environmental performance section, p. 51-52
305 Emissions	Reported under the Environmental performance section, p. 52-55	Reported under the Environmental performance section, p. 52-55	Reported under the Environmental performance section, p. 52-55
306 Effluents and waste	Reported under the Environmental performance section, p. 55-57	Reported under the Environmental performance section, p. 55-57	Reported under the Environmental performance section, p. 55-57
MM5	NA	NA	Central requirement identified as part of ESIAS
MM6	No significant disputes	No significant disputes	No significant disputes
MM7	No significant disputes	No significant disputes	No significant disputes

## Responsibilities and resources

The Mining business unit is part of the Production segment, with EVP Production being overall responsible. The Mining unit oversees both project development and operational mines.

Galvani is a Joint Venture with Yara being the majority shareholder. Through the Chair position in the JV Board, Yara manages the expectations for HESQ and Ethics and Compliance standards and performance.

Galvani is fully integrated into Yara's Compliance Program and has a Regional Compliance Manager reporting directly to Yara's Ethics and Compliance Department. For HESQ management, Galvani adopts all Yara's HESQ policies, with a dotted line of reporting into the Yara organization.

Yara Dallol is a Joint Venture with Yara being the majority shareholder. The JV follows Yara standards for HESQ and Ethics and Compliance. Furthermore, Yara holds the Chair position of the JV Board.

# Economic performance

## GRI 201: Economic Performance

### Disclosure 201-1 Direct economic value generated and distributed

YTD figures (2017) in NOK million

Direct economic value	2017	Report in Annual report	Line/Column name
Revenues:	93 812	Consolidated statement of income	Revenues
	634	Consolidated statement of income	Interests and other financial income
	68	Note 14	Dividend/repayment of capital from EAls
<b>a) Total revenues</b>	<b>94 515</b>		
<b>Economic value distributed</b>			
Operating costs:	70 782	Consolidated statement of income	Raw materials, energy costs and freight expenses
	-467	Consolidated statement of income	Change in inventories of own production
	4 289	Consolidated statement of income	Other operating costs
<b>b) Sum operating costs</b>	<b>74 604</b>		
<b>c) Employee wages and benefits</b>	<b>8 970</b>	<b>Consolidated statement of income</b>	<b>Payroll and related costs</b>
Payments to providers of capital:	1 048	Note 9	Interest expense
	-581	Note 9	Capitalized interests
	-	Statement of cash flow	Purchase of treasury shares
	-	Statement of cash flow	Redeemed shares Norwegian State
	2 732	Statement of cash flow	Dividend
<b>d) Sum payments to providers of capital</b>	<b>3 200</b>		
<b>e) Payments to government</b>	<b>1 645</b>	Statement of cash flow	Tax paid
<b>f) Community investments</b>	<b>21</b>	N/A	Information reported in HFM form Z2, where only the total figure for Donations, Gifts and Sponsoring is shown.
Fines:	3		Non-compliance with environmental laws and/or regulations
	3		Non-compliance with other laws and/or regulations
<b>g) Sum fines paid</b>	<b>6</b>		
<b>Total economic value distributed</b>	<b>88 447</b>		
<b>Economic value retained</b>	<b>6 068</b>	Revenues - costs	

The figures in 201-1 are compiled according to guidance and definitions provided by GRI. Yara's financial statements in the annual report are compiled according to IFRS, ref. to page 67 in the annual report.

[Yara's Annual Report 2017, available at our Investor Relations website](#)

## GRI 201-2 Financial implications and other risks and opportunities due to climate change

Risks which are seen as materially important to Yara are covered in the risk chapter of the annual report. Key risks and opportunities are also described in the section Key Impacts, Risks and Opportunities, p. 12-13. For climate change, the following risk factors apply:

### **Environmental risks and regulatory framework on production/ application of nitrogen fertilizer:**

Environmental impacts constitute strategic risks on Yara's license to operate, as drivers for regulatory actions and for market interventions. There is an increasing trend of stricter governmental regulations impacting production, (e.g. Emission trading system in Europe and ever stricter limits of emissions to air and water across the world) and application of fertilizer related both to the environmental aspects and safety of handling and applying fertilizer. These regulations could have a substantial impact on Yara's earnings.

*Mitigation:* Yara continuously discuss and participate in various arenas to understand and influence existing and ongoing new regulations aimed at fertilizers. The risk is primarily mitigated by contact with governmental

bodies to ensure that balanced information is available and to ensure influence to get to acceptable solutions. Yara also continuously discuss with the EU on the future CO<sub>2</sub> emissions structure for the fertilizer industry arguing that the European ammonia industry is the most efficient globally which needs to be reflected when policies are made. On existing assets, Yara has established rigid management systems and policies to manage the environmental impacts of our operations and to reduce exposure. Moving forward, significant resources are put into developing the Plant of the Future in order to meet the expected environmental requirements.

Further, Yara is differentiated by delivering better performing quality products, alongside agronomic knowledge and advice as well as precision farming technology. Such balanced crop nutrition solutions assist farmers in optimizing the use of fertilizers, ensuring high yields while reducing losses to the environment.

### Climate risks:

Climate change pose risks which may have a negative impact for Yara. Climate risks are related to our markets, operational risks linked to our assets, in addition to the supply chain/ infrastructure risks. Climate change leads to societal processes which may pose risks on market preferences, legislation and technology. The societal aspects are as much opportunities as risks.

*Mitigation:* Yara's investments into assets are vetted against extreme weather events. Through stakeholder dialogues, Yara promotes low carbon solutions, life cycle perspectives and resource smart solutions. As a materially important topic, climate is one of the focus areas of Yara's innovation processes, where we aim to provide knowledge based mitigation solutions. The innovation efforts include resource optimization and reducing carbon footprints in agriculture, as well as developing production processes towards zero emissions.

### Natural disasters:

Yara's production and logistics operations could be directly or indirectly affected by natural disasters.

*Mitigation:* We have implemented specific precautionary measures for operations located in areas more likely to be affected by extreme weather conditions and natural disasters. Significant efforts are also put into crisis management training and scenario planning, to minimize potential threats to security, health and operational assets.

## GRI 201-3 - Defined benefit plan obligations and other retirement plans

Yara's benefit plan liabilities are described in Note 24 of the Financial statements Yara's Annual Report 2017, available at our [Investor Relations website](#).

Reference is also made to additional information in disclosure 401-2.

## GRI 203 Indirect economic impacts

### GRI 203-2 - Significant indirect economic impacts

Yara's operations worldwide are engaged in, and support, a wide variety of community projects and local initiatives that benefit the general public. More significant, however, is Yara's business approach, which focuses on sharing its agronomic knowledge with farmers. Yara's mission is to help responsibly feed the world and protecting the planet.

Improving cropland productivity and increasing food production depends on the application of agronomic knowledge. Yara possesses extensive knowledge, which it shares with farmers as part of its crop nutrition solutions. In addition, Yara contributes to knowledge development and knowledge dissemination through several global initiatives and partnership projects, such as: The Farm to Market alliance launched in January 2016 by World Food Program, Rabobank, AGRA, Yara and other partners, Grow Africa, Grow Asia (both linked to the WEF New Vision of Agriculture) and the Southern Agricultural Growth Corridor of Tanzania (SAGCOT), founded by the Tanzanian Government, Yara and other partners in 2010.

The Farm to Market alliance harnesses the efforts across eight partners to promote market access, productivity, quality and farmers' income. The alliance targets reaching 1.5 million farmers by 2022.

Since 2015, the concept has been launched in Rwanda, Tanzania, Zambia and most recently in Kenya. The results of the first two years validate the underlying business model of increases in yield and farmer incomes.

According to mapping done by the alliance, more than 136,000 farmers have aggregated over 49,000 tonnes of crops for fair sale, predominantly cow peas, maize, pigeon peas, groundnuts and soya beans. Farmers crop sales have generated over USD 12 million, while more than USD 5 million has been approved in input and output financing. First evidence of impact indicates that a USD 80 annual investment per farmer over the first two years has resulted in average 83% increase of farmers income and average yield increase by 32%.

## GRI 205 Anti-corruption

### GRI 205-1 Operations assessed for risks related to corruption

Yara's risk assessment process aims to identify, evaluate and manage risk factors across all areas of the company, including corruption risks. Risk assessment is mandatory for all our operations and expert functions; from Production to plant level; Crop Nutrition to country level; Industrial and Supply Chain to Business Unit level.

Yara Ethics & Compliance performs specific risk assessments on both corporate and regional levels, including Europe, North America, Brazil, Latin America, Asia, India and Africa. Corruption is one of the risks included in the several assessment matrixes. The matrixes cover several types of corruption, such as conflicts of interests, bribery, illegal gratuities, economic extortion and facilitation payments. When such risks are identified, mitigating actions are implemented.

### GRI 205-2 Communication and training about anti-corruption policies and procedures

Yara's video learning program on ethics and compliance is mandatory for all new employees. The program covers various topics, including anti-corruption policies and procedures. In addition to the mandatory training program for new employees, Yara's Ethics and Compliance Department has a face-to-face training program called "Share it!". This is a role-based dilemma training program conducted by Ethics & Compliance professionals.

