Yara Sustainability Report 2022

On course to a nature-positive food future
Yara launched its new ambition statement, ‘Growing a Nature-Positive Food Future’, with last year’s integrated report. During the past year, we have worked on putting our ambition into action. This work has been developed under drastically changed conditions, from Russia’s war on Ukraine, through disruptions in supply chains, to unprecedented volatility in energy and commodity prices.

Throughout 2022, Yara’s people, culture and business model have continued to create value for our shareholders as well as for farmers, suppliers, and other important stakeholders. Yara’s ability to sustain supplies and keep providing our crop-nutrition and industrial solutions to the markets is based on our integrated business model, operating a worldwide production, trade, and marketing system. This means that we can keep our focus on maintaining supply of Yara’s vital solutions to customers and securing continuity throughout the supply chain.

We are concerned about the impact of the current crisis on the food value chain, with high food prices for consumers, and availability and affordability of fertilizers being a substantial challenge to farmers worldwide. While increasing prices for fertilizers helped Yara’s profitability, we have made efforts to support the farmers hardest hit by the crisis. This has happened through market design models enabling discounts for fertilizers and making digital tools available for farmers at no cost.

While we face many risks and uncertainties in the current context, we have made progress towards Growing a Nature-Positive Food Future. Among our key contributions this year, this report gives insight into:

- How Yara has adapted its operations to tackle a challenging environment, ensuring sustainable value creation for investors, farmers, suppliers, employees, and society at large
- How we have used the challenges presented to strengthen our efforts to decarbonize our business
- New partnerships that move us closer to delivering on our Ambition, including through Yara Clean Ammonia
- Strengthened efforts to protect and restore nature with a specific focus on solutions in the value chain where it matters the most – in the field
- Continued efforts on People, through stronger engagement and development of our employees, follow-up on Safe by Choice, and actions on human rights and ethics
- Increased efforts to reach more farmers and communities to improve nutrition and quality of life through our global scale.

This year has underscored how important the security of fertilizers, food, and energy really is. Our employees have demonstrated tremendous agility and commitment to our mission. As Yara, we have proved the solidity of our business model, and our collective ability to deliver on our ambition. By providing innovative, climate- and nature-friendly solutions for farmers, food companies and other energy-intensive sectors, Yara will follow through on its commitment to sustainable value creation and a decarbonized and nature-positive future.
Performance highlights 2022

People

TRI 1.1
Total Recordable Injuries per million hours worked for employees and contractors

Planet

3.1
GHG emissions intensity, tonne emissions of CO₂e per tonne nitrogen in Yara’s own produced products

Prosperity

35%
of our procurement spend covered by third-party sustainability ratings

Governance

97%
completion rate for our Code of Conduct training

Eyes set on climate neutrality by 2050
In 2022, we continued the steadfast implementation of projects to decarbonize our operations, including the step change projects to electrify production at Yara Porsgrunn and to capture and store carbon from Yara Sluiskil.

Defining the Climate and Nature roadmap
We are working diligently on our Climate and Nature roadmap to translate the strategic ambition of Growing a Nature-Positive Food Future into clear targets and governing principles.

Lasting social impacts
In 2022, we launched a new Social Impact 2030 framework in Yara Africa & Asia. Our ambition is to advance prosperity for 50 million farmers by 2030 through innovative and inclusive business models.

Standing up for biodiversity
We joined the Make it Mandatory campaign at the 2022 UN biodiversity conference (COP15) and will follow up on the call for nature disclosures by testing the methodologies from the Taskforce on Nature-Related Financial Disclosures and the Science Based Targets Network.

Mental health and well-being for all
Throughout 2022, we continued to roll out measures to promote and protect the mental health of everyone working for us. This included new procedures and guidelines, local well-being committees, and new training material.
This is Yara International ASA’s 2022 Sustainability Report. We report on all material topics in the Performance section of this report, except for the topics Profitability and Board Composition and Oversight, which are reported in Yara’s Integrated Report 2022.

We have used the Global Reporting Initiative framework to guide our reporting since 2007 and were early adopters of the GRI Universal Standards. Our materiality assessment is based on the double-materiality approach. This will be a core element of the Corporate Sustainability Reporting Directive (CSRD), which will apply to Yara for the financial year 2024.

Additional information is also available in the following reports for the financial year 2022, all available at the Latest annual report page on yara.com:

- Yara Executive Remuneration Report 2022
- Yara EU Taxonomy Report 2022
- Yara Country-by-Country Report 2022

Yara Sustainability Report 2022
How we plan

During 2022, Yara’s people, culture, and business model continued to create value for our shareholders as well as for farmers, suppliers, and other important stakeholders. In 2023, we will continue to work on putting our long-term ambition of Growing a Nature-Positive Food Future into action.
PRODUCTS AND SOLUTIONS

What we offer

Our products and solutions support sustainable food production and the decarbonization of the shipping and energy sectors.

Farming solutions

We offer a complete range of premium fertilizer products, backed by agronomic knowledge and a growing range of digital solutions and other services for modern farming. This unique combination of crop nutrition, expertise, tools, and services helps farmers to apply sustainable farming practices and grow more food on less land.

Industrial solutions

We develop and sell environmental solutions and essential products for industrial applications in the energy, cement, mining, and animal nutrition sectors. Our portfolio includes emission abatement solutions for the transportation and maritime sectors along with products for water treatment, odor control, and solar power plants.

Clean ammonia

We are positioned to deliver clean ammonia to scale to enable reduced emissions from food production and in the shipping and energy sectors. Low greenhouse gas emissions from its production and no CO₂ emissions from combustion make clean ammonia an attractive solution to decarbonize hard-to-abate industries.
Where we operate

Global presence

Yara is the industry’s most global player. We combine the production and marketing of crop nutrition products and solutions with a farmer-centric approach, turning a century of agronomic knowledge into value for millions of farmers around the globe.

Yara-branded retail outlets around the world

10,800+

Countries with operations
60
Production plants
26

Countries with sales
140
Terminals, warehouses, blending units, and bagging facilities
200

1) More than 10,800 Yara-branded retail outlets around the world
2) Yara-operated terminals and logistical production sites
Yara employs an array of resources and assets to create value and deliver on our mission.

**INPUT**

**Energy**
- Natural gas to produce ammonia

**Materials**
- Minerals to produce crop nutrition

**Infrastructure**
- 26 production plants
- 200 infrastructure points globally
- 10,800 Yara-branded retail outlets worldwide

**Knowledge**
- Unique agro-nomic and industrial knowledge
- 17,500 employees representing great diversity

**Financials**
- Strong track record
- High credit rating
- Liquid share

**Brand**
- Global recognition
- Quality and reliability

**Why fertilizer?**
Almost half of the world’s population depend on mineral fertilizer for their food security\(^1\). Mineral fertilizers are essential crop nutrients, which replenish the soil after harvest and enable farmers to profitably grow nutritious quality crops. FAO estimates a need for 60% increase in food production by 2050, and balanced fertilization is crucial to sustainably increase agricultural output.

**Why Yara?**
Yara is the world’s leading crop nutrition company. Yara supports farmers globally with agronomic knowledge, digital tools, and top-quality fertilizers. Unlike most fertilizer companies, we offer a complete range of crop nutrition products, ranging from those based on key nutrients – nitrogen (N), phosphorus (P), and potassium (K) – to those incorporating growth and quality enhancing nutrients, such as calcium (Ca) and magnesium (Mg), to micronutrients tailored to specific soil or crop conditions. Read more in the Fertilizer Industry Handbook at yara.com.

**OUTPUT**

**We create**
- A safe and inspiring workplace, helping to feed 200 million people

**We supply**
- Our global footprint enables consistent and reliable deliveries to customers worldwide.

**We deliver**
- We deliver complete crop nutrition solutions for the farming community and food industry, as well as nitrogen-based solutions for industrial use.

**Production**
- #1 producer of nitrates and compound NPK (premium products)
- #2 producer of ammonia
- Flexible and scalable production system

**Distribution**
- Global network of sales offices, terminals, and warehouses
- Timely deliveries aligned with crop cycles and demand

**Farmer**
- Sales to 20 million farmers
- Agronomists worldwide
- Complete package of premium products, knowledge, digital tools for modern farming

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\(^1\) Erisman et al. (2008). "How a century of ammonia synthesis changed the world", Nature geoscience, Vol 1, October 2008
CEO MESSAGE

Doing more of what we know works

Many solutions for a more sustainable, resilient, and fair food system already exist. The challenge is to implement them at scale.

In our hunt for new technology and new solutions, we tend to forget the many solutions already invented. Although continued innovation is important, I think that the biggest breakthrough needed has to do with behavior. We must succeed in working across industries, across the public and private sectors, and through the whole value chain, in order to succeed in building a sustainable, net-zero future, which will benefit people and planet and create prosperity for all.

PEOPLE drive change

Analyses show that the most diverse companies are more likely than ever to outperform their less diverse peers on profitability. Adding the challenges of the climate emergency and food insecurity, it is clear that we need all the knowledge and experience available to ensure the future prosperity of the company.

