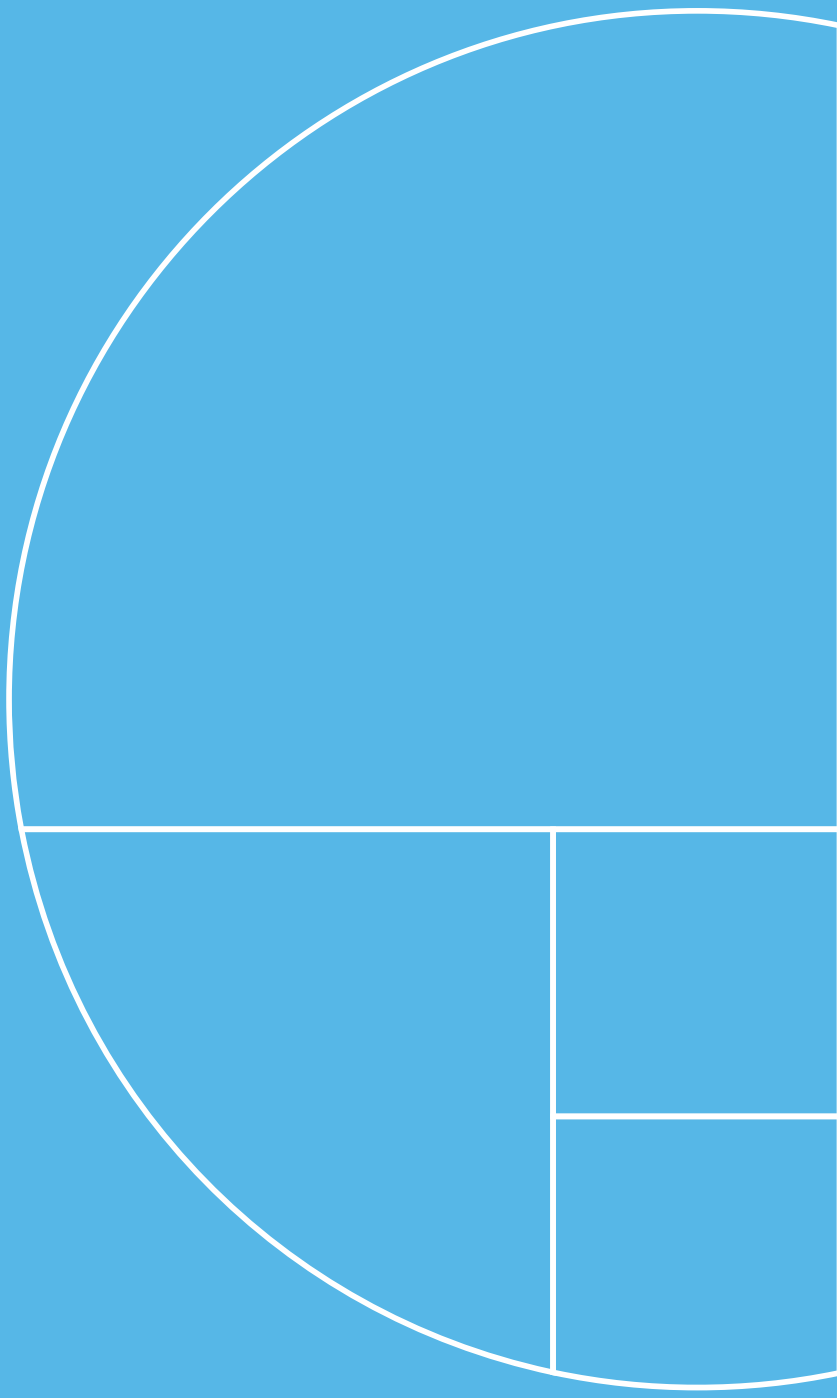
Knowledge grows

Yara's GRI Report 2019

Table of content

CEO message



A defining year for the food industry

2019 was the year that agriculture reached the top of the world agenda. It is no exaggeration to say that we will not be able to solve the climate emergency and meet the Paris Agreement, unless we are able to fix the broken food system. This means that we have to produce enough food with lower carbon emissions and with less waste. Yara will play a key role in doing so, and we are taking significant steps to deliver on our strategic targets.

On track, but still not there

2019 can be summarized as a year where Yara materially improved its performance, but where there is still a lot to be done. Coming out of a large investment program and challenging markets, we improved our capital performance throughout the year, expanded our improvement program, demonstrated the resilience of our distribution business in Sales & Marketing and established a new capital allocation policy and initiated shareholder distributions of more than USD 0.75 billion since the start of 2019, equal to an average dividend yield of approximately 4% per year. In addition, we are expanding our innovative growth within digital solutions where we have already reached the 2020 goal of 10 million hectare under management. Two other important positives are the continued reduction and best-in-class performance on safety, with a TRI rate of 1.4, and our systematic work to improve on diversity and inclusion.

However, there is still a lot to be done. A return on invested capital (ROIC) at 6.6 % is below the target of +10 % through the cycle. This is a main concern for me, but we know the steps that need to be taken to achieve the target – and we are taking those steps.

Cheap food at a high price

As a company, we must balance the short-term with the long-term, meaning tackling the challenges in front of us while building an ever-stronger base to capture the value creating opportunities ahead.

The challenges might seem overwhelming, but we are already responding to them:

- Agriculture accounts for 23 percent of the global CO_2 emissions – our contribution is complete solutions to optimize yields on existing farmland, to prevent deforestation
- Agriculture is responsible for 70 percent of freshwater usage – our contributions are precision farming tools and fertigation products that provide more crop per drop
- 1/3 of all food is wasted – our contributions are crop nutrition solutions that increase quality and shelf-life
- More than 800 million people go hungry to bed every night – our contribution is to support farmers to increase their yields and profits, and helping them to produce enough food for a growing population
- Approximately 2 billion people are undernourished while 2 billion suffer from obesity related diseases – our contributions are solutions for nutritious food, including micronutrients to adjust for nutrient deficiencies, and leading the way in transforming to a more just food system through partnerships and innovation

For decades, the growth in yields has provided more food and reduced the number of people starving by hundreds of millions. Today, however, we see that the traditional growth model is outdated. Growth has expanded beyond what natural systems can sustain and we are now facing a climate emergency. The global reduction in emissions is not at the right trajectory and we also see severe loss of biodiversity. The fact is that cheap food has come at a high price.

In August 2019, the IPCC launched their special report Climate Change and Land and in September, the Food and Land Use Coalition (FOLU) published its Growing Better report. Both reports put agriculture at the center of what must be done to transform how we produce and consume food.

Cause for realistic optimism

The FOLU report put forward some astonishing – and worrying – numbers: the total market value of the global food system is USD 10 trillion (2018 prices). However, the hidden cost is USD 12 trillion. These costs relate to health, environment, food waste and rural welfare. From a societal point of view, this means that the food system is destroying value.

A main reason for this is that there are no incentives in place for farmers to produce in a more environmentally friendly way. We know that sustainable farming practices leads to increased costs at the farm, but the farmer isn't compensated for this.

Basically, we are asking the farmer to pay the price for climate change, instead of us paying the farmer the right price for her or his products.

This is not because the consumers are unwilling to pay a little more for sustainable food – it is because the consumers do not know the carbon footprint of the products they buy. However, that doesn't have to be the case. The technology is already ready and available to enable consumers to make fact-based, conscious and climate-friendly choices.

There are many reasons for being a pessimist. In Yara, however, we are realistic optimists. We know it is possible to produce enough food on existing land, meaning we can safeguard natural land. There will be a need to create carbon sinks, and the most promising are nature-based solutions that capture and store carbon in the soil and forests.

But these efforts require extensive collaboration throughout the whole value chain and also at the political level. Only then can we fix some of the defects that are haunting our food system.

Integrated reporting for integrated challenges

Yara's business model is centered around building a profitable business by solving societal challenges. In the Better Business, Better World report from 2017, it is calculated that there is a value creating potential of USD 12 trillion a year if companies align their business to the UN Sustainable Development Goals. I was part of the group preparing the report and I'm convinced that there is tremendous value creation potential in having a sustainable business model.

Faced with integrated challenges, Yara is moving towards integrated reporting. We believe it is important to be evaluated based on our combined financial, environmental and societal performance. This approach to creating value is rooted both in our DNA and our corporate strategy. Increasingly, our returns will derive from the sustainable solutions we offer. This

commitment to responsible business conduct is confirmed by us being a signatory to the UN Global Compact.

As we see it, there is no contradiction between running a sound and profitable business and aiming to solve societal challenges.

Walk the talk

It is said that action speaks louder than words, and in Yara we are continuously pursuing the actions and projects that live up to our bold statements. Over the past decades, Yara has moved from an owner of assets and producer of fertilizer to becoming a complete solutions provider, both for farmers and the food companies. We are transitioning from growing volume to growing value. This is a decisive, conscious and forward-looking development, allowing for improved value creation and answering to stricter regulations and a rightfully stronger public engagement.

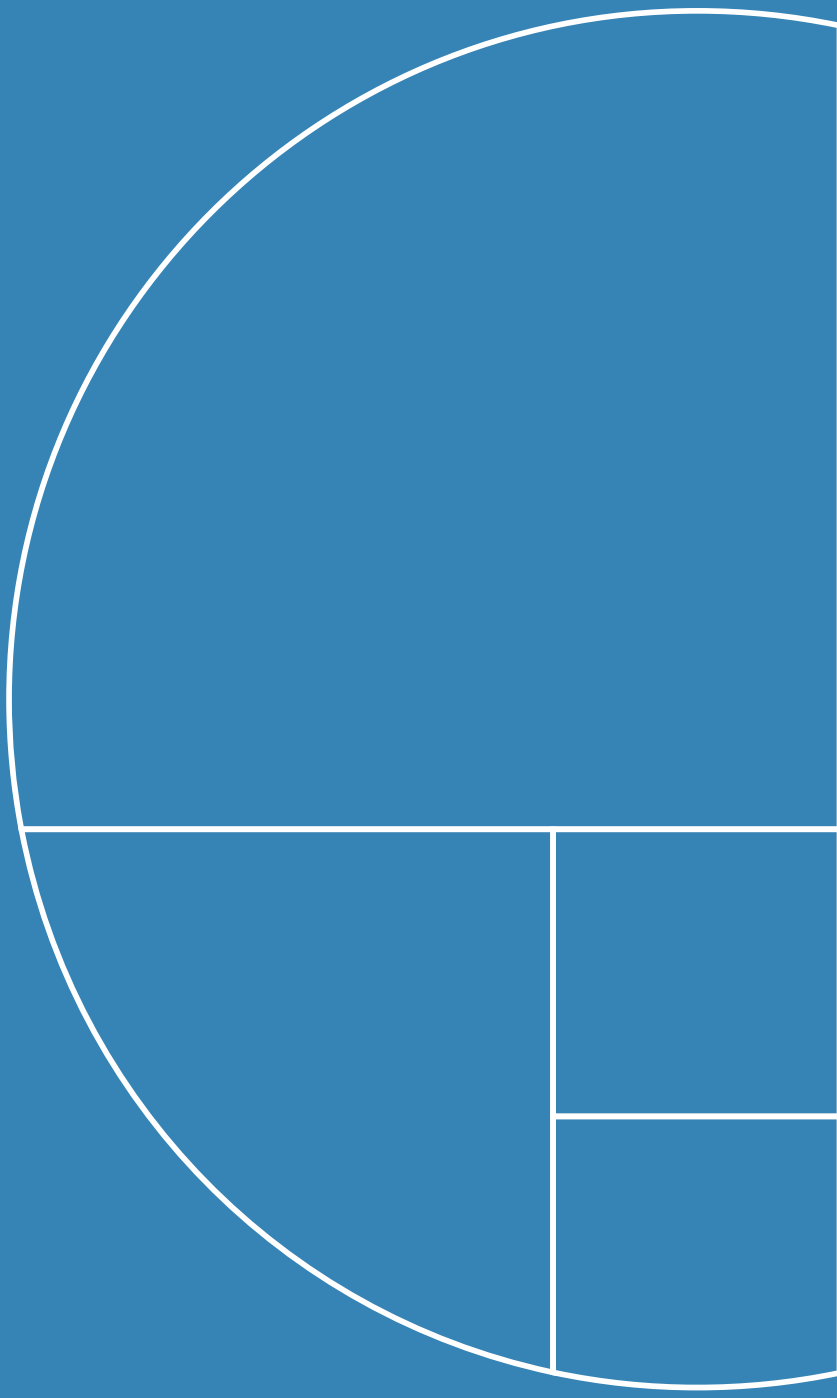
We are confident that we have a role to play, but not in isolation. We have therefore entered several strategic partnerships with companies that are world-leading in their specific industries. For example, with IBM to develop digital solutions that enable farmers to produce more with less. Another example is how we work with Veolia on circular economy, where we are basically connecting the beginning of the value chain – nutrients in the field – with end – the waste treatment of nutrients. We are also doing pilot projects with Engie and NEL to explore the opportunities in green ammonia production, to further reduce our carbon footprint.

By partnering with other industry leaders, we are increasing the collective knowledge while decreasing the risk, both of which are important to develop environmentally and commercially sustainable solutions.

Yara was established in 1905, based on the world's most life-saving innovation; mineral fertilizer. Our business was from the very start based on developing a sound business and solving a global challenge. In this sense, nothing has changed. Therefore, Yara is a company with a truly proud history – and a great future.

Svein Tore Holsether
President and CEO Yara

Company presentation



About Yara

Yara grows knowledge to responsibly feed the world and protect the planet, to fulfill our vision of a collaborative society, a world without hunger and a planet respected.

To meet these commitments, we have taken the lead in developing digital farming tools for precision farming and work closely with partners throughout the whole food value chain to develop more climate-friendly crop nutrition solutions. In addition, we are committed to working towards sustainable mineral fertilizer production.

We foster an open culture of diversity and inclusion that promotes the safety and integrity of our employees, contractors, business partners, and society at large. Founded in 1905 to solve the emerging famine in Europe, Yara has a worldwide presence with about 16,000 employees and operations in over 60 countries. In 2019, Yara reported revenues of USD 12.9 billion.

www. yara. com

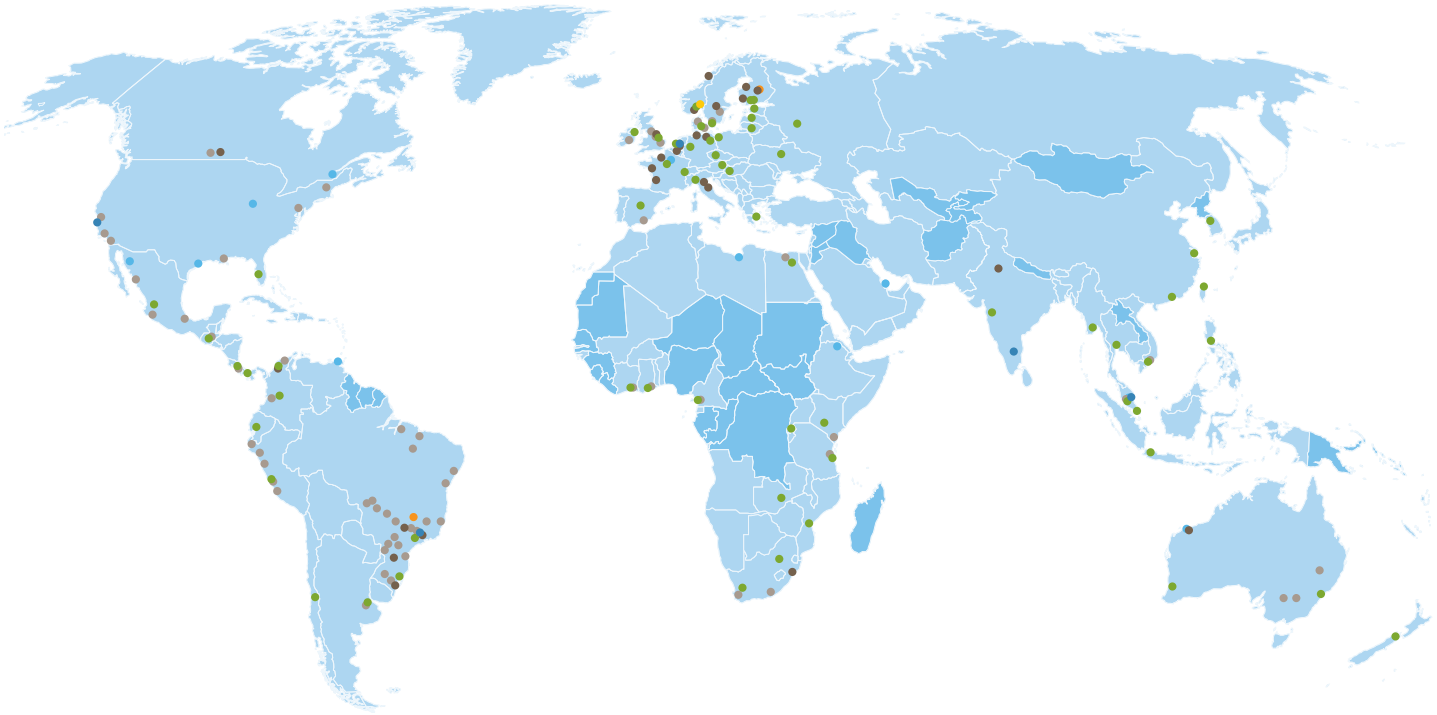
Responsibly
feed the world and
protect the planet

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

Ambition
Curiosity
Collaboration
Accountability

Global presence

Yara is the industry's only global player. We combine production of premium products with a farmer-centric approach, turning a century of agronomic knowledge into value for millions of farmers around the globe.



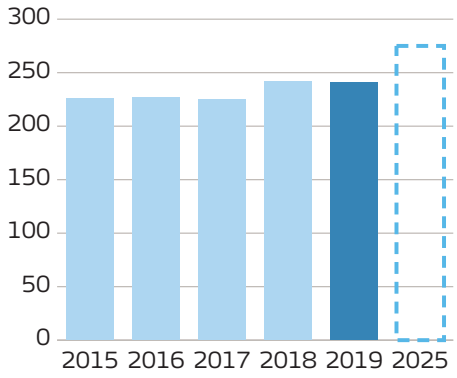
- Countries with sales [1)]
- Yara Plants
- Smaller sites [2)]
- Head office
- Phosphate mines
- Joint ventures
- Sales offices and R&D sites
- Digital Hub

1) More than 10,800 Yara-branded retail outlets around the world
2) Yara operated terminals and logistical production sites

Key figures

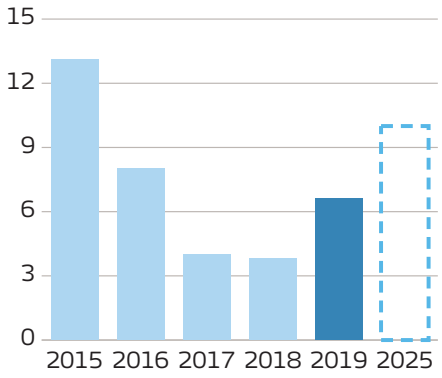
241 million people fed

Our target is to help feed more than 275 million people by 2025.



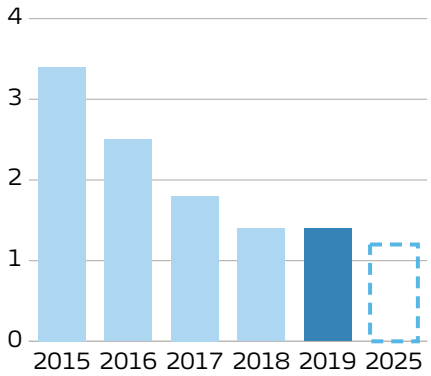
6.6% return on invested capital

We aim to achieve a ROIC above 10% through the cycle.



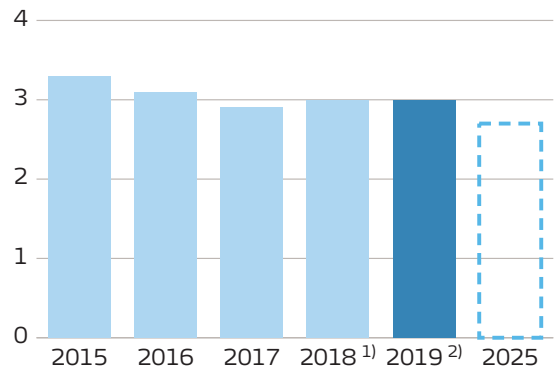
Total Recordable injuries rate: 1.4

We strive for zero accidents and a TRI rate below 1.2 by 2025.



2025 target: >10% reduction in carbon intensity

We aim to protect the planet by reducing emissions from our plants



Products and services

Our operations are based on the efficient conversion of energy, and of 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 Sales & Marketing 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 solutions. We can do this because we are a market leader and crop nutrition experts.

Our fertilizers range from those based on the most widely needed nutrients – nitrogen, phosphorous and potash – 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 solutions, delivering scale and reach to farmers globally, making a real difference in the field and allowing farmers to conveniently obtain highly relevant knowledge and information.

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

Solutions for industrial customers

Yara also commercializes 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. Our industrial chemicals include urea, ammonia, nitrates, calcium nitrate and nitric acid.

Solutions provided include a range of business areas such as biogas enhancers, concrete additives, odor and H2S solutions and molten salt solutions for concentrated solar power plants, with the main areas being:

Environmental Solutions for Transport, Maritime and Stationary:

Yara's fastest growing business unit, Environmental Solutions, provides a range of solutions to the market. Yara is the leading provider of AdBlue, also called DEF in the US and ARLA 32 in Brazilian markets. This catalyst fluid reacts with harmful NOx emissions in diesel engines' exhaust, cleansing the emissions. Yara also provides systems – SCR and SNCR – to reduce emissions to air from stationary and maritime technologies. We have a complete portfolio of technology, reagents, after-treatment processes and services for nitrogen oxide emissions abatement, delivered to industrial plants.

Mining Applications:

For the mining and civil explosives industry, Yara delivers technical ammonium nitrate, which is a raw material for explosives.

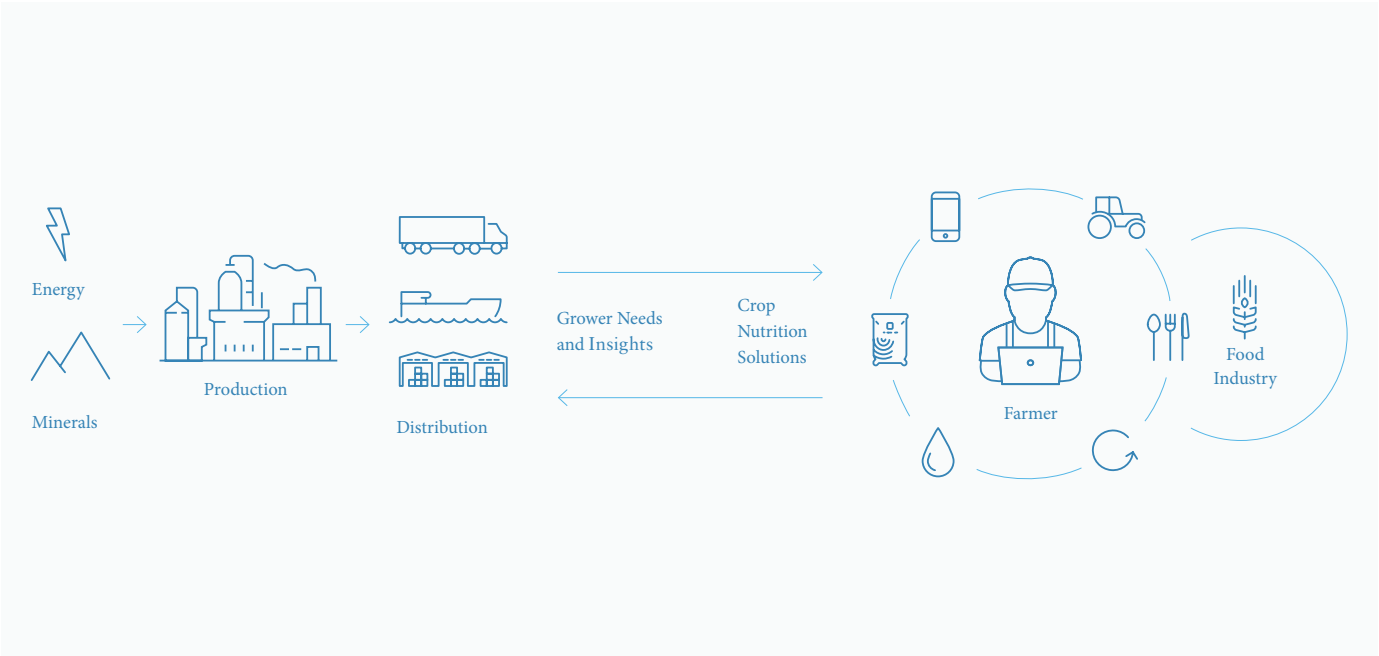
Industrial Nitrates:

Yara provides a set of solutions based on nitrates and odor removal technologies to water utilities and wastewater treatment plants. It also has developed nitrates-based solutions for several industries such as concrete, latex, biogas and solar power.