The program encourages managers and employees to identify and reflect on ethical and compliance related issues with a strong focus on anti-corruption. It aims to build a culture of openness around such matters. It also provides practical guidance on the Ethics & Compliance tools available, such as the Code of Conduct and the Ethics Hotline. The number of employees trained in the Yara's anti-corruption policies and procedures in face-to-face sessions during 2017 was more than 3.700 globally.

Yara's standard terms and conditions include our policies related to anti-corruption. Yara has also developed a Code of Conduct for Business Partners, which describes the standards that Yara expects of its business partners, including anti-corruption. Through its Integrity Due Diligence initiatives, Yara has communicated its Code of Conduct for Business Partners to more than 1.550 business partners throughout 2017. On a risk-basis, certain business partners are selected for additional due diligence work, including training and communications.

For further details about Integrity Due Diligence within Yara, please refer to the Ethics and Compliance management approach section, p. 37.

Yara's key governance bodies include the Board of Directors and Executive Management. All members of these bodies have confirmed receipt of Yara's Code of Conduct, which they are also instrumental in developing and maintaining. Twice a year, Yara's Board of Directors receive an update on the status of the compliance program. These updates include dilemma training from Yara's Chief Compliance Officer. All members of these bodies have completed Yara's mandatory e-learning program and are included in compliance training programs.

### GRI 205-3 Confirmed incidents of corruption and actions taken

As highlighted in the Ethics and Compliance management approach section, the risk category *Corruption* includes the following sub-categories, according to Yara International's Investigation Procedure: Conflicts of Interest, Bribery, Illegal gratuities, Economic Extortion, Facilitation Payments and Antitrust.

In 2017, there were 46 reports to the Ethics Hotline regarding corruption and the mentioned sub-categories. The reports related to conflicts of interest, facilitation payments, bribery and illegal gratuities and they were handled according to Yara's procedures of investigation. Of the 46 reports, nine were not substantiated and 28 were resolved within the reporting period.

## GRI 206 Anti-competitive behavior

### GRI 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices

Yara is actively defending one case in South America regarding allegations that a company Yara acquired had previously participated in anti-competitive behavior. The case is pending final appeal. Another case, also in South America, was closed during the reporting period. This case also involved allegations that a company acquired by Yara had participated in anti-competitive behavior. The court ruled in favor of Yara.



# Environmental performance

## Important notice

From last year, scope and boundaries for the reporting has changed. The JV Lifeco no longer fulfils the IFRS 11 requirements, and is no longer covered in the disclosures. Historic data have been updated accordingly to allow direct comparison, which explains variations between figures provided in the 2016 and the 2017 reports.

Yara uses SI units in reporting; tonnes refer to metric tons.

## GRI 301 Materials

### GRI 301-1 Materials used by weight or volume

Yara used approximately 7.2 million tonnes of purchased materials in 2017, a slight increase from 7.0 million tonnes in 2016. The increase reflects increased production volumes. Main materials used are key fertilizer raw materials like ammonia, phosphate rock, potassium salts and dolomite. These represent the majority of the purchased volume.

### GRI 301-2 Recycled input materials used

Yara explores the opportunities for recycling nutrients, although recycled materials as sources for nitrogen, potash or phosphate are not used on a material scale yet.

## GRI 302 Energy

### GRI 302-1 Energy consumption within the organization

Yara's total energy consumption in production was 266 million GJ in 2017. This was in line with the energy consumption in 2016, despite an increase in production.

Almost 90% of the energy is consumed as feed or fuel in ammonia production. Natural gas is the main fuel used in Yara, with more than a 90% share of the total fuel use.

Brazilian units use some renewable fuels, most notably wood chips. Wood chips made up slightly less than 1% of the total fuel use in 2017.

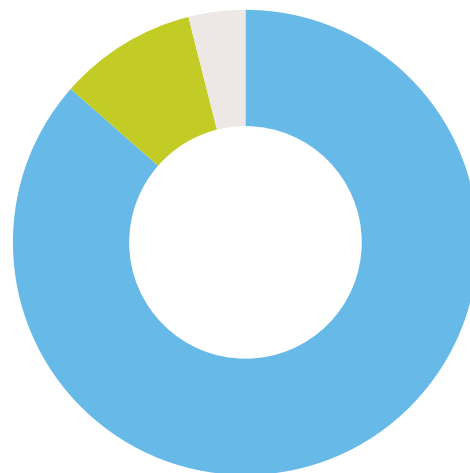
In 2017, Yara purchased about 2,800 GWh of electricity for use in production.

### GRI 302-1 Energy consumption 2017

Energy consumption in production 2017						
	Unit	2012	2013	2014	2015	2017
Total Energy consumption	million GJ	262	251	253	266	266

Cartagena and Galvani plants included from 2015 onwards Lifeco (Libya) not included. Calculations were adjusted to be based on fuel consumption thus avoiding double calculation of by-product energy.

### Yara energy use is dominated by ammonia production



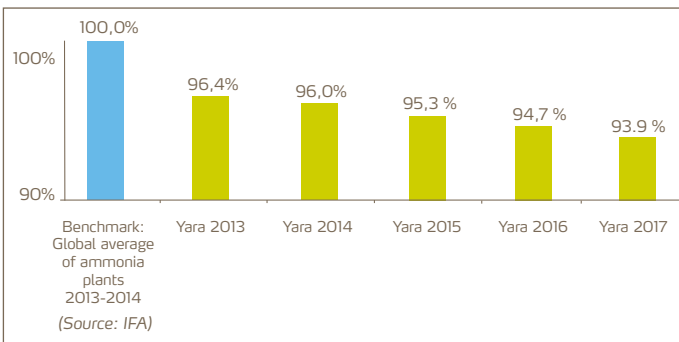
- Direct fuel consumption in Ammonia production
- Direct fuel consumption in other production
- Purchased energy (mainly electricity)

## GRI 302-3 Energy intensity

Due to the dominant energy intensity of ammonia production, Yara's key energy intensity indicator is energy efficiency in ammonia production. Yara continues to improve the ammonia energy efficiency. A specific, annual energy KPI is set for each ammonia plant. In 2017, Yara achieved the targeted improvement, as more than 60% of the plants reached their KPI level. Further improvements are gained through systematic energy efficiency diagnostics. Due to continuous investments to upgrade and optimize the plants' reliability and energy efficiency, Yara's ammonia plants perform better than the global industry average.

### Continuous improvement of energy intensity in ammonia production

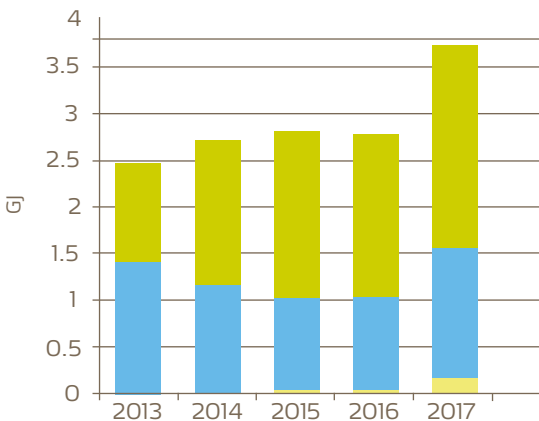
Percentage of global average GJ/ton NH<sub>3</sub>



The energy intensity figure includes all the energy used in ammonia production; both production energy and energy used during shutdown periods and startups.

One of Yara's action areas to improve energy efficiency is to sell the surplus energy available from the plants. In 2017, Yara exported approximately 3.7 million GJ of by-product heat, steam and electricity from its plants.

### Energy export from Yara plants: Approximately 3.7 million GJ of surplus heat, steam and electricity sold



■ Heat export  
■ Steam export  
■ Electricity export

## GRI 303 Water

### GRI 303-1 Total water withdrawal by source

In 2017, Yara's total water withdrawal was 783 million m<sup>3</sup>. This was a decrease of 8% from 851 million m<sup>3</sup> in 2016.

The water sources were:

- 97.5% surface water, including water from wetlands, rivers, lakes and the ocean
- 1.5% municipal water supplies
- 1% groundwater

In Yara's production, water is primarily used for cooling purposes, and to a lesser extent for steam production and production of liquid products. Thus, nearly all the water that Yara withdraws is returned to the water course, unpolluted.

### 303-3 Water recycled and reused

Arrangements to recycle or reuse water are in place at eight of Yara's production sites and under planning at another. However, flows of recycled or reused water are only measured at a few sites, representing 192 million m<sup>3</sup> or 25% of Yara's total water withdrawal. Total amounts of recycled or reused water is higher for Yara's overall, but data is not available for all sites.

## GRI 304 Biodiversity

Biodiversity impacts are regarded as material for Yara's mining operations, but not for the fertilizer production sites. Disclosures related to GRI 304 Biodiversity are therefore restricted to the mining operations. See the boundary of mining related disclosures in the Mining management approach section, p. 44.