Yara is a diverse organization, but it takes continuous effort to create an inclusive and equitable work environment. This is why Diversity, Equity, and Inclusion is seen as a key enabler of our strategy. Among our initiatives in this area are the Women in Agronomy program, the Black Talent Initiative, Black Leadership Program, and company-wide support of the Pride movement.

“Tackling the climate crisis is essential for the future prosperity of this planet. However, so is tackling the nature crisis, halting biodiversity losses, and restoring natural ecosystems.”
When measuring our employee engagement, we are satisfied to see that Yara is in the top quartile with an engagement rate of 78 percent. This confirms that we are indeed a purpose-driven company, with as many as 83 percent of our employees feeling they contribute to fighting hunger, growing prosperity, and improving the company’s environmental performance. The pandemic and the repercussions of the war in Ukraine have proved that having a clear purpose is invaluable.

This year marks the 10-year anniversary of our Safe by Choice program. We started out focusing mostly on people and processes, but today, it covers all aspects of Health, Environment, Safety, Security, and Quality (HESQ). With Total Recordable Injuries (TRI) down 75 percent, from 4.3 to 1.1, Yara continues to lead the way in the safety field.

A widened responsibility for the PLANET
People will not thrive on a planet that doesn’t thrive. At Yara, we have made significant progress in reducing our direct emissions. Since 2005, we have reduced our GHG emissions by about 45 percent, and we have set a KPI to reduce them by a further 30 percent by 2030.

The main focus for most companies is the direct emissions. It is common to start with what is closest. However, it is not nearly enough if we are to deliver on the Paris Agreement and make sure global warming does not exceed 1.5°C above pre-industrial levels. To succeed, we must all get serious about scope 3 emissions – emissions that are not produced by the company itself, but by those in the upstream and downstream of its value chain. For Yara, scope 2 and scope 3 account for 76 percent of its total emissions.

Our efforts to reduce our own scope 3 emissions overlap with the goals of other companies. Emissions from the fields of the farmers are in our downstream scope 3, but also in the upstream scope 3 of industries such as food and fashion, meaning the knowledge we can provide also brings a value proposition to other stakeholders in the value chain. Yara has also taken an active role in the fertilizer industry, which is pursuing the development of a Sectoral Decarbonization Approach to enable it to set science-based targets for its scope 1 and 2 emissions, and also reducing the emissions from fertilizer use – i.e., downstream scope 3 emissions.

Tackling the climate crisis is essential for the future prosperity of this planet. However, so is tackling the nature crisis, halting biodiversity losses, and restoring natural ecosystems. This was the clear message sent from COP15 with the establishment of the Global Biodiversity Framework. As an agribusiness, we are well aware of the food systems’ dependencies on balanced ecosystems, and that agriculture has impacted that balance for decades. By placing nature center stage in Yara’s ambition statement, we are committed to tackling the climate and nature crises as part of Growing a Nature-Positive Food Future.

PROSPERITY through regenerative farming
A key element in tackling scope 3 emissions, protecting biodiversity, and creating inclusive growth is the transition to regenerative agriculture.”
Regenerative agriculture links to five crucial aspects of farming:
1. Climate: Mitigate emissions and improve crop resilience
2. Soil health: Improve soil fertility and prevent soil degradation
3. Resource use efficiency: All relevant resources, e.g., nutrients and water
4. Biodiversity: Protect natural habitats, improve in-field and landscape biodiversity
5. Prosperity: Improve farmers’ livelihoods.

At Yara, we are dedicated to contributing to the systems-wide adoption of regenerative agriculture. We work systematically to expand our offerings, contributing to the transition. Among our solutions are green and low-carbon nitrate fertilizers, specialty products for enhanced crop performance, organic-based fertilizers, and digital solutions.

As part of the Sustainable Markets Initiative (SMI), Yara contributed to the report “Scaling Regenerative Farming: An Action Plan”, which found that regenerative farming must grow three times faster to limit climate change to 1.5°C. According to this report, regenerative farming is adopted on approximately 15 percent of global cropland. Increasing this to 40 percent would save around 600 million tonnes of emissions, which is around two percent of the global total, or equivalent to the footprint of Germany.

The major hurdle to achieving this is making it commercially attractive for farmers, especially at a time in which high input prices are making life difficult for many farmers. However, the transition must continue. In a world that only incentivizes volume, we are in practice incentivizing farmers to break planetary boundaries. Ensuring that markets and regulators support regenerative agriculture is required to support the Paris agreement and reduce nature loss.

A key solution is to close the climate finance gap and remove harmful subsidies. According to the International Fund for Agricultural Development (IFAD), less than three percent of climate finance currently goes towards supporting smallholder farmers to adapt to the impacts of climate change. We must remove subsidies that harm the planet. Repurposing them to environmentally friendly solutions would help close this gap. With significant benefits for the soil, the farmers, and the planet.

Svein Tore Holsether
President and CEO
Global macrotrends inform and influence Yara’s market megatrends

Growing and increasingly urban global population
- Sustained and continued global population growth, with biggest magnitude in developing countries, driving growth in consumer demand
- Changing demographic structures, with growing urban population impacting consumer preferences

Geopolitical and trade uncertainty
- Covid-19 and war in Ukraine bringing uncertainty to the globalization and future trade flows, with likely slow-down in globalization
- Increasing importance of resource security across food, energy, and other critical resources

Megatrends that shape Yara’s market and value chain

- Climate change
- Water safety and reliability
- Dietary shifts
- Soil health
- Zero waste and circular economy
- Agri and food industry integration
- Digitalization
### Megatrends shaping our industry

<table>
<thead>
<tr>
<th>Agriculture, the food value chain, and industries are undergoing profound changes. These are the megatrends significantly shaping our industry and markets.</th>
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#### Agriculture, the food value chain, and industries are undergoing profound changes. These are the megatrends significantly shaping our industry and markets.

- **Climate change**
  
  The climate crisis is set to put food systems under extreme pressure, affecting agricultural production globally. There are increasing expectations for and regulations related to tangible climate actions and the reduction of greenhouse gas emissions.

- **Water safety and reliability**
  
  Water is crucial for plant growth, a lack thereof is a major stress factor in crop production. Climate change disrupts precipitation patterns, while extensive irrigation taps aquifers and reduces water quality through salination. These changes have caused considerable impacts on water reliability worldwide.

- **Dietary shifts**
  
  Consumers particularly in high-income countries, are increasingly driving diets towards healthier, sustainable choices, with more plant-based nutrition. Globally, however, the trend towards higher calorie and animal protein intakes continues.

- **Soil health**
  
  Roughly one third of the world’s soil is degraded, and soil erosion, biodiversity loss, and pollution are high on the list of causes. Farming without adequate replenishment of nutrients adds to soil degradation. Best farming practices, however, focus on soil health, carbon capture, and regenerative agriculture.

- **Zero waste and circular economy**
  
  Resource scarcity, growing sustainability awareness, and increased consumer pressure is creating a push towards a more circular economy. It is driving increased interest in recycling nutrients in agriculture and food value chains, as well as for organic fertilizers.

- **Agri and 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 the whole industry is under pressure to achieve new levels of sustainability.

- **Digitalization**
  
  Digital innovation and technological transformation are fundamentally changing strategies and practices in decision making, fertilizer application, farm automation, and traceability. It has started to impact the entire food value chain.
MEGATRENDS

Opportunities and risks from the megatrends

Megatrends present new opportunities we can actively pursue, as well as risks we need to mitigate.

Opportunities

• Shifts towards sustainability and transparency, where our crop nutrition offerings provide a good starting point for finding solutions
• Digital tools to enable new market channels and reduce the yield gap through farmer connectivity
• Mainstream adoption of green ammonia and hydrogen
• Focus on soil health, water use, and biodiversity, where optimal fertilizer use has a positive impact
• New monetization opportunities from increased data access

Risks

• Regulatory changes, consumer demand for sustainability, and optimized fertilizer use can lead to lower fertilizer demand growth
• Environmental costs and taxes can increase costs
• Physical climate change risks to our operations and customers
• Reduction in demand, commoditization, and increased price competition can challenge premium fertilizer margins
• Competitive landscape can be disrupted
• Increased uncertainty around the competitive position of our European production

> For more information on Yara Climate Scenarios, see page 20 in our Integrated Report
How can we avoid food insecurity in times of crisis?

The planet is facing both a climate crisis and a nature crisis. Solving these two crises while feeding a growing population will require a fundamental transformation of the way we produce food.

Over the last one hundred years, farmers have supported a more than four-fold increase in world population. The growth in food production has been rapid, but it has come at a cost, as agriculture has contributed to the current climate and nature crises.