For a full account of products and services, please refer to our Products & Service web page

Our supply chain

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



Raw materials

Ammonia is the basis of 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 absorbed by plants. See also Suppliers p. 13.

Manufacturing

Yara pioneered the production of nitrogen fertilizer a century ago and today controls 29 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 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 to 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 the purchase of raw materials, energy costs and freight expenses. In 2019, such purchases amounted to USD 9,334 million.

The sourcing of natural gas and nutrients constitutes the costliest factor of our purchasing and operating expenses.

Natural gas

Natural gas is produced in many regions across the world. Yara sources natural gas, and in some cases other forms of hydrocarbons, for the production of nitrogen fertilizers and industrial products. The largest energy suppliers are Gail (India), Equinor (Norway), Engie (France), RWE (Germany), BP (UK), ENI (Italy), National Gas Company of Trinidad and Tobago (NGC), Comgas (Brazil) and Santos (Australia).

Phosphate

Phosphorus (P) occurs in natural geological deposits of phosphate rock, which is mined from the earth's crust. The largest phosphate rock resources are located in Morocco, China, Algeria, Syria, and Brazil. Yara sources P to produce granular and feed phosphates and NPK fertilizers. The largest suppliers are Phosagro (Russia), OCP (Morocco), and Bayovar rock via Mosaic (Brazil). Yara also mines phosphate rock in two fully owned sites; Salitre (Brazil) and Siilinjärvi (Finland). In addition to phosphate rock, Yara also sources granulated phosphates. The largest suppliers are, Maaden (Saudi Arabia), OCP (Morocco) and Mosaic (Brazil).

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 2019, six of those countries (Canada, Russia, Belarus, Germany, China and Israel) produced about 90% of the world's aggregate production of approximately 41 million tonnes, measured as K_2O.

Yara sources K for NPK fertilizers mainly from nine suppliers: BPC (Belarus), Uralkali (Russia), K+S (Germany), ICL (Israel), Canpotex (Canada), SQM (Chile), Kemira and Tessenderlo (processors based in Finland 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. 48.

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 talent we can in all our markets and to create a diverse and global talent pool.

At the end of 2019, Yara had 15,837 employees worldwide, of which 14,775 were employed on a permanent basis, representing decrease compared to the previous year. The largest decrease in the permanent workforce was in Brazil (536 employees), mainly due to the split of the former JV Galvani.

In 2018, Yara updated its definitions of third-party employees based on the terms of the services rendered. Any worker whose duties are being directed by an external supplier/vendor and is not on Time and Material contract will be considered an External Contractor. Any worker who has an approved position in the organization chart, is integrated in the team and receives specific instructions from a Yara employee, covers a temporary position or a temporary project role, is considered a Position Contractor. In December 2019, 366 employees were categorized as Position Contractors and 428 as External Contractors. As of 2018, the figures reflected in Yara's headcount will exclude External Contractors.

When including the Position Contractors, External Contractors and Yara Marine Technologies, Yara's total headcount was 16,964 employees worldwide at year-end 2019.

The employees of Yara Marine Technologies AS (196 employees, Yara ownership share 100 percent) 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 2019.

The table below does not include Lifeco employees. Lifeco, Libya is reported as an equity-accounted investee, and had 955 permanent employees at the end of 2019 – 939 male and 16 female. As part of the 955 male employees, there were 97 international assignees, mainly Indians, Filipinos, Bangladeshis, East European and Middle east European. The company had 3 male temporary employees (2 Libyan and 1 Middle east). Grand Total is 958 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.

Ambitions and goals	Gender	Africa	Asia	Brazil	Europe	Latin America	North America	Grand Total
Permanent	Female	89	278	883	1393	372	87	3102
	Male	445	1186	4103	4669	1129	337	11869
Permanent Total		534	1464	4986	6062	1501	424	14971
Non-permanent	Female	20	27	140	114	50	3	354
	Male	45	46	268	236	106	7	706
Non-permanent Total		65	73	408	350	156	10	1062
Yara employees total		599	1537	5394	6412	1657	434	16033
Position Contractor	Female	2	2		81	2	3	90
	Male	12	17		236	1	10	276
Position Contractor Total		14	19		317	3	13	366
Grand Total		613	1495	5394	6594	1660	447	16399
External Contractor		5	250	0	159	7	7	428

Strategy, risks and opportunities

Yara's ambition is to be the Crop Nutrition Company for the Future. We will grow responsible solutions for farmers, for industry and for society, while delivering superior return on capital.

Yara's strategic focus is to be the Crop Nutrition Company for the Future. By developing the best possible crop nutrition solutions for the future, we support better yields and create value for our customers and society while ensuring superior return on invested capital for our shareholders.

The strategy will bring us closer to our mission to *Responsibly feed the world and protect the planet* and entails a clear commitment to sustainability in everything we do.

We have three strategic priorities to ensure we succeed:

- Advance operational excellence
- Create scalable solutions
- Drive innovative growth

Our strategy is farmer-centric, meaning that we aim to maximize farmer value by combining our crop nutrition, knowledge and services in complete offerings. We increasingly engage in the agriculture and food value chain to develop holistic crop solutions, expand our digital services and solutions, and promote sustainable farming practices. Better yields, higher nutrient efficiency and a lower environmental impact is our constant goal.

To learn more about how our materiality assessment has shaped Yara's corporate strategy, please refer to p. 19.

Megatrends

The global environment is rapidly evolving, and we have identified seven megatrends, of which three are biophysical and four socioeconomic, which impact our business, and which may constitute risks or opportunities.

In our main market, the agricultural sector, three biophysical trends will create changing dynamics which must be addressed: climate change, water stress and soil degradation. These trends can influence the demand side for fertilizers, driving shifts in agricultural production. Our global positioning is a natural hedge against downside risks.

Yara is also positioned to gain advantages in the market by providing solutions, including reducing carbon footprints, water solutions and balanced crop nutrition programs.

Four socioeconomic megatrends will also drive developments in our markets: food industry integration, dietary shifts, circular economy and digitalization. These are megatrends where Yara has a strong position through our global reach and advanced knowledge.

Climate change

Changing climatic patterns are set to impact agricultural production throughout the world, mainly impeding plant growth. Across most sectors, there is increasing pressure and expectation for climate actions and reduction of greenhouse gas emissions.

Climate change could impact demand for our products as a result of land areas becoming unproductive or from new policies encouraging a reduction in fertilizer use. In some regions, notably Europe, the competitiveness of our fertilizer production can be challenged by carbon pricing and taxes.

Yara may capitalize on climate change and ensuing market adaptations along two main avenues: Our agronomic knowledge can develop solutions that respond to the changing growing environments, and our low-carbon nitrate offering is a proven choice for reducing emissions from farming. Our decarbonizing efforts also include the piloting of green ammonia and mineral fertilizers, fit for a zero emissions future.

Water stress

Water is crucial for plant growth. It has no substitute. Agriculture is a huge consumer of water, and lack of sufficient water quantity and quality is a major stress factor in crop production. Climate change disrupts precipitation patters, while extensive irrigation taps aquifers and reduces water quality through salination.

Limitations on water supplies and sharper regulations can impact negatively on fertilizer demand and/or require new fertilizer formulations. Climate risks and farmer economics can

reduce farmers' willingness to invest in water managements systems and, hence, fertigation solutions.

Yara has identified a fundamental and close relationship between crop nutrition and crop water consumption. We employ new knowledge and innovative technologies to advance water use efficiency and offer solutions for water-scarce agriculture, as manifested in the Yara Water Solution, our fertigation solutions and products tailored for fertigation.

Soil degradation

Roughly one third of the world's soil is degraded due to a variety of factors, including soil erosion, biodiversity loss and pollution. Farming without adequate replenishment of nutrients adds to the problem and results in productivity losses. Best farming practices focus on soil health, carbon capture and regenerative agriculture.

Soil health is becoming a key topic globally and can lead to new fertilizer polices and consumption patterns, as fertilizers are often earmarked as a cause of soil degradation. While our crop nutrition and application knowledge can contribute to soil health, we face reputational risks and an overall reduced demand for fertilizer.

Yara is well positioned to improve soil health across the world, and to deliver the solutions required to do so. Our Analytical Services analyze soil, tissue and water samples from all over the world. Our R&D on soil health management includes learnings from ongoing field trials dating back several decades. This helps to deepen our understanding of different farming environments and best practices for improving soil health.

Food industry integration

Agriculture and the food value chain is becoming increasingly integrated. Input providers are joining forces, farms are growing in scale and professionalism, the food industry is moving upstream, and conscious consumers are putting pressure on the food and agriculture industry to achieve new levels of sustainability.

Agri- and food industry integration is changing our competitive landscape. New and larger players with holistic solutions can put pressure on our ability to stay relevant for farmers and to defend and expand our market share.

Our global presence, knowledge and crop solutions makes us well positioned to expand our collaboration with the food industry. Consumers are increasingly willing to pay for quality and sustainability, which we can help to achieve with better crop nutrition, application knowledge and tools. By proving our value in these partnerships, we open opportunities for the commercialization of our solutions in new market channels.

Dietary shifts

Climate and health conscious consumers, particularly in high income countries, are increasingly driving diets towards healthier and sustain-able choices, and more plant-based nutrition. Globally, however, the trend towards higher calorie intakes and increasing shares of animal protein continues.

Changing dietary patterns impact agricultural demand and crop production regionally. Lower meat consumption can in certain regions reduce fertilizer demand in grass and feed production. Demand for our mineral fertilizers can also be impacted by growth in organic food, commonly perceived as clean and healthy.

Yara is well positioned to respond to changes in dietary patterns. Nitrates – the backbone of our crop nutrition solutions – are the superior source of nitrogen for most applications. Combined with our on-the-ground presence, agronomic knowledge and tools, we are equipped to develop and provide the best solutions to local needs.

Circular economy

Resource scarcity, growing sustainability awareness and increased consumer pressure are creating a push towards a circular economy, including in the agri- and food value chain. The recycling and reuse of materials coupled with reduced waste and pollution are core ideas in this trend.

Nutrient reuse, recycling and reducing losses, whether driven by regulations or raised awareness, can reduce demand or drive cost for fertilizer. In some regions, first and foremost Europe, recycled and organic fertilizers are promoted as a substitute for mineral fertilizers.

Yara has taken an early position and is engaging in innovative partnerships to create and capitalize on new business models and revenue streams through the recycling of nutrients in agriculture and food value chains. By increasing resource use efficiency and reducing raw materials costs, we aim to strengthen our competitive edge and add value to our brand.

Digitalization

Digital innovation and technological transformation fundamentally change strategies and practices in decision making, fertilizer application, farm automation and trace-ability. Opportunities offered by big data, artificial intelligence and block-chains impact the entire agricultural food industry value chain.

Digital agriculture is developing rapidly, with a number of multinationals and startups making large investments into digital platforms. Securing our competitive edge on delivering knowledge and solutions hinges on our ability to achieve scale, generate value and protect our knowledge advantage.

Yara has made an early entry into the rapidly changing landscape of digitalized farming. This supports and supplements our existing business model, and it presents options to develop new crop nutrition business models. Digital services and solutions complement our existing offerings, enabling the creation of new revenue streams.

Risks and strategy

For a full review of strategy and Yara's Enterprise Risk Management (ERM) system, please refer to the annual report available on yara.com.

Significant changes in 2019

Key business initiatives in 2019 included a plant closure in Trinidad and the completion of the transaction of the previous joint venture Galvani's assets.

Following the agreement announced in October 2018, Yara Brazil owns 100% of the industrial unit in Paulínia with integrated Single Super Phosphate production and a fertilizer bulk blend facility, and the Serra do Salitre project with an annual production capacity of approximately 1.2 million tonnes of phosphate rock. The production unit in Luis Eduardo Magalhães and the mining units in Angico dos Dias and Irecê (all three in the state of Bahia), as well as the Santa Quitéria greenfield phosphate project, have been separated out from Galvani. These assets are hence out of scope for Yara's 2019 reporting.

At its Capital Markets Day in June, Yara announced it is evaluating an IPO of its industrial nitrogen businesses. An IPO of Yara's industrial nitrogen businesses would create the first integrated industrial nitrogen company. Yara is well underway to becoming a focused crop nutrition company, and the evaluation of an IPO is seen as an important step in that direction.

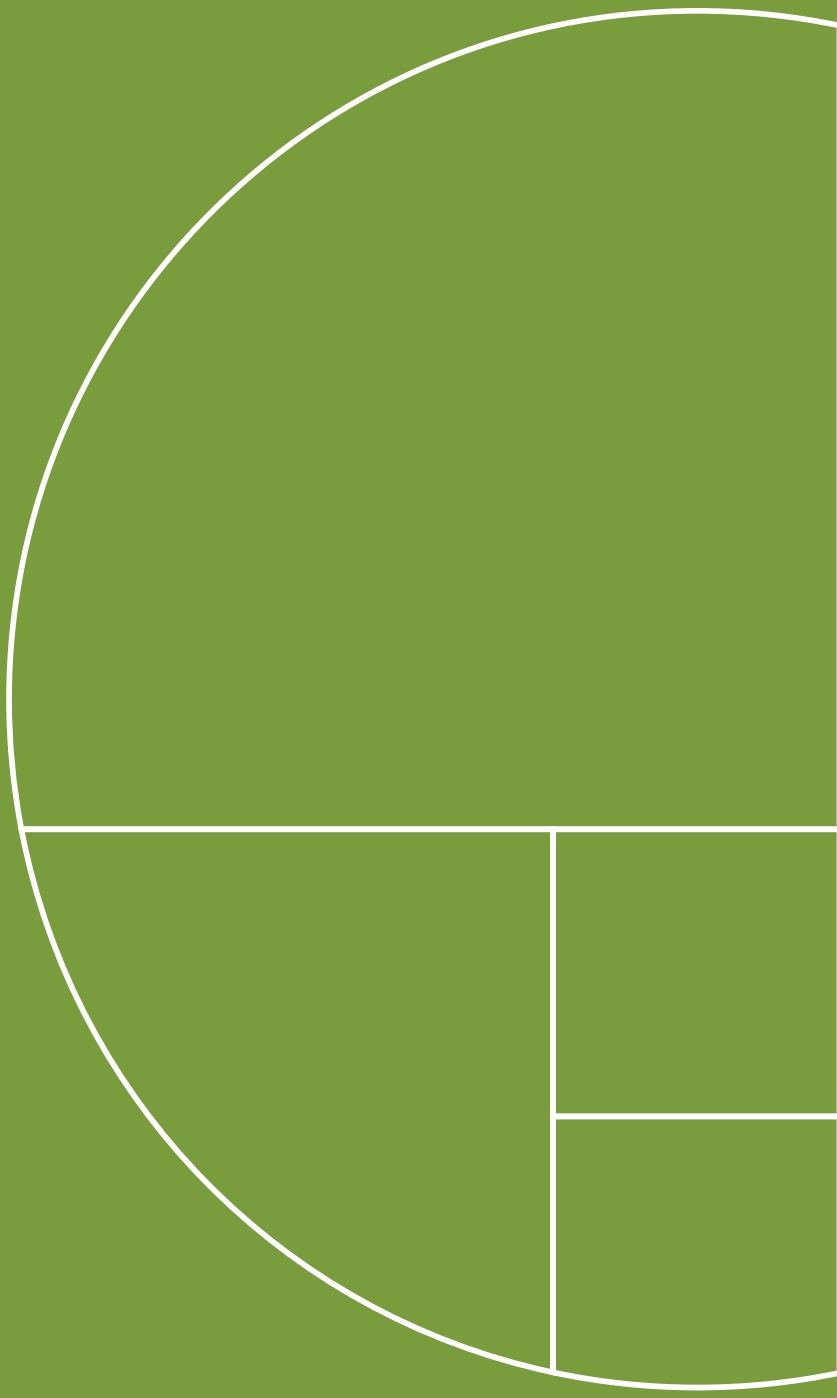
As announced in 2018, Yara simplified its operating model at year-end 2018 in line with its strategy to be the Crop Nutrition Company for the Future. Effective January 2019, our activities are within three segments:

The Sales & Marketing segment provides worldwide sales, marketing and distribution of a complete range of crop nutrition products and programs, along with essential products for industrial applications, environmental solutions and animal nutrition.

The Production segment remains unchanged and is a world leader in the production of ammonia, nitrates, calcium nitrate and NPKs, with a growing portfolio of phosphates, providing the foundation for our crop nutrition and industrial solutions.

The New Business segment now comprises a portfolio of businesses, most of which were formerly part of the Industrial segment. It will now be operated more independently with distinct strategies for each business. This includes the Environmental Solutions business where an evaluation of strategic options is underway.

Materiality



Materiality

In 2019, Yara progressed its work on the detailing and implementation of its updated strategy, which was approved by the Board of Directors in 2018. At the Capital Markets Day in June, Yara launched its company scorecard, which integrates financial and non-financial indicators as measures of success on strategy implementation.

Yara also decided to move to an integrated reporting format and started the implementation of the Integrated Reporting framework for the 2019 report. As a result of this move, the materiality assessment was updated.

Defining materiality

Yara made its first materiality assessment in 2015, in a process 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.

The materiality assessment has since been reviewed in internal follow-up processes. In 2019, the review was largely informed by an update on megatrends, the integrated reporting process and the corporate scorecard. As a result of this process, Yara updated its strategic priorities, as presented on p. 15.

Our Material Topics

This report covers materiality as also presented in Yara's annual report. Material topics for financial performance are accounted for in Yara's Annual Report 2019.

Materiality has been defined according to four main areas: megatrends, key value drivers, company capabilities and position, and license to operate.

Megatrends

Megatrends constitute both risks and opportunities. They have been prioritized according to their relevance to Yara's business model, and also company ability to interact with such megatrends. These are presented in full in the Strategy, Risk and Opportunities section on p. 15 and therefore only briefly listed here.

Three megatrends are of biophysical nature: climate change, soil degradation and water stress. Four megatrends are of socioeconomic nature: dietary shifts, circular economy, food industry integration and digitalization.

Key value drivers

Nitrogen fertilizer prices: Changes in global and regional fertilizer production and capacity impact fertilizer prices and our profitability.

Natural gas prices: Hydrocarbons, mostly natural gas, are Yara's main raw material and our main cost. Affordable access to natural gas is therefore a competitive advantage, and energy price swings impact Yara's costs.

Availability of raw materials: Our fertilizer production plants depend on consistent supplies of raw materials, most notably phosphate and potash.

Food prices: Increasing food prices can support higher investments in agriculture and sustainable crop nutrition solutions.

Political drive: Political drive for climate-smart agriculture can strengthen demand for our crop nutrition solutions.

Company capabilities and position

Knowledge margin: Yara's deep understanding of crop nutrition, farmers and industrial markets allows us to sell highly profitable premium products and solutions that also benefit society.

Production reliability: Increased plant reliability is a key driver of organic growth in our production system.

Global scale and presence: We operate across six continents, in various commercial segments, and in 28 production plants and mines. Our global distribution network allows us to optimize product flows and plant inputs across geographies and adjust production volumes to match market conditions.

Infrastructure and logistics: Yara operates 200 infrastructure points across the world, and has 10,800 Yara-branded retail outlets worldwide – providing an unmatched market reach.

Human capital: We have a passionate workforce. This enables the company to take on new tasks, drive profitability, optimize productivity, and propel innovative thinking. In our markets, digital technology is making rapid progress, a trend in which Yara actively engages based on our knowledge and a diverse, talented workforce.

The Yara Brand: Our brand represents our values and the company personality. Embodying our knowledge, quality, vision, mission and values, the brand represents the trust we earn from partners, customers and suppliers.

License to operate

Health and safety: We value our employees, and safety is therefore a key priority at 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 of 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 quality review and the monitoring and handling of our products is the foundation of industry standards.

Environmental performance: Yara expects increased awareness of sustainable agricultural practices and an increasing pressure on sustainability from governments and regulations globally. Soil degradation, water stress, biodiversity loss and nutrient pollution are issues which will impact Yara's operations and value chain. Yara's strategy to become the Crop Nutrition Company for the Future responds to these trends.

Ethics and compliance: With operations in more than 60 countries and sales to about 160 countries, Yara is exposed to different cultures, traditions, labor conditions and threats. We are dedicated to responsible business conduct throughout our own operations and value chain. This means respecting recognized labor and human rights and having safeguards in place for combating corruption, and respecting laws and regulations. Responsible business conduct is crucial in earning the trust of our stakeholders and key to our success.

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.

Mining-specific topics are not material per se at a Yara Corporate level, but are a requirement for reporting in accordance with the GRI Standards as Yara operate mines.

Yara material topics	Raw materials	Manufac-turing	Marketing, shipping and storage	Application	Management approach	GRI topics
The Yara Brand	■	■	■	■	Economic, p. 35	201 Economic performance
Nitrogen fertilizer prices				■	Economic, p. 35	201 Economic performance
Natural gas prices	■				Economic, p. 35	201 Economic performance
Availability of raw materials	■				Economic, p. 35	201 Economic performance 301 Materials 308 Supplier environmental assessment 414 Supplier social assessment
Circular economy	■				Environmental, p. 37	301 Materials
Food prices			■	■	Economic, p. 35	201 Economic performance 203 Indirect economic impacts
Ethics and compliance	■	■	■	■	Ethics and compliance, p. 48	201 Economic performance 205 Anti-corruption 206 Anti-competitive behavior 410 Security practices 412 Human rights assessment
Political drive	■	■	■	■	Ethics and compliance, p. 48	205 Anti-corruption 206 Anti-competitive behavior 302 Energy 305 Emissions 307 Environmental compliance 415 Public policy 419 Socioeconomic compliance
Production reliability		■			Economic, p. 35 Environmental, p. 37	305 Emissions 201 Economic performance
Climate change	■	■	■	■	Environmental, p. 37	305 Emissions 302 Energy
Soil degradation				■	Environmental, p. 37	201 Economic performance
Water stress	■	■		■	Environmental, p. 37	305 Emissions 303 Water and effluents
Environmental performance		■		■	Environmental, p. 37	302 Energy 303 Water and effluents 304 Biodiversity 305 Emissions 306 Effluents and waste 307 Environmental compliance 413 Local communities
Health and safety	■	■	■	■	Health and safety, p. 45	403 Occupational health and safety
Product stewardship	■	■	■	■	Product steward-ship, p. 51	416 Customer health and safety 417 Marketing and labelling
Knowledge margin	■	■	■	■	Human resources, p. 42	404 Training and education 405 Diversity and equal opportunity

Yara material topics	Raw materials	Manufac-turing	Marketing, shipping and storage	Application	Management approach	GRI topics
Dietary shifts					Economic, p. 35	201 Economic performance
Food industry integration					Economic, p. 35	201 Economic performance
Digitalization					Economic, p. 35 Human resources, p. 42	201 Economic performance 404 Training and education
Human capital					Human resources, p. 42	202 Market presence 401 Employment 404 Training and education 405 Diversity and equal opportunity 406 Non-discrimination 407 Freedom of association and collec-tive bargaining 408 Child labor 409 Forced or compulsory labor
Global scale and presence					Economic, p. 35	201 Economic performance 413 Local communities
Infrastructure and logistics					Economic, p. 35	201 Economic performance 413 Local communities
Mining related					Mining, p. 54	MM Local communities MM Closure planning MM Labor management 411 Indigenous rights 413 Local communities 201 Economic performance 202 Market presence

Changes from previous reports

Yara reports according to the GRI Standards framework and the GRI Mining and Metals Sector Supplement.