### 304-1 Operational sites in or adjacent to protected areas or areas of high biodiversity value

#### MM2 Sites requiring biodiversity management plan

Biodiversity aspects of the mining operations are assessed in the Environmental and Social Impact Assessments according to applicable local regulations. Such assessments are carried out prior to any major enlargement, investment or other change of the activities.

None of Yara's operational mining sites are in or adjacent to protected areas or areas of high biodiversity, nor are any of them required to prepare a specific biodiversity management plan. A voluntary biodiversity assessment is under planning at the Siilinjärvi mine as a part of this site's Sustainable Mining commitment.

## 304-2 Significant impacts on biodiversity

## 304-3 Habitats protected or restored

## 304-4 IUCN red list species and national conservation list species

No significant, negative impacts on biodiversity, protected habitats or endangered species have been identified as a consequence of Yara's mining operations. On the contrary, the tailings areas are resting and nesting areas for birds, even for endangered bird species. Meadows, wet lands and deadwood areas have been formed in the tailings areas, providing suitable living environments for various species.

## MM1 Land disturbed or rehabilitated in the mining activities

Yara's total mining area covered approximately 4,500 hectares in 2017. Last year, operation expansion disturbed new areas of 161 hectares, while 12 hectares were rehabilitated. No households were resettled in 2017, and the mines did not receive any significant complaints related to land use or rights.

# GRI 305 Emissions

## 305-1 Direct greenhouse gas (GHG) emissions (Scope 1)

For more than a decade, Yara has made good progress in reducing its carbon footprint. In 2017, Yara's greenhouse gas (GHG) emissions totaled 15.1 million tonnes of CO<sub>2</sub> equivalents, compared to 15.4 million tonnes in 2016.

In 2017, Yara aligned its calculations with the Greenhouse gas protocol and the European Emission Trading sector guidance. Thus, CO<sub>2</sub> used as feedstock in on-site chemical production processes, such as in urea production, are now included in Scope 1 emissions instead of Scope 3. Historical values have been adjusted accordingly in the table below.

	Unit	2013	2014	2015	2016	2017
Greenhouse gases from Yara production	million tonnes of CO <sub>2</sub> equivalents	15.6	14.7	15.2	15.4	15.1

\*) Cartagena and Galvani included 2015 onwards; Lifeco excluded from figures

Yara's European nitric acid and ammonia plants are covered by the European Union Emissions Trading System (EU ETS). In 2017, Yara emitted approximately 9 million tonnes CO<sub>2</sub> equivalents from these plants (notice: the figures are still undergoing the official ETS verification).

At the same time, Yara received 8.5 million EUAs (EU Allowance unit, one ton of CO<sub>2</sub> under the EU ETS) in total, creating a shortage of 500,000 tonnes CO<sub>2</sub> equivalents in 2017.

### Gases included in the calculation:

Relevant gases for calculating the carbon footprint of fertilizers are CO<sub>2</sub> from fossil fuels and N<sub>2</sub>O from nitric acid production.

### Emission factors and global warming potential (GWP) rates used:

When assessing the potential impact of its emissions on the environment, Yara uses the principles given in the Operational guidelines for the ISO 14040 Life Cycle Assessment standards.

The greenhouse gases relevant for Yara's production plants are CO<sub>2</sub> from use of fuels and N<sub>2</sub>O from nitric acid production. These are calculated as CO<sub>2</sub> equivalents using the following factors, corresponding to the emissions factors in IPCC (2006):

CO<sub>2</sub> to air: 1  
N<sub>2</sub>O to air: 298

The greenhouse gas emissions are consolidated according to the operational control approach. Joint ventures where Yara has operational control are included. Yara's share of production, energy or emissions in less than equity-accounted investees are not included.

## 305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2)

Yara has estimated the Scope 2 greenhouse gas emissions relevant to the company's purchased energy. The gross location-based energy indirect GHG emissions related to production and supply of purchased electricity were 0.9 million tonnes of CO<sub>2</sub> equivalents in 2017. The respective gross market-based energy indirect GHG emissions were 1.2 million tonnes of CO<sub>2</sub> equivalents in 2017.

In 2017, Yara refined its calculations through stricter reporting of own, by-product electricity generation. Therefore, the previous location-based figure published in 2016 (1.3 million tonnes) is not directly comparable. The boundary of the calculation is the same for all GHG figures. Libya (Lifeco) was excluded from the calculations in 2017. Earlier Scope 2 figures have not been adjusted to the change.

The location-based calculation used factors of energy supply emissions given in the Fertilizers Europe Carbon Footprint calculator. The European Residual Mixes 2016 published by the Association of Issuing Bodies (AIB) were used as market-based emission factors. Location-based factors were used for calculation of market-based figures for non-European countries.

### 305-3 Energy indirect greenhouse gas (GHG) emissions (Scope 3)

Yara has also estimated the Scope 3 greenhouse gas emissions associated with own produced fertilizers.

The estimation covers production of fuels and raw materials supplied to Yara’s production, upstream transport to Yara sites and downstream transport of Yara fertilizers to customers. Emissions related to the use of Yara fertilizer at the farm is also covered. Traded products or blended products based on third party components were not included, neither were any Industrial uses of Yara products.

Scope 3 calculations are based on vintage data of 2015-2017. The calculations includes estimates where direct data was not available.

While Yara’s own emissions (Scope 1) and supply of energy (Scope 2) represent approximately 23% and 1% of the total Scope 1-3 GHG, Scope 3 emissions forms the major part of emissions.

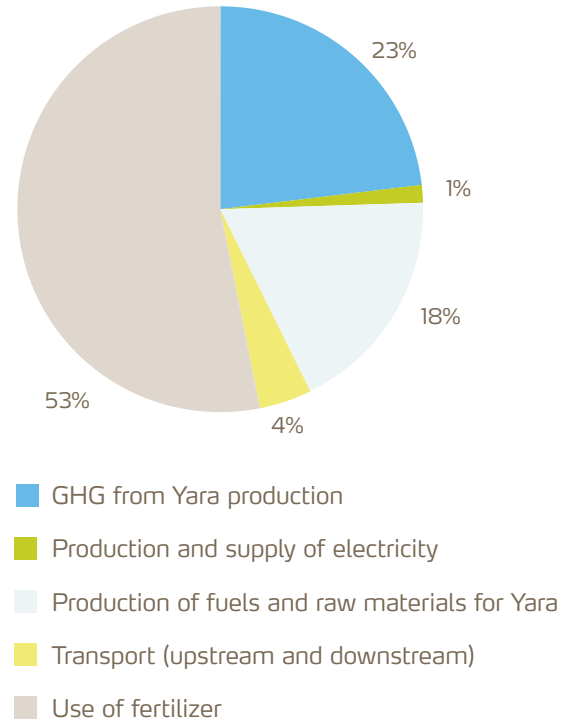
The use of fertilizers at farms is by far the most significant climate impact related to the fertilizer life cycle. Above 50% of the total GHG emissions are formed at farm level. Regardless of Yara’s global supply chains, transport is only a minor contributor to the total GHGs.

Scope	Category	Million ton CO <sub>2</sub> eqv	%
1	Yara production	15.1	23%
2	Purchased electricity (Location based)	0.9	1%
3	Purchased fuels and raw materials	11.9	18%
	Transport (upstream and downstream)	2.7	4%
	Use of fertilizer	34.9	53%
<b>Total calculated Scope 1-3</b>		<b>65.5</b>	<b>100%</b>

The estimates are based on the emission factors used in the Fertilizers Europe Carbon Footprint calculations. The same emission factors are embedded in the Cool Farm Tool. The use phase includes calculations for the formation of N<sub>2</sub>O from the use of nitrogen fertilizer, and CO<sub>2</sub> from lime application via CAN fertilizers. The use phase emissions are calculated using the IPCC 2006 emission factors.

Compared to 2016 figures, Yara has adjusted the boundary between Scope 1 and the Scope 3 use phase emissions. This aligns Yara’s reporting to the European ETS boundary for ammonia production. CO<sub>2</sub> which is used for urea production is released when the product is used at the farm, via urea hydrolysis. These emissions were moved from Scope 3 to Scope 1.

### Scope 1, 2 and 3 greenhouse gas emissions from fertilizers produced by Yara



### 305-4 Greenhouse gas (GHG) emissions intensity

Yara maintains the carbon footprint calculations for its main fertilizers produced in the Nordic and Central European plants. Yara uses a calculation tool specifically designed for the fertilizer sector. This makes it easy to visualize the fertilizers’ impact on the carbon footprint of agricultural products. The carbon footprint for the different fertilizer grades from the Nordic and Central European sites are verified by a third party. The carbon footprint values (in kg CO<sub>2</sub>/kg product) represent the maximum carbon footprint for the specific fertilizer product and production site.