Now we must transform how we grow, process, trade, transport, consume, and dispose of our food to ensure future food security while respecting the boundaries of our planet. This will require a concerted effort from everyone involved in food production. Sustainability is within reach, but not without the application of agricultural knowledge, partnerships, better farming practices, and a strong will to create a nature-positive food future.
FOOD SYSTEMS TRANSFORMATION

What Yara brings to food systems transformation

Maximize output: feed the world

<table>
<thead>
<tr>
<th>Farming inputs</th>
<th>Farming</th>
<th>Transportation</th>
<th>Food processing</th>
<th>Retail</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>We offer a complete range of crop nutrition products to match any crop.</td>
<td>Digital tools enable farmers to optimize food production.</td>
<td>Our maritime solutions enable ships to sail longer on less fuel.</td>
<td>We enable food companies to meet demand for low-carbon food.</td>
<td>Balanced crop nutrition prolongs the shelf life of food.</td>
<td>Nitrogen mineral fertilizers provide food for about half of the world population.</td>
</tr>
<tr>
<td>We work relentlessly to produce more from less.</td>
<td>Our carbon marketplace enable farmers to profit from sustainability.</td>
<td>Our 800+ on-the-ground agronomist share knowledge and best practices.</td>
<td>We enable food companies to meet demand for low-carbon food.</td>
<td>We continue to explore ways to increase food production within planetary boundaries.</td>
<td>We continue to explore ways to recycle nutrients from food and other waste into high-quality fertilizers.</td>
</tr>
</tbody>
</table>

Minimize impacts: optimize resources used

Farming

- Precision farming tools use land, nutrients, and water more efficiently.
- We promote regenerative agriculture practices in farming.
- We offer foliar fertilizers, biostimulants, and fertigation solutions to enable a more resilient crop production.

Transportation

- Clean ammonia offers emission-free shipping.
- Our environmental solution reduce emissions from road transport.

Food processing

- We offer solutions to reduce NOx emissions from industrial processes.

Retail

- Our product carbon footprints support climate labelling of products.

Consumption

- We are developing ways to recycle nutrients from food and other waste into high-quality fertilizers.
Our material topics

Building on the 2021 materiality assessment, the 2022 update deepened Yara’s approach to double materiality. We clarified our understanding and definitions of the identified impacts, linked our assessment to financial and impact materiality, and strengthened the link between our stakeholder engagement and prioritization of material topics.

<table>
<thead>
<tr>
<th>AMBITION</th>
<th>OUR PILLARS</th>
<th>TIER 1 TOPICS</th>
<th>TIER 2 TOPICS</th>
</tr>
</thead>
</table>
| Growing a Nature-Positive Food Future | People | • Occupational and Process Safety  
• Diversity, Equity, and Inclusion  
• People, Culture, and Leadership  
• Security, Emergency, and Data Privacy | • Human Rights and Labor Practices  
• Product Safety  
• Health and Well-Being at Work |
|                         | Planet      | • Opportunities in Clean Tech  
• Sustainable Farm Management and Regenerative Agriculture  
• Climate Change  
• Energy | • Air, Water, and Waste  
• Protection of Ecosystems |
|                         | Prosperity  | • Profitability  
• Sustainable Finance  
• Digitalization | • Customer Management  
• Socioeconomic Impacts on Communities  
• Sustainable Supply Chains |
|                         | Governance  | • Business Integrity  
• Regulatory Changes and Compliance | • Board Composition and Oversight |
At Yara, we want to focus our attention and efforts on topics that represent our most significant potential impacts on people, the planet, prosperity, and governance. We therefore define material topics as matters that have the potential to affect our value creation, along with topics that represent actual and potential negative or positive environmental and social impacts related to our activities along the value chain. We are transforming our business with the ambition of offering nature-positive solutions, which entails both new challenges and new opportunities. The evolving understanding of our impacts and the developments on the concept of materiality triggered an update of the 2022 assessment to ensure that our priorities are relevant and aligned with our ambitions.

To determine Yara’s material topics, we used the same four-step approach developed in 2021 for the 2022 update, with some adjustments in light of lessons learned and upcoming regulatory requirements.

**Step 1: Identification of impacts**

Our mapping of potential impacts covered economic, environmental, and social impacts and drew on input from several sources and processes, not least from our stakeholder engagement.

Holistic performance management is fundamental to the way we measure our success. We approach materiality in the same manner – holistically. Building on the 2021 assessment, the list of topics was reviewed based on several sources – external and internal – to identify potential negative and positive impacts on the environment, people, and value creation. The Stakeholder Management Procedure was used to complete the list of impacts with topics raised by Yara’s ten prioritized stakeholder groups, and key concerns were identified. Our Stakeholder Management Procedure, which we established in 2020, mandates our business units to conduct regular stakeholder analyses, create engagement plans, and report their findings and responses. See Stakeholder Management Procedure, page 31 for details.

The complete list of impacts was consolidated into topics and relevant subtopics to reflect the connectivity of issues, and we refined topic descriptions with the involvement of internal subject matter experts.

**Sources used to identify impacts**

- External:
  - Stakeholder engagement
  - Legislation and global policy development
  - Megatrends
  - Industry trends
  - ESG standards
  - ESG ratings
  - Customer surveys
  - Customer surveys
- Internal:
  - Yara’s strategy
  - Yara’s risk map and risk universe
  - Internal audits
  - Business partner monitoring
  - Human rights impact assessments
  - Employee surveys

**Step 2: Prioritization of topics**

Involving subject matter experts from around the organization, we assessed the significance of the impacts to Yara’s value creation and to the environment and society along the value chain and prioritized them in tier 1 and 2 topics.

We assigned ownership of topics to internal subject matter experts in order to assess and prioritize the significance of the impacts to Yara across the value chain along two dimensions:

1. Financial materiality
2. Impact materiality

Financial materiality is determined by estimating the potential monetary impact on Yara’s annual EBITDA on a scale from major (>USD 400 million) to insignificant (<USD 5 million) and the likelihood for the impact to occur from almost certain (65-100%) to rare (<5%). The estimation of financial materiality is modelled in accordance with Yara’s Risk Management Process. It should be noted that the assessment performed is at a high level, and that there are uncertainties associated with it.

Impact materiality is estimated by assessing the impact of each topic on environment and society, where it occurs on the value chain, and whether they are likely to play out over the short-(0-1 years), medium-(2-5), or long-term (6-30 years), as well as how important the topic is to our stakeholders. See page 31 for details.

The assessment process was facilitated by our Sustainability Governance function, which also provided second opinions and initiated broader discussions when needed. Conducted on a shared platform with assessments of individual topics accessible to all involved, this process created significant engagement and dialogue internally. A number of functions and teams were involved and topics were refined, and
subtopics regrouped to better reflect their connectivity, importance, and management.

Using all inputs gathered through the impact assessment and prioritization, a materiality matrix was generated in line with the requirements of the Global Reporting Initiative (GRI), the Integrated Reporting Framework and early Corporate Sustainability Reporting Directive (CSRD) interpretation. The outcome of the assessment process was a complete list of material topics prioritized in tier 1 and tier 2 topics. The tier 1/2 threshold was set at higher than medium risk and medium likelihood for the financial materiality and higher than medium impact in at least one stage of the value chain for the impact materiality.

Step 3: Validate and approve material topics

The prioritization process and outcome were validated by our Strategy and Risk functions, approved by the CFO, and directionally supported by the Board Audit and Sustainability Committee (BASC).

Our Strategy and Risk functions reviewed the list and weighting of topics against our strategic priorities and Yara’s risk profile and provided their feedback on thresholds for tier 1 and 2 topics. Following the review and final amendments, the material topics were validated by the heads of Strategy and Risk, and by Yara’s CFO. The materiality-assessment approach and outcome were also directionally supported by Yara’s Board Audit and Sustainability Committee (BASC).

We report on our priorities and progress for each material topic in the Performance section of this report with two exceptions, Profitability, and Board Composition and Oversight, which are reported in Yara’s Integrated Report 2022.

Step 4: Implementation

We take a holistic approach to measuring success and have defined specific KPIs and responses for our material topics and disclose them in our reporting in order to demonstrate progress. We manage and monitor material topics through the implementation of our strategy, risk, and business plan. Progress is monitored regularly through business reviews and communicated in our quarterly and annual reports.

While all tier 1 and tier 2 topics are closely monitored and tracked, tier 1 topics are candidates for inclusion in Yara’s Strategy scorecard, see page 24. We are continuously working to improve and maintain data quality in our performance management.

We intend to review the materiality assessment annually, however, sudden changes in our business environment can trigger more frequent updates. Future materiality reviews will be run ahead of our corporate business plan process to integrate sustainability requirement, responses, and KPIs into the individual business plans of our regions and functions.

Changes from 2021

While the 2022 materiality update reconfirmed the prioritization of all material topics from the 2021 assessment, two topics were assessed to have increased in materiality and, thus were moved from tier 2 to tier 1:

1. Security, Emergency, and Data Privacy
2. Regulatory Changes and Compliance.

The topic Stakeholder Engagement was removed from the identified impacts as it was seen as an enabler of all other material topics. The global stakeholder engagement summary that informed the identification of impacts and prioritization of the materiality can be found on page 37-41.

The topics Leadership and Employee Enablement, and Entrepreneurship and Agility were merged into People, Culture, and Leadership. Air Quality, Circularity, and Water Management in Production were merged into Air, Water, and Waste for better clarity.
Material topics and how Yara understands them

PEOPLE: Our employees and culture are important success criteria for Yara. We measure how we develop a culture of safety, engagement, diversity, and inclusion among our employees.