Notable changes from previous reports include:
In 2018, it was agreed that Yara would acquire the minority position in the JV Galvani, while transferring two sites and one project to the previous partners. The transaction was completed in July 2019. Performance data for the previous JV has been managed as follows:

- Ethics and Compliance figures incorporate cases from the previous JV until the date of closing the deal, and full coverage of the parts of the operations which became fully owned by Yara
- Environmental data from the two sites which were transferred to Yara's previous partners in the Galvani JV are excluded from the reporting
- Health and safety: Galvani data included until the closing of the deal
- HR: Headcount is per 31 December 2019, and hence exclude parts of JV operations sold. People cases are covered by Ethics and Compliance reporting.

Yara recognizes energy and greenhouse gases (GHG) as complex reporting topics. As greenhouse gas intensity was selected as a Corporate KPI, Yara decided to improve the external assurance level for GHG and energy from a limited to a reasonable level.

Part of the process involved additional research on existing emissions parameters. Notably, one site identified errors in reporting ammonia feedstock and flaring figures, which were corrected for 2015-2018. Other sites identified errors in 2018 data as a consequence of the improved reporting process for 2019. Finally, CO_2 emissions from own electricity generation has been included from 2018 onwards.

This led to the following restatements of scope 1 GHG emissions, stated as million tonnes of CO_2 equivalents.

	Reporting year	2014	2015	2016	2017	2018
Greenhouse gas emissions from Yara production	From 2018 report:	14.7	15.2	15.4	15.1	16.6
	Restatements in current report:		15.3	15.7	14.9	17.1

*) Babrala and Cubatão included 2018 onwards. Cartagena and Galvani included 2015 onwards

Report boundaries

Consolidated data within this report covers the reporting year 2019, and reporting boundaries mainly reflect IFRS accounting principles, unless otherwise noted. For a full account of entities included in Yara's consolidated financial statements, please refer to the Yara Annual Report 2019, note 8.4.

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

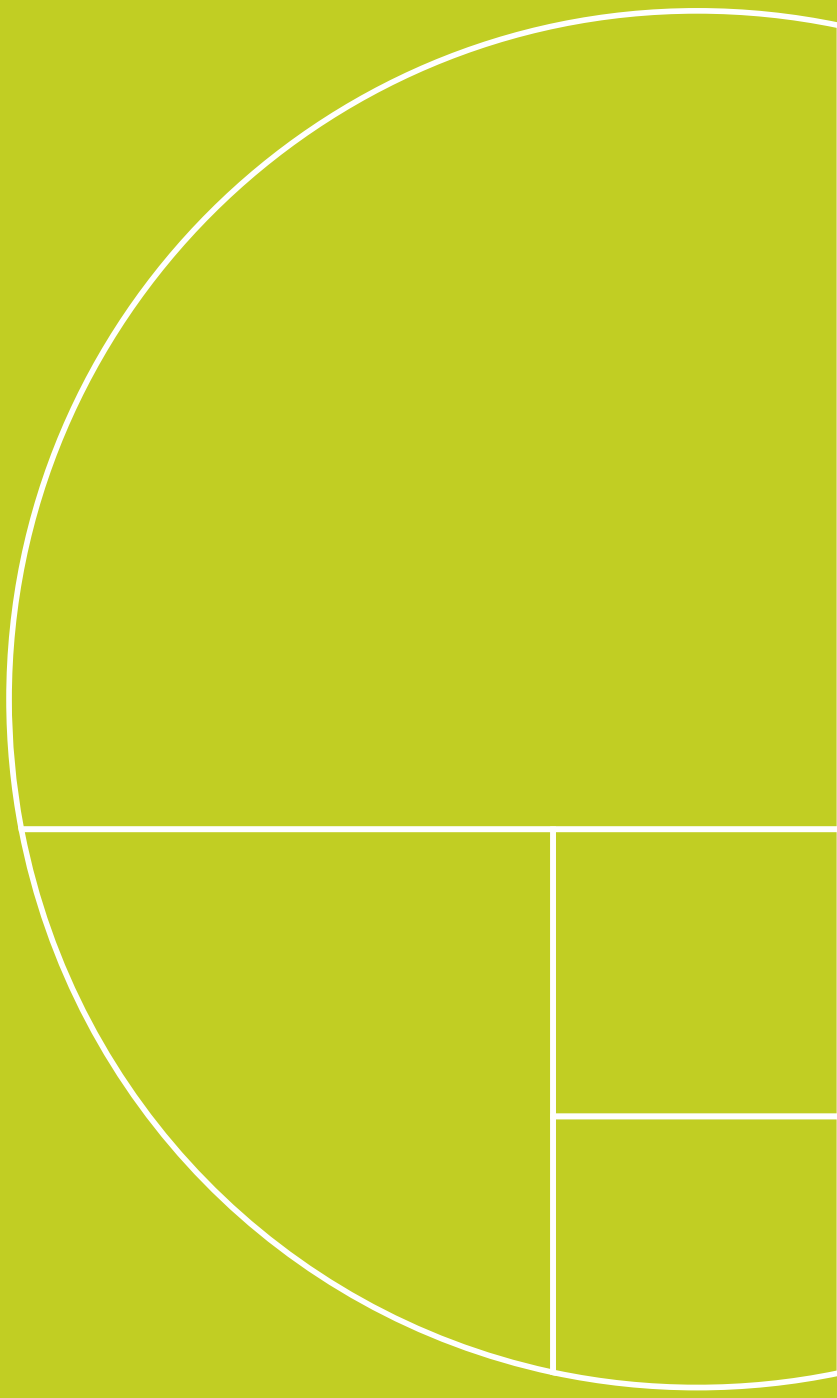
- Environmental performance data covers Yara's major chemical production and mining sites.
- Joint ventures are included where Yara is in control, according to IFRS 11 requirements. For the 2019 report this includes Yara's joint ventures in Trinidad and Pilbara, Australia.
- Labor indicators cover Yara sites with five employees or more, with the exception of cases filed through Ethics and Compliance, which cover the entire organization.

List of companies which represent special cases as of year end 2019:

Company / plant	Operational control	Covered by HESQ policy	Covered by Code of Conduct	Reported in Labor performance	Reported in E&C performance	Reported in HESQ performance	Type of ownership
Hull (UK)	No	No	No	No	No	No	Wholly owned subsidiary
Freeport (USA)	No	No	No	No	No	No	Joint operation
Pilbara Nitrates (TAN) (Australia)	Yes	Yes	Yes	Yes	Yes	Yes	Joint operation
Tringen (Trinidad)	Yes	Yes	Yes	Yes	Yes	Yes	Joint operation
Lifeco (Libya) *)	No	No	No	Headcount only	No	No	Equity-accounted investee
Qafco (Qatar)	No	No	No	No	No	No	Equity-accounted investee

*) Yara owns 50% in Libyan Norwegian Fertilizer Company ("Lifeco"), while Libya's National Oil Corporation (NOC) and the Libyan Investment Authority (LIA) each hold a 25% stake. Lifeco owns and operates two urea and two ammonia plants with nominal capacity of approximately 850,000 tons of urea and 120,000 tons of merchant ammonia per year. More than 90% of the ammonia and urea from Lifeco is exported. In 2015, Yara made an impairment write-down of its investment in Lifeco of USD 112 million, which was triggered by the worsening security outlook in Libya.

Stakeholder engagement



Stakeholder engagement

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

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

Yara engages extensively in dialogues related to major global challenges, and the correlation between 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 changing the benchmarks of the fertilizer industry, improving standards and performance. We take an active role in our industry associations and 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

At the end of 2019, Yara had 15,837 employees worldwide, of which 14,775 were employed on a permanent basis. When including Yara Marine Technologies, the Position Contractors and External Contractors, Yara's total headcount was 16,964. Yara strives for a corporate culture of openness and accessibility to senior management, engaging employees in corporate matters through several channels and surveys.

Yara values its good relationship with employees and their organizations and engages with them on a regular basis. In 2019, about 66% of Yara employees were covered by collective bargaining agreements.

Yara is committed to using feedback from employee surveys to implement improvements and keep making Yara a better and safer place to work. Therefore, we regularly run employee engagement surveys. The extensive survey done in 2017 was followed by workshops in all units in which the results were discussed, and improvement actions planned. 2018 was spent implementing and following up on these actions.

Percentage of employees covered by collective bargaining agreements

Proportion of employees covered by collective bargaining agreements (percent)	2019	2018
Africa	27.4	30.5
Asia & Oceania	14.2	8.8
Brazil (2018 including Galvani)	91.4	100.0
Europe	80.2	78.7
Latin America	6.7	6.5
North America	29.4	29.7
Yara	69.8	70,7

While Yara performed far above the global norm when it came to employee engagement in 2017, employees felt that there was room for improvement with regards to having a focus on the customer and on diversity. In 2019, one pulse survey was done for engagement and two pulse surveys were done to capture perceptions on diversity. Actions to address the raised topics will be run in 2020.

Customers

Yara has a wide range of customers worldwide, including those who use our products, distributors and agents. With agronomists working worldwide, Yara has access to deep understanding of farmers' needs and capacity to respond. We engage our customers in several ways and in a variety of 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. Customer feedback is essential to Yara's performance and continued improvement.

Food Industry
Yara collaborates with Food Industry companies both at an institutional level, such as through the WBCSD, where we promote food systems reform and climate smart agriculture, and directly in projects aiming to improve the performance of the agricultural sector.

Industry organizations
Yara is a member of several industry associations, such as the International Fertilizer Association and Fertilizers Europe. Here, Yara is engaged in the exchange of knowledge and the promotion of best practices and product stewardship. Through the associations, Yara is also engaged in high level processes involving, for example, the UN bodies.

Civil Society
Civil Society helps drive sustainability commitments and acts as agenda setters. Yara collaborates actively, both through its institutional engagement such as WEF and WBCSD, and directly e.g. through collaboration with the Norwegian NGO ZERO, Business for Nature, Cool Farm Alliance, farmer organizations and others.

Governments
Yara holds a lobby capacity in Brussels, reflecting the relative weight of its European footprint. Yara actively shares its knowledge to help inform policy making processes, including through the WEF's Global Future Council on Europe.

Academia
Yara operates under its logo slogan Knowledge Grows, signaling a strong dependency and interaction with both academic and other knowledge driven stakeholders. Yara's R&D also drives open innovation and collaboration with academic institutions to foster sustainable development and improved efficiencies.

Investors
Yara engages continuously with its owners through stock exchange releases, presentations and meetings, 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 to 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.

Yara has entered into strategic collaboration with waste management companies, such as Veolia on a global basis and others more locally, to gain access to nutrient-rich waste streams. This is part of Yara's response to the Circular Economy megatrend, positioning the company to take part in the recovered nutrient loop.

Local Communities
Trust and support from local communities is fundamental to Yara's license to operate. We aim for an open dialogue and high performance levels. Every complaint is taken seriously and handled promptly.

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). Yara is also a member of Transparency International.

We are committed to upholding 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. We apply a precautionary approach as defined in Yara's Health, Environment, Safety and Quality (HESQ) Policy.

To read the full policy, please refer to our Yara HESQ Policy web page and Code of Conduct

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 is a member of the World Business Council for Sustainable Development (WBCSD), with a specific project focus on Climate Smart Agriculture, Natural Climate Solutions, Food Reform for Sustainability and Health, as well as the Vision 2050 Refresh initiative, for which Yara hosted a CEO Roundtable discussion in Oslo examining what it will take to advance sustainable development over the next decade. Svein Tore Holsether, CEO and President of Yara, is a member of WBCSD's Executive Committee, as well as the Chair of WBCSD's Food and Nature Board. In 2019, Yara became an active member of the Business for Nature Coalition, advocating a series of policy improvements to support businesses to reduce climate and environmental impacts. Yara is also a member of the One Planet Business for Biodiversity (OP2B), hosted by WBCSD.

Engaging on the emerging topic of circular economy, Yara has also joined the European Sustainable Phosphorous Platform (ESPP), The Platform for Accelerating the Circular Economy (PACE), the European Biogas Association (EBA), the German

Association for Water, Wastewater, and Waste (DWA) and the International Water Association (IWA). Yara has also become a member of the European Biostimulants Industry Council (EBIC).

Yara is one of the two founding member companies of 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 (IFIEC), where we currently hold the Presidency. Yara has also signed up for the Global Alliance for Climate Smart Agriculture (GACSA) and holds a position in its Strategic Committee.

Through IFA, Yara is part of the International Agri-Food Network (IAFN) and the Private Sector Mechanism at the UN Committee of World Food Security (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 partner of the Water Footprint Network.

Yara is a Strategic Partner Associate of the World Economic Forum (WEF) and in 2019, was represented at WEF's Annual Meeting in Davos, at its International Business Council and Climate CEO Leaders meetings in Geneva and at WEF's Sustainable Development Impact Summit in New York, alongside the UN's COP on Climate Change. Yara is also a signatory of the WEF's Partnering Against Corruption Initiative (PACI).

Yara is a partner of the African Green Revolution Forum and supports its work on youth entrepreneurship through Generation Africa. Yara is 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.

Key concerns raised in 2019

No new significant concerns were raised at the corporate level in 2019. At a local level, communities adjacent to production facilities raised concerns regarding noise, odor and dust. In September 2019, a demonstration was held outside Yara's production facility in Brunsbüttel, Northern Germany. The demonstrators were protesting "the devastating practices and impacts of industrial agriculture."

Pardies, France

In March 2017, Yara announced its plans to close operations in Pardies, France. The operations were scheduled to cease in October 2018. Due to a significant number of employees leaving the plant, the main parts of the operations were closed in June 2018.

At the time of the announcement, the site had 85 employees. In October 2018, the official scheduled closing date, 43 employees remained on site. These remaining employees were tasked with undertaking the decommissioning of the plant. At the end of 2018, 60% of the decommissioning work was completed.
The closure process was supported by a social plan to compensate for job losses. The plan was allocated a budget to provide for a range of supportive actions. The plan fulfilled both legal requirements and agreements with trade unions. Some of the main elements in the social plan:

- 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 the plant was operating.
- Monthly alignment meetings with trade unions.
- Paid leave when searching for a new job.
- Temporary compensation if the new job had 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. At the end of December 2019, the status of employees was:

- 4 moved to other Yara sites (internal mobility)
- 9 retired
- 19 are in pre-retirement
- 2 are still working in order to supervise the decommissioning and demolition of the plant
- 51 were laid-off and only 10 are still searching for a job and are accompanied by an outplacement firm to find job opportunities or support to establish own business or training/education.

There are local monthly meetings between the local Human Resource Business Partners (HRBP) and unions to follow-up the process.

Lagamar, Brazil

The phosphate mine Lagamar, Brazil, was closed in 2018. The closure process was planned several years in advance and executed accordingly. Throughout the process consultations were held with stakeholders, including the Mayor of the municipality and public entities involved in industrial and occupational support. The mine was the second largest employer in the local community.
The closure plan was initiated with a first round of labor qualification programs stimulating employees to requalify for non-mining jobs. Twenty-one different programs were included in the process, with the program offerings also extending to relatives of employees and community members. Of the 131 employees registered at the programs' inception in 2015, 13 were registered as unemployed and 7 remained employed on the site at the end of 2019 working with phosphate.

Trinidad

In November 2019, Yara announced the closure of its wholly-owned ammonia plant in Trinidad. The Yara Trinidad plant was one of three ammonia plants operated by Yara Trinidad Ltd. The remaining two plants, Tringen I and Tringen II, are jointly owned by Yara International ASA and National Enterprises Ltd (NEL).

The plant profitability was impacted by lower ammonia prices, and in addition, negotiations with The National Gas Company of Trinidad and Tobago (NGC) had failed to reach an agreement that could sustain operations.

The plant stopped production on 3 December 2019. A total of 242 employees had positions at the plant, of which 213 in permanent positions. There have not been separations or terminations based on the production stoppage. Talks are ongoing with the recognized majority union. The employees are currently mothballing the equipment and placing all assets in a safe and environmentally acceptable position. Demolition is being contemplated with timing to be determined.

Pilbara, Australia

For Yara's plants in the Pilbara region of Australia, concerns were previously raised about the Aboriginal rock art of the Burrup Peninsula. In 2019, Yara continued partnering with scientists, heritage experts and the local Aboriginal owners. This included another partnership to monitor the rock art, as well as support for the owners in seeking World Heritage Listing for the cultural landscape. Over the three years of studies, the rock art experts have not found any indication that Yara's plants are having an impact on the rock art. In September, the Western Australian Government's Environmental Protection Authority (EPA) released a report that confirmed contemporary best practice pollution control technology has been incorporated into the Yara TAN Plant.

Stakeholder engagement in 2019

Food systems transformation

Yara is involved in multiple dialogues on the systemic changes in how food is grown and delivered. Yara believes that through transitioning to regenerative agricultural approaches, food systems can support the demand for food without driving land expansion, thereby substantially reducing GHG emissions and supporting farming economy through resource optimization. Land management, including restorative growth, has a potential to become a carbon sink, making the agriculture and forestry sectors part of the climate solution.

In 2019, Yara took an active role in accelerating the transformation of food systems, including participation in World Economic Forum meetings, and through thought leadership contributions. Additionally, Yara promoted the WBCSD's CEO Guide to Food System Transformation, outlining clear actions for business to take in the next decade to achieve healthy people and a healthy planet. Yara was also represented at regional and global Food Systems Dialogues (FSDs), including at the EAT Forum, to discuss food systems policies and economics, science-based targets and pathways, the potential for innovation, and the inclusive approach required for a just transition. In September, Yara advocated for the ten critical transitions to transform food and land use in the Food and Land Use Coalition's *Growing Better* Report at numerous stakeholder meetings.

Yara recognizes the critical role of the next generation in the transition, and in 2019 promoted youth entrepreneurship at Generation Africa's GoGettaz Agripreneur Prize awarded at the Africa Green Revolution Forum in September, and further at the FAO's CFS Private Sector Mechanism meetings in Rome.

Climate Engagement

Yara remains part of the WBCSD Climate Smart Agriculture working group, which has been instrumental in developing definitions and metrics in support of making farm management practices more climate smart and resilient.

It is Yara's aim that having better sustainability performance should provide an advantage in the market. Following this logic, Yara is both a member and a sponsor of the True Cost of Food work in WBCSD. This includes a collaboration with Oxford University on measuring and valuing externalities from agriculture and the food system, a private sector guidance document and investor dialogues.

Yara's CEO is part of the CEO Climate Leaders group in WEF, which aims to be at the forefront, boosting ambition and accelerating action amongst the private sector companies. The group met in Davos in January 2020 and Geneva in August 2019, agreeing to take lead on net zero commitments and communicate effectively. Leadership and decisive action were seen as crucial in the run up to COP26 and 2020, as the critical milestones in addressing the climate emergency.

Also through WBCSD, Yara participates in discussions on Natural Climate Solutions. Thematically linked to regenerative growth, this work aims at linking climate finance to effective solutions based on making nature a carbon sink. Through this workstream, Yara is also involved in the global update process of the GHG Protocol, preparing for how to incorporate such carbon sinks into reporting.

Linked to Yara's green ammonia pilot projects in Porsgrunn, Norway and Pilbara, Australia, we have established a collaboration with the Swedish agro-company Lantmännen. In September 2019 we launched our joint ambition of establishing a fossil fuel free value chain of food, providing consumers with climate smart choices in the food store.

In May 2019, Yara took part in the annual meeting of the Tropical Forest Alliance, also partaking in discussions on a jurisdictional approach of safeguarding forests. This conversation was carried forward also at the COP25 in Madrid, Spain, where the climate finance and Natural Climate Solutions work was linked to the forestry agenda. Yara takes the position that future needs for food and other agricultural produce can be met on existing farmland, with the added opportunity to restore degraded lands either back into productive use or for reforestation.

Throughout 2019, Yara participated in the Koronivia dialogue, which is the UNFCCC process of engaging the agricultural sector in climate negotiations. Set up as multistakeholder workshops, this process discusses one theme at a time. At the COP25, nutrient and manure management was covered, and Yara made an intervention calling for balanced nutrition, a farmer-centric approach and urging collaboration across sectors to leverage private sector expertise as well.

At the 74th Session of the UN General Assembly and Climate Summit in New York in September 2019, Yara engaged in multiple side events to advocate for and activate the potential of food systems as sustainable transformative pathways to accelerate progress toward the Sustainable Development Goals (SDGs) and climate action. In line with the IPCC Report on *Climate Change and Land*, Yara recognizes that to achieve the SDGs and the Paris Agreement, all stakeholders must work together to change behaviors as we enter the "decade of action and delivery" of the 2030 Agenda.

Being aware that emissions of N_2O from the field represent the largest emissions throughout the life cycle of sourcing, producing, transporting and using crop nutrients, we are also investing resources into R&D to better understand and mitigate such emissions. In 2019 this work was strengthened through a R&D partnership with Irish Teagasc. Here, we will do research to add more data about the formation of these emissions, aiming to identify which conditions may trigger emissions. Yara's ultimate goal is to provide solutions which minimize losses of N as N_2O from the field.

In October Yara was one of the key private sector representatives at the 5th Global Science Conference on Climate Smart Agriculture. Yara addressed digital solutions, smallholder engagement and Natural Climate Solutions as some of the key solution areas for scaling up CSA.

Regenerative agriculture and soil health

At the UN Climate Action Summit in September 2019, Yara joined One Planet Business for Biodiversity (OP2B), a cross-sectorial, action-oriented business coalition on biodiversity with a specific focus on scaling up regenerative agricultural practices. The coalition works to drive systemic change and accelerate concrete projects to protect and restore cultivated and natural biodiversity within value chains, engage institutional and financial decision-makers, and develop and promote policy recommendations in the CBD COP 15 framework. As OP2B develops tangible projects to improve soil health, nutrient use efficiency and the transition to regenerative agricultural practices, Yara is well-positioned to share knowledge, on-farm tools and solutions in the implementation of the transition.

Yara CEO is also one of the WEF's Champions for Nature committed to an ambitious and integrated agenda to halt nature loss. Yara recognizes that a failure to do so has tangible economic impacts: for example, the negative impacts of land degradation are estimated as high as 5% of total GDP in some countries, and the societal losses from soil degradation are estimated to be $100 billion per year. Yara has also taken an active role in the Business of Nature Coalition, raising ambitions globally to reflect nature's critical role as the infrastructure that underpins humanity's prosperity and existence.

Sustainability in the Nordics

Yara is part of the Nordic CEOs for a Sustainable Future, a group of 14 companies working to incorporate the UN sustainable development goals in their respective business strategies. The CEOs met with the Prime Ministers of Iceland, Norway, Sweden, Denmark and Finland at the Nordic Prime Ministers` meeting in Reykjavik in August 2019.

Yara is a founding partner of The Xynteo Exchange – an annual conference bringing stakeholders from the business community, governments and civil society together in dialogue to "reinvent growth". Around 85 people participated in a two-day innovation workshop with the aim of finding commercial solutions to problems facing humanity.

Improving practices

Yara is committed to the CAP reform in the EU with the specific aim of embedding environmental aspects into the agricultural policy. Yara supported the eco-scheme for being in line with the European Commission's ambition of moving to a "smarter, simpler, fairer and more sustainable" CAP.

Yara's main approach is built on our balanced crop nutrition strategy. Leveraging quality products, knowledge and solutions for the right application, minimizing input whilst maximizing output is a winning strategy from both an economic and an ecological perspective.

A drive towards improved resource use efficiency, while protecting the farmers' economic interests and the environment, can also help address issues of overshooting the ammonia emissions targets which many EU countries are facing. Applying the right form of mineral fertilizers could generate a reduction of more than 10% of the total ammonia emissions in Europe.

Yara also welcomes the initiatives in the CAP post 2020 taken by the EU Commission and Member States to support and mainstream the use of FaST (Farming Sustainability Tools) and the development of FAS (Farm Advisory Services), increasing the knowledge transfer and digitization of EU agriculture, all to the benefit of both the EU environment and its society.