Yara Product	Product type	Production sites	Data vintage	kg CO <sub>2</sub> e/kg product max
YaraBela Extran 33.5	AN (33.5 %N)	Rostock, Germany Sluiskil, The Netherlands Tertre, Belgium	2013 2014 2015	1.25
YaraBela Extran 27	CAN (27 %N)	Rostock, Germany Sluiskil, The Netherlands Tertre, Belgium	2013 2014 2015	1,04
YaraVera	Urea (46 %N) **)	Sluiskil, The Netherlands	2014	1.52
Yara UAN	UAN (30 %N)**)	Rostock, Germany Sluiskil, The Netherlands	2013 2014	1.06
YaraLiva	CN (15.5 %N)	Glomfjord, Norway Porsgrunn, Norway	2013 2013	0.65
YaraMila	NPK *) (15 %N -15 %K <sub>2</sub> O -15 %P <sub>2</sub> O <sub>5</sub> )	Glomfjord, Norway Porsgrunn, Norway Siilinjärvi, Finland Uusikaupunki, Finland	2013 2013 2013 2013	0.80

\*) Exact result of a NPK grade depends on the N-P-K ratio.

\*\*\*) The Urea and UAN figures include CO<sub>2</sub> emissions from hydrolysis after application, but no other emissions from use of the product.

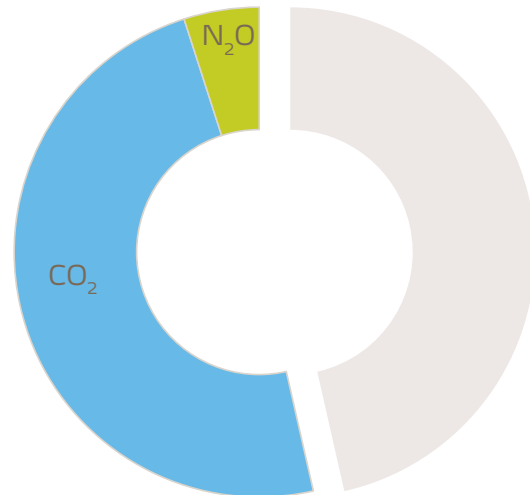
The verification statement for Yara’s Carbon Footprint of fertilizer products is available on our website: [Carbon Footprint](#)

The carbon footprint covers GHG emissions related to the production of a specific fertilizer product and includes all emissions with GWP (Global Warming Potential). It includes both direct and indirect emissions from all materials directly related to the production of the fertilizer product, as delivered to the final product storage at the production site. Further, it includes the estimated emissions from purchased energy and indirect emissions resulting from the production and transportation of raw materials. The calculation does not include any emissions released from the application of the fertilizers, except the CO<sub>2</sub> from the hydrolysis of urea (see disclosure 305-1).

### 305-5 Reduction of greenhouse gas (GHG) emissions

So far, Yara’s most significant initiative to reduce GHG emissions is the installation of N<sub>2</sub>O catalyst technology at its nitric acid plants. The catalysts remove about 90% of the N<sub>2</sub>O emissions in Yara’s plants. Yara’s catalyst technology is also commercially available to third parties. Catalysts have been installed at close to 60 plants so far. Through continuous improvements in energy efficiency and the good performance of the N<sub>2</sub>O catalyst technology at the nitric acid plants, Yara has achieved a significant reduction in GHG emissions compared with 2004, when the company was established. GHG emissions from Yara production are almost half of what they would have been without the use of N<sub>2</sub>O abatement. The reduction represents about 13 million tonnes of CO<sub>2</sub> equivalents annually.

Yara’s N<sub>2</sub>O catalyst technology has reduced GHG emissions from Yara production by nearly half compared to levels without abatement [in CO<sub>2</sub> equivalents]



Reduced by N<sub>2</sub>O abatement and energy efficiency



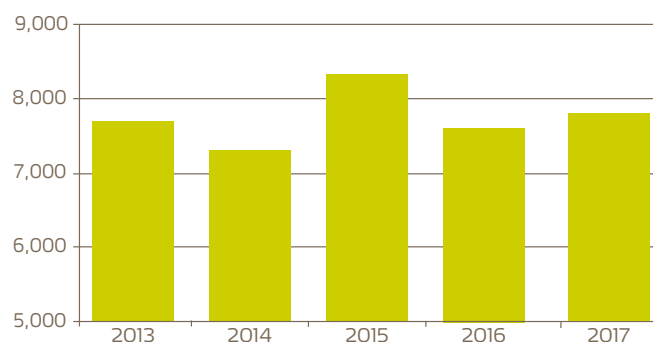
## 305-7 NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions

The main emissions to air from fertilizer plants and phosphate mines are nitrogen oxides, sulphur oxides, ammonia, fluorides and dust. As fertilizer production is based on inorganic raw materials, it is not regarded as a significant emitter of any of the most hazardous organic pollutants like VOCs (Volatile Organic Compounds), POPs (Persistent Organic Compounds), Polyaromatic Hydrocarbons (PAH) or Dioxins or Furans (PCDDs/F).

Yara continues to install and revamp DeNO<sub>x</sub> units at the production sites, reducing the emission of NO<sub>x</sub> over time. The stability of the plants and the DeNO<sub>x</sub> abatement have contributed to the reduction of NO<sub>x</sub>. Total NO<sub>x</sub> emissions from Yara plants in 2017 was 7,796 tonnes of NO<sub>2</sub>, compared to 7,649 tonnes in 2016. Shutdown periods for maintenance in ammonia or nitric acid plants cause the variations in annual emissions.

### NO<sub>x</sub> emissions to air

Tonne NO<sub>2</sub>



The increase in 2015 is due to the acquisition of the Cartagena and Galvani plants

SO<sub>x</sub> emissions from Yara plants are mainly the result of sulphuric acid production. Yara's acquisition of the Galvani plants are thus reflected in the SO<sub>x</sub> emissions, which are currently about 2,000 tonnes per year (1,981 tonnes SO<sub>2</sub> in 2017 and 2,022 tonnes in 2016). However, the level is 40% lower than in 2010 (4,600 tonnes in 2010), largely thanks to the change of fuel used in the Brunsbuttel ammonia plant.

Approximately 3,400 tonnes of dust were emitted from Yara plants in 2017. The dust is either plant nutrients, raw material inerts or salts.

## Emissions to air from Yara production

	Unit	2017	2016
NO <sub>x</sub>	tonnes NO <sub>2</sub>	7,796	7,649
SO <sub>x</sub>	tonnes SO <sub>2</sub>	1,981	2,022
NH <sub>3</sub>	tonnes	3,499	4,908
F	tonnes	44	38
Dust	tonnes	3,366	3,854

Air emissions are measured, analyzed and registered according to national regulations. Emissions are included in the data to the extent that monitoring is in place at the plants. When assessing the potential impact of emissions on the environment, Yara uses the principles given in the operational guidelines for the ISO 14040 Life Cycle Assessment standards. Emissions from the Galvani and Cartagena plants are included in the figures from 2015 onwards. Lifeco (Libya) figures have been excluded from 2017 and historical data.

### Noise and vibration

Regulatory noise limits apply to most of Yara's sites. A few individual noise complaints have been reported, but otherwise Yara is not aware of any compliance breaches related to noise regulations.

Yara's mining operations are covered by regulatory limits for seismic impacts of blasting. Explosives are rarely used in Yara's Brazilian mines. The Siilinjärvi mine in Finland has a strict regime for its blasting activity, and the site complies with the requirements.

## GRI 306 Effluents and waste

### 306-1 Water discharge by quality and destination

The main nutrients, nitrogen and phosphorus, are key effluent parameters relevant for waste water discharges from fertilizer production. Oxygen demand (BOD/COD) or Total Suspended Solids (TSS) are typically not relevant nor monitored due to the lack of organic material and due to the high solubility of fertilizer materials.

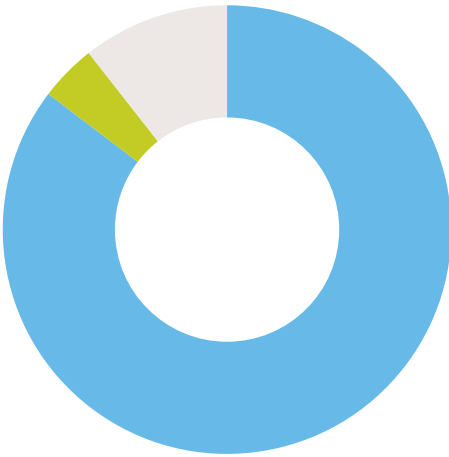
The total volume of water discharge was 722 million m<sup>3</sup> in 2017, compared to 787 million m<sup>3</sup> in 2016. Most of this is cooling water, which is returned unpolluted. 85% of the water volume was discharged to the ocean, 4% to rivers and 11% to lakes through defined discharge points. Some small streams disperse over land after treatment and are absorbed by the soil, representing only 0.03% of the total discharge volume.

Nitrogen discharge from Yara's plants amounted to 2,292 tonnes in 2017, compared to 2,423 tonnes in 2016. Phosphorus discharge amounted to 39 tonnes in 2017, compared to 40 tonnes in 2016.