- Occupational and Process Safety: Keeping all our employees, contractors, and neighboring communities safe and minimally exposed to risks.
- People, Culture, and Leadership: Developing and retaining the skills, talent, and culture needed to deliver our strategy and realize our vision.
- Diversity, Equity, and Inclusion: Building a diverse and inclusive working environment and ensuring fair treatment and equitable opportunities for all employees.
- Human Rights and Labor Practices: Respecting internationally recognized human rights along with all relevant labor rights throughout our operations and supply chain and maintaining good and constructive relations with our employees and their organizations.
- Health and Well-Being at Work: Building a healthy workplace to protect and promote the health and well-being of employees considering both their physical and psychosocial work environment.
- Security, Emergency, and Data Privacy: Protecting our people, environment, assets, and reputation from internal and external threats and potential emergencies.
- Product Safety: Taking proper care of our products’ compliance, quality, safety, and environmental footprint throughout the entire value chain.

PLANET: Our ambition is to become climate-neutral by 2050, and to grow a nature-positive food future. Decarbonizing our own operations is critical, but we also want to contribute to reducing emissions and impacts on nature from our supply chain, our operations to the farmers, and other customers who use our solutions.

- Opportunities in Clean Tech: Investing in implementing low-carbon and other environmental technologies in our operations and in our offerings.
- Climate Change: Mitigating climate change by reducing greenhouse gas (GHG) emissions and adapting to climate change by increasing our resilience.
- Sustainable Farm Management and Regenerative Agriculture: Facilitating and supporting sustainable farming practices that impact positively on crop quality, GHG emissions, soil quality, and water use efficiency.
- Energy: Improving energy efficiency and defining the company position on sourcing of renewable energy.
- Air, Water, and Waste: We are working towards zero harm to the environment by protecting fresh air and clean water, by adopting the waste hierarchy, and by moving towards a circular economy.
- Protection of Ecosystems: Supporting biodiversity and health of ecosystems by understanding and addressing the impacts of our operations and products to plants, animal species, and protected areas.

PROSPERITY: We aim to improve the profitability of our operations and grow new business areas to create value for our customers and society at large, and to deliver superior returns to our shareholders.

- Profitability: Sustaining profitability in our business and delivering superior shareholder returns based on reliable and cost-efficient operations, capital discipline, and global optimization.
- Sustainable Finance: Supporting sustainable finance by implementing sustainability criteria in our investment decisions and maintaining a favorable ESG profile and high ratings on ESG criteria.
- Digitalization: Applying digital technologies to improve our production, agronomy services, and overall business.

GOVERNANCE: Sound governance is the foundation for living our purpose, and for progressing on the other three pillars People, Planet, and Prosperity.

- Business Integrity: Honoring responsible business conduct and promoting accountability by maintaining proper policies and practices, upholding a culture of respect, honesty and fairness, and contributing to transparency.
- Regulatory Changes and Compliance: Conforming to all applicable laws, regulations, standards, and voluntary commitments while keeping abreast of and prepared for new regulatory changes.
- Board Composition and Oversight: The extent to which the composition, role, and work of our Board of Directors is aligned with long-term value creation.
Where and when impacts are likely to occur

How we manage and monitor material topics depends on where and when they are likely to have an impact.

We have considered the significance of each impact along our value chain. Acknowledging the fact that many impacts are expected to play out over the coming years and decades, we applied time horizons longer than normal business planning.

Time frame

- **Short term**: Impacts exist or can arise expectedly or unexpectedly within 0–1 year
- **Medium term**: Impacts are expected to arise or increase in significance within 2–5 years
- **Long term**: Impacts are expected to arise or increase in significance within 6–30 years

How we define the value chain:

- **Sourcing**: Selection and engagement with suppliers providing Yara with raw materials, products, and services.
- **Production**: All stages of the manufacturing of Yara’s nitrogen fertilizers and industrial products to factory gate.
- **Distribution**: Logistics operations and transport of products from factory gate to delivery and sales through local distributors and retailers or directly to end users.
- **Application**: Use of our products and services in industrial applications or in the field to grow crops.

Level of impact:

- High
- Medium
- Low
- N/A

<table>
<thead>
<tr>
<th>Impact in our value chain</th>
<th>Sourcing</th>
<th>Production</th>
<th>Distribution</th>
<th>Application</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational and Process Safety</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>People, Culture, and Leadership</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Diversity, Equity, and Inclusion</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Human Rights and Labor Practice</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Health and Well-Being at Work</td>
<td></td>
<td>●</td>
<td>●</td>
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<td>○●●</td>
</tr>
<tr>
<td>Security, Emergency, and Data Privacy</td>
<td>●</td>
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<tr>
<td>Product Safety</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Planet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities in Clean Tech</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
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<tr>
<td>Sustainable Farm Management and Regenerative Agriculture</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>○●●</td>
</tr>
<tr>
<td>Energy</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Air, Water, and Waste</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Protection of Ecosystems</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Prosperity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Sustainable Finance</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Digitalization</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Customer Management</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Sustainable Supply Chains</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Socioeconomic Impacts on Communities</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Integrity</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Regulatory Changes and Compliance</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
<tr>
<td>Board Composition and Oversight</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○●●</td>
</tr>
</tbody>
</table>
Our strategy

We launched our updated strategy and the overarching ambition of Growing a Nature-Positive Food Future with last year’s integrated report. We have moved further during 2022 to put these into action.

Strategic priorities
Over the past two decades, Yara’s business model has developed from focusing on our asset and product base – what we have, to focusing on farmers and complete solutions – how we can contribute.

We will continue to improve our fertilizer production and competitive edge, what we have, but we are increasingly aiming to expand our reach and offerings – tapping into the opportunities emerging in our business environment, how we can contribute.

The three pillars of Climate neutrality, Regenerative farming, and Prosperity represent the initial and most material actions we are taking to operationalize our ambition. Read more about them on the next page. While moving forward, we recognize that discussions around the concept of ‘nature-positive’ are still evolving, notably in the Kunming-Montreal Global Biodiversity Framework, which we support, and through the Taskforce on Nature-related Financial Disclosures and the Science-Based Targets Network, both of which we are engaging in. Additional actions will be added as these discussions evolve, and standard setting in the nature field becomes more mature.

Accelerate operational excellence
Culture of entrepreneurship
Efficient operations
Holistic performance management

Expand our reach and offering
New commercial offerings
Focused asset growth
New business opportunities

Three pillars for Growing a Nature-Positive Food Future
Climate neutrality  Regenerative farming  Prosperity
Accelerate operational excellence

Culture of entrepreneurship and continuous improvement: Invest in engagement, leadership, cultural evolvement, diversity, equity, and inclusion, and dynamic upskilling

Efficient operations: Strengthen our core and realize the Yara Improvement Program targets through operational excellence, including the Yara Productivity System and Digital Production, with continued focus on safe operations

Holistic performance management: Create value through active capital allocation and pursuing climate neutrality by 2050

Expand our reach and offering

New commercial offerings: Develop and commercialize new farmer offerings, services, and solutions to transform our core business based on outcomes we deliver

Focused asset growth: Grow in assets which support the farming solutions transition, high value products and to achieve scale in strategic markets

Pursue new business opportunities: Invest in potentially disruptive areas such as nature-positive solutions and decarbonization, e.g., Yara Clean Ammonia, Agoro Carbon Alliance, Yara Growth Ventures

Three pillars for moving forward with our ambition statement

Driven by our purpose, science, and more than 100 years of agronomic knowledge, we need to give back to Earth more than we take. We will focus our efforts on three pillars where we aim to create a tangible global impact.

Climate neutrality
Reduce our own emissions and improve productivity at our production sites
Contribute to decarbonize agriculture
Contribute to decarbonize transportation and energy

Regenerative farming
Improve farming productivity and nutrient use efficiency
Positively impact nature in the value chain: soil health, biodiversity, water, air quality, and land use change

Prosperity
Improve farmer income and sustainability
Positively impact farmer diversity
Contribute to zero hunger and healthy nutrition

The Earth’s pulse connects us
Watch our film about the underlying phenomenon that connects us all
## STRATEGY SCORECARD

### Strategy scorecard

Yara’s Strategy scorecard contains the KPIs we use to measure the progress on the execution of our corporate strategy. On the next page, you can read how our KPIs are connected to our material topics and the UN Sustainable Development Goals (SDGs).