Yara remains committed to the dissemination of information and knowledge through direct contact with key stakeholders and through collaboration with the Euractiv and Politico platforms.
Emphasizing Yara's focus on reducing emissions, Yara was main sponsor at the ZERO Conference in Oslo, the primary event of the Norwegian climate NGO ZERO, featuring digital farming tools that will improve the sustainability of farming.

Customers

Our business units ran several satisfaction surveys in their respective markets throughout 2019. Phone interviews, a central component of many of the surveys, were used to get feedback from farmers, other customers and distributors on order handling, delivery, service and product quality. We also ran local Sales & Marketing specific initiatives, such as online surveys, focus groups, social media engagement, crop clinics, field days, demonstration trials, training sessions, tradeshows, customer phone calls upon delivery of our products and participation in farmer meetings, to collect feedback.
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. The complaints

are handled according to procedure to analyze and solve the issues. All complaints are logged and we follow-up and investigate individual complaints based on root cause analysis. Some of the other topics raised in our surveys and through our engagement with farmers, other customers and distributors in 2019 include:

For smallholder farmers:

- Credit: lack of capital result in high dependency on credit
- Knowledge of product: lack of product knowledge results in dependency on other stakeholders for product knowledge
- Advisory: lack of an advisory network

In the professional market:

- Price
- The next two vary by region from availability to financing/ terms to shipping options.

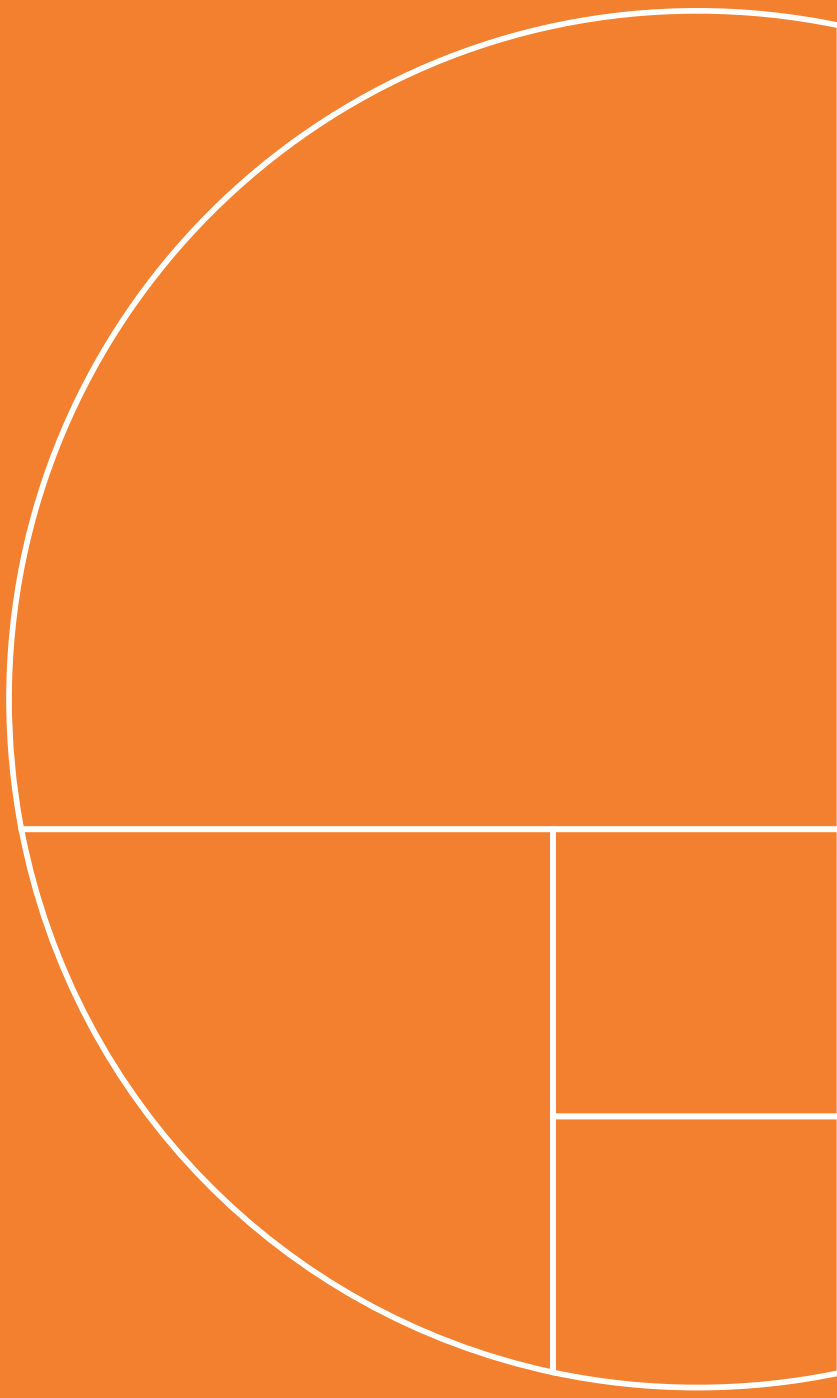
Every third year, Yara conducts a global brand survey to assess brand awareness. The survey also helps us understand our customers preferences in seeking out information about our company, products and solutions.

Norway

To improve Yara's company positioning, we completed a significant awareness building campaign in 2019 among key stakeholders as well as the general public. Through advertising, visible sponsoring positions at multiple events and active collaborations we accomplished our objective, raising the awareness and improving the reputation of the Yara brand.

Not only was Yara recognized by Brand Finance as having the largest growth of brand value in Norway from 2018 to 2019, but the company was able to reach the majority of its 5-year brand and reputation metrics in just 18 months.
The campaign firmly positioned Yara as a global company helping to responsibly feed the world and protect the planet among both the general public and business-to-business stakeholders. Both reputation and awareness metrics are currently registering all-time record highs for Yara.

Governance



Governance

Guided by our mission – to responsibly feed the world and protect the planet – we integrate sustainability in every decision we make and everything we do.

Governing bodies

According to Norwegian corporate law, the President and CEO constitutes a formal corporate body. The President and CEO is responsible for the day-to-day management of the company. At Yara, the division of functions and responsibilities has been defined in greater detail in the Rules of Procedures established by the board, which 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 the 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. At year-end 2019, Yara's Executive Management Team consisted of eight members: three were female and two were non-Norwegians (Brazilian and Chilean).

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 a yearly evaluation of its work and procedures.

The Yara board consists of 11 members, of whom seven are elected by the shareholders, and four are elected by and among the employees. Five Board members are female, and six are male. At year-end 2019, females represented 22% of Yara's workforce and held 20% of the top critical management positions.

Corporate functions

Global Initiatives and Corporate affairs

Yara stakeholder engagement and positioning work is led by the Global Initiatives and 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 of the function is to align Yara's external relations and strategy, also positioning the company as a driver for sustainability.

Corporate Human Resources (HR)

Yara's Corporate HR function is responsible for executing the People and Organizational response to Yara's Business Strategy. The Corporate HR organization consists of three central HR teams responsible for compensation & benefits, talent & leadership and HR governance & 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 People & Global Functions.

Health, Environment, Safety and Quality

Yara's HESQ function maximizes value creation for Yara by ensuring that the company operates to industry-leading standards related to occupational health and safety, process safety, environment, quality, product stewardship, security and emergency management and preparedness. Protecting all employees, contractors and stakeholders involved in the life cycle of our plants and our products is a prerequisite for achieving a sustainable operation. The Head of Corporate HESQ reports to EVP People & Global Functions and presents reports to the full Board of Directors and Board's Audit Committee at least once per year.

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.

Ethics and Compliance

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 corruption, fraud, human rights and Business Partner integrity. Ethics training of employees is among the key performance indicators (KPIs) followed by Yara's Board of Directors. The Chief Compliance Officer reports administratively to Yara's General Counsel, twice annually to the Board of Directors, the Audit Committee quarterly and to the CEO monthly (or on an ad hoc basis, as necessary) on matters relating to ethics and compliance, including human rights and corruption.

Yara has a Compliance Committee which is chaired by the CEO and attended by the members of Yara's Executive Management. The Compliance Committee meets quarterly and acts as a focal point for matters related to ethics and compliance.

The central department is supported by a team of full-time Regional Compliance Managers who are embedded into the business and tasked with the day to day implementation of the Compliance Program. The Chief Compliance Officer reports to the General Counsel and the Board of Directors twice a year and to the Board's Audit Committee quarterly.

Sustainability governance

Yara's VP Sustainability Governance reports to the CFO and owns the non-financial reporting processes. This work is closely aligned with the Company Performance and Risk function, which oversees key parameters on strategy implementation, risk processes and other core business processes such as the business planning process.

Sustainability network

Yara has established a Sustainability Network, previously named the ESG Committee, which is responsible for ensuring that we have clearly established accountability, processes and systems in place for our ESG performance indicators. The Committee includes representatives from our corporate functions Sustainability, Health, Environment, Safety and Quality, Human Resources, Ethics and Compliance, Communications & Brand and Enterprise Risk Management as well as representatives from the operating segments.

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 2019. Linked to Yara's establishment of carbon intensity as a corporate KPI on the company scorecard, and the complexity of the energy and GHG reporting, Yara has chosen to increase the level of assurance on GHG and energy reporting to a reasonable assurance level.

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 2019.

GRI Content Index

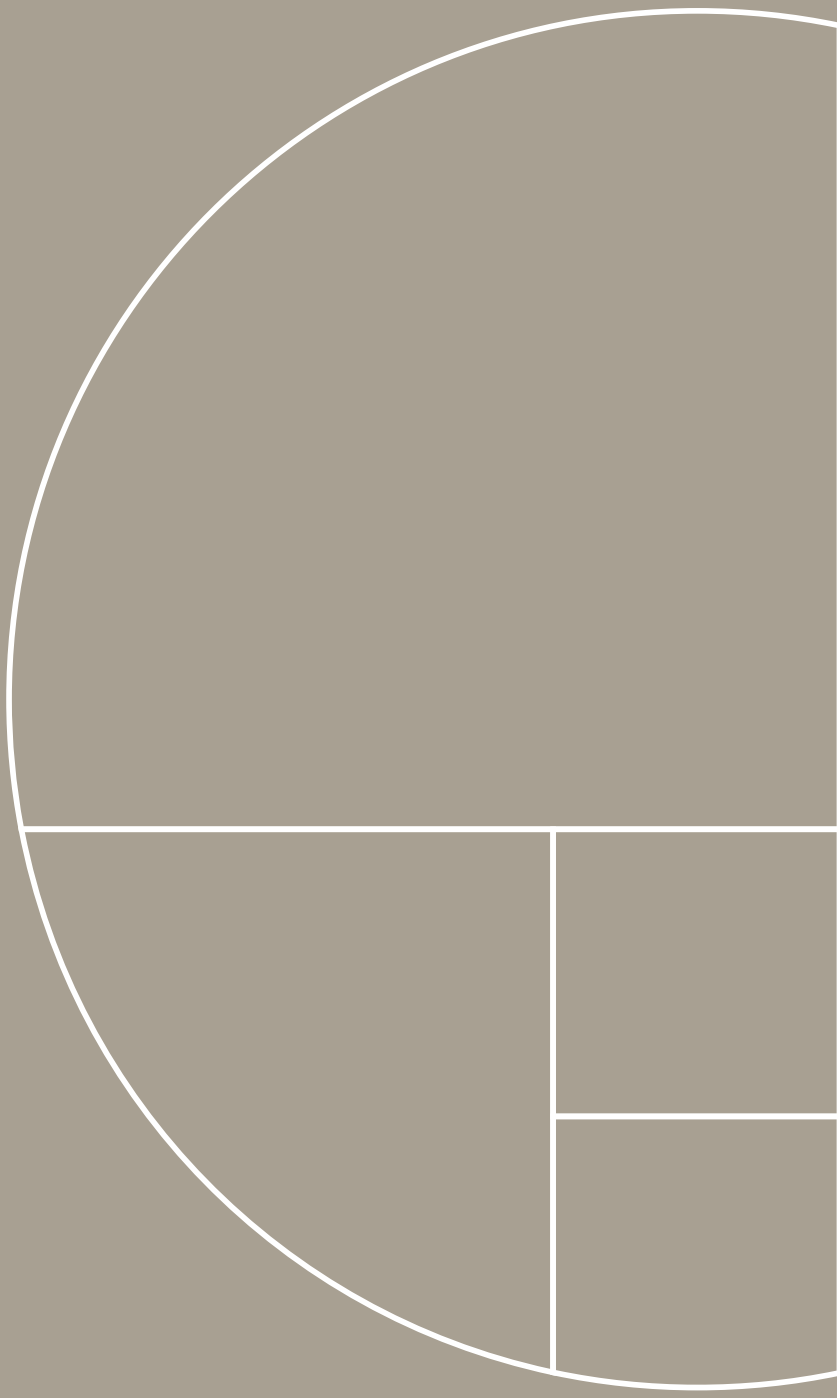
The GRI Content Index is published on yara.com: GRI Content Index

Previous reports are available in the Sustainability section of our website yara.com

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

Bernhard Stormyr
VP Sustainability Governance
bernhard.stormyr@yara.com

Management approach



Economic management approach

Materiality

Our corporate strategy to be the Crop Nutrition Company for the Future is based on profitable and sustainable growth. Our strategy is to focus on three areas: advancing operational excellence, creating scalable solutions and driving innovative growth. This will deliver attractive returns to our shareholders, create value for farmers, preserve nature and help to feed the growing population.

This belief is reflected in our vision: *A collaborative society; a world without hunger; a planet respected*. Through our core business, operations and offerings, Yara is able to respond to global challenges. We develop knowledge and solutions that support increased yields and better-quality crops, with less waste and a lower environmental impact.

Financially, our ambition is to have at least 10% ROIC (Return on Invested Capital) throughout the industry cycle. Our three-part strategy is expected to contribute to this aim.

Operational excellence is driven by the Yara Improvement Program (YIP 2.0), launched at the Capital Markets day 2019. YIP 2.0 is focused on improving the reliability and energy efficiency of our production plants, delivering savings in procurement activities, maintaining a flat level of fixed costs and optimizing working capital. These ambitions are addressing the core of our operational performance, they will drive efficiency in organization and bring EBITDA improvements.

Another component of operational excellence is focused on improving carbon intensity. Yara is engaged in projects that will reduce our carbon footprint and increase both the energy efficiency and profitability of our production plants.

A key element of Yara's strategy is to increase the share of premium product sales and provide agronomical advice, driving increased resource efficiency and improved environmental performance within the food value chain. Over time, Yara expects that fertilizer demand growth will be reduced due in part to improved nutrient use efficiency. Although such a development represents a challenge for commodity fertilizer producers, it creates a competitive landscape where Yara's knowledge, premium products and solutions are strongly positioned to compete. Yara will focus more on developing scalable solutions for farmers, using specialized products and digital tools.

Collaboration throughout the food value chain is necessary to improve transparency and environmental performance in the food industry. Yara collaborates with global food chains to apply knowledge and deliver the best crop nutrition solutions for relevant crops.

Yara is also developing solutions for decarbonizing our plants and a circular economy approach to the production of fertilizers. Together with the creation of digital tools for farmers, these activities represent a basis for growth through innovation.

By performing the strategic priorities described above, Yara's business model is well positioned to deliver competitive, high-value crop nutrition solutions that represent a strong business approach for future needs.

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

Yara material topic	GRI topic	GRI disclosures
The Yara Brand Availability of raw materials Nitrogen fertilizer prices Natural gas prices Food Prices Climate change Human capital Global scale and presence Infrastructure and logistics Food industry integration Digitalization Dietary shifts	201 Economic performance	201-1, 201-2, 201-3
Ethics and compliance	205 Anti-corruption 206 Anti-competitive behavior	205-1, 205-2 205-3, 206-1

Management approach

Policies and commitments

Yara's ability to create shareholder value is based on economic performance and maintaining a sound financial capacity. We target a BBB credit rating from Standard & Poor's. In 2019, Yara issued a new capital allocation policy, where the focus on financial solidity was strengthened by the addition of a target level for net Debt/EBITDA as a basis for capital allocation. Targeted capital structure is a mid-to long-term net debt/EBITDA range of 1.5-2.0 and a net debt/equity ratio below 0.60. Reference to these specific metrics shall, on one side, strengthen the focus on prudent capital allocation and, at the same time, allow for additional shareholder distribution when relevant.

For a full account of our dividend policy and financial performance, please refer to the Yara Annual Report 2019 available on our Investor Relations website.

Yara is committed to serving all shareholders and potential investors with the consistent, open and prompt disclosure of relevant information. All material new information is first published to the stock exchange and Yara's web pages, and Yara will provide a consistent level of information regardless of whether the news is positive or negative.

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 emphasizing the importance of an open dialogue about the generation and allocation of wealth from natural resources. 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 2019 country-by-country report, please refer to our Investor Relations website.

Responsibilities

Accountability for performance lies in the operating business segments. Further details of responsibilities are found in the Governance and Corporate Functions section, page 32.

Yara's Corporate Performance and Risk department is responsible for governance within performance management, including business planning, performance reviews and reviews of strategic and investment projects.

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 manner consistent 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

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. 48.

Evaluation

Yara is experiencing an increased 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, reviews 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 2019, please refer to the Yara Annual Report 2019.

Environmental management approach

Materiality

Yara's new corporate strategy has an increased environmental focus, which is in line with the company's mission to *Protect the planet*. Future opportunities lie in focusing on sustainability and the environment. Because the environmental regulatory framework is becoming continuously more complex and demanding, Yara's operations and products are exposed to increasing challenges.

While agriculture is the solution to the increasing global demand for food, it causes significant GHG emissions. We therefore strive to reduce the environmental footprint of our operations, while at the same time develop and deliver solutions and knowledge that achieve sustainable intensification of crop production worldwide.

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

Yara material topic	GRI topic	GRI disclosures
Climate change Political drive	305 Emissions	305-1, 305-2, 305-3, 305-4, 305-5
Natural gas prices Production reliability	302 Energy	302-1, 302-3
Environmental performance Water stress Mining related	301 Materials	301-1
	303 Water & Effluents	303-1, 303-2, 303-3, 303-4, 303-5
	304 Biodiversity	304-2, MM1, MM2
	305 Emissions	305-7
	306 Effluents and waste	306-2, 306-3, MM3
	307 Environmental compliance	307-1
	308 Supplier environmental and related disclosures	308-1, 308-2

Management approach

Policies and commitments

Key principles of Yara's environmental policy are described in the HESQ policy (latest version April 2019) and in the Code of Conduct (latest version January 2020), both approved by the Yara CEO and available on our website yara.com.

Yara has been a UN Global Compact CEO Water Mandate signatory since July 2014 and is an active participant in the Water Footprint Network. We engage with private and public partners in a number of projects to improve water stewardship both within our own operations and in agriculture to help achieve the UN Sustainable Developments Goals.

Yara strives to be best in class compared to industry peers and is committed to promoting the highest standards of environmental responsibility. Yara has a low appetite for risk relating to the degradation of the environment resulting from our operations or products. Yara aims for the highest environmental standards and best available technologies and strives to be a leader in developing and advocating sustainable approaches.

Yara is committed to complying with all applicable laws, rules, and regulations in the countries in which we operate. We follow the strictest standards when making decisions, whether they be local or international laws and regulations, Yara's policies and procedures, or our Code of Conduct. We monitor compliance and assess risks in order to fully adhere to changing and stricter environmental laws and regulations and engage with stakeholders to find new solutions to satisfy their needs.

Yara uses a precautionary approach to identify risks and take preventive measures to mitigate the potential harm to people and the environment and searches for resource optimization opportunities.

Yara is implementing a corporate-wide environmental management system according to the ISO 14001 standard, as well as the Quality Management System (ISO 9001) and the Occupational Health and Safety management system (ISO 45001). In 2020, Yara will obtain a corporate ISO certificate for these standards. To increase environmental awareness and enable the mitigation of risk as well as ensuring the timely management of performance issues, Yara has rolled-out relevant steering documents, improved reporting practices and carried out consistent risk assessments. Major environmental risks are included in the Enterprise Risk Management process as a part of business planning and strategy development.

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. The 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, barring a major accident.

To ensure that the full fertilizer life cycle is responsibly managed, we have implemented externally certified Product Stewardship programs throughout our operations. For further details, please refer to the Product Stewardship and Chemical Compliance section, p. 52.

Suppliers are screened through a company-wide Integrity Due Diligence (IDD) process. 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 section.

Yara publishes company positions on key sustainability topics related to fertilizers and agriculture, such as agriculture and climate change, water use efficiency and circular economy. To explore the opinion papers, please refer to the Our opinions web page.

Goals and targets

Ambitions and goals	Targets	Actions	Achievements in 2019
Climate change and Natural gas prices			
Climate neutrality by 2050	Reduce greenhouse gas emission intensity with 10% by 2025	Sources and improvement opportunities were systematically assessed during 2018-2019. A site-level roadmap was created. Project costs and investments have been included in the business plan 2020 onwards.	All ammonia plants and nitric acid plants (major contributors to Yara's GHG emissions) have set GHG targets up to 2025. 70% of nitric acid plants and 85% of ammonia plants have identified projects for reducing their emissions. More than 60 projects have been identified, the expected CAPEX in the range of 200-450 MUSD. See performance section, GRI 305 Greenhouse gases their emissions.
	Establish flagship projects enabling scale-up of green ammonia technology	Setup a pipeline of projects at Yara's production sites to make them hybrid as a first stage (partially natural gas, partially renewable)	Unit set up to materialize the projects (BU Climate Neutral Solutions) Two publicly announced green hydrogen projects ongoing: - Feasibility study with Engie in Australia - Partnership with NEL in Norway Both have the total size of >10MW, being amongst the world's largest green hydrogen initiatives A project established with Lantmännen to use the knowledge and products from these projects for the world's first fossil free food value chain
Energy efficient production plants	Reduce energy consumption at the ammonia plants 5% by 2025	Attain energy management system certification (ISO 50001) for all major production sites	6 of 20 sites certified by end of 2019 10 more planned in 2020, and the remaining ones by end of 2022.
		Continually reduce energy consumption in our plants by energy efficiency programs and by improving plant reliability in ammonia plants.	Energy efficiency diagnostics have been executed in our plant in Cubatao, Brazil. Community of Practice for Energy has been launched with the objective of increasing energy awareness and capabilities; sharing knowledge and experiences across the operation plants. See performance section, GRI 302 Energy.
		Drive energy efficiency at the production sites with the help of digital solutions	New unit *Digital Production* established. Advanced Process Controls and new tools to support operators at the control rooms are under implementation, showing promising potential to improve energy efficiency.

Resources and the environment			
Reduce global resource depletion, nutrient losses and emissions to water	Business development for nutrient recycling in agriculture & food production chain	Develop business driven solutions to use recovered materials, in agriculture, as sources of N, P and K	Launch of a new fertilizer certified for organic farming in the Finnish market. Finalized commercial agreement to promote Organic Fertilizer in Italy as part of the Yara product portfolio.
		Source sustainable raw materials for Yara production	Research on use of P ashes as secondary raw material for NPK production. Laboratory tests successful Finalized negotiation to secure secondary P source as DCP for Yara Montoir.
	Create partnerships and new business models to enable a more circular agriculture	Engage in strategic partnerships across the agri-food value chain	Progressed strategic partnership with Veolia. Collaboration for N recovery from compost emissions valorized into sodium nitrate grade as Nutriox solutions. Two ongoing projects with Veolia on joint business solutions for closing the nutrient loop. Yara is a core partner of the Ellen MacArthur Foundation (EMF) Food Initiative. Nutrient Upcycling Alliance (NUA) launched with Veolia, bringing together all value chain partners to valorize food waste and redesign the agri-food system in the peri-urban agricultural area. Identified London as first pilot to prove the concept. The EMF provides Veolia and Yara with circular economy knowledge to support the development of the NUA.
		Participate in joint research initiatives and develop new solutions to optimize the reuse of nutrients for agriculture	Involvement in multiple H2020 projects, collaborating on solutions to recover nutrients from waste water, manure and food waste.
	Grow premium product volumes (Yara Vita): >100 million units of YaraVita sales by 2025	Boost crop performance by specific and accurate nutrient mix.	55% growth since 2015, 25% growth from 2018 to 2019
Improve air quality by offering solutions to reduce emissions	Strengthen Yara's position as the global market leader for emissions abatement for NOx, SOx and other relevant pollutants		1.7 mtons of NOx reduced by Yara's AdBlue solutions and NoxCare in 2019.
The Yara Brand			
Environmental compliance	Zero high severity environmental incidents	Tools updated and guidance given to ensure consistent reporting	Zero
	Reduce number of permit and regulatory breaches	KPI set for breaches	Developed a guideline to assist with consistent reporting of breaches across all sites. A reduction target will be set in 2021.
	Environmental management systems	One Yara-level ISO14001 certificate by end of 2020	Production segment and 20/28 production units certified. Remaining production units to be certified by end of 2020. One Yara -certificate covering all business segments and relevant corporate functions ongoing – 70 corporate, segment and local units will be audited in 2020.