## Waste water quality parameters

	Unit	2017	2016
Total volume of water discharge	million m <sup>3</sup>	722	787
N	tonnes	2,292	2,423
P	tonnes	39	40

## Water discharges from Yara



- Discharged to the sea
- Discharged to a river
- Discharged to a lake

### Standards, methodologies and assumptions used:

The parameters for water quality are chosen according to the European BAT defined for the fertilizer sector. Discharges and quality parameters are reported to the extent that they are monitored according to national regulations and sites' permits. Collected rainwater discharged from the product handling areas is only included in the figures if the site is required to collect and monitor it. Sewage water is also included in the figures, but the treatment of sewage water is not reported separately.

Yara's share of emissions in less than equity-accounted investees are not included. Lifeco (Libya) is excluded from the figures.

## 306-2 Waste by type and disposal method

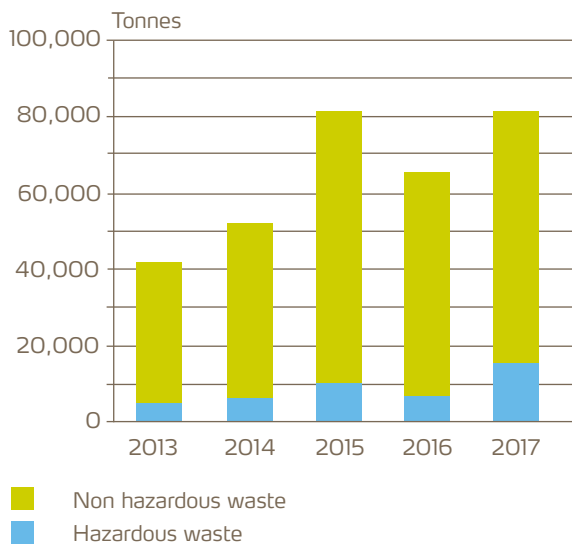
There are few specific wastes relevant to fertilizer manufacturing. Large-volume apatite mining wastes are reported under MM3. Gypsum generated in the phosphoric acid production and iron oxide generated in the production of sulphuric acid are reported separately below.

Typical hazardous wastes from fertilizer manufacturing are waste oils, chemical residues and other wastes from maintenance activities. Typical non-hazardous wastes are construction and demolition materials and scrap generated through investment and demolition activities.

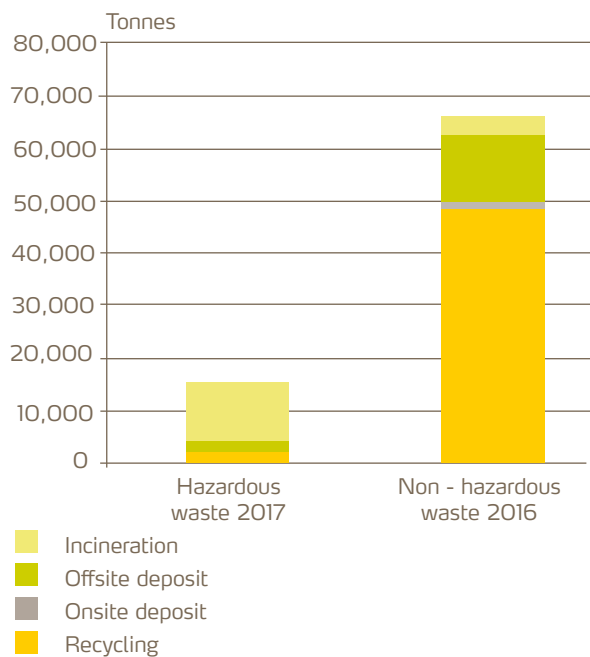
Yara's production operations generated about 65,700 tonnes of non-hazardous waste (58,700 in 2016) and 15,600 tonnes of hazardous waste in 2017 (6,600 tonnes in 2016). 72% of all non-hazardous waste was recycled in 2017, the same share as in 2016. The increase in hazardous waste and the reduction of recycled hazardous waste (only 12% in 2017 compared to 40% in 2016) were due to one investment project, where the phase-out of a hazardous chemical required an extensive clean-up of process equipment, generating more than 9,000 tonnes of hazardous waste. In addition, 1,700 tonnes of the increase in non-hazardous waste was due to the demolition of an old building.

Incineration treatment of waste also includes recovery of energy. Disposal methods are typically informed by the waste contractors unless default methods are known by the site.

## Amount of generated waste



## Waste by type and disposal method, excluding phosphate mining related wastes, gypsum and iron oxide



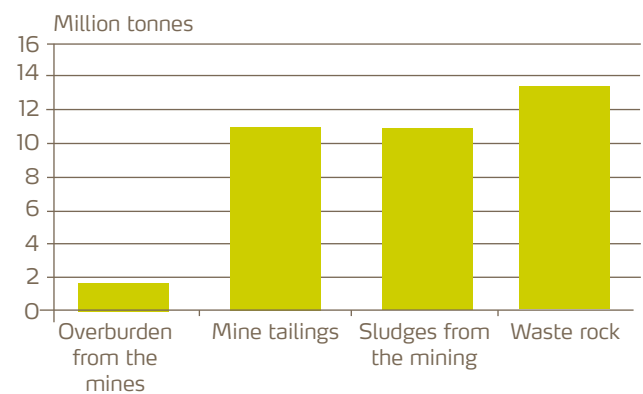
Most of the iron oxide and part of the gypsum generated in the sulphuric and phosphoric acid production were sold as by-products in 2017. Remaining volumes were stored in on-site landfills.

Material	Sold as byproduct [thousand tonnes]	Stored in on-site landfill [thousand tonnes]
Gypsum	12	2,202
Iron oxide	346	221

## MM3 Overburden, rock, tailings and sludges from the mining

Yara's mining operations dealt with close to 26 million tonnes of materials from extractive activities. Waste rock in the quantity of 13.4 million tonnes and overburden of 1.7 million tonnes were removed to process the ores. Tailings and sludges totaled 10.9 million tonnes in 2017. These were stored in on-site tailings ponds and stock piles.

## Materials handled at the mining operations



## 306-3 Significant spills

Six sites registered accidental spills during 2017. None of these had an environmental, financial or reputational impact at a level considered to be significant.

No spills were reported at the mining sites. Yara mines have strict emergency response/dam safety plans in place, describing the operational procedures, risks, potential consequences and mitigation actions for flooding, leakage or damage of the dam.

## GRI 307 Environmental compliance

### 307-1 Non-compliance with environmental laws and regulations

Ten Yara sites reported permit breaches to local authorities in 2017. Their root causes have been investigated and corrective measures are ongoing to ensure further conformity. The breaches were mainly related to exceedances of air emission limits (mainly NO<sub>x</sub>) and discharges to water exceeding the nitrogen or phosphorus limits. Yara sites' current environmental permits do not typically differentiate between normal operational conditions (NOC) and other-than normal operational conditions (OTNOC). Most of the breaches were caused by abnormal operational conditions, like safety releases at plant trips, process disturbances or abatement equipment damages. In Yara Montoir, France, a long-term action plan is being implemented to reach compliance with water discharge regulations. A new sewage system has been installed and further water treatment options are under investigation. As binding BAT limits for fertilizer plants have not yet been given in Europe, the discussion about target levels continue.

Fourteen sites reported short-term accidental emissions, most of which did not lead to a permit breach.

Three Yara sites received fines or other sanctions from local authorities for environmental breaches in 2017. One of the cases was about uncontrolled waste water discharges. Monitoring of the discharge point has already been prepared. Another was about exceeding air emission limits. An investment is already ongoing to replace the production unit with new technology and adequate emission abatement systems. The third case was also caused by a breach of permit stipulations, and corrective actions are under planning. The total sum of the fines was approximately NOK 1.2 million. In addition, the JV Galvani paid one fine of ca. NOK 3.2 million.

## GRI 308 Supplier environmental assessment

### 308-1 New suppliers that were screened using environmental criteria

Yara has implemented a company-wide Integrity Due Diligence (IDD) process, which includes the screening of suppliers against environmental criteria. By reviewing potential and existing suppliers, and working with them to explain our standards, Yara manages the performance of its vendor base. For further details about the IDD process, please refer to the Ethics and Compliance management approach section, p. 37.

In major technical projects, potential environmental impacts and hazards are identified in an early project phase. Based on this assessment, environmental and safety specifications for the design and construction are created. Throughout the project, suppliers' performance is followed up according to a project specific HES program, which also defines the roles and responsibilities of each party. Yara continued to implement this structure to its major technical projects throughout 2017, in addition to preparing complete specifications for the bidding phase.

### 308-2 Negative environmental impacts in the supply chain and actions taken

Yara has an Integrity Due Diligence (IDD) framework implemented in all Yara companies. By reviewing potential and existing suppliers, and working with them to explain our standards, Yara manages the performance of its vendor base. During 2017, Yara did not record any significant environmental breach related to its supply chain.

For more on the IDD framework, please refer to the Ethics and Compliance management approach section, p. 37.