### People

<table>
<thead>
<tr>
<th>Yara KPI</th>
<th>2020</th>
<th>2022</th>
<th>2025 Target</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strive towards zero accidents</td>
<td>1.3</td>
<td>1.1</td>
<td>&lt;1.0</td>
<td>TRI</td>
</tr>
<tr>
<td>Engagement index &lt;sup&gt;1)&lt;/sup&gt;</td>
<td>79%</td>
<td>78%</td>
<td>Top quartile</td>
<td>Index</td>
</tr>
<tr>
<td>Diversity and inclusion index &lt;sup&gt;1)&lt;/sup&gt;</td>
<td>74%</td>
<td>75%</td>
<td>Top quartile</td>
<td>Index</td>
</tr>
<tr>
<td>Female senior managers</td>
<td>24%</td>
<td>29%</td>
<td>40%</td>
<td>%</td>
</tr>
</tbody>
</table>

### Planet

<table>
<thead>
<tr>
<th>Yara KPI</th>
<th>2020</th>
<th>2022</th>
<th>2025 Target</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency &lt;sup&gt;1)&lt;/sup&gt;</td>
<td>33.2</td>
<td>33.7&lt;sup&gt;2)&lt;/sup&gt;</td>
<td>32.7</td>
<td>GJ/t NH&lt;sub&gt;3&lt;/sub&gt;</td>
</tr>
<tr>
<td>GHG emissions, intensity</td>
<td>3.0</td>
<td>3.1</td>
<td>2.7</td>
<td>t CO&lt;sub&gt;2&lt;/sub&gt;e-N</td>
</tr>
<tr>
<td>GHG emissions, scope 1+2 &lt;sup&gt;4)&lt;/sup&gt;</td>
<td>-4%</td>
<td>-14%</td>
<td>-30%</td>
<td>CO&lt;sub&gt;2&lt;/sub&gt;e</td>
</tr>
<tr>
<td>Active hectares &lt;sup&gt;4)&lt;/sup&gt;</td>
<td>8</td>
<td>15</td>
<td>150</td>
<td>MHa</td>
</tr>
<tr>
<td>Carbon marketplace &lt;sup&gt;1)&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

### Prosperity

<table>
<thead>
<tr>
<th>Yara KPI</th>
<th>2020</th>
<th>2022</th>
<th>2025 Target</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia production &lt;sup&gt;1)&lt;/sup&gt;</td>
<td>7.7</td>
<td>7.7</td>
<td>8.6</td>
<td>Mt</td>
</tr>
<tr>
<td>Finished fertilizer production &lt;sup&gt;1)&lt;/sup&gt;</td>
<td>20.8</td>
<td>20.5</td>
<td>22.5</td>
<td>Mt</td>
</tr>
<tr>
<td>Premium generated &lt;sup&gt;2)&lt;/sup&gt;</td>
<td>1 036</td>
<td>1808</td>
<td>N/A</td>
<td>MUSD</td>
</tr>
<tr>
<td>Revenues from new business models</td>
<td>6</td>
<td>22</td>
<td>1 500</td>
<td>MUSD</td>
</tr>
<tr>
<td>Revenues from online sales</td>
<td>-</td>
<td>17</td>
<td>1 200</td>
<td>MUSD</td>
</tr>
<tr>
<td>Working capital &lt;sup&gt;1), 2)&lt;/sup&gt;</td>
<td>113</td>
<td>87</td>
<td>92</td>
<td>Days</td>
</tr>
<tr>
<td>Capital return (ROIC) &lt;sup&gt;2)&lt;/sup&gt;</td>
<td>8.0%</td>
<td>25.7%</td>
<td>&gt;10%</td>
<td>%</td>
</tr>
<tr>
<td>Fixed costs &lt;sup&gt;2), 5)&lt;/sup&gt;</td>
<td>2 113</td>
<td>2 379</td>
<td>Beat inflation</td>
<td>MUSD</td>
</tr>
<tr>
<td>Capex &lt;sup&gt;4)&lt;/sup&gt;</td>
<td>0.8</td>
<td>1</td>
<td>1.2</td>
<td>BUSD</td>
</tr>
<tr>
<td>Net debt / EBITDA &lt;sup&gt;2)&lt;/sup&gt;</td>
<td>1.36</td>
<td>0.66</td>
<td>1.5-2.0</td>
<td>Ratio</td>
</tr>
<tr>
<td>MSCI rating</td>
<td>BBB</td>
<td>A</td>
<td>A</td>
<td>Score</td>
</tr>
<tr>
<td>Sustainalytics rating</td>
<td>Mod</td>
<td>Mod</td>
<td>Mod</td>
<td>Score</td>
</tr>
</tbody>
</table>

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<sup>1)</sup> Measured annually

---

<sup>1)</sup> Yara Improvement Program target for 2023, more details in our Integrated Report, page 79
<sup>2)</sup> Restated from Yara International ASA 2022 fourth-quarter results
<sup>3)</sup> GHG absolute emissions scope 1+2 target is for 2030 with a 2019 baseline
<sup>4)</sup> Cropped with digital farming user activity within defined frequency parameters
<sup>5)</sup> Reported upon updates

---

<sup>1)</sup> Energy efficiency target is for 2023
<sup>2)</sup> Restated from Yara International ASA 2022 fourth-quarter results
<sup>3)</sup> GHG absolute emissions scope 1+2 target is for 2030 with a 2019 baseline
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<sup>5)</sup> Reported upon updates

---

<sup>1)</sup> Yara Improvement Program target for 2023, more details in our Integrated Report, page 79
<sup>2)</sup> See our Integrated report, page 207, for definitions, explanations, and reconciliations of Alternative Performance Measures (APMs)
<sup>3)</sup> Market reference used in the premium calculation is currently under review
<sup>4)</sup> CAPEX max 1.2 BUSD (including maintenance) in 2022 real terms
<sup>5)</sup> Fixed cost target is annual
CORPORATE COMMITMENTS

Living by high standards

Adhering to and promoting responsible business conduct and internationally respected standards is imperative to our future success and forms the foundation of our sustainability aspirations.

We want to be a driving force for sustainability in the food value chain and deliver nature-positive solutions. This entails standing up for people, the planet, and prosperity and conducting our business responsibly no matter where we operate or with whom we partner.

To this end, our key policy documents clearly state our commitment to living up to internationally respected policies and principles. These policies apply to everyone working in and for Yara, and form the foundation for how we behave, make decisions, and deploy best practices throughout our operations and supply chain.

<table>
<thead>
<tr>
<th>Key international policies and principles</th>
<th>Embedded in</th>
<th>Approved by</th>
<th>Last updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>• UN Guiding Principles on Business and Human Rights</td>
<td>Code of Conduct</td>
<td>CEO and Board of Directors</td>
<td>January 2023</td>
</tr>
<tr>
<td>• OECD Guidelines for Multinational Enterprises</td>
<td>Code of Conduct for Business Partners</td>
<td>Group Executive Board</td>
<td>January 2022</td>
</tr>
<tr>
<td>• International Bill of Human Rights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Voluntary Principles on Security and Human Rights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Core ILO conventions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Precautionary principle</td>
<td>Health, Environment, Safety, Security and Quality (HESQ) Policy</td>
<td>CEO</td>
<td>January 2022</td>
</tr>
</tbody>
</table>

UN Global Compact
Yara is a signatory to UN Global Compact (UNGC). We have embraced its ten principles covering human rights, labor rights, environment and anti-corruption, and support the UNGC’s work to promote the UN Sustainable Development Goals. As long-time signatories, we have submitted annual Communication on Progress reports to the UNGC since 2014.

UN Sustainable Development Goals
We engaged actively in the development and launch of the UN Sustainable Development Goals. The 17 goals strongly influence our corporate strategy and framework for long-term value creation.

» UN Sustainable Development Goals at the core of our business, page 28 in our Integrated Report
Progress in partnerships

We partner with energy, technology, and food companies to enable the production of clean ammonia and advance sustainability in agriculture. Yara’s partnerships within the value chain ensure proven results through the implementation of innovative products, digital solutions, and crop knowledge. Here are some of our partnership headlines from 2022:

Bringing green fertilizers to market

Yara and Lantmännen, northern Europe’s leading agricultural cooperative, are collaborating on several projects to reduce the carbon footprint of farming. The parties have signed a commercial contract for delivery of green fertilizers starting in 2023, which will enable Lantmännen to establish a fossil-free value chain. During 2022, Yara and Lantmännen have shown that decarbonized food systems will be a reality by good collaboration and novel fossil-free crop nutrition products.

Sustainable coffee production

We have established a partnership in Colombia and Peru with Volcafe, one of the biggest coffee traders in the world. We work closely with farmers to support sustainable coffee production and supply for one million coffee bags (60 kg/bag) through business models that include diagnosis, recommendation, monitoring, financing, and recognition actions in the adoption of customized crop nutrition programs.

Yara is also expanding the partnership with Volcafe in Uganda, East Africa, focusing on farmer living income though improved crop nutrition and regenerative agriculture practices. This is a stepwise collaboration to tackle farmer productivity and profitability, nitrogen use efficiency, and water use efficiency through focusing on soil health, reducing carbon, and combating climate change.

Improving livelihoods of cocoa farmers

The partnership between Yara and Barry Callebaut’s Forever Chocolate Sustainability Program aims to improve livelihoods of cocoa farmers globally. In 2022, Yara analyzed more than 1,400 soil samples from four key cocoa supplying cooperatives, financed by Mondelez and Yara’s Action Africa program. Yara’s R&D team analyzed the data and provided comprehensive insights on the key nutrient deficiencies and fertility concerns, providing Barry Callebaut and its farmers with improved crop nutrition programs to increase productivity, the income of the farmers, and consequently improving consistency of supply.
We work on several World Business Council for Sustainable Development (WBCSD) initiatives, most notably Scaling Positive Agriculture, Natural Climate Solutions, SOS 1.5, and One Planet Business for Biodiversity (OP2B).