Responsibilities and resources

Business units at all levels are accountable for the environmental performance of their operations, for compliance with legal and statutory requirements, and for requirements outlined in the Yara Steering System. Segments and production units have dedicated HESQ resources supporting the implementation and monitoring of environmental performance. Units report their environmental performance, identified risks and compliance breaches up in the line organization. Yara headquarters is responsible for providing transparent and timely information to the public.

The Corporate HESQ organization holds responsibility for corporate governance, reporting and follow-up of overall environmental performance and compliance and supports the units by providing central HESQ expertise and common tools. Corporate HESQ is the owner of the management system certification processes and defines processes and standards in the Yara Steering system platform. HESQ runs frequent internal audits to all units to ensure compliance and continuous improvement.

The Head of Corporate HESQ reports to the EVP People & Global Functions, presents reports to the Board of Directors and Board's Audit Committee and has organizational responsibility for ensuring that appropriate environmental governance is in place over the whole of the company. Yara's Board of Directors ensures that policies and steering documents are in place, and is frequently informed about environmental governance, liabilities and risks.

Grievance mechanisms

Yara uses several channels to collect feedback from internal and external stakeholders related to environmental impacts, compliance and expectations. Each case is reported, analyzed and a reply sent back to the initiator. Corrective and preventive actions are considered and implemented 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.

Incident reporting system

Yara has a company-wide system in place for the 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. 48.

Twelve (12) Yara sites received environmental grievances from neighbors or other stakeholders during 2019. A total of 135 environmental complaints and concerns were reported in 2019, fewer than the 165 reported in 2018. The cases were all addressed and investigated, and 96% of them were closed during the year. The cases were typically individual concerns raised by neighbors related to noise and dust.

Potential liabilities due to environmental issues are described in Yara's annual report in Note 5.6

Projects and programs

Climate change and Energy

Yara focuses on energy efficiency and reducing GHG emissions. In fertilizer production, our focus is on optimizing the use of natural gas. Almost 90% of Yara's energy consumption and 80% of direct GHG emissions are related to ammonia production. We continuously monitor the energy efficiency of the units, with specific energy and GHG reduction KPIs for each plant, and regularly perform internal and external benchmarking. European nitric acid and ammonia plants are covered by the European Trading System (EU ETS). Energy efficiency diagnostics and audits are carried out resulting in systematic improvement actions. Yara is in a process to cover all main sites with an Energy Management certificate (ISO 50001). A new Yara business unit, Digital Production, established in 2019, will drive energy efficiency with the help of digital solutions.

Yara's most significant initiative to reduce GHG emissions so far is the development and installation of N_2O catalyst technology at its nitric acid plants. This technology removes about 90% of the N_2O 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 its 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.

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 through the recently established Circular Economy

business unit, Yara is exploring opportunities to do so. Today, we consider our work to improve agricultural productivity and nutrient efficiency as our main contribution to better resource management. This combines environmental stewardship with profitable farming and the promotion of prosperity for local communities.

Farming for Generations: Together with seven other agricultural sector leaders, Yara started a global collaboration in 2019 to support dairy farmers' adoption of regenerative agricultural practices that preserve and renew our planet's resources, respect animal welfare and ensure the long-term economic viability of farms.

Water

Water is essential in the fertilizer production process, but it is primarily used for cooling and, to a lesser extent, in steam production and manufacturing processes, which means that most of the water withdrawn is returned to the source unpolluted.

Compliance with statutory requirements and permits is a minimum expectation for any operation. The discharges to water from Yara's production are mainly nitrogen and phosphate. The control of emissions complies with each site's environmental permits and is continuously monitored and reported to the local environmental authorities.

The impact of water use during the manufacturing of fertilizer is minor compared to the in-the-field use phase. Agricultural practices hold significant potential for better water management and improved water use efficiency. Yara's largest opportunity for contributing to solving the global water challenges occurs in the fields, at the hands of farmers across the world. Consequently, our primary focus is on our downstream operations and value chain engagement. Yara engages with farmers and partners along our value chain to share knowledge and collaborate on projects seeking to sustainably intensify agricultural production, including through better water management.

Our Research & Development activities show that nutrient supply should be adapted to the availability of water in order to maximize crop water productivity. We continue to investigate and quantify the effects of crop nutrition on water use efficiency through agronomic trials, and to bring this knowledge to growers across the world. 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. Furthermore, we have helped develop methods for reducing emissions derived from the use of mineral fertilizer, including runoff into waterways.

The sites continue to work together with local communities and other stakeholders to discuss water quality and address water risks and issues. This includes for instance flooding emergency procedures, risks related to rivers providing the main water supply and improvements in sanitary water treatment systems

Environmental risk and compliance

To mitigate environmental risks and liabilities by better awareness, Yara is running a corporate-wide Environmental Risk Assessment project covering

- environmental aspects and impacts
- environmental liabilities
- water stress and
- climate change

In 2019, environmental liability risks were assessed for 47 active and closed chemical production sites, mines and 61 bulk terminals and warehouses. Operating standards and guidance for environmental management systems was rolled out and audited. Water stress risk was assessed for active production sites. Three sites were identified as extremely high or high risk, and a detailed assessment will be carried out for those.

The Enterprise Risk Management framework was reviewed to better represent major HES risk categories. Appetite for environmental risk was defined, setting the acceptance of environmental risk at a low level. The assessment includes accidental pollution, damage to soil, groundwater or natural values, and natural disaster or extreme weather. Climate risk assessment is included in business plan 2020.

Evaluation

The effectiveness of Yara's environmental management is evaluated frequently both internally (e.g. by Yara Internal Risk and Audit and Corporate HESQ) and by third parties (e.g. ISO Certification, GRI verification). Improvement actions are taken based on the feedback.

Internal HESQ audits conducted in 2019 revealed some individual gaps in the Environmental Management requirements, mainly related to the identification of stakeholders' requirements, environmental aspects and risks in the Sales & Marketing units. Local action plans have been created with the support from Corporate HESQ to ensure the right level of risk awareness at the smaller units to remediate the gaps.

Third party environmental management certification and follow-up audits (ISO 14001) identified positive indications around the implementation of a life cycle approach to environmental performance. They also identified improvements required for rolling out environmental objectives at regional or site level. Such target setting was continued by building a roadmap for greenhouse gas reduction, setting a compliance KPI and improving risk awareness, see previous sections for *Goals and targets* and *Projects and Programs*.

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 that knowledge margin has been identified as a core competitive edge and a materially important topic. Attracting and retaining the right talent 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 of *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 Organizational response sets the direction for the management and development of people across Yara. Fully aligned with Yara's business strategy, this response links Yara's mission, vision and values, our HESQ policies and Ethics and Compliance, and our people systems and processes. To further realign this response, Yara has initiated a People Strategy project to be completed within 2020, aimed at identifying the Programs and processes to improve human performance and deliver on the corporate strategy.

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, Human capital	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 developing a culture of continuous improvement and productivity, which includes enhancing our understanding of the full concept of Diversity & Inclusion. Collaboration is one of Yara's four company values and true collaboration can only happen when you embrace diversity and foster a culture of inclusion and respect.

Yara is committed to promoting equal opportunities and fighting discrimination. A diversified employee base is a key success factor and provides abundant opportunities to add value to our company. Diversity & Inclusion is firmly anchored in Yara's business strategy and driving equality and diversity through an engaged and respected workforce. While our main ambition is to increase the proportion of women in Yara in general and particularly in senior management positions, we also focus on other aspects of diversity in key human resources processes like recruitment, performance management, employee development and succession planning.

Yara's ultimate goals of Diversity & Inclusion are

- contributing to the greater good of society and to a world which is respectful of individuals and their similarities and differences
- improving our organizational performance

The company aims to

- secure equal career opportunities, equal pay and work-life integration
- ensure a diverse workforce and leadership, representing the markets we sell to and operate in
- create a collaborative and inclusive work environment in which employees feel valued for their uniqueness and safe to be themselves
- influence our partners and become a valuable D&I discussion participant to external stakeholders

The chemical industry has traditionally been a male dominated field, 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.

Yara has the ambition of having at least 20% women in senior management positions by 2020 and a minimum of 25% by 2025. During 2018 and 2019, we ran seven regional development programs for emerging female leaders. At the end of 2019, Yara had 22% female employees, 20% female line managers, and 20% females in senior management positions. In addition to running an annual Diversity & Inclusion employee survey, we follow up succession candidates to senior management positions based on gender and nationality/ ethnicity.

During 2019, more than 400 employees were actively engaged in regional ambassador networks, focusing mainly on raising awareness and increasing knowledge about minority groups, in particular women, people with disabilities, ethnic minorities and the LGBT+ community. To show our commitment externally, we have – among other things – signed the UN's Women Empowerment Principles and the UN's LGBTI Standards for Business.

In 2020, we will keep raising awareness for the workplace challenges faced by minorities, identify barriers for

collaboration and equal opportunities and define ways to overcome them. Moreover, we will review/amend/implement local HR policies based on a global framework supporting work-life integration.

Yara is committed to paying employees fairly, regardless of personal beliefs or any individual characteristics. Individual remuneration will vary based on specific factors such as country, employment market conditions, position, performance and competence.

In 2018, Yara performed a gender pay gap analysis in Brazil, Norway, Colombia, Belgium, UK and the USA. These countries represent Yara's largest employee workforces, making up more than 60% of overall employees. Tariffed employees were not in scope as they do not have individual salary definitions. Yara identified a gender equal pay gap in the analyzed countries, ranging from 2.1% in Norway to 16% in Colombia.

Not satisfied with a remaining average global gender pay gap above 5% after the annual salary increase in 2019, an extraordinary salary review was run in December 2019 to further close the gap. As a result of the process the global gender pay gap has been reduced by 0.5 percentual points, from 5.5% to 4.9%, impacting 666 employees.

As part of the Diversity & Inclusion Strategy, Yara has set an ambition to close the gender equal pay gap by at the latest 2025. In order to achieve this ambition, we have already implemented stricter rules for salary review and recruitment that are valid for both men and women in order to prohibit negative discrimination.

In order to ensure that balanced pay is a priority, an additional budget from the corporate level will be allocated for business units to close the gap over time. In an effort to track progress and compliance, yearly follow ups will be executed to determine if additional budgets are necessary to close any gender pay gap fluctuations that arise over time.

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 environments.

Responsibilities

Organizational responsibility for the oversight and follow-up of labor practices and performance quality lies with the Executive Vice President People & Global Functions. This is enabled through a structure of management forums which brings the HR leadership from all business sectors together, in addition to the participation in an annual global HR summit. A network of HR employees provides support across the globe in the development and 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

Together with the appraisal from last year and the goals establishment for the next year, development is formally discussed between managers and employees once a year, at the beginning of the year, and follow-up and updates take place throughout the year with special focus in the summer months when career and development discussions are taking place. In addition, managers are expected to frequently follow up and provide feedback, coaching and support for the employees' goals achievement.

In late 2018 and throughout 2019, all global HR processes where incorporated in a new global HR platform called Yara PeoplePath, built on SAP Successfactors.

In 2019, all Yara employees had the opportunity to take part in the Performance Management and Talent Development processes, either using Yara PeoplePath 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 PeoplePath. Both managers and employees have access to Yara PeoplePath through Manager Self Service (MSS) and Employee Self Service (ESS), respectively.

Yara's interactive learning platform, that since 2019 is also part of Yara PeoplePath, offers a single repository for all global learning programs and provides employees and externals holding Yara positions with opportunities to develop their competencies. The platform is available to all employees and externals holding Yara positions with access to Yara's internal systems. It contains a wide range of training material and is also supporting the management for mandatory training paths. The curriculum is continually developed and expanded based on the needs and priorities of the business.

Yara has developed and is running various Leadership Development programs to further develop and grow our leaders in order to leverage, inspire, build and deliver on Yara's ambitions over the long term. In 2019, we put particular focus on developing our collaborative culture as well as on leadership behaviors and self-awareness.

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, for example, HESQ and leadership development activities adapted to local or regional needs. In 2018, all employees had to complete ethics training, and safety training was developed and deployed by the HESQ team. These programs continued to run throughout 2019.

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, the 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 166 notifications that were classified as 'People' matters during the reporting period. All 166 of these notifications were addressed, and 133 resolved, during the reporting period.

In 2019, Yara HR dealt with a total of 375 Labor Grievance cases. 365 were in Brazil, one in Asia & Oceania, seven in Latin America and 2 in Europe. Of the 375 cases, 80 were both reported and resolved in 2019. 295 cases were reported in 2018, but not resolved by the end of the year.

In Brazil, most labor claims are related to one or more of the issues below:

- 59 percent: Overtime
- 35 percent: Insalubrity
- 35 percent: equal pay

The figures are estimates based on reviewing first half of 2019.

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 HR organization of Yara continuously strives to ensure the business needs and targets are met, with the most valuable resource being its employees. HR ensures that Yara has the right people for the right job at the right time. Yara's people strategy and processes are closely linked to Yara's vision, mission, values and corporate strategy. Yara's people strategy follows 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.

In 2019 a People Strategy Project was launched to realign with the latest updates within the Corporate Strategy. This project will run through 2020 and is aimed at realizing the people experience that enables Yara to achieve the goals set forth in our corporate strategy, drives our values, and positions Yara for continuous improvement up to and beyond 2030.

At Yara, we also put great effort into creating a coaching and feedback culture, take feedback very seriously and strive for continuous improvement. Both external and internal feedback are 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.

Yara conducted three employee surveys in 2019 in order to get snapshots on how the company is progressing with regards to employee engagement, performance enablement, the deployment of Yara's updated strategy and Diversity & Inclusion.

According to Korn Ferry's global benchmark, the resulting employee engagement level in Yara positions us as one of the most engaged companies. In addition, Yara scored higher than the average among the best performing companies on employees' assessment of respect and diversity.

The surveys' results are followed up at the various leadership levels and actions are taken as required. Two surveys following up on the same topics are planned in 2020.

Health and safety management approach

Materiality

Yara's ambition is 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 relate 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	403-8, 403-9
	410 Security practices	410-1

The indicators 403-1 through to 403-7 are considered to be covered by this management approach chapter.

Management approach

Policy and commitments

Yara's ultimate ambition of zero injuries is 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 personnel and process safety. Our focus is on actions that will further develop the safety culture at Yara with the aim to reduce exposure to hazards through safety leadership and greater responsibility for oneself and others.

Yara is also committed to protecting life and health, infrastructure, the environment we work in, information and our reputation by understanding security risks and proactively implementing mitigating measures. Security is an obligation to our employees and is 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 April 2019) and in the Code of Conduct (latest version January 2020), both approved by the Yara CEO and available on our website yara.com

Yara works 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. Contractors are subject to the same scrutiny as employees. Yara has strict requirements for reporting of incidents, accidents and injuries and they 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 among our units. Classification of personal injuries is aligned with OSHA requirements.

Yara has established a Safe by Choice initiative to instill a common safety culture and lead the company to safety excellence. The aim is to proactively improve Yara's safety culture where working safely is everyone's responsibility and is a condition of employment. This means an increased focus on responsibility for individual safety and the safety of colleagues. Our Safety Principles are based on the philosophy that all injuries are preventable. Safety principles clarify the expectations both for managers, supervisors and all employees and contractors. Actions have been defined on the application of safety leadership, tools and methods, with a continuously improved level of quality and consistency through competence development and employee engagement. Yara is also implementing a certified corporate-wide Occupational Health and Safety management system according to the ISO 45001 standard. Yara's Safety principles and information about Safe by Choice are available on www.yara.com.

The process safety management system in Yara is based on Risk Based Process Safety. Steering documents, guidelines and risk assessment tools are created and available in the Yara Steering System to support the implementation.

Security management at Yara is designed to ensure that security threats are identified and assessed, and that people, the environment, assets and reputation are protected by appropriate measures. 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 the 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.

Emergency management practices to increase the organization's ability to handle threats are included as an elementary area of HESQ management. The management approach is based on developing skills, tools and templates and testing them in practical application. Yara's employees are regularly trained in the conduct of safe operations and response in case of emergencies.

Goals and targets

Ambitions and goals	Targets	Actions	Achievements in 2019
Occupational health and safety and Process safety			
Create a safe workplace with the ultimate goal of zero incidents	Total Recordable Injury rate (TRI) < 1.4	Safe by Choice program Safety training (Together We Learn) Cascading HESQ strategy through the line Potential Severe Injuries & Fatalities (PSIF) program	Target level achieved (TRI 1.4) see performance section, GRI 403-9
	No high severity (fatality or severe disability) occupational incident		Target achieved, no high severity occupational safety incident in 2019.
	No high severity (consequence to people, assets or environment) process safety incident	Process safety management system. Process Safety Index follow up Monthly follow up of lagging and leading indicators, sharing lessons learnt.	One severity 2 process safety incident reported in 2019 (major fire in a compressor building, leading to asset loss but not personal injury or significant environmental damage). Investigation and corrective actions have been executed.

Responsibilities and resources

The Head of Corporate HESQ reports to EVP People & Global Functions, presents reports to the full Board of Directors and Board's Audit Committee at least once per year and has organizational responsibility for ensuring that appropriate health, safety and security governance is in place over the whole of the company. Yara's Board of Directors ensures that policies and steering documents are in place, and is frequently informed about health, safety and security governance, liabilities and risks.

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 ensures that all areas of security within their area of responsibility are being assessed. Additionally, Yara has established a Corporate emergency response and security function to develop and review security and emergency management practices.

Grievance mechanisms

Yara uses several channels to continuously monitor safety and security incidents. We seek to handle unwanted incidents proactively in order to reduce the potential impact on our employees, contractors 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.

Incident reporting system

Yara has a company-wide system in place for the 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 assist 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. 48.

Projects and programs

Occupational safety competencies are developed through the line organisation and as a driver of employee engagement. A common platform for the sharing of training material, toolkits and e-learning exercises has been developed (HESQ Academy) and structured into numerous training modules such as Safety Leadership and Together We Learn. The goal of the training modules is to further strengthen the knowledge of all Yara employees and leaders about key safety aspects such as our HESQ principles, Safe by Choice program, our hazards and risks and our operational rules. In 2019, Process Safety was added to the training modules.

In 2019, Yara started to focus systematically on incidents which have a potential for severe injuries or fatalities (PSIF program). This new way of working with such incidents will be rolled out in 2020, with a new leading KPI to be established thereafter.

The implementation of the occupational health management system, launched in 2018, was continued in 2019, with the goal of having it fully implemented by the end of 2020.

Evaluation

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

The Safe by Choice program has proved to be very effective in reducing the injury rate, however, not as effective when it comes to the prevention of high severity injuries. In response to this, Yara established a major incident prevention program and developed a Potential Severe Injuries & Fatalities rate (PSIF) as a leading indicator to be rolled out starting in 2020.

All of Yara's operational units are internally audited by Corporate HESQ at maximum four-year intervals. In 2019, Yara conducted internal HESQ audits of 25 units, focusing on security management, environmental risks, product quality, steering system governance and incident management.

In 2019, no non-conformities on a corporate or segment level were reported by the management system certification audits, which covered the Production segment and its units. Key health and safety observations were related to:

- knowledge about stakeholders and their expectations, also in the context of ISO 45001 and
- cross-checking that the health and safety policies are in compliance with the ISO 45001 requirements, for example related to consultation with and participation of workers and workers' representatives

Yara is now developing and implementing a global stakeholder assessment process to ensure that interested parties and their requirements are appropriately identified and taken into account in business planning and risk management processes.

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, traditions, labor conditions and threats. We are dedicated to responsible business conduct throughout our own operations and value chain. This means respecting recognized labor and human rights and having safeguards in place for combating corruption, and respecting laws and regulations. Responsible business conduct is crucial in earning 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 Political drive Human capital Global scale and presence Infrastructure and logistics Availability of raw materials	205: Anti-corruption	205-1, 205-2, 205-3
	206: Anti-competitive behavior	206-1
	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

The key principles of Yara's compliance program are defined in the Code of Conduct which outlines our position on a wide range of topics. The Code of Conduct includes our anti-corruption policies and 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.

The Code of Conduct applies to all Yara employees, whether full-time, part-time, permanent or temporary. It also applies to the members of the Board of Directors. We are proud to say that the document is translated into more than 15 languages and distributed globally.

Yara's Code of Conduct is reviewed on a yearly basis and is approved by the Board of Directors. No material changes were made to the new version launched on 1 January 2020.

The **Code of Conduct for Yara's Business Partners** considers internationally recognized and endorsed standards in key areas such as international human rights, business ethics and labor conditions. Yara expects its Business Partners to uphold similar standards and to require the same from its own set of Business Partners, especially those that conduct business for Yara. The Code of Conduct for Yara's Business Partners shall be included in all material contracts.

The **Ethics and Compliance Commitment** outlines our Compliance Program for preventing corruption and human rights abuse, and to promote an ethical culture and responsible business conduct. It has been created for the benefit of all Yara's stakeholders.

Yara's **Human Rights Policy** set out in our Code of Conduct shows the priority areas and salient risks identified. Taking an active stance against human rights abuse is more than a corporate initiative, it's a moral obligation. Our business activities can impact human rights in both our own operations as well as our Business Partners', and we therefore have a responsibility and duty to uphold human rights in the value chain.

All policy documents are available on our website yara.com.

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 corruption, fraud, human rights and Business Partner integrity. Ethics training of employees is among the key performance indicators (KPIs) followed by Yara's Board of Directors. The Chief Compliance Officer reports administratively to Yara's General Counsel, twice annually to the Board of Directors, the Audit Committee quarterly and to the CEO monthly (or on an ad hoc basis,

as necessary) on matters relating to ethics and compliance, including human rights and corruption.

Yara has a Compliance Committee, which is chaired by the CEO and attended by the members of Yara's Executive Management. The Compliance Committee meets quarterly and acts as a focal point for matters related to ethics and compliance.

The Ethics and Compliance department consists of 16 full time employees, with a corporate team in Oslo supported by a network of Regional Compliance Managers. The Regional Compliance Managers are based in each Business Unit and are responsible for implementing Yara's Compliance Program including providing training and giving guidance in their respective regions.

Yara's Compliance Program

The purpose of our Compliance Program is to prevent corruption and human rights abuses and to promote a culture in which these matters are difficult to perpetrate. The program consists of 15 key elements.

Human rights

Yara's Human Rights Policy states our commitment to respecting internationally recognized human rights throughout our operations, as well as in our supply chain. We follow the UN Guiding Principles on Business and Human Rights, which means monitoring our potential human rights impacts, preventing, mitigating and remediating those we are causing or contributing to, and seeking to prevent and mitigate impacts we may be linked to.

Human rights are an integral part of the Compliance Program. A global human rights risk assessment is updated annually and ranks the countries where Yara operates in terms of human rights risk exposure. The 2019 risk assessment identified 17 high risk countries and guided our focus on targeted human rights impact assessments. In 2019, Human Rights Impact Assessments performed by independent external subject matter experts were conducted in two high-risk countries (India and Colombia) where Yara has production facilities and where the impact on human rights and leverage to remedy are considered to be the highest. An Impact Assessment was also performed in the Philippines, ranked with medium risk exposure, based on the identified risk of child labor and an assessment is planned in Brazil for 2020. In total, six of the 17 high-risk countries have been subject to Human Rights Impact Assessments since 2017, covering our main operations. All high- and medium-risk countries are monitored through the Compliance Program and specific action plans are developed from the Impact Assessments to mitigate possible impacts identified.