# Labor indicators

## GRI 401 Employment

### GRI 401-1 New employee hires and employee turnover

#### New hires and turnover by age, gender and region

New Hires/ Leaving Yara	Age Group	Africa	Asia	Brazil	Europe	Latin America	North America	Total
Female New Hire	Age above 50	1	8	2	12	3		26
	Age below 30	11	31	211	47	60	3	363
	Age between 30-50	8	16	112	66	31	18	251
Male New Hire	Age above 50	8	29	22	27	10	4	100
	Age below 30	30	96	490	131	120	12	879
	Age between 30-50	44	75	497	138	89	19	862
<b>Total New Hire</b>		<b>102</b>	<b>255</b>	<b>1334</b>	<b>421</b>	<b>313</b>	<b>56</b>	<b>2481</b>
Female Leaving Yara	Age above 50	4	2	1	32	7	3	49
	Age below 30	4	14	110	64	52	11	255
	Age between 30-50	11	19	75	67	49	12	233
Male Leaving Yara	Age above 50	23	13	51	160	30	11	288
	Age below 30	26	38	343	170	92	21	690
	Age between 30-50	71	44	424	110	134	16	799
<b>Total Leaving Yara</b>		<b>139</b>	<b>130</b>	<b>1004</b>	<b>603</b>	<b>364</b>	<b>74</b>	<b>2314</b>



## GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

The table below displays benefits provided to permanent employees and non-permanent employees, ranging from disability coverage, flexible working hours, health care facilities and life insurance. Benefits provided to permanent employees that are not provided to non-permanent employees differ based on country.

Some countries with major sites offer different benefits on different sites. Other benefits provided to employees in certain countries are educational assistance, matched savings plan and paid matched vacation. Last year's GRI disclosure showed the percentage of countries where Yara offered the various benefits. For the 2017 disclosure, the table shows the share of employees covered.

Table: Benefits for permanent and temporary employees

	Disability Coverage	Flexible Working hours	Health care Facilities/ subsidies	Life Insurance	Paid maternity above the legal requirements	Retirement/ Pension Plan	Stock ownership
Permanent employees	73.8%	29.1%	83.6%	87.8%	21.0%	85.5%	13.6%
Temporary employees	72.8%	11.5%	66.6%	80.8%	7.3%	25.3%	3.1%

For a definition of significant locations of operations, please refer to the Report boundaries section of this report, p. 17.

## GRI 401-3 Parental leave

		Africa	Asia & Oceania	Brazil	Europe	Latin America	North America
How many female employees met the requirements of going out on parental leave (Meeting the requirements means being pregnant or adopting)	#	3	10	38	99	34	2
How many female employees returned to work after parental leave ended	#	3	6	26	54	31	2
How many female employees took parental leave	#	3	8	38	79	32	3
How many male employees met the requirements of going out on parental leave	#	20	27	192	266	42	15
How many male employees returned to work after parental leave ended	#	20	28	174	179	42	10
How many male employees took parental leave	#	20	14	192	182	43	10
How many of the female employees who returned to work after parental leave ended were still employed twelve months after their return to work	#	3	6	28	59	31	2
How many of the male employees who returned to work after parental leave ended were still employed twelve months after their return to work	#	17	23	169	169	41	10

# GRI 403 Occupational health and safety

## GRI 403-1 Workers representation in formal joint management-worker health and safety committees

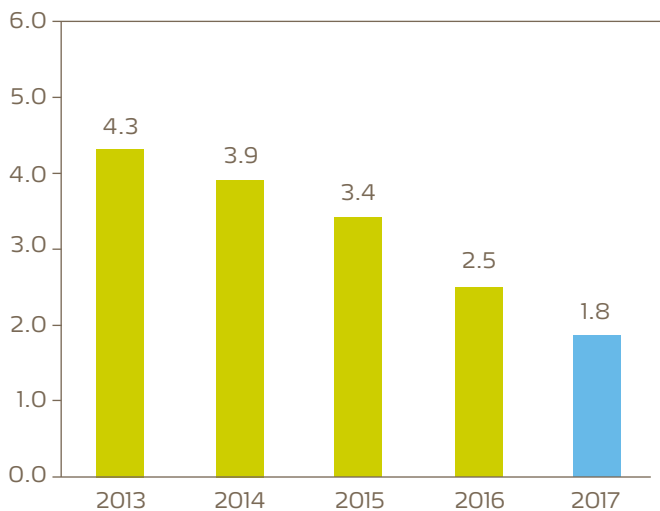
All production sites have a mandatory health and safety committee that covers all of the employees working on the site.

46 of the reporting countries have a health and safety committee in place. All in all, the committees cover 14,367 employees, equal to 92.5% of our workers. This is in line with the coverage in 2016. At the smallest units this activity is just in the starting phase.

## GRI 403-2 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender

Yara achieved a TRI rate of 1.8 (Total Recordable Injuries per million hours worked for employees and contractors combined), an outstanding improvement of 22% compared to 2016 and better than the target rate 2.25.

### Total Recordable Injury rate (Yara employees and contractors) per million hours worked



The TRI rate includes fatalities, lost-time injuries, restricted work cases (employees and contractors were able to be at work, but on restricted duties), and medical treatment cases.

Since mid-2013 Yara has been working to further improve its safety performance by implementing the program Safe by Choice. The purpose of this program is to develop a strong safety culture in Yara’s growing global organization

through both emotional, rational and sustainable organizational developments. Yara’s TRI rate has steadily declined since the program was launched, from a TRI rate of 4.3 in 2013 to 1.8 in 2017.

We recognize that occupational and process safety risks are inherent to our business but are confident that our dedication and commitment to safety will continue to deliver sustainable improvements.

### Injuries and sickness rate

	2013	2014	2015	2016	2017
TRI rate employees	3.3	3.1	2.9	2.2	1.5
TRI rate contractors	6.3	5.6	4.6	3.0	2.3
TRI rate employees and contractors	4.3	3.9	3.4	2.5	1.8
Sickness rate (percent) **)	4.0	Not available	3.3	3.3	2.8

\*) Cartagena and Galvani operations included in TRI rates from 2016 onwards and Serra do Salitre construction site in 2017.

\*\*) 2013 sickness rate covers production sites only

Unfortunately, Yara suffered three fatal accidents in 2017. In Mexico, a contractor fell from height while working on a pipeline. In Brazil, a contractor working at the Salitre project site was run over by a truck and lost his life. At the Salitre site, another contractor was also fatally injured after falling from a platform. All three accidents have been investigated to identify root causes, with corresponding learnings and measures implemented.

Yara pursues a target of zero major process safety accidents. During 2017 there was one incident classified as severity 1 due to financial loss: a fire at an ammonia compression unit during the plant start-up in Porsgrunn, Norway. The incident did not cause personal injuries or environmental impact at a level of major significance.

Yara’s absence rate was 2.8% in 2017.

Yara recorded two disease cases in 2017, both caused by work environment factors according to the local Human Resources unit and thus regarded as work-related diseases. Sickness caused by accidents are not included in the figure, as those cases are covered in the TRI data. Yara is working on establishing a corporate reporting standard for occupational diseases, but currently there are still variations in local definitions.

## GRI 403-3 Workers with high incidence or high risk of diseases related to their occupation

As Yara's products and raw materials include hazardous chemicals like ammonia and acids, identification of work related hazards, assessment of risk and implementation of adequate mitigation measures cover all employees in Yara. In addition, chemical exposure risk assessments are carried out for every task with a potential exposure to hazardous chemicals.

Yara has not identified any professions with high risk of communicable or specific diseases.

## GRI 403-4 Health and safety topics covered in formal agreements with trade unions

Health and safety topics are covered in all trade agreements between Yara and its unions.

Yara has set up a European Works Council to promote cooperation between management and European employee representatives to meet the company's economic, social and environmental challenges. This agreement has been amended with a Safety Agreement, to share the same commitment to safety and to reach the goal of zero accidents. Safety principles such as application of site safety rules, joint health and safety committees, and employee participation and involvement are covered. This agreement is also used as a guideline for non-European units, although it does not have a formal position outside Europe.

## GRI 404 Training and education

### GRI 404-1 Average hours of training per year per employee

In 2017, Yara spent approximately NOK 61 million on external training, equating to about NOK 4,500 per permanent employee.

3,729 employees had individual development plans agreed with their managers in a development discussion and documented in the HR information system. Employees with non-digital development plans are not included in this number. Besides formal training activities, Yara emphasizes on-the-job learning activities and learning from others (coaching, shadowing, etc.).

Yara has an exhaustive e-Learning catalog with more than 200 modules. These activities, under the heading of YaraLearning, are available to all employees and contents are aligned with business and employee needs.

In addition to the investment made in external training listed above, Yara also launched globally customized internal training programs developed with the support of external partners; a mandatory Ethics Training Program for all employees, as well as project and people management courses available to the employees who have this as development actions in their development plans. Employees also benefit from local training initiatives fulfilling local needs.