The World Economic Forum (WEF) is an important platform for dialogue and collaboration to accelerate nature and climate actions, and to initiate public-private collaboration. We are a WEF Strategic Partner, cofounder of the First Movers Coalition, and signatory to the Partnering Against Corruption Initiative (PACI). Yara takes an active role in shaping global and regional agendas through Global Future Councils and Regional Action Groups, and Yara’s CEO participates in the WEF Alliance of CEO Climate Leaders, the International Business Council, and Industry Governors and Food Stewards meetings.

We play an active role in the International Fertilizer Association (IFA), aiming to raise industry performance and to promote sustainable farming solutions. Through IFA, we engage in several high-level processes in the UN such as the multi-stakeholder coalition Farming First. Yara’s CEO chairs the IFA Executive Board of Directors.

As a member of Fertilizer Europe, we engage in the development of more sustainable agricultural policies and practices in Europe. We also promote the principles of Product Stewardship, which we have helped develop in order to raise industry standards. Yara holds the position of Vice President of the Fertilizers Europe Board, and Yara also chairs the Climate Committee.
Uniting for change

Through our engagement on the global scene, we have entered and endorsed several coalitions and pledges, with the goal of ensuring a sustainable future.

Collaboration is one of our core values and a cornerstone of our ambition to deliver nature-positive solutions. We partner with food, technology, and energy companies to pursue this ambition, and collaborate with companies and organizations to bring down cultural, environmental, and economic barriers to sustainability.

The following pages provide an overview of recent commitments and endorsements that we have made through our engagement on the global scene.

Putting food at the center of climate negotiations at COP27

Yara and its CEO participated actively at the international climate negotiations (COP27) in Sharm el-Sheikh, Egypt. Yara shared messages on the multiple crises threatening the global food system, urging delegates to embed food security considerations in climate adaptation and mitigation plans. Yara emphasized that food systems transformation can improve the climate resilience of agriculture and drastically reduce emissions. Co-hosting the first ever Food Systems Pavilion at COP, Yara contributed to putting food and agriculture high on the climate agenda. Regenerative agriculture, green fertilizer, clean hydrogen, and food systems collaboration were highlighted as key elements to develop a more resilient food system. Yara also repeated its commitment to work to stay within the 1.5°C limit by signing a We Mean Business coalition letter, urging climate negotiators to strengthen efforts.
First Movers Coalition
Yara is a cofounder of the coalition of forward-thinking members committed to using their purchasing power to accelerate demand and create new markets for emerging technologies that can bring the climate target of 1.5°C within reach.

Alliance of CEO Climate Leaders
Yara’s CEO participates in the global community of CEOs committed to reducing emissions by more than one gigatonne annually by 2030 and urging world leaders to reach agreement aligned with a 1.5°C pathway.

Trade for tomorrow:
A collective call to action to make trade work for all
We support the call on world leaders to re-engage on trade reform to support investment, human development, and inclusion.

Measuring Stakeholder Capitalism
We are committed to deploying metrics focused on people, planet, prosperity, and principles of governance to allow for better benchmarking on sustainability progress.

Partnering Against Corruption Initiative (PACI)
Yara is a signatory to PACI, a cross-industry collaborative effort to transform the global, regional, and industry agendas on combating corruption.

Clean Hydrogen Pledge
The pledge of companies to drive growth in the demand for, and supply of, decarbonized hydrogen. Yara pledges to source and/or produce a minimum of 3 million tonnes of reduced-carbon ammonia (equivalent of 530 kilotonnes of reduced-carbon hydrogen) by 2030, of which a minimum of 50% will be low-carbon or ultra-low carbon. Yara is taking the first steps towards fulfilling this commitment by delivering its first green ammonia and consequently green fertilizer tonnes from the Skrei project in Porsgrunn, Norway in 2023. The Skrei project produces green hydrogen by using renewable electricity and electrolysis of water, delivering a zero-carbon hydrogen that replaces grey hydrogen in Yara’s existing ammonia plant in Porsgrunn.

One Planet Business for Biodiversity (OP2B)
We are a member of this cross-sectorial business coalition on biodiversity with actions focused on regenerative agricultural practices, boosting cultivated biodiversity and diets, eliminating deforestation and preserving high-value natural ecosystems.

Science Based Targets: Sectoral Decarbonization Approach
We have partnered with Nutrien, OCP, IFA and WBCSD to support a Sectoral Decarbonization Approach (SDA) for the nitrogen fertilizer sector in support of science-based targets.

SAI Platform
SAI Platform is building an implementation program to enable farmers to engage with regenerative management through an outcome-based approach. Yara has participated actively in the Regenerative Agriculture Programme since 2022, and in the Crops Working Group.

Yara joined more than 330 businesses to “make it mandatory” for all large businesses and financial institutions to assess and disclose their impacts and dependencies on biodiversity by 2030.

Empowering farmers
Yara is one of six partners committed to the Farm to Market Alliance, a global public-private consortium seeking to transform food value chains in emerging markets.

Farming for generations
Yara is a part of the alliance of nine agri-food companies, key partners, and farmers that supports dairy farmers to adopt regenerative agricultural practices.
The Food Collective

Yara’s CEO participates in this social venture pushing the broader ag-food system towards future solutions to become more regenerative, equitable, and healthy.

Climate Risk Management guide

In 2022, Yara and other leading Nordic companies in the initiative Nordic CEOs for a Sustainable Future updated their commitment to strengthening integration of sustainability into the business planning, monitoring, reporting, and verification of sustainability indicators.

Open letter reaffirming 1.5°C commitment

Yara signed the joint letter from over 200 business leaders and major civil society voices reaffirms their own commitment to limit global temperature rise to 1.5°C and call on governments to urgently pursue delivery.

Diversity, Equity and Inclusion pledge

Yara has signed the CEO commitment, a pledge and network to drive change towards more diversity, equity, and inclusion, with a particular focus on ethnicity and gender.

Together for Sustainability (TfS)

In February 2023, Yara became a member of Together for Sustainability (TfS), a chemical sector initiative to set global standards for the environmental, social, and governance performance of chemical supply chains.

Accounting for Sustainability (A4S)

In 2022, Yara resubmitted its commitments, for a second year, as A4S member. A4S equips finance teams with the practical tools and approaches to embed sustainability into financial decisions, reflective of the opportunities and risks posed by environmental and social issues.
We engage with stakeholders globally and locally to build trusting relationships and bring better business intelligence that can spur ideas for products and services.

Our Stakeholder Management Procedure provides a structured approach to the way we consult, involve, and collaborate with stakeholders. All business units conduct stakeholder analyses as part of their business planning, or in the case of specific events or initiatives.

**Strategy**

Establish objectives, aligned with corporate strategy

**Engagement approach**

Determine approach, format, and frequency

**Mapping and analysis**

Identify stakeholders and establish level of engagement

**Ongoing interaction**

Execute plan and manage relations and feedback

### Stakeholders

**Farmers**

Sales and support to about 20 million farmers worldwide

**Employees**

About 17,500 employees worldwide

**Food industry**

Major food companies and other potential partners in the food chain

**Industry associations**

Leading fertilizer industry organizations and other alliances

**Civil society**

Agenda-setting institutions, NGOs, and farmer associations

**Local communities**

Neighboring and farming communities worldwide

**Suppliers**

Ranging from global suppliers of raw materials to local businesses

**Investors and lenders**

Our shareholders and providers of capital

**Academia**

Universities, research organizations, and other forward-thinking institutions

**Regulators and policy makers**

The bodies shaping tomorrow’s regulations and policies
Key concerns raised in 2022 and Yara’s responses

2022 will be remembered for war, conflict, and a wide-reaching energy crunch. Amidst this geopolitical turmoil, the world was slowly recovering from the Covid-19 pandemic and trying to find ways to halt and tackle climate change.

Operations in areas of conflict

R#usses’s invasion of Ukraine, the military regime in Myanmar, and the civil conflict in Ethiopia all invoked continued crisis management in 2022.

Ukraine

In 2022, the war in Ukraine raged at a scale and brutality unprecedented in Europe since World War II. The impacts on the Ukrainian people and society have been devastating. The war has impacted geopolitical security and global trade. Atrocities against the civilian population and the weaponizing of food, energy, and fertilizer persist. The invasion immediately impacted Yara’s employees in Ukraine when our office in Kyiv was hit by a missile on 26 February 2022. Our direct investments in Ukraine are limited, but our operations support the crucial Ukrainian food production.

Our response

Yara employees have sustained operations despite the increasing challenges, adapting to the security situation and martial law restrictions. Due to the fighting and the contamination of farmlands by mines and unexploded devices, Yara’s ability to maintain operations in certain districts has been limited. Yara has suspended operations in occupied territories and imposed geographic security restrictions. The planning of daily duties includes preparations for sheltering from air strikes and preparing provisions for extended periods without essential services.