Findings from the impact assessments performed in India, the Philippines and Colombia in 2019 show that contracted labor performing services for Yara are at risk of negative human rights impacts, especially where manual labor is combined with heat exposure. Specific concerns relate to:

- Manual labor in hot working conditions
- Piece rate pay
- Living wage, working terms & conditions
- Freedom of association, grievance channels and right to remedy

Findings from the Impact Assessments have been presented to Executive Management and the Board of Directors. The mitigating actions remain a local management responsibility. The Ethics and Compliance department monitors implementation and reports on progress.

Training and awareness

Training and communication are key elements of Yara's Ethics and Compliance Program, which includes:

- The internal Ethics Portal with clear, practical guidance for all Yara employees
- Mandatory e-learning which includes all topics covered by the Code of Conduct
- Yara's Ethics Hotline, available in over 60 languages, allowing both employees and external stakeholders to share their concerns confidentially
- An interactive, face-to-face training program
- Mandatory Ethics and Compliance introduction as part of the human resources onboarding

The Ethics and Compliance training program is delivered by the dedicated regional compliance managers.
Yara employees are also required to study, observe and comply with the various guidelines laid out in Yara's competition law compliance manual. The manual is available for all employees and has been adapted to local law in seventeen jurisdictions and translated into seventeen languages. In addition to the manuals, an interactive and mandatory e-learning on competition law is available for all employees in the Yara learning portal.

Notifications of misconduct

Employees and Business Partners are expected to report suspected violations of the Code of Conduct, Yara's policies and procedures, or laws and regulations in our own operations and in our supply chain. For employees the first point of contact should be the line manager. Alternatively, both employees and external stakeholders may use the Ethics Hotline which is available in 60 languages 24 hours a day, 7 days a week. Our website and intranet also feature an option to contact the Ethics and Compliance Department directly at ethics@yara.com.
Yara has an obligation to investigate all reports made, and all notifications will be treated confidentially.

Yara's Internal Investigation Procedure was updated in 2019. The purpose of the procedure is to establish a standardized, structured and effective process for investigations that protects involved parties and ensures a consistent approach to the handling of allegations.

All notifications are categorized according to the Code of Conduct and given a priority. Based on category and priority an Investigative Party is assigned, usually consisting of Ethics and Compliance and subject matter experts from other functions such as human resources. Independence and competence shall be observed when determining the Investigative Party. External resources such as external legal counsel, may be appointed for notifications with a high priority.

More than 215 notifications to Ethics and Compliance were recorded in 2019, a decrease from 270 in 2018. The number of internal guidance requests received by Ethics and Compliance has increased though, from 514 in 2018 to more than 580 in 2019. This indicates a high level of awareness in the organization and allows us to work proactively and prevent matters from escalating to notifications of misconduct.

Integrity Due Diligence

Integrity Due Diligence (IDD) is the process of investigating the integrity of potential, new and existing Business Partners. An IDD may identify actual or potential risks related to corruption or human rights, and potential issues such as litigation, court judgments, commercial failures or health, environmental, safety, and quality concerns. Yara's IDD process requires an initial assessment of all potential new Business Partners, to determine whether they fall into any of the following risk factor categories:

- Country risk
- Agents & Intermediaries
- Strategic importance
- Known integrity risks
- Public tenders
- Special Partnerships

Special Partnerships was included as a risk factor in 2019 to reflect Yara's changing risk exposure connected to the strategic priority of developing partnerships in the food value chain and digital farming.

If one or more of the risk factors is present, the Business Partner shall complete a self-assessment and declaration covering key business information and compliance across many risk areas, such as:

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

If the self-assessment and declaration uncovers unacceptable risks, an In-Depth IDD may be required. Continued monitoring of business partner transactions is part of the IDD process and consists of nightly screening against sanctions and compliance databases as well as close cooperation between the business line and Ethics and Compliance.

Complying with and understanding the IDD process is the responsibility of all employees. The IDD process is included in the face-to-face training on ethics and compliance matters, as well as in induction training to new-hires. All employees with specific responsibilities in reviewing and approving IDDs have received targeted training on the process.

Approximately 10% of Yara's more than 50.000 active suppliers have completed the IDD self-assessment questionnaire since 2012, in line with the established risk-based approach. All Business Partners, including suppliers and customers, are continuously monitored and screened against compliance databases regardless of a completed IDD. If integrity risks are discovered through the screening, an IDD questionnaire is sent to the Business Partner for completion. Critical and strategically important suppliers undergo enhanced monitoring by Ethics and Compliance in close cooperation with the responsible business line.

Approximately 1% of Yara's Business Partners have been rejected based on adverse results from the IDD process since the process was implemented in 2012. The purpose of the IDD process is not to reject Business Partners, but to identify integrity risks and to mitigate these to safeguard Yara's interests. If adverse responses are identified in the IDD self-assessment questionnaire, we enter into dialogue with the Business Partner, and are committed to influencing them to uphold the same integrity standards as at Yara.

Evaluation

The effectiveness of the Compliance Program is evaluated annually in the business plan process and an annual maturity assessment of the program is presented to the Board of Directors. Policies and procedures follow the established renewal cycle of three years on the Yara Steering System. In 2019, the Internal Investigation procedure was amended based on recommendations from Internal Risk and Audit. In addition, an annual review of key policies is performed by Ethics and Compliance and updates made as needed.

An internal Ethics Survey measuring Yara's culture of integrity is conducted every three years and helps guide the focus areas for the Ethics and Compliance department. The previous survey was conducted in November 2018 and the year of 2019 was used for targeted follow-up activities such as the roll-out of a face-to-face Ethical leadership training module.

Product Stewardship and Chemical Compliance management approach

Materiality

Yara is committed to ensuring 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, occupational and public safety, the environment, and security. This includes supplying plant nutrients which satisfy society's requirements for safe food production and animal feed.

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

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

Management approach

Policy and commitments

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. 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 are always complied with and, in cases of inconsistency between the statutory requirements and the Yara standard, the more stringent is applied. Product Stewardship provides a systematic, risk-based approach to monitoring and reviewing the quality, safety and security of our products and related operations.

Yara's products set the industry standard for quality across the fertilizer industry. Having the right product quality, with the declared physical and chemical features, provides the basis for the crop nutrition solution offerings. In the current customer-centric strategy, product quality and its definition is being further elevated to match customer needs and requirements. Product quality standards are expected to be assessed at market level. Any deviation from what is expected – from production specification, packaging, timing and/or way to delivery and even services and attention to customers – is considered and/or subject to a complaint, which can be initiated by either the Yara sales organization itself or by the customers.

Our key commitment related to product stewardship and chemical compliance is to constantly seek to improve our products, operations and production processes, to maximize efficiency, and to ensure that our products are properly handled.

Yara's Product Stewardship and Chemical Compliance policy is described in the HESQ policy (latest version April 2019) and in the Code of Conduct (latest version January 2020), both approved by the CEO and available on our website yara.com. Yara applies the fertilizer sector's Product Stewardship programs (Fertilizers Europe Product Stewardship Program in Europe and International Fertilizer Association program outside Europe), including third party certification requirements, to ensure that proper care is taken along the whole fertilizer value chain from product development and the purchase of raw materials, to production, storage, transport and distribution and up to use at the farm. The Product Stewardship programs address product safety, environmental issues, safe food production, and security against theft and misuse.

To learn more about the fertilizer sector's product stewardship programs, please refer to:

www.productstewardship.eu
www.protectandsustain.org

Products in EU/EEA markets fall under the European chemicals' regulation REACH and the CLP regulation on the classification and labelling of chemicals. The requirement of a formal chemical compliance check is referenced in Yara's Procurement Process, and the all relevant substances are registered accordingly.

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. Yara avoids, whenever possible, procurement of 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. If substitution of such chemicals is not feasible, the necessity of using them in industrial scale is strictly assessed including potential exposure, and to mitigate the risk to a minimum, primarily by engineering risk management measures e.g. closed systems.

From 2022 onwards, the new EU Fertilizing Products Regulation (FPR) will be in force. It will bring major changes to the production, marketing and labelling of fertilizer products. In the future, it will be possible to market a wide

range of fertilizing products labelled as CE fertilizers such as organic fertilizers, organo-mineral fertilizers, growing media or biostimulants – provided that they comply with the environmental and safety requirements of the new legislation.

Yara is preparing for the new regulation by establishing a centrally coordinated compliance assessment process in order to take timely actions to ensure full compliance.

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

Goals and targets

Ambitions and goals	Targets	Actions	Achievements in 2019
Product Stewardship			
Implement Product Stewardship in all Yara's fertilizer operations	All relevant Yara units to be certified by the end of 2019	Systematic roll out of Product Stewardship risk assessment, self-assessment and improvement of practices to close gaps against PS program requirements.	Target almost achieved, all European and 30 non-Eu-ropean units certified. All these achieved the "Excellence" level of the program. Audits for the remaining 12 units, including the latest acquisitions, are planned for 2020.
Ensure alignment between segments and units on product quality development		Establish a Product Quality Board consisting of all segments and relevant support functions	Established and work started in 2019, chaired by the new position of Quality Manager in Sales & Marketing. Work will continue to set Product Quality indicators.

Responsibilities and resources

Managers at all levels of the organization are accountable for the performance of their operations, for compliance with legal and statutory regulations and requirements laid down in the Yara Steering System. Each Yara unit is responsible for the legal compliance of its products, raw materials and other chemicals under applicable regulations. This includes:

- notifying and registering products and substances according to regulatory requirements
- securing correct labelling and packaging
- informing customers and business partners about product compositions, their correct uses and safe handling, providing Safety Data Sheets and other relevant documents to the customers and markets

The Head of Corporate HESQ reports to EVP People & Global Functions, presents reports to the full Board of Directors and Board's Audit Committee at least once per year and has organizational responsibility for ensuring chemical compliance and the implementation of product stewardship programs. The Corporate HESQ function assists units in Product Stewardship and Chemical Compliance activities by establishing corporate processes and steering documents and serving as a center of expertise for product stewardship, classification of products, labelling, and generating legally required product safety information such as Safety Data Sheets.

Grievance mechanisms

Yara engages with the customers in a number of ways: 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.

Our country websites feature contact forms for anyone who wants to raise questions or provide feedback.

Yara currently has several product quality complaint handling systems, which are adapted to the various business models and operations throughout the world. Some are based on globally used IT platforms while others are based on business platforms e.g. SAP, and their combinations. Yara's ambition is to harmonize and use a single global system integrating all segments and functions from sales, supply, operations and production, thus allowing better traceability, monitoring and problem-solving handling.

Projects and programs

Several jurisdictions are setting stringent security requirements to manage the sale, supply and handling of ammonium nitrate to prevent a potential misuse of the product. However, nitrate-based fertilizers, including Ammonium Nitrate, are the most commonly used straight fertilizers in Europe. They are well suited to European soils and climatic conditions.

Yara believes that Ammonium Nitrate can be safely produced, distributed and used, provided full transparency and control of all activities in the supply chain. To ensure business continuity and compliance with the forthcoming requirements, Yara is improving its global product traceability and recall processes for all relevant AN and high N-containing products. In addition to introducing product tracking technologies, this implies increased emphasis on product quality and warehousing standards.

Since the REACH regulation came into force, Yara has identified ten chemical substances of concern. One chemical was granted an Authorization by the Commission with a 2021 sunset date to develop a substitute. One substance is scheduled to be phased out by the end of 2020. Yara no longer purchases this chemical and has developed a substitute via a long R&D process. The eight other substances are being tracked and managed centrally by Yara HESQ, with defined responses according to the regulatory processes.

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.

The latest third-party audits for the European Product Stewardship program took place in 2017. Yara's European fertilizer activities were found to conform. Recertification audits are ongoing, scheduled to be completed by the end of Q1 in 2020. Outside Europe, certification and recertification continued according to the IFA Protect & Sustain program. All certified units achieved the "Excellence" level of the program. A main observation from the audits was related to HES criteria used in the selection of suppliers and especially third-party warehouse operators. Local actions have now been taken in the countries concerned to ensure compliance with Yara's existing contracting policies.

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 the main ones are phosphorous (P) and potash (K). Over time, Yara has sought to increase the vertical integration of P and K, and our mining footprint has consequently grown.

Yara started implementing the GRI Mining and Metals Sector Supplement in our reporting for 2017 by mapping material topics and relevant indicators across the company's 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 standards	GRI disclosures
The Yara Brand	201 Economy 2016	201-2
Human capital	202 Market presence 2016	202-2
	MM Labor management	MM4
Environmental performance	304 Biodiversity 2016	304-2, MM1, MM2
	305 Emissions 2016	305-7
	306 Effluents and waste 2016	306-2, 306-3, MM3
Ethics and Compliance	411 Indigenous rights 2016	MM5
NA	MM Local communities	MM6, MM7
NA	MM Closure planning	MM10

Policies and commitments

Yara employs the same set of policies and standards for mining operations and projects as for any other type of operation and is committed to delivering excellent performance and conducting business responsibly across the dimensions of environment, social and governance. Key principles are described in the HESQ policy (latest version April 2019) and in the Code of Conduct (latest version January 2020), both approved by the Yara CEO and available on our website yara.com.

Yara uses a precautionary approach to identify risks and take preventive measures to mitigate potential harm to people and the environment. Environmental and Social Impact Assessments (ESIA) are conducted to evaluate the impact that mining operations have on local communities.

It is Yara's practice to recruit the management and personnel locally, to the extent possible, for all mining operations. Yara values its good relationship with employees and their organizations and consults them on a regular basis. The freedom of association and the right to collective bargaining applyies to all Yara's operations, including mining operations. This is in accordance with the principles described in the Ethics and Compliance management approach disclosure.

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 in which we operate. We follow the strictest standards when making decisions, whether they be local or international laws and regulations, Yara's policies and procedures, or our Code of Conduct. We monitor compliance and assess risks in order to fully adhere to changing and stricter laws and regulations and engage with stakeholders to find new solutions to satisfy their needs.

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	Reported in Labor performance
Yara Siilinjärvi	Finland	NA	100%	Operational
Serra do Salitre	Brazil	NA	100%	Operational
Lagamar	Brazil	NA	100%	Operations were closed in 2018. Company maintains recovery work and environmental controls.
Yara Dallol	Ethiopia	Member, not assessed against the 2016 standard	57.1%	Development. Advancing to final investment decision
Lifeco (Libya) *)	No	No	No	Headcount only
Qafco (Qatar)	No	No	No	No

Closure of Lagamar is covered in the Stakeholder dialogue section, and as relevant under performance indicators.

Navigation and performance per indicator / topic:

Indicator / topic	Yara Siilinjärvi, Finland	Yara Brazil, Salitre	Yara Dallol, Ethiopia
201-2: Payment to local communities for land use	NA	NA	NA in current phase
202-2: Proportion of senior management hired from the local community	All Yara sites use local (domestic) management staff to the extent possible	All Yara sites use local (domestic) management staff to the extent possible	All Yara sites use local (domestic) management staff to the extent possible
MM1: Land disturbed or rehabilitated in the mining activities	Reported under the Environmental performance section, p. xx-xx	Reported under the Environmental performance section, p. xx-xx	NA in current phase
MM2: Sites requiring biodiversity management plan	Reported under the Environmental performance section, p. xx-xx	Reported under the Environmental performance section, p. xx-xx	NA in current phase
MM3: Overburden, rock, tailings and sludges from the mining	Environmental performance section, p. xx-xx	Reported under the Environmental performance section	NA in current phase
MM4: Number of strikes and lockouts exceeding one week's duration	No strikes or lock-outs exceeding one week's duration	No strikes or lock-outs exceeding one week's duration	No strikes or lock-outs exceeding one week's duration
MM5: Number of operations in or adjacent to indigenous peoples' territories, percentage of operations with formal agreements with indigenous peoples' communities	NA	NA	Central requirement identified as part of ESIA
MM6: Significant disputes relating to land use, customary rights of local communities and indigenous peoples	No significant disputes	No significant disputes	No significant disputes
MM7: Grievance mechanisms used to resolve issues under MM6	No significant disputes	No significant disputes	No significant disputes
MM10: Number and percentage of operations with closure plans	Generic closure plans are in place for all operational mines as part of their operational permits	Generic closure plans are in place for all operational mines as part of their operational permits	NA in current phase
304 Biodiversity	Reported under the Environmental performance section	Reported under the Environmental performance section	NA in current phase
305 Emissions	Reported under the Environmental performance section	Reported under the Environmental performance section	NA in current phase
306 Effluents and waste	Reported under the Environmental performance section	Reported under the Environmental performance section	NA in current phase

Responsibilities and resources

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

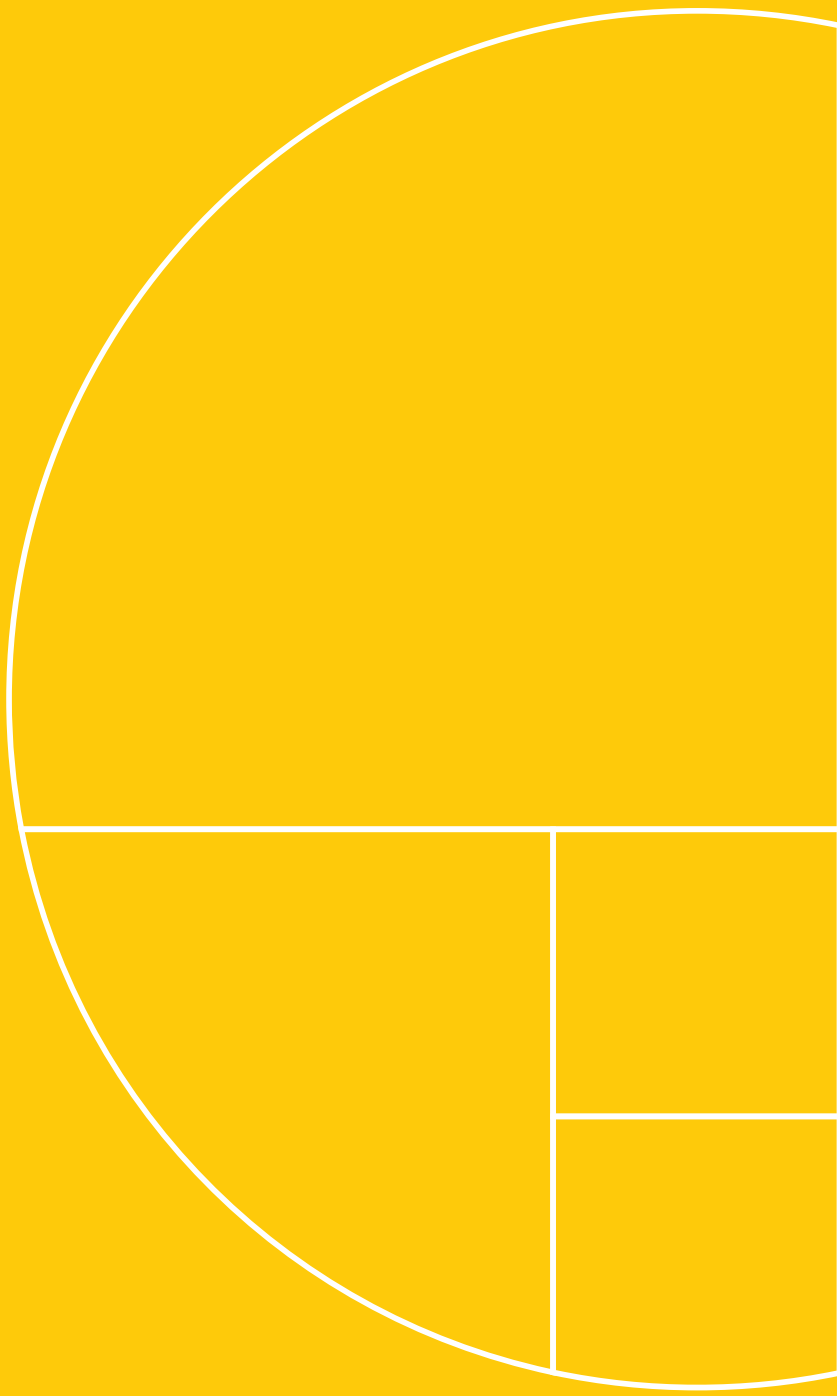
In October 2018 Yara agreed to acquire the remaining shares in Galvani Indústria, Comércio e Serviços S.A. ("Galvani"). Following the transaction, Yara owns 100% of the Serra do Salitre mine with an annual production capacity of approximately 1.2 million tonnes of phosphate ore and the non-operational Lagamar mine, which was closed in 2018. The mining units in Angico dos Dias and Irecê, as well as the Santa Quitéria greenfield phosphate project, have been separated out in a new company fully controlled and managed by the former Joint Venture partner, the Galvani family. The acquisition was finalized in July 2019.

Yara Dallol B.V ("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.

Training and awareness, grievance and evaluation

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.

Performance



Economic performance

GRI 201: Economic Performance

GRI 201-1 Direct economic value generated and distributed

Direct economic value generated and distributed in 2019, reported as USD million.

Direct economic value		Report in Annual report	Line/Column name
a) Revenues:	12 936	Consolidated statement of income	Revenues
	76	Consolidated statement of income	Interests and other financial income
	166	Note 4.3	Dividend/repayment of capital from EAIs
Total Revenues	**13 178**		
Economic value distributed			
b) Operating costs	9 317	Consolidated statement of income	Raw materials, energy costs and freight expenses
	17	Consolidated statement of income	Change in inventories of own production
	467	Consolidated statement of income	Other operating costs
Sum operating costs	**9 801**		
c) Employee wages and benefits	1 180	Consolidated statement of income	Payroll and related costs
d) Payments to providers of capital:	212	Note 2.7	Interest expense
	-55	Note 2.7	Capitalized interests
	65	Statement of cash flow	Purchase of treasury shares
	-	Statement of cash flow	Redeemed shares Norwegian State
	203	Statement of cash flow	Dividend
Sum payments to providers of capital	**425**		
e) Payments to government	135	Statement of cash flow	Tax paid
f) Community investments	2	N/A	Information reported in HFM form Z2, where only the total figure for Donations, Gifts and Sponsoring is shown.
g) Fines:	0		Non-compliance with environmental laws and/or regulations
	0		Non-compliance with other laws and/or regulations
Sum fines paid	0		
Total economic value distributed	**11 544**		
Economic value retained	**1 634**	**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 93 in the annual report.

The geographical spread of Yara's revenues are reported in Note 2.1 in the financial statements of the annual report.

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. Covering both risks and opportunities, key megatrends which are of relevance to Yara's strategy are described in the annual report on p. 10-11. Key risks and opportunities are also described in the section Strategy, Risks and Opportunities, p. 15.

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

Yara's benefit plan liabilities are described in Note 5.4 of the Financial statements in the annual report

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 protect the planet.

Improving cropland productivity and increasing food production is dependant upon the application of agronomic knowledge. Yara possesses extensive knowledge in this field, 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 (FtMA) 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 of eight partners to promote market access, productivity, quality and farmers' income. The alliance targets reaching 1.5 million farmers by 2022.

In the agricultural season of 2018/2019 alone, FtMA successfully engaged almost 90,000 farmers in Kenya, Rwanda, Tanzania, and Zambia and developed a network of Farmer Service Centres that serves as a one-stop shop through which farmers interact with service providers across PATH. Since 2015, FtMA has catalyzed over US$30 million in smallholder crop sales purchased by commercial buyers and involved over 65 local private sector players, significantly increasing the transactions between smallholders and formal commercial markets.

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 assessments are mandatory for all our operations and expert functions and are performed annually at both corporate and regional levels. This is done both as part of the ERM process but more specifically also through the annual E&C risk assessment, which is performed both regionally and at the corporate level.