### GRI 404-2 Programs for upgrading employee skills and transition assistance programs

#### Percentage of countries that provide assistance programs

Region	Percentage of countries that provide assistance programs	
	2016	2015
Africa	10.0%	33.3%
Asia & Oceania	27.3%	30.8%
Brazil	100.0%	100.0%
Europe	45.5%	42.9%
Latin America	11.1%	10.0%
North America	66.7%	66.7%
<b>Yara</b>	<b>32.1%</b>	<b>35.1%</b>

#### Types of assistance offered

	2017
Percentage of countries that offer assistance when transit to retirement	21.1%
Percentage of countries that offer outplacement services	17.5%
Percentage of countries that don't offer severance pay	68.4%
Percentage of countries that offer training for ones continuing professional career	12.3%
Percentage of countries that offer pre-retirement planning	15.8%
Percentage of countries that don't offer severance pay	73.7%
Percentage of countries that offer training for ones continuing professional career	15.8%

## Performance plans

Gender	Africa	Asia and Oceania	Brazil	Europe	Latin America	North America	Grand Total
Female	78	173	630	1151	365	85	2482
Male	393	484	3071	3933	870	324	9075
<b>Grand Total</b>	<b>471</b>	<b>657</b>	<b>3701</b>	<b>5084</b>	<b>1235</b>	<b>409</b>	<b>11557</b>
% of total	74 %	84 %	64 %	81 %	83 %	63 %	74 %

## Development plans

Gender	Africa	Asia & Oceania	Brazil	Europe	Latin America	North America	Grand Total
Female	47	66	90	520	121	57	901
Male	206	225	215	1826	196	160	2828
<b>Grand Total</b>	<b>253</b>	<b>291</b>	<b>305</b>	<b>2346</b>	<b>317</b>	<b>217</b>	<b>3729</b>
% of total	40 %	37 %	5 %	38 %	21 %	33 %	24 %

### GRI 404-3 Percentage of employees receiving regular performance and career development reviews

In 2017, there were two global processes for performance and career development; the Performance Management Process and the Talent Development process (called the Performance & Development Discussions). In the Performance Management Process in December/January, performance from the past year is evaluated and goals are set for the coming year. Progress towards these goals are reviewed in the June to August period, when the Talent Development process takes place. The main purpose of the Performance & Development Discussions is to discuss and agree development areas related to the employee's current job and to future career ambitions, resulting in a 12-month development plan that is followed up throughout the year.

Employees that do not yet have access to the support tools in the HR Information System (HRIS) complete the processes on paper. The numbers in the tables above refer to both permanent and temporary employees with performance reviews and development plans in HRIS compared with the total number of permanent and non-permanent employees.

## GRI 405 Diversity and equal opportunity

### GRI 405-1 Diversity of governance bodies and employees

Yara strives to improve diversity in both corporate management as well as board composition. During 2017, Yara's Executive Management Team consisted of twelve members. Three were female and three were non-Norwegians (Belgian, Brazilian). Five members were between 30 and 50 years old. The rest of the group were above 50 years old.

Yara does not have a corporate assembly, and the shareholders' representatives on the Board of Directors are therefore elected directly at the Annual General Meeting.

The board of Yara consisted of eight members, of whom five are elected by the shareholders, and three are elected by and among the employees. In 2017, three members were female.

At the year-end, 26 of the top 170 management positions in Yara were filled by women. One position was vacant. 51 were held by Norwegians, 84 by other Europeans, four by North Americans, 24 by Latin Americans, four by Asians, and one by Africans. 45% of the position holders are 50 years old or above, 55 % are aged between 30 and 50 years.

### GRI 405-2 Ratio of basic salary and remuneration of women to men

For all Yara sites, guidance is applicable regarding equal and fair treatment and wages and payment. Actual ratios are managed and monitored at local level.

At Yara, it is our strong belief that diversity is a key enabler to solving the difficult challenges the world is facing. Achieving gender equality and strengthening our diversity across a number of other dimensions will also be an enabler to meet several of the other 16 UN Sustainable Development Goals as well. To ensure that we enforce an equal pay policy for men and women in comparable positions and markets, with comparable background and performance, we have started a process of analyzing pay data in some of our main countries. We have noticed pay differences and are moving to verify and take action where there are gaps.

# Human rights performance

## GRI 406 Non-discrimination

### GRI 406-1 Incidents of discrimination and corrective actions taken

Yara's Ethics and Compliance Department received a total of 144 notifications that were classified as 'People' matters during the reporting period. Such notifications are in principle handled by HR. 109 were classified as harassment or discrimination, 106 of which were resolved within the reporting period. 60 notifications were found to be substantiated and 46 were found to be unsubstantiated.

The cases resolved within the reporting period had the following outcomes:

- 15 employees were dismissed
- 9 employees were given a written warning
- 15 employees were given a verbal warning
- 24 employees received coaching/training

## GRI 407 Freedom of association and collective bargaining

### GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk

Yara recognizes and respects their employees' right to freedom of association and the right to collective bargaining within national laws and regulations. Yara does not consider any of its own operations to be at significant risk of violating these rights. When operating in countries where this right is limited through local legislation, we will seek to take mitigating actions in accordance with local conditions and regulations.

Yara has implemented a Code of Conduct for Business Partners. Further, through Yara's Integrity Due Diligence process, suppliers are screened on a risk-basis for issues relating to anti-corruption, labor rights, human rights, health and safety and environment. All registered vendors in Yara are screened daily against a global database to identify potential issues such as sanctions.

## GRI 408 Child labor

### GRI 408-1 Operations and suppliers at significant risk for incidents of child labor

Yara does not consider its own operations to be at significant risk of child labor. Based on recommendations from the ILO, Yara does not allow children below the age of 15 to be employed in our operations. We will not allow children under the age of 18 to do work that jeopardizes their health, safety or morals. In any scenario, the employment of a minor should never be to the detriment of the child's education, development or overall well-being. Yara identified the following incidents with minors working in a country in Asia:

- On one occasion, two minors attempted to work in a Yara warehouse. Both were prevented, as Yara's controls were in place. They were detected before any work took place.
- On one occasion, a minor was presented by an external Human Resources agency (external provider). The minor was detected and prevented from commencing work, as Yara's controls were in place.
- On one occasion, a minor was seen working for a transport company outside Yara premises. Yara sent a written warning to the transport company that dismissed the responsible truck driver.

In Brazil, the education system gives pupils from the age of 14 the opportunity to gain work experience as apprentices. These positions are regulated by law and are also applicable to Yara's operations in Brazil.

Yara has implemented a Code of Conduct for Business Partners. Further, through Yara's Integrity Due Diligence process, suppliers are screened on a risk-basis for issues relating to anti-corruption, labor rights, human rights, health and safety and environment. All registered vendors in Yara are screened daily against a global database to identify potential issues such as sanctions.



## GRI 409 Forced or compulsory labor

### GRI 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor

Yara does not consider any of its own operations to be at significant risk of forced labor. Our Code of Conduct states that, “We will not use any form of forced labor in our operations in accordance with the definitions provided by the ILO. Yara believes a work relationship should be freely chosen and free from threats.”

Yara has implemented a Code of Conduct for Business Partners. Further, through Yara’s Integrity Due Diligence process, suppliers are screened on a risk-basis for issues relating to anti-corruption, labor rights, human rights, health and safety and environment. All registered vendors in Yara are screened daily against a global database to identify potential issues such as sanctions.

## GRI 410 Security practices

### GRI 410-1 Security personnel trained in human rights policies or procedures

Yara’s own security personnel and security service providers working on Yara sites are covered by work induction training, covering site safety and security practices. In addition, Yara’s Code of Conduct covering Yara’s ethical policies and practices is available in 15 languages. It has been distributed as hard copies to 119 Yara locations around the world, with the purpose to reach every Yara employee. Reading and understanding the Code of Conduct is mandatory for every Yara employee, and guidance is available to resolve any questions or concerns people may have.

#### [Ethics and Compliance Program](#)

For external security service providers, Yara has a Code of Conduct for Business Partners reinforcing the company’s goal to continue to develop relationships with Business partners to share corporate values. All contracts, purchase orders or agreements with Yara’s business partners (suppliers, agents, JV Partners, Distributors, etc.) should refer to the Ethics Clause and Code of Conduct for Business Partners.

## GRI 411 Rights of indigenous peoples

### GRI 411-1 Incidents of violations involving rights of indigenous peoples

In 2017, Yara’s Ethics and Compliance Department did not receive any reports concerning incidents of violations involving rights of indigenous peoples.

## GRI 412 Human rights assessment

### GRI 412-1 Operations that have been subject to human rights reviews or impact assessments

Yara’s risk assessment process aims to identify, evaluate and manage risk factors across all areas of the company. Risk assessments, including human rights, are mandatory for all our operations and expert functions; from Production to plant level; Crop Nutrition to country level; Industrial and Supply Chain to Business Unit level.

In the reporting period, a full Human Rights Impact Assessment was performed for Yara’s operation in Brazil. Similar activities were initiated in India and Ethiopia.

### GRI 412-2 Employee training on human rights policies or procedures

Yara’s Ethics and Compliance program encompass the issue of human rights, including it as a separate topic in the Ethics and Compliance training program. Human rights are also included as a dedicated segment in the mandatory introduction videos for all new employees. During 2017, more than 3.700 employees received face-to-face training in Ethics and Compliance matters, including human rights as a distinct topic.