Yara established two crisis response teams in the wake of the war. The Operational Crisis Team has focused on the global effects of the war and the impacts on Yara’s global operations. Additionally, The Ukraine Crisis Management Team was established in late January 2022, under the guidance of Yara HESQ Security connects daily with all employees in Ukraine and has continuously provided information to support their safety. Additional training has been provided when required, including land mine awareness and shelter preparedness.
Security. It meets seven days a week to ensure that appropriate security measures are implemented at all times.

In the initial stages of the war, Yara worked closely with several NGOs to solve the transportation stoppage that emerged in the chaos of the invasion. Concurrently, our agronomists reached out to farmers and farming communities to support them with knowledge and resources to adjust the fertilizer application. Yara has also donated money and equipment to humanitarian relief and the clearing of mines in Ukraine, and we have engaged with the World Food Programme and NGOs, aiming to avert a global food crisis.

To mitigate the effects of Russian strikes on energy and water distribution networks, all employees at the Kyiv office have been equipped with emergency power. Yara HESQ Security has also provided emergency communications equipment and training to enable unimpeded communications. Yara continues to implement response measures in 2023.

Myanmar
The military coup carried out in February 2021 set off a deterioration of the societal improvements gained from five years of democracy in Myanmar. The military junta met peaceful protests with brute force and has continued with attacks on civilians and widespread violence against the Rohingya people, a persecuted Muslim group. The UN Refugee Agency estimates that more than 1.1 million people have been displaced since the coup took place, many of them in dire need of protection and humanitarian aid.

Our response
Yara formed a crisis management team immediately after the coup, and this team kept managing the situation as it unfolded in 2022. Our employees in Myanmar remained safe throughout the year, and we maintained operations to keep supporting the country’s farmers and food production. Yara Myanmar also strengthened its cooperation with stakeholders operating in the country, including with the Food and Agriculture Organization (FAO) which procured and distributed products to farmers in need.

We continued to provide support to our employees and their families throughout 2022. Priority was given to mitigating risks to our staff and their families from the conflict and from indirect consequences of violence. Sales agronomists were reallocated to regions less exposed to violence, Yara HESQ Security ran awareness training for the mobile workforce during a visit in June, and all staff were trained in first aid by the International Committee of the Red Cross (ICRC). We also continued offering Covid-19 vaccination and awareness-raising.

Ethiopia
Two years of conflict between the Ethiopian federal government, backed by Eritrea, and the Tigray People’s Liberation Front (TPLF) has driven ethnic tension and caused a refugee and humanitarian crisis in the region. This conflict continues, despite a peace deal between the Ethiopian government and the TPLF in early November 2022.

Our response
The Yara Dallol BV project has been on hold since the end of 2019, with activities limited to a contracted guard unit on site to protect the camp, an administration office in Semera, the capital of the Afar region, and a country office in Addis Ababa. The government restricted and monitored movements between Semera and Dallol throughout 2022, and provisions to the guard unit were delivered by alternative routes. The guard unit was instructed to prepare for full evacuation on two occasions in 2022. The first happened when the TPLF advanced into the Afar region. Later, the Eritrean Army passed through the project site as it deployed towards the Tigray border.

In July 2022, Yara signed a Share Purchase Agreement with XLR Enterprises Limited to sell its ownership interest in the Dallol mining project in Ethiopia. Since the signing, we have continued to support the country team in the ownership transition.
Energy crisis and supply disruptions

Stakeholders most affected:
- All stakeholders

2022 saw unprecedented peaks in energy prices and significant supply disruptions.

Russia’s invasion of Ukraine in early 2022 and the sanctions and import restrictions imposed on Russian gas and oil drove natural gas prices to peak levels in 2022. The sanctions also caused disruptions in supplies of crop nutrients, as Russia is one of the world’s largest producers of nitrogen, phosphate, and potash.

The consequences are serious and far-reaching. Reduced production and availability of fertilizers, coupled with higher prices for fertilizer and fuel, threaten global food security. The increase in food prices, inflation, and reduced purchasing power have also been felt by consumers worldwide, increasing the risk of social unrest and polarization.

The energy crunch has spurred significant investments in renewable energy, but access to energy at affordable prices remains challenging in the short term. European nations have scrambled to stock up on natural gas, oil, and coal, raising fears of a lasting fossil lock-in that will make it harder to achieve the goals of the Paris Agreement.

Our response

Yara has historically sourced large volumes of ammonia, potash, and phosphate rock from Russian producers. Additionally, Yara’s European natural gas volumes are indirectly exposed to significant price risk linked to Russian pipeline supply. Adhering to the sanctions, we leveraged our global sourcing, production, and distribution capabilities to replace these volumes with inputs from other producers. We also curtailed production at several of our production plants due to the high natural gas prices in Europe. These production cutbacks were managed carefully and in alignment with our employees’ unions to minimize negative social impacts.

We also called on the EU to develop a strategy for fertilizers and to secure industry access to natural gas, accelerate the use of renewable energy, and reinforce Europe’s autonomy in fertilizer.
Climate change

Stakeholders most affected:
- All stakeholders

In 2022, global warming reached 1.1°C from pre-industrial levels, contributing to extreme weather events and adding momentum to new, climate-related regulations.

2022 brought more evidence of climate change from across the world, from drought conditions and heat waves in Europe, to devastating rains, floods, and landslides in Pakistan. Extreme weather events and long-term changes in the physical climate are felt in all parts of the world and are impacting agriculture more than any other sector. Tackling climate change will require agriculture to adapt farming practices and crops, and to significantly reduce GHG emissions.

New, climate-related regulations are also felt by farmers and industries, particularly in Europe. The Farm to Fork strategy makes the EU a frontrunner in the transformation of food systems, while the Fit for 55 climate package intends to drastically reduce GHG emissions across several sectors, essentially by making polluters pay and boosting renewable energy production. On the other hand, the US Inflation Reduction Act of 2022 provides tax incentives, which can attract large investments in domestic clean energy, spurring talk of future trade barriers from uneven pricing of the most important enabler of the green transition: renewable energy.

Our response
Climate change represents both a strategic risk and opportunity for Yara, influencing greatly our strategy and decision-making. We follow two main avenues to mitigate climate change: One is to reduce greenhouse gas emissions from our own operations, the other to explore and offer new, sustainable solutions for farmers and food companies to reduce the emissions from the use of fertilizer and from agriculture in general. In 2022, we took new steps towards offering green fertilizer from renewable energy, which we plan to produce from mid-2023.

Our work to offer sustainable solutions for farmers and food companies also involves precision farming innovations and measures to increase agricultural resilience to climate stress and unpredictable growing conditions.

For more information on Yara Climate Scenarios, see page 20 in our Integrated Report.
Pandemic recovery

Stakeholders most affected:
• Employees
• Farmers
• Distributors and retailers
• Local communities

The pandemic continued to dominate news in the early parts of 2022 and is far from over.

The Covid-19 pandemic has taken a reported 6.2 million lives since it broke out, according to the WHO, which estimates the actual death toll to be much higher given unusually high mortality rates. Moreover, the pandemic drove an additional 77 million people into extreme poverty (UN) and cost the jobs and livelihoods of millions of people, a large proportion of whom were migrants and women.

In many parts of world, lockdowns and pandemic restrictions were considered a thing of the past in the last half of 2022. Several regions have, however, struggled with high infection rates, continued restrictions, or local community impacts throughout 2022. For Yara, this was most notable in Brazil and Asia.

Recuperation has also been uneven, depending on governments’ ability to support people and businesses in their return to normalcy. Uncertainty, fear, social distancing, and the overall disruption of life have affected people’s mental and physical health, posing new challenges for employers. Yara has also experienced new expectations for flexible work arrangements and work-life balance when employees have returned to work from home offices.

Our response
Yara closely monitored the development of the Covid-19 pandemic since the beginning and has maintained contingency plans ready to be activated, if necessary. We also established a policy both on vaccination and on covering the cost where vaccination is not funded by the government.

In 2022, we continued to invest in our employees’ physical and mental health, and to support a better work-life balance. We established a ‘work disconnection policy’ in Latin America to ensure that employees’ free time is respected consistently, and Yara India re-modelled its training program to schedule all sessions within working hours. Globally, we expanded healthcare coverage and services, and we established a new ‘workation’ policy that extends the number of days employees can work remotely abroad. A USD 1,000 bonus to all employees was extended from 2020 to 2022, as a means of showing appreciation for the flexibility, perseverance, and efforts of employees in a challenging year.

Pandemic recovery was also a theme in many of our local community engagement projects and a strong motivation for the Yara Social Impact program, which we started to implement in 2022.
Stakeholder engagement in 2022

The war in Ukraine, and the energy and climate crises were felt by all stakeholders and atop the agenda in our engagements throughout 2022. Here is a summary of dialogues with key stakeholder groups in 2022.