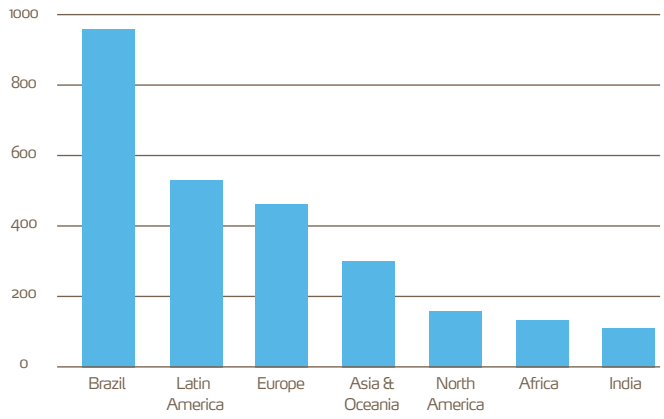
Several types of corruption are assessed, including conflicts of interests, bribery, illegal gratuities, economic extortion and facilitation payments. Mitigating actions are implemented where potential risks are identified.

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

Yara's e-learning on ethics and compliance is mandatory for all employees and is included in the onboarding of new hires. The program covers topics in the Code of Conduct, including anti-corruption policies and procedures. In addition, Yara's Ethics and Compliance Department performs targeted face-to-face training on anti-corruption topics. The number of employees trained on Yara's anti-corruption policies and procedures in face-to-face sessions during 2019 was more than 2,600 globally.

Below is a graph presenting the number of face-to-face trainings per region.

Participants per region



Yara's Code of Conduct for Business Partners and standard terms and conditions include our policies related to anti-corruption and describe the standards that Yara expects its business partners to uphold. Through Yara's Integrity Due Diligence process, the Code of Conduct for Business Partners was communicated to more than 1,400 business partners throughout 2019. On a risk-basis, certain business partners are selected for additional due diligence work, including training and communications.

For further details about Yara's Integrity Due Diligence process please refer to the Ethics and Compliance management approach, p. 48.

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, the Board of Directors receives an update on the status of Yara's compliance program from the Chief Compliance Officer, which may include training. All members of these bodies have completed Yara's mandatory e-learning program and are included in compliance training programs. The Board members completed the e-learning when it was implemented in 2018, and they will be re-trained in 2020.

GRI 205-3 Confirmed incidents of corruption and actions taken

According to Yara's Investigation Procedure, the risk category Corruption includes the following sub-categories: Conflicts of Interest, Bribery, Illegal gratuities, Economic Extortion, Facilitation Payments and Antitrust.

In 2019, the Ethics and Compliance Department received 57 notifications regarding corruption and the mentioned sub-categories. 51 of the notifications were resolved within the reporting period, and of these 19 were substantiated according to the Investigation Procedure.

GRI 206 Anti-competitive behavior

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

Yara considers cases with a potential value of USD 5 million (economic loss, penalty or similar) to be of major severity, and such cases are actively followed up by the Corporate level. No new significant cases were registered in 2019. On 21 January 2020, Yara announced that the Comisión Nacional de los Mercados y la Competencia (CNMC) has initiated an investigation against Yara Iberian SA of possible infringements of the Spanish Competition Act. Yara cooperated fully with the CNMC during the dawn raid. In 2018, two Yara entities in South America are amongst a group of twenty-four companies who are the subject of an ongoing investigation by the local authorities regarding alleged antitrust activities. One other case disclosed in 2017 is pending final appeal. Here, Yara is actively defending a case in South America regarding allegations that a company Yara acquired had previously participated in anti-competitive behavior.

Environmental performance

Important notice

As reported in previous years, the JV Lifeco does not fulfil the IFRS 11 requirements, and is no longer covered in the disclosures. Historic data was updated accordingly to allow direct comparison, which explained the 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 9.7 million tonnes of purchased materials in 2019, equal to that in 2018. The main materials used were key fertilizer raw materials such as ammonia, phosphate rock, potassium salts and dolomite. These represent the majority of the purchased volume.

GRI 301-2 Recycled input materials used

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

GRI 302 Energy

GRI 302-1 Energy consumption within the organization

Yara's total energy consumption in production was 285 million GJ in 2019.

87 percent of the energy was consumed as feed or fuel in ammonia production. Natural gas is the main fuel used in Yara, with close to a 95 percent share of the total fuel use.

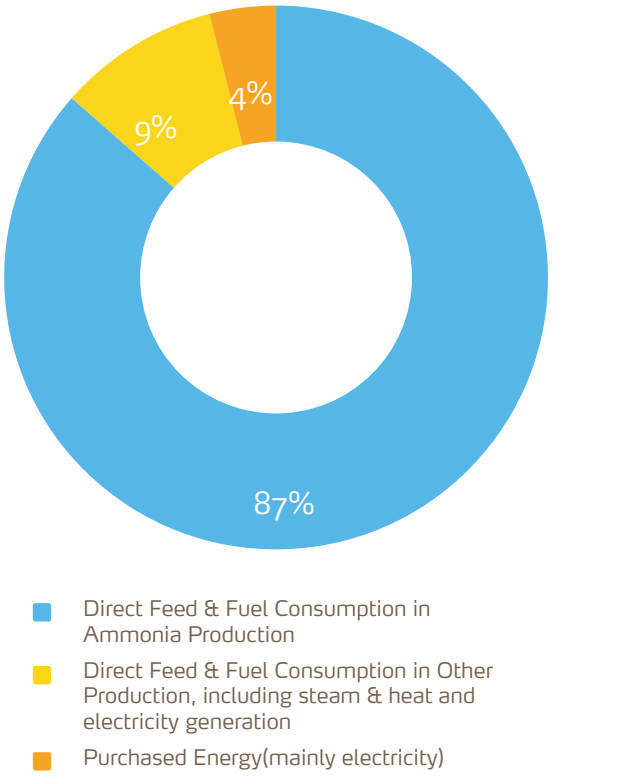
Brazilian units use some renewable fuels, most notably wood chips. However, wood chips make up less than half a percent of the total fuel use in 2019.

In 2019, Yara purchased about 3,250 GWh of electricity for use in production.

Energy consumption in production 2019						
	Unit	2015	2016	2017	2018	2019
Total Energy consumption	million GJ	253	266	266	301	285

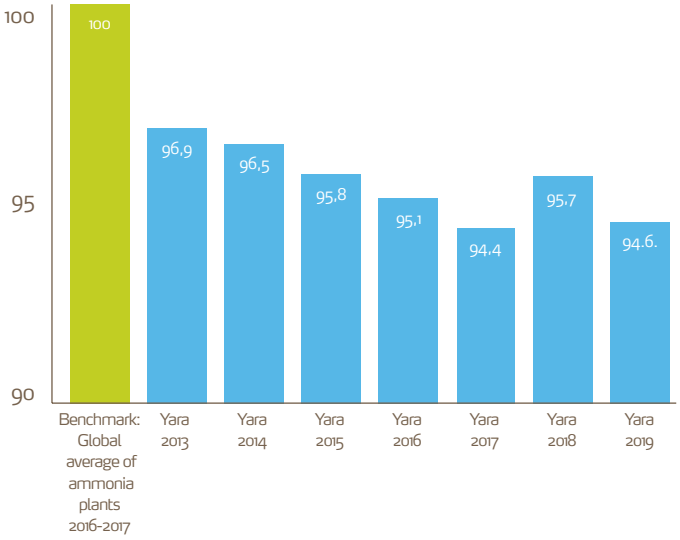
Notes: Babrala and Cubatão plants included from 2018 onwards.

Yara energy use is dominated by ammonia production



GRI 302-3 Energy intensity

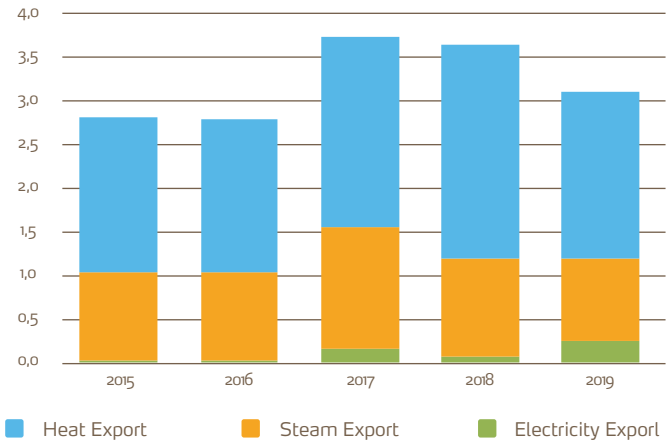
Due to the dominant energy intensity of ammonia production, Yara's key energy intensity indicator is energy efficiency in ammonia production and consequently specific, annual energy KPIs are set for each ammonia plant. Yara focuses on continuous improvement of energy intensity and Yara's ammonia plants are performing better than the global industry average (refer to figure below). However, in 2019 Yara was not able to achieve the overall KPI target for 2019. This is mainly attributed to energy consumption from both planned and unplanned production stops.



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

One of Yara's action areas to improve energy efficiency is to sell the surplus energy available from the plants. In 2019, Yara exported approximately 3.1 million GJ of byproduct heat, steam and electricity from its plants.

Energy export from Yara plants: Approximately 3.1 million GJ of surplus heat, steam and electricity sold



GRI 303 Water and effluents

GRI 303-3 Water withdrawal
GRI 303-5 Water consumption

In 2019, Yara's total water withdrawal was 922 million m³. This was a slight decrease from 925 million m³ in 2018. The water sources were:

- 57% surface water, including water from wetlands, rivers and lakes
- 2% groundwater
- 40% seawater
- 1% municipal water supplies

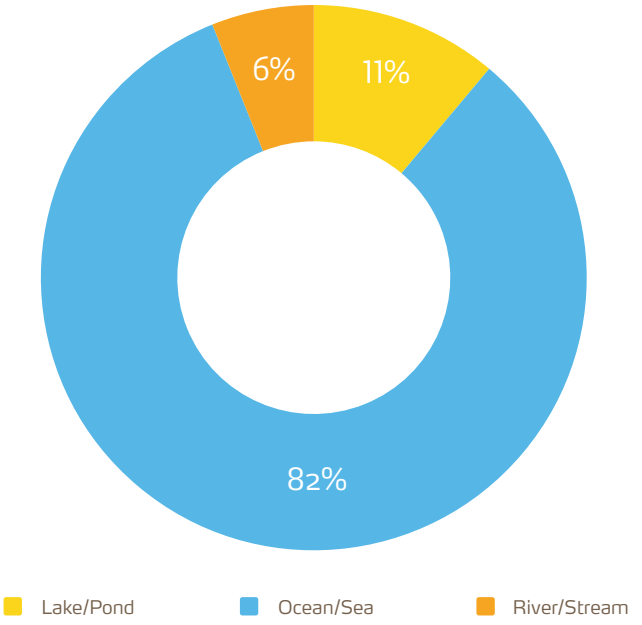
In Yara's production, water is primarily used for cooling purposes, and to a lesser extent, for steam production and the production of liquid products. Thus, nearly all the water that Yara withdraws is returned to the water source, unpolluted.

GRI 303-4 Water discharge

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 to the high solubility of fertilizer materials.

The total volume of water discharge was 821 million m³ in 2019 (or 89% of the water withdrawn) compared to 774 million m³ in 2018 (or 84% of the water withdrawn). Most of this was cooling water, which was returned unpolluted. 82% of the water volume was discharged to the ocean, 6% 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 1% of the total discharge volume.

Water discharges by destination



Nitrogen discharge from Yara's plants amounted to 3,606 tonnes in 2019, compared to 4,056 tonnes in 2018. Phosphorus discharge amounted to 460 tonnes in 2019, compared to 507 tonnes in 2018.

Wastewater Quality Parameters						
	Unit	2015	2016	2017	2018	2019
Total Volume of Water Discharged	million m³	800	787	722	774	821
N	Tonnes	2,814	2,423	2,292	4,056*	3,606
P	Tonnes	47	40	39	507*	460

* The increase in both N and P in 2018 is directly related to the acquisiton of the Babrala plant in January 2018 and the Cubatão plants in May 2018

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.

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.

GRI 304-1 Operational sites in or adjacent to protected areas or areas of high biodiversity value and MM2 Sites requiring biodiversity management plan

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 biodiversity management plan. A voluntary biodiversity assessment is under planning at the Siilinjärvi mine as part of the site's Sustainable Mining commitment.

GRI 304-2 Significant impacts on biodiversity
GRI 304-3 Habitats protected or restored
GRI 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, some of which are endangered 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 3,300 hectares in 2019. Operation expansion disturbed approximately 25 hectares of new area, while approximately 25 hectares were rehabilitated. No households were resettled in 2019, and the mines did not receive any significant complaints related to land use or rights.

GRI 305 Emissions

GRI 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 2019, Yara's greenhouse gas (GHG) emissions totaled 17.1 million tonnes of CO_2 equivalents (CO_2e).

In 2017, Yara aligned its calculations with the Greenhouse Gas Protocol and the European Emission Trading sector guidance. Thus, CO_2 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.

Scope 1 GHG Emissions						
	Unit	2015	2016	2017	2018	2019
Scope 1 GHG from Yara production	million tonnes of CO_2 equivalents	15.3	15.7	14.9	17.1	17.1

CO_2 from own electricity generation included from 2018 onwards
Babrala and Cubatão included 2018 onwards

Yara's European nitric acid and ammonia plants are covered by the European Union Emissions Trading System (EU ETS). In 2019, Yara emitted approximately 8.8 million tonnes CO_2e from European plants (notice: the figures are still undergoing the official ETS verification). At the same time, Yara will receive approximately 8.1 million EUAs (EU Allowance unit, one ton of CO_2 under the EU ETS) in total, creating a shortage of 700,000 tons CO_2e in 2019.

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 to Yara's production plants are CO_2 from use of fuels N_2O from nitric acid and NPK production and CO_2 generated in calcium carbonate processing. These are calculated as CO_2 equivalents using the following factors, corresponding to the emissions factors in IPCC Fourth Assessment Report (2007):

CO_2 to air: 1
N_2O 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.

GRI 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_2 equivalents in 2019. The respective gross market-based energy indirect GHG emissions were 1.4 million tonnes of CO_2 equivalents in 2019.

The location-based and market-based calculations used factors of energy supply emissions given in the European Residual

Mixes 2018, published by the Association of Issuing Bodies (AIB). Location-based factors were used for calculation of market-based figures for non-European countries.

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

Yara also estimated the Scope 3 greenhouse gas emissions relevant to fertilizers produced by Yara.

The estimate included the production of fuels and raw materials supplied for Yara production, upstream transport to Yara sites and downstream transport of Yara fertilizers to customers. Emissions related to the use of Yara fertilizers at farms were also included. Traded products or blended products based on third party components were not included, neither were any industrial uses of Yara products.

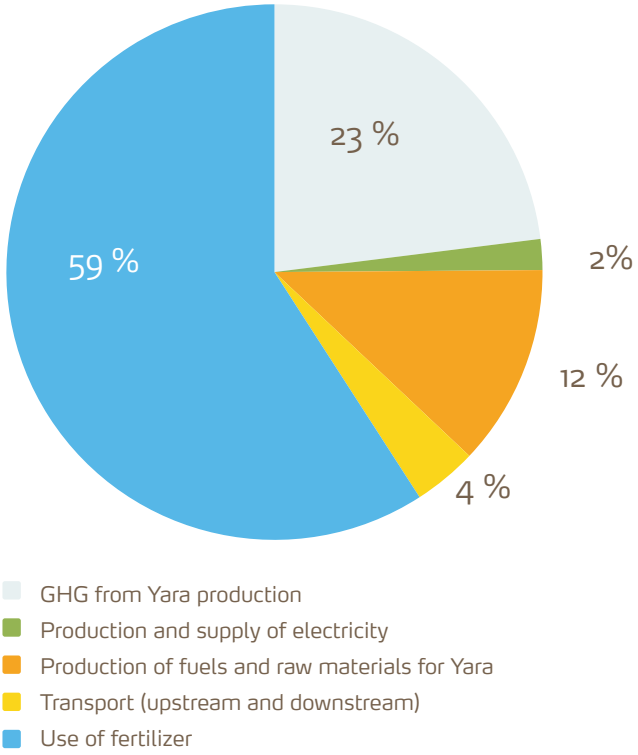
While Yara's own emissions (Scope 1) and supply of energy (Scope 2) represent approximately 23% and 2% of the total Scope 1-3 greenhouse gases, Scope 3 forms the major part of greenhouse gas emissions.

The most significant climate-related phase of the fertilizer life cycle is use at farms. More than 50% of total greenhouse gases are formed at the farm. Despite Yara's global supply chains, transport is only a minor contributor to the total GHGs.

Scope	Category	Million ton CO_2eqv	%
1	Yara production	17.1	23%
2	Purchased electricity (Market-based)	1.4	2%
3	Purchased fuels and raw materials	9.0	12%
	Transport (upstream and downstream)	2.9	4%
	Use of fertilizer	43.8	59%
Total calculated Scope 1-3		**74.2**	**100%**

The estimates are based on the emission factors used in the Fertilizers Europe Carbon Footprint calculations. The same emission factors are used in the Cool Farm tool. The use phase includes calculations for formation of N_2O from the use of nitrogen fertilizer, and CO_2 from lime application via CAN fertilizers. The use phase emissions are calculated with the emissions factors in IPCC Fourth Assessment Report (2007).

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



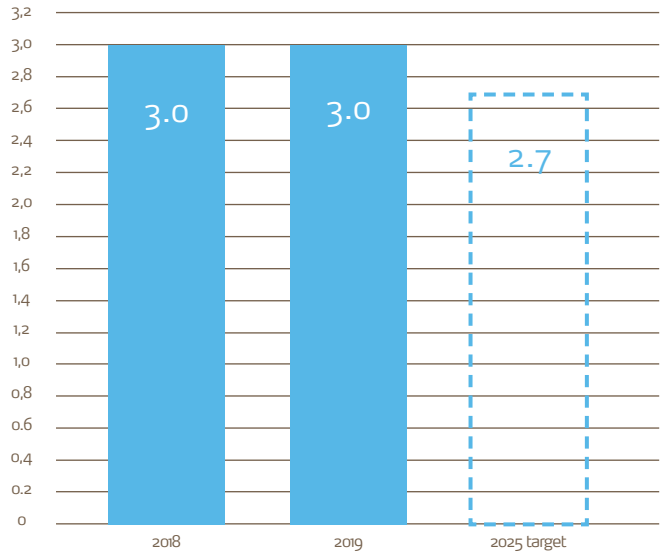
305-4 Greenhouse gas (GHG) emissions intensity

In 2019 Yara developed and publically communicated its GHG emissions intensity target of 10% reduction in CO_2 equivalents intensity by 2025 from a 2018 baseline. The targeted 10% reduction in carbon intensity compared to 2018 is an ambitious target in light of the already achieved step change of 90% reduction in N_2O emissions from our nitric acid plants. Our major sources of emissions are included in the GHG intensity target, that is:

- Scope 1: Direct emissions from sources owned or controlled by Yara
- Scope 2: Indirect emissions from the generation of purchased energy consumed by Yara
- Scope 3: Indirect emissions from major raw materials in our supply chain

Improved CO_2 intensity will be achieved by implementing the GHG reducing projects. The effect in 2019 is not yet visible due to timeline needed for the executing these projects.

Carbon Intensity in tonne CO_2e/tonne N

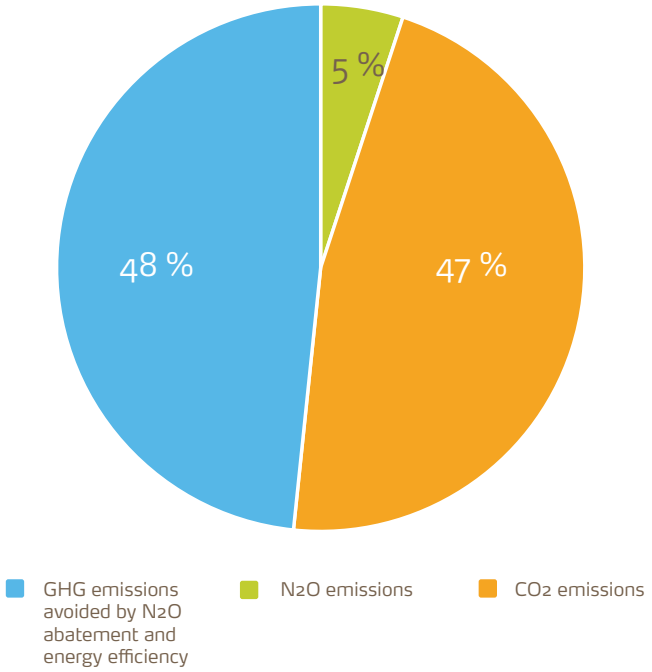


Yara maintains the carbon footprint calculations for its fertilizer products. Yara uses a calculation tool specifically designed for the fertilizer sector. This makes it easy to visualize the fertilizers' impact on the carbon footprint of agricultural products. The carbon footprint for the different fertilizer grades are verified by a third party. The carbon footprint values (in kg CO_2/kg product) represent the maximum carbon footprint for the specific fertilizer product and production site. Currently CFP calculations are being done and verified covering 14 of Yara's main fertilizer sites. Additional sites will be calculated in 2020. More information on Yara's Carbon Footprint of fertilizer products is available on our website, see section Sustainability – Commitment and policies.

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

So far, Yara's most significant initiative to reduce GHG emissions is the installation of N_2O catalyst technology at its nitric acid plants. The catalysts remove about 90% of the N_2O emissions in Yara's plants. Yara's catalyst technology is also commercially available to third parties. To date, catalysts have been installed at approximately 60 plants.

Through continuous improvements in energy efficiency and the good performance of the N_2O catalyst technology at the nitric acid plants, Yara has achieved a significant reduction in GHG emissions as compared to 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_2O abatement technology. These N_2O reductions represents about 16 million tonnes of CO_2 equivalents annually.

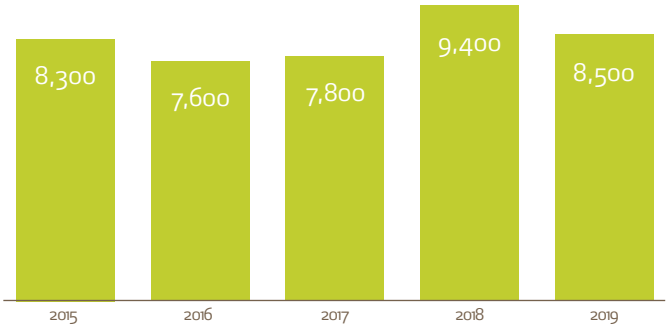


GRI 305-7 NOx, SOx, and other significant air emissions

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 DeNOx units at the production sites, reducing the emission of NOx over time. The stability of the plants and the DeNOx abatement have contributed to the reduction of NOx. The increase in 2018 is directly attributable to the acquisition of the Babrala plant in India and plants in Cubatão in that year. Total NOx emissions from Yara plants in 2019 was approximately 8,500 tonnes of NO_2, compared to approximately 9,400 tonnes in 2018.

NOx emissions as NO_2 (tonnes)



SOx emissions from Yara plants are mainly the result of sulphuric acid production. Yara's SOx emissions are currently steady at around 2,000 tonnes per year. The increase in 2018 is directly attributable to the acquisition of the Babrala plant in India and plants in Cubatão in that year.

Air Emissions						
	Unit	2015	2016	2017	2018	2019
NOx	Tonnes NO2	8,300	7,600	7,800	9,400	8,500
SOx	Tonnes SO2	2,600	2,000	2,000	2,800	2,100
NH3	Tonnes	3,700	4,900	3,500	4,800	4,000
F	Tonnes	34	38	44	31	30
Dust	Tonnes	4,600	4,200	3,400	3,900	2,500

Babrala and Cubatão included 2018 onwards

Approximately 2,500 tonnes of dust were emitted from Yara plants in 2019. The dust is either plant nutrients, raw material inerts or salts.

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.

Noise and vibration

Regulatory noise limits apply to most of Yara's sites. Despite a few individual noise complaints, Yara's operations comply with noise regulations.