## GRI 412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

Compliance risks, including human rights, are an integrated part of Yara's Capital Value Process. The Capital Value Process includes all significant investments and transactions. The "Capital Value Process" refers to the steps that Yara must take when assessing the risks and benefits associated with Capital Value Transactions, and when deciding whether to allocate resources for the development, execution and operation of such. In the context of the Capital Value Process, the term "Capital Value Transactions" means transactions of any value involving:

- I. the acquisition of any interest in another company by Yara;
- II. any other forms of investment activity in other companies on the part of Yara;
- III. Yara's involvement in partnerships, alliances, joint ventures, consortia and other similar arrangements with other companies; and
- IV. any divestments or permanent site or plant closures including consequential dismantling and demolition.

# Society performance

## GRI 413 Local communities

### GRI 413-2 Operations with significant actual and potential negative impacts on local communities

#### Mining project in Brazil

In Brazil, Yara's JV Galvani is developing a phosphate mining project in Serra do Salitre, Minas Gerais. Covering 2,787.5 ha, this R\$ 2.2 billion investment will provide 2,100 jobs during construction and 1,400 jobs during operation. The implementation phase was initiated in June 2015, and the first production is forecast in August 2018. Annual capacity will be 1,200,000 tonnes of phosphate concentrate and 950,000 tonnes of granulated fertilizer.

The project analyzed social and environmental impacts during the planning phase. The official permits processes for the construction of the mine established safe levels of exposure. The Environmental Impact Assessment concluded that adequate mitigating measures are in place for all potential environmental impacts, including emissions monitoring and control programs, wildlife monitoring, deforestation control and a degraded areas recovery program.

For the complementary remediation actions, more than 800 ha land was purchased and set aside for environmental protection, replanting of seedlings from natural species found on the project site and relocation of wildlife to protected areas. Endangered species were not identified on site but are known to live in the region.

The main socioeconomic exposures are noise, rising local expectations, job and income generation, traffic increase on highways and an increased urbanization process. The mining project will prefer to hire staff in the local region, which will have both direct and indirect positive impacts.

Indirect socioeconomic impacts have also been identified as a consequence of embedding a substantial economic operation into a modestly sized community. These involve the preparedness of local authorities, infrastructure capacity and human and economic development. Mitigating actions include but are not limited to:

Collaboration with a local NGO to plan and support the local education system, training of local labor, developing a contingency plan for local public service capacity (hospital, school, sewage) and road repairs.

#### Mining project in Ethiopia

In Dallol, Ethiopia, there is a contingent of Yara Dallol BV direct employees and contractor employees who may be affected. The project has recently reopened for some activities. An estimated number of 150 workers will be involved, including Yara Dallol BV direct employees and contractor employees.

## GRI 414 Supplier social assessment

### GRI 414-1 New suppliers that were screened using social criteria

Yara's Integrity Due Diligence Procedure requires the screening of all new suppliers against key risk factors and red flags, including concerns on labor practices, working conditions, human rights or societal impacts. If a risk is present, further research is required, including a self-declaration from the supplier concerning the topic flagged, inter alia.

### GRI 414-2 Negative social impacts in the supply chain and actions taken

Yara's Integrity Due Diligence Procedure requires the screening of all new suppliers against key risk factors and red flags, including concerns on labor practices, working conditions, human rights or societal impacts. Wherever a risk is present, further research is required, including a self-declaration from the supplier concerning the topic flagged, inter alia. Issues are analyzed according to procedure and raised with the Ethics and Compliance Department in defined cases. One incident of child labor with a vendor is disclosed in GRI 408-1.

## GRI 415 Public policy

### GRI 415-1 Political contributions

It is Yara's policy, as defined in the Code of Conduct, not to make any political contributions, either financial or in-kind. In 2017, there were no breaches registered.

## GRI 419 Socioeconomic compliance

### GRI 419-1 Non-compliance with laws and regulations in the social and economic area

Yara considers cases with a value of USD 5 million (economic loss, penalty or similar) to be of major severity, and such cases are actively followed up from a Corporate level. In 2017, no fines above this threshold were registered. A total of seven fines were on record, with a total sum of approximately NOK 3.3 million.

A previously disclosed case is still ongoing. A labor tribunal in South America has issued a decision concerning labor regulations against Yara, including a fine that has yet to be quantified. Yara's appeal is pending in the local Supreme Court.

# Product responsibility performance

## GRI 416 Customer health and safety

### 416-1 Percentage of significant product and service categories for which health and safety impacts are assessed for improvement

The fertilizer product stewardship programs, international, regional and national chemical legislation (like REACH in Europe), fertilizer legislation and other sector specific legislation, require assessments of health and safety impacts throughout the life cycle of the products. This requirement covers all Yara's significant product categories:

	Fertilizer uses	Ind uses
<b>Ammonia</b>	HSE impacts assessed	HSE impacts assessed
<b>Urea</b>	HSE impacts assessed	HSE impacts assessed
<b>Nitrates</b>	HSE impacts assessed	HSE impacts assessed
<b>NPKs</b>	HSE impacts assessed	HSE impacts assessed
<b>CN</b>	HSE impacts assessed	HSE impacts assessed
<b>UAN</b>	HSE impacts assessed	HSE impacts assessed
<b>SSP</b>	HSE impacts assessed	HSE impacts assessed
<b>DAP/MAP</b>	HSE impacts assessed	HSE impacts assessed

### 416-2 Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcome

In 2017, Yara recorded no incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of its products or services.

## GRI 417 Marketing and labeling

### 417-1 Requirements for product and service information and labeling

In addition to information about nutrient content and the correct use of the fertilizers, products are classified and labeled according to the European CLP Regulation in EU/EEA markets. Globally, Yara classifies and labels its products following either the European CLP regulation or the local legislation, e.g. the American OSHA and EPA standards in North America.

In line with changes in chemical legislation in many countries of the world, Yara also classify and label its products according to the UN Globally Harmonized System of Classification and Labeling of Chemicals. Additional local requirements, such as local fertilizer regulations or food and feed regulations when relevant, are managed by local Yara units.

All of the following information is needed for the classification of the products and the provision of safety data sheets, to ensure compliance with relevant chemical and product registrations:

- i. Raw materials purchased and used for the product
- ii. Content (composition) of the product, with particular regard to hazardous substances
- iii. Guidance for safe use of the product (via the exposure scenarios of chemicals in Europe)
- iv. Guidance for safe disposal of the product

These procedures cover all Yara's products as well as raw materials:

	Purchased raw materials used	Content of the product	Safe use of the product	Disposal of the product
<b>Ammonia</b>	Yes	Yes	Yes	Yes
<b>Urea</b>	Yes	Yes	Yes	Yes
<b>Nitrates</b>	Yes	Yes	Yes	Yes
<b>NPKs</b>	Yes	Yes	Yes	Yes
<b>CN</b>	Yes	Yes	Yes	Yes
<b>UAN</b>	Yes	Yes	Yes	Yes
<b>SSP</b>	Yes	Yes	Yes	Yes
<b>DAP/MAP</b>	Yes	Yes	Yes	Yes

Safety data sheets for Yara products can be found on the yara.com: [Safety Data Sheets](#)

### 417-2 Incidents of non-compliance concerning product and service information and labeling

In 2017, Yara was not subject to any significant fines for non-compliance with laws or regulations concerning the provision and use of products and services.



# Auditor's report



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To the management of Yara International ASA

## INDEPENDENT AUDITOR'S REPORT

### Report on the Yara's GRI Report 2017

We have reviewed Yara's GRI Report 2017 ("the Report") presented on [www.yara.com](http://www.yara.com). The Report is the responsibility of and has been approved by the management of Yara International ASA ("Yara"). Our responsibility is to draw a conclusion based on our review.

We have based our work on the international assurance standard ISAE 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board. The objective and scope of the engagement were agreed with the management of the Company and included those subject matters on which we have concluded below.

Based on an assessment of materiality and risks, our work included analytical procedures and interviews as well as a review on a sample basis of evidence supporting the subject matters. We have performed interviews with management and individual resources responsible for the GRI reporting at corporate and at selected production units represented by Yara France Pardies and Yara Ambès.

We believe that our work provides an appropriate basis for us to provide a conclusion with a limited level of assurance on the subject matters. In such an engagement, less assurance is obtained than would be the case had an audit-level engagement been performed.

### Conclusions

Based on our review, nothing has come to our attention causing us not to believe that:

- Yara has applied procedures to identify, collect, compile and validate information for 2017 to be included in the Report, as described in the Report.
- Information presented for 2017 is consistent with data accumulated as a result of these procedures and appropriately presented in the Report.
- Yara has applied a reporting practice for its GRI Report aligned with the Global Reporting Initiative (GRI) Standards' reporting principles.
- The Report fulfils the Core "in accordance" criteria in the GRI Standards and appropriately provides information, or refers to information, on each of the reported disclosures of the GRI Standards.

Oslo, 23 March 2018  
Deloitte AS

Aase Aa. Lundgaard  
State Authorised Public Accountant (Norway)

Frank Dahl  
Deloitte Sustainability

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