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

GRI 306 Waste

GRI 306-2 Waste by type and disposal method

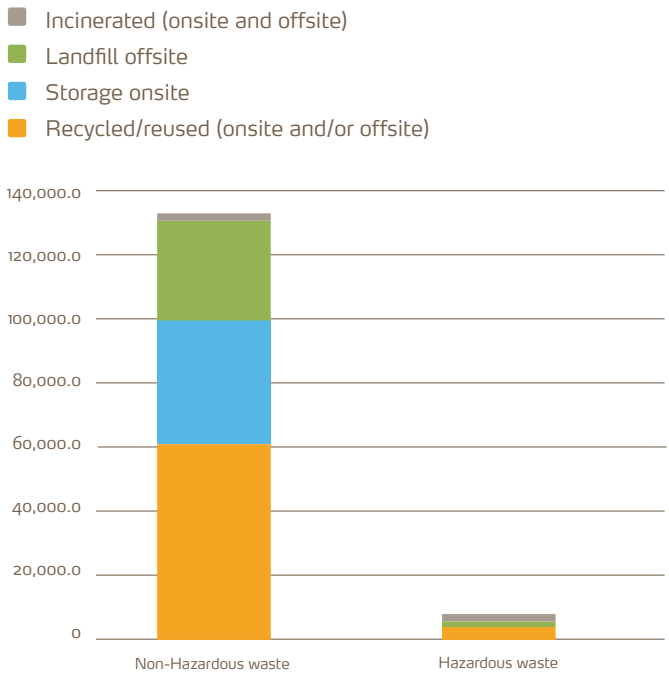
There are very few wastes relevant specifically to fertilizer manufacturing. Large-volume apatite mining wastes are reported under MM3. Gypsum generated in the phosphoric acid production and iron oxide generated in the production of sulphuric acid are reported separately below.

Typical hazardous wastes from fertilizer manufacturing are waste oils, catalysts removed and replaced during shutdowns, 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.

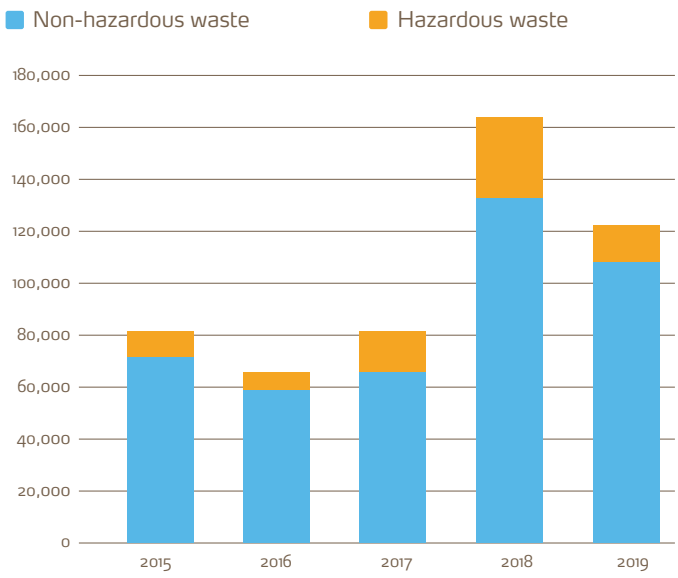
Yara's production operations generated about 119,000 tonnes of non-hazardous waste (133,000 tonnes in 2018) and 7,500 tonnes of hazardous waste in 2019 (31,000 tonnes in 2018). Of all the non-hazardous waste, 46% was recycled, less than what was recycled in 2018. The significant decrease in hazardous waste is attributable to the fact that in 2018 one of the sites was required to dispose of over 16,500 m³ of wastewater from an onsite containment pond which was not required in 2019.

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.

Waste by type and disposal method, excluding phosphate mining related wastes, gypsum and iron oxide (tonnes)



Amound of generated waste (tonnes)



Most of the iron oxide and part of the gypsum generated in the sulphuric and phosphoric acid production were sold as by-products in 2019. Remaining volumes were stored in on-site landfills.

Material	Unit	Sold as byproduct	Stored in on-site landfill
Gypsum	thousand tonnes	361	1,605
Iron oxide	thousand tonnes	373	195

MM3 Overburden, rock, tailings and sludges from the mining

Yara's mining operations dealt with approximately 28 million tonnes of materials from extractive activities. Waste rock in the quantity of 14.3 million tonnes and overburden of 0.3 million tonnes were removed to process the ores. Tailings and sludges totaled 13.0 million tonnes in 2019. These were stored in on-site tailings ponds and stock piles.

GRI 306-3 Significant spills

Of the environmental incidents reported during 2019, none were spills that were assessed as having an environmental, financial or reputational impact at severity level 1 or 2, i.e., considered to be significant at either production plants or mine 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

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

Fifteen (15) Yara sites reported permit breaches to local authorities in 2019. 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 NOx) and discharges to water exceeding the nitrogen or phosphorus limits. Yara sites' current environmental permits do not typically differentiate between normal operational conditions and other-than normal operational conditions. Most of the breaches were caused by abnormal operational conditions, like safety releases at plant trips, process disturbances or abatement equipment damages. As reported in 2018, Yara Montoir, France, is implementing a long-term action plan 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.
Seven Yara sites received fines or other sanctions from local authorities for environmental breaches in 2019. The total sum of the fines was USD 229,228.

GRI 308 Supplier Environmental Assessment

GRI 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, p. 48.

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 2019, in addition to preparing complete specifications for the bidding phase.

GRI 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 2019, 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. 48.

Labor practices and decent work

GRI 401 Employment

GRI 401-1 New employee hires and employee turnover

New hires and turnover by age, gender and region

NewHire/ Leaver	Age Group	Africa	Asia	Brazil	Europe	Latin America	North America	Grand Total
Female New Hire	Above 50		1	5	7			13
	Below 30	6	20	80	69	24	5	204
	Between 30-50	6	35	78	85	12	3	219
Male New Hire	Above 50	4	8	16	23	2	4	57
	Below 30	15	85	155	82	40	3	380
	Between 30-50	30	77	235	143	43	9	537
New Hire Total		**61**	**226**	**569**	**409**	**121**	**24**	**1410**
Female Leaving Yara	Above 50	3	1	4	44	3	3	58
	Below 30	7	7	75	24	27		140
	Between 30-50	8	30	121	103	34	5	301
Male Leaving Yara	Above 50	9	22	77	179	25	8	320
	Below 30	5	43	236	46	37	3	370
	Between 30-50	28	80	510	166	109	8	901
Leaving Yara Total		**60**	**183**	**1023**	**562**	**235**	**27**	**2090**

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. The percentages represent the number of employees being covered by various benefits in individual countries.

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.

Benefits for permanent and temporary employees

2019	Disablility coverage	Flexible working hours	Health care facilities/ subsidies	Life insurance	Paid maternity above the legal require-ments	Retirement/ pension plan	Stock ownership
Permanent Employees	78.4%	30.5%	89.1%	86.8%	18.5%	84.5%	13.5%
Temporary Employees	82.4%	27.3%	80.5%	81.3%	8.1%	78.2%	2.7%

For a definition of significant locations of operations, please refer to the Report boundaries section of this report, p. 23.

GRI 401-3 Parental leave

Return to work and retention rates after parental leave, 2019

	Africa	Asia	Brazil	Europe	Latin America	North America
How many female employees met the requirements for going out on parental leave (Meeting the requirements means being pregnant or adopting)	28	45	53	96	209	5
How many female employees returned to work after parental leave ended	9	12	50	66	15	5
How many female employees took parental leave	8	14	53	84	15	5
How many male employees met the requirements for going out on parental leave	133	95	152	295	511	8
How many male employees returned to work after parental leave ended	25	40	152	161	50	8
How many male employees took parental leave	22	40	152	151	50	8
How many of the female employees who returned to work after parental leave ended were still employed twelve months after their return to work	8	10	39	73	13	5
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	35	34	144	34	8

GRI 403 Occupational health and safety

GRI 403-8 Workers covered by an occupational health and safety management system

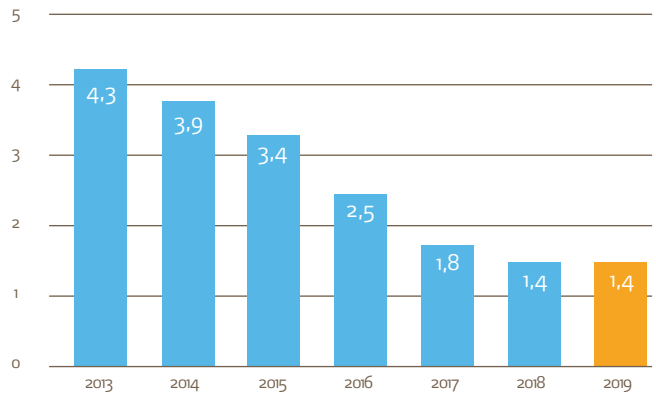
Yara is implementing a corporate-wide occupational health and safety management system according to ISO45001 and will obtain certification in 2020.

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

GRI 403-9 Work-related injuries

Yara achieved a TRI rate of 1.4 (Total Recordable Injuries per million hours worked for employees and contractors combined) which was the 2019 target. 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.

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



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 1.4 in 2019. We recognize that occupational and process 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

	2015	2016*)	2017	2018**)	2019***)
TRI rate employees	2.9	2.2	1.5	0.9	1.4
TRI rate contractors	4.6	3.0	2.3	1.9	1.4
TRI rate employees and contractors	3.4	2.5	1.8	1.4	1.4
Sickness rate (percent) **)	3.3	3.3	2.8	3.4	3.2

*) Cartagena and Galvani operations included in TRI rates in 2016 and Serra do Salitre construction site in 2017.
**) Babrala operations included as of 2018
***) Cubatão figures included as of 2019.

Yara pursues a target of zero major process safety accidents. Yara defines Tier 1 (major) process safety incidents as those being classified as severity 1, 2 or 3. During 2019 there were no severity 1 incidents, one (1) severity 2 incident and eleven (11) severity 3 incidents. The Severity 2 incident was a fire in a compressor building which led to an asset loss but no personal injury or significant environmental damage.

GRI 404 Training and education

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

In 2019, Yara spent approximately NOK 59.1 million on external training, equating to about NOK 4,000 per permanent employee.

2,074 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. In addition to formal training activities, Yara emphasizes on-the-job learning activities and learning from others (coaching, shadowing, etc.).

Yara has an exhaustive online learning catalog with more than 300 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

	2019	2018
Africa	50.0%	10.0%
Asia & Oceania	30.8%	16.7%
Brazil	0%	100.0%
Europe	64.0%	50.0%
Latin America	10.0%	37.5%
North America	66.7%	66.7%
Yara	44.4%	36.2%

Types of assistance offered

	2019
Percentage of countries that offer assistance when transit to retirement	18.5%
Percentage of countries that offer outplacement services	22.2%
Percentage of countries that offer pre-retirement planning	16.6%
Percentage of countries that don't offer severance pay	40.7%
Percentage of countries that offer training for ones continuing professional career	29.6%

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

In 2019, 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 previous year is evaluated and goals are set for the coming year.

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

Performance plans

Gender	Africa	Asia & Oceania	Brazil	Europe	Latin America	North America	Grand Total
Female	141	326	768	1040	292	61	2628
Male	269	751	2324	3631	869	85	7929
Grand Total	**410**	**1077**	**3092**	**4671**	**1161**	**146**	**10557**
% of Total	77%	77%	62%	79%	77%	34%	71%

Development plans

Gender	Africa	Asia & Oceania	Brazil	Europe	Latin America	North America	Grand Total
Female	10	78	44	313	68	49	562
Male	55	357	88	806	89	117	1512
Grand Total	**65**	**435**	**132**	**1119**	**157**	**166**	**2074**
% of total	12%	31%	3%	19%	10%	39%	14%

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. At year-end 2019, the Management team consisted of eight members, of whom three were women. Six management team members were Norwegian, one Brazilian and one Chilean.

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.

Yara's Board of Directors consists of eleven members, with seven shareholder-elected Board members and four employee-elected Board members. Three of the shareholder-elected and two of the employee-elected Board members are women.

At the year-end, 34 of the top 205 management positions in Yara were filled by women. 74 were held by Norwegians, 89 by other Europeans, seven by North Americans, 24 by Latin Americans, seven by Asians, and four by Africans. 54 percent of the position holders were aged 50 years or older, 46% were aged between 30 and 50 years.

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

Yara is committed to paying employees fairly, regardless of personal beliefs or any individual characteristics. Individual remuneration will vary based on specific factors such as country, employment market conditions, position, performance and competence.

In 2018, Yara performed a gender pay gap analysis in countries with the largest employee population Brazil, Norway, Colombia, Belgium, UK and USA and which represented more than 60% of the relevant population. Tariffed employees were not in scope as they don't have individual salary definition. Yara found a gender equal pay gap in the analyzed countries, ranging from 2.1% in Norway to 16% in Colombia, which remains after correcting for factors such as position level, education and experience. The gap is already present when women start as new hires.

As part of the overall Diversity and Inclusion Strategy, Yara has set an ambition to close the gender equal pay gap over a defined period of time. Specifically, we have implemented stricter rules for salary review and recruitment. These rules are valid for both men and women in order to prohibit negative discrimination.

From 2019 a proxy measure of the gender equal pay gap has been implemented to follow up the development on a monthly basis. The proxy calculation of the proxy measure is simplified compared to the analysis made in 2017. It calculates the average difference of base salary between men and women corrected for the two factors responsibility in position and documented performance.

Following the 2019 annual salary adjustments, the overall gender pay gap proxy was at 5.5%. An extraordinary salary review was run in December 2019 to further close the gap. As a result, the global gender pay gap has been reduced to 4.9%.

Human rights performance

GRI 406 Non-discrimination

GRI 406-1 Incidents of discrimination and corrective actions taken

In 2019, Yara's Ethics and Compliance Department received a total of 76 notifications classified as harassment or discrimination. Of the 76 notifications, 66 were resolved within the reporting period and 24 of these were substantiated.

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

- 6 employees were dismissed
- 3 employees were given a written warning
- 7 employees were given a verbal warning
- 7 employees received coaching/training
- 1 case without disciplinary measures

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 employees' right to freedom of association and the right to collective bargaining within national laws and regulations. Yara does not consider any of its fully owned operations to be at significant risk of violating these rights. When operating in countries where this right is limited through local legislation, we seek to take mitigating actions in accordance with local conditions and regulations. This includes Yara's activities in Qatar and Libya where Yara holds shares in a Joint Venture in each jurisdiction. One example of this could be encouraging independent gatherings where employees can elect members to a representative committee that will discuss work-related matters with management.

Yara expects its Business Partners to respect and uphold their employees' freedom of association involving trade unions or similar external representative organizations. This expectation is clearly stated in Yara's Code of Conduct for Business Partners which shall be included in all contracts. Through Yara's Integrity Due Diligence process, suppliers are screened on a risk-basis for issues relating to labor rights and human rights.

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 do 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. No incidents of minors working in Yara facilities were identified in 2019.

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's Code of Conduct for Business Partners clearly states our expectations for business partners regarding child labor. 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's Integrity Due Diligence process did not identify specific suppliers at significant risk for incidents of forced or compulsory labor. Furthermore, Yara's Code of Conduct for Business Partners places explicit expectations for all suppliers with whom Yara is contracting with.

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 given work induction training, covering site safety and security practices. In addition, Yara's Code of Conduct covering 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 of reaching 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.

Web link: Ethics and Compliance Program

For external security service providers, Yara's Code of Conduct for Business Partners reinforces the company's goal of continuing to develop relationships with business partners and to share corporate values. All contracts with Yara's business partners (suppliers, agents, JV partners, distributors, etc.) shall refer to the Ethics Clause and the Code of Conduct for Business Partners.

GRI 411 Rights of indigenous peoples

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

In 2019, 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

The annual human rights risk assessment ranks the countries in which Yara operates in terms of human rights risk exposure. The 2019 risk assessment identified 17 high-risk countries.

In 2019, Human Rights Impact Assessments were conducted in two high-risk countries (India and Colombia) and one medium risk country (the Philippines). All high- and medium-risk countries are monitored through the Compliance Program.

Findings from the impact assessments in 2019 show that contracted labor are at risk of negative human rights impacts, especially where manual labor is combined with heat exposure. Specific concerns relate to:

- Manual labor in hot working conditions
- Piece rate pay
- Living wage, working terms & conditions
- Freedom of association, grievance channels and right to remedy

Mitigating actions are a line and local management responsibility, while the Ethics and Compliance Department monitors implementation and reports on progress.

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

Human rights, as a topic, is included in the Ethics and Compliance training program. In 2019, more than 2,600 employees received face-to-face training in Ethics and Compliance matters, including human rights as a distinct topic. The training material on human rights was updated in 2019 and will be rolled out as part of the training program in 2020. Several human rights topics are also included in the mandatory e-learning for all new employees.

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

The Capital Value Process (CVP) 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. The CVP includes all significant investments and transactions, where compliance risks, including human rights, are integrated in transactions of any value involving:

- Technical Projects
- Mergers & Acquisition & Divestment Projects
- Mining Projects
- Joint Venture Projects
- Agile projects
- Strategy & Change projects

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 is developing a phosphate mining project in Serra do Salitre, Minas Gerais. Covering 2,787.5 ha, the project will provide 2,100 jobs during construction and 1,400 jobs during operation (direct and contractors). The implementation phase was initiated in June 2015, and the first production of phosphate concentrate started in May 2018 while production of granulated fertilizer will start in 2021. 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 process 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, the replanting of seedlings from natural species found on the project site and the 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, dust, 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.

Lagamar, Brazil

The phosphate mine Lagamar, in Brazil, operated by the JV Galvani, was closed in 2018. The closure process was planned and executed for several years. Throughout the process consultations were held with stakeholders, including the Mayor of the municipality and public entities involved in industrial and occupational support. Labor topics related to the closure are reported under the Stakeholder engagement section, p. 27.

Mining project in Ethiopia

In Dallol, Ethiopia, there is a contingent of Yara Dallol BV direct employees and contractor employees who may be affected. Currently 20 workers are involved in care and maintenance work and Social development programs preparing future construction, including Yara Dallol BV direct employees and contractor employees. Reference is also made to he Mining management approach section, p. 54.

GRI 414 Supplier social assessment

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

Yara's Integrity Due Diligence Procedure requires an assessment of all new suppliers against key risk factors and red flags, including concerns for labor practices, working conditions, human rights and 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 is designed to identify any negative social impacts in the supply chain. In 2019, audits including social and human rights aspects were performed on a risk basis in accordance with Yara's supplier audit program.

GRI 415 Public policy

GRI 415-1 Political contributions

Yara's Code of Conduct prohibits political contributions. In 2019, Yara did not register any breaches of this policy.

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 by the Corporate level. In 2019, no fines above this threshold were registered. A total of 11 sites had fines on record, with a total sum of USD 257,000.

Product responsibility performance

GRI 416 Customer health and safety

GRI 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	Industrial uses
Ammonia	HSE impacts assessed	HSE impacts assessed
Urea	HSE impacts assessed	HSE impacts assessed
Nitrates	HSE impacts assessed	HSE impacts assessed
NPKs	HSE impacts assessed	HSE impacts assessed
CN	HSE impacts assessed	HSE impacts assessed
UAN	HSE impacts assessed	HSE impacts assessed
SSP	HSE impacts assessed	HSE impacts assessed
DAP/MAP	HSE impacts assessed	HSE impacts assessed

GRI 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 2019, Yara recorded no significant 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

GRI 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 classifies and labels 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, 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, and 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	Content of the product
Ammonia	Yes	Yes	Yes	Yes
Urea	Yes	Yes	Yes	Yes
Nitrates	Yes	Yes	Yes	Yes
NPKs	Yes	Yes	Yes	Yes
CN	Yes	Yes	Yes	Yes
UAN	Yes	Yes	Yes	Yes
SSP	Yes	Yes	Yes	Yes
DAP/MAP	Yes	Yes	Yes	Yes

Safety data sheets for Yara products can be found in Yara's safety data sheet database

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

In 2019, Yara was not subject to any significant fines for non-compliance with laws or regulations concerning the provision and use of products and services.

Deloitte AS
Dronning Eufemias gate 14
Postboks 221 Sentrum
NO-0103 Oslo
Norway

Tel: +47 23 27 90 00
Fax: +47 23 27 90 01
www.deloitte.no

To the management of Yara International ASA

INDEPENDENT AUDITOR'S ASSURANCE REPORT ON YARA'S GRI REPORT 2019

We have been engaged by the management of Yara International ASA to provide independent assurance in respect of the Yara – GRI Report 2019 ("the Report") presented on www.yara.com. Our responsibility is to provide:

- Reasonable level of assurance on Yara's corporate indicator on greenhouse gas (GHG) emissions intensity, measured in tonne CO2 equivalents per tonne N in Yara's products, presented on page 65 in the Report.
- Limited level of assurance on other subject matters concluded on below.

Management's responsibilities

The management of Yara International is responsible for the preparation and presentation of the Report and that it has been prepared in accordance with the reporting criteria described in the Report, including the GRI Standards, level Core, and criteria for Yara's corporate indicator on greenhouse gas (GHG) emissions intensity, as described in the Report. The management is also responsible for establishing such internal controls that they determine are necessary to ensure that the information is free from material misstatement, whether due to fraud or error.

Auditor's responsibilities

Our responsibility is to express a reasonable assurance conclusion on the preparation and the presentation of Yara's corporate indicator on greenhouse gas (GHG) emissions intensity and a limited assurance conclusion on Yara's preparation and presentation of the Yara – GRI Report 2019.

We have conducted our work in accordance with ISAE 3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board.

Deloitte AS is subject to International Standard on Quality Control 1 and, accordingly, applies a comprehensive quality control system, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Reasonable assurance on Yara's corporate greenhouse gas (GHG) emissions intensity indicator

The control procedures selected in our reasonable assurance engagement depend on our judgement, including the assessment of risk of material misstatement of the indicator, whether due to fraud or error.

In making those risk assessments, we have considered internal control relevant to the preparation and presentation of the indicator in order to design assurance procedures that are appropriate in the circumstances, but not for the purposes of expressing a conclusion as to the effectiveness of Yara's internal control over the preparation and presentation of the indicator.

Our engagement including assessing the appropriateness of the indicator and the suitability of the criteria used by Yara in preparing the indicator.

Deloitte.

Specific procedures for the reasonable assurance on the indicator included:

- Interviews with relevant staff at corporate and business area level responsible for collecting and consolidating the information used for the preparation of the corporate GHG emissions intensity indicator, to understand and evaluate the design and implementation of the systems and methods used to collect and consolidate the data.
- Site visits at two production sites to review and validate source data and the design and implementation of the systems and methods used to collect and consolidate the data at local level.
- A review of collected source data for energy consumption and GHG emissions from a selection of 8 production sites covering about 80 percent of the GHG emissions from the Yara sites to test consistency with data reported to Yara corporate.
- Analytical review of data trends and developments, including comparing prior year GHG emissions data reported to corporate from European sites with third party verified data later reported to the EU ETS to assess reliability of Yara's reporting process for the European sites.

Reasonable assurance conclusion

In our opinion, Yara's corporate indicator on greenhouse gas (GHG) emissions intensity, is in all material respects prepared and presented in accordance with the GRI Standards; Core option and the specific criteria described for this indicator in the Report.

Limited assurance on the Yara – GRI Report 2019

The procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent than a reasonable assurance engagement. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Considering the risk of material misstatement, our work included analytical procedures and interviews with management and individuals responsible for the preparation of the Report and for sustainability management at corporate level, as well as a review on a sample basis of evidence supporting the information in the Report.

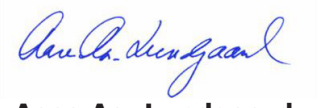
We believe that our work provides an appropriate basis for us to provide a conclusion with a limited level of assurance on the subject matters.

Limited assurance conclusion

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

- Yara has applied procedures to identify, collect, compile and validate information for 2019 to be included in the Report, as described in the Report.
- Information presented for 2019 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 GRI Standards; Core option and appropriately provides information, or refers to information, on each of the reported disclosures of the GRI Standards.

Oslo, March 17, 2020
Deloitte AS



Aase Aa. Lundgaard
State Authorised Public Accountant

Frank Dahl
Deloitte Sustainability