Stakeholder engagement is a continuous process at Yara, both at a strategic and local level. Our business units and project teams worldwide conduct regular stakeholder analyses and establish arenas for dialogue with groups important to our business. Each year, we collate reports from these units and teams to document our interactions with stakeholders, identify recurring concerns, and share learnings. In addition to the stakeholder groups presented below, we actively engage with industry associations. For more information, see Key memberships and alliances page 27.

### Employees

**How we engage**
- Global and local townhalls with Q&A sessions
- Intranet
- Frequent employee surveys
- Regular engagement with unions
- Regular job appraisals
- Training and coaching
- Global Diversity, Equity, and Inclusion (DEI) network and local teams
- Global awareness days
- Shop floor meetings and safety talks

**Key topics in 2022**
- War in Ukraine
- Security situation in Myanmar and Ethiopia
- Production curtailments
- Diversity, Equity, and Inclusion
- Safety, health, and well-being at work
- Returning to the workplace after the pandemic
- Flexible and hybrid working
- Career paths, learning, and development
- Developing a culture of entrepreneurship

**Stakeholders’ expectations**
- Frequent updates on the impacts of the war in Ukraine
- Support for colleagues in Ukraine, Myanmar, and Ethiopia
- An inclusive, safe, healthy, and fair workplace
- Clear goals, commitments, and awareness raising on DEI topics
- Work-life balance and flexible work options
- Making learning opportunities available for all
- Competitive and fair compensation
- Recognition of feedback and efforts
- Support to realize potential

**Challenges**
- Ensuring the safety and well-being of employees and their families affected by the war in Ukraine
- Supporting employees experiencing burnout and stress after the pandemic
- Aligning DEI priorities across the company and bringing down barriers to change
- Covid-19 management at locations still facing restrictions and lockdowns
- Building digital competence and making learning activities available and accessible for all
- Managing impact of inflation on compensation

**How we responded**
- Continuous management of the crisis in Ukraine, p. 32
- Support of employees and their families in Myanmar and Ethiopia, p. 33
- Careful management of production curtailments, p. 34
- Roll-out of DEI initiatives, p. 49

### Material Topics

- War in Ukraine
- Security situation in Myanmar and Ethiopia
- Production curtailments
- Diversity, Equity, and Inclusion
- Safety, health, and well-being at work
- Returning to the workplace after the pandemic
- Flexible and hybrid working
- Career paths, learning, and development
- Developing a culture of entrepreneurship

- New ‘workation’ policy, p. 68
- Investments in our employees’ physical and mental health, p. 68
- Covid-19 management and relief, p. 36
- Improved accessibility to upskilling and reskilling, p. 53
- Established the living wage project, p. 65
### Distributors and retailers

**How we engage**
- On-the-ground agronomists, crop and product specialists
- Customer satisfaction surveys and feedback
- Meetings and events
- Social media
- Participation in retail associations

**Material Topics**

### Key topics in 2022
- Fertilizer and crop prices
- Logistical constraints
- Product properties (quality, safety, security)
- Crop nutrition programs
- Sustainable farm management
- Women's role in agriculture
- Substitute and fake products

### Stakeholders’ expectations
- Frequent updates on the impacts of the war
- Reliable and timely deliveries
- Guidance on price developments and risk management
- Leadership in sustainability and regulatory issues
- New products and solutions
- Partnership opportunities, incentive schemes, and market support
- Favorable credit terms
- Support in fighting fake products

### Challenges
- Creating understanding for peaking product prices and shipping costs
- Continuously bringing new products and innovative solutions to our partners
- Meeting distributors' expectations for sales incentives
- Managing the long-term effects of the geopolitical crisis on our partner and customer relationships

### How we responded
- Ensured stable supplies of fertilizers, p. 127
- Continued engagement with and on-the-ground support to distributors, retailers, and their customers, p. 126

### Farmers

**How we engage**
- On-the-ground agronomists, crop and product specialists
- Customer satisfaction surveys and feedback
- Marketing activities and campaigns
- Farmer meetings
- Digital engagement and marketplaces

**Material Topics**

### Key topics in 2022
- Market volatility
- Product affordability and availability
- Product properties (quality, safety, security)
- Return on investment
- Market access
- Sustainable farm management
- Digital solutions
- Women’s role in agriculture

### Stakeholders’ expectations
- Access to knowledge and expertise in crop nutrition, fertilizer application, and sustainable farming
- Available and affordable products and services
- Improved profitability
- Access to financing
- Solutions and technologies to increase yields and reduce losses
- Help to identify fake products

### Challenges
- Delivering innovations that meet the evolving needs of farmers
- Expanding reach and connecting farmers with experts through digital channels
- Helping farmers cope with high fertilizer prices, fluctuating crop prices, and the impacts of climate change
- Decreasing the presence of fake products

### How we responded
- Increased digital and on-farm presence, p. 125
- Demonstrated the benefits of sustainable farm management and regenerative agriculture, p. 85
- Developed new concepts and fertilizer products, p. 86

- Documented product carbon footprints and traceability, p. 95
- Supported farmers in authenticating Yara products, p. 127
### Suppliers

**How we engage**
- Regular, direct dialogue
- Strategic collaborations and alliances
- Integrity Due Diligence process
- Participation in industry forums

**Key topics in 2022**
- Market volatility and pricing of energy, materials, and services
- Responsible business conduct
- Future business needs and deliveries
- Accuracy in orders and timely payments
- Sustainability and product stewardship requirements
- Digitalization opportunities
- Labor shortages in carrier sector

**Stakeholders’ expectations**
- Transparency and fair treatment
- Adherence to code of conduct
- Long term relationships
- Understanding of sustainability requirements
- Clear priorities and how suppliers can contribute

**Challenges**
- Providing clarity on how suppliers can contribute to our sustainability targets
- Engaging suppliers to improve their sustainability ratings and to commit and invest in sustainability
- Expanding our network of suppliers and business partners to realize decarbonization plans
- Addressing the limited availability of recycled packaging material

**How we responded**
- Clarified expectations in Yara’s Code of Conduct for Business Partners, p. 61
- Implemented Sustainable Procurement Strategy, p. 132
- Developed preferred provider and investment programs, p. 132
- Introduced Supplier Sustainability Ratings requirements, p. 132
- Implemented energy-saving technologies, p. 133
- Continued work on sustainable transport and packaging, and reuse, p. 111 and p. 135

### Investors and lenders

**How we engage**
- Stock exchange and press releases
- Quarterly and annual reports and presentations
- Roadshows, conferences, and meetings
- Individual investor calls

**Key topics in 2022**
- Impacts of the war in Ukraine and the energy crisis on Yara’s supply chain and operations
- Yara Clean Ammonia
- Shareholder returns
- Operational performance
- ESG performance
- Regulatory topics such as CBAM and the EU ETS

**Stakeholders’ expectations**
- Timely, accurate, and comprehensive information to evaluate Yara’s management of material issues
- Information and dialogue to understand the clean ammonia path
- Clear capital allocation policy
- Transparent reporting and clearly defined KPIs

**Challenges**
- Explaining complexities and impacts from volatile market conditions
- Communicating timely and accurately under volatile market conditions

**How we responded**
- Transparent communication on sanctions and production curtailments, p. 34
- Thorough presentation of Yara Clean Ammonia, p. 99
- Distributed dividend and evaluated additional dividend or share buy-backs, p. 120
- Improved ESG ratings and received positive feedback on our decarbonization approach, p. 121
- Conducted climate risk assessment, p. 94
- Assessed and reported EU taxonomy alignment, p. 119
Regulators and policy makers

How we engage

- Engagement in policy-making processes
- Provision of analyses and studies
- Dedicated advocacy resources in Oslo (Norway), Brussels (EU), Washington DC (USA), and Ottawa (Canada)
- Core Teams and Expert Networks on key policy issues
- Engagement through industry associations
- Visits, meetings, social events, and conferences

Material Topics

Key topics in 2022

- Market volatility and pricing of energy, materials, and services
- Responsible business conduct
- Future business needs and deliveries
- Accuracy in orders and timely payments
- Sustainability and product stewardship requirements
- Digitalization opportunities
- Labor shortages in carrier sector

Stakeholders’ expectations

- Timely, accurate, and comprehensive information to evaluate Yara’s management of material issues
- Information and dialogue to understand the clean ammonia path
- Clear capital allocation policy
- Transparent reporting and clearly defined KPIs

How we responded

- Engaged publicly to raise concerns regarding impacts on global food security, p. 28
- Participated in the UN Crisis Response Group, in Integrated Report, p. 36
- Demonstrated the importance of exports to succeed with the EU CBAM system, p. 145

Challenges

- Promoting demand for our renewable and low-carbon products
- Communicating plant nutrition’s role in ensuring both yield and lower emissions
- Managing supply chain disruptions to maintain deliveries and our contributions to food security
- Meeting increasingly stringent and complex regulations on our processes and products

Food industry

How we engage

- Key processor discussions
- Partnerships with food companies and growers
- Participation in crop specific associations

Material Topics

Key topics in 2022

- Decarbonization of food systems
- Regenerative agriculture
- Carbon footprints
- Carbon credits and marketplaces
- Nutrient use efficiency
- Farmer incentives and profitability
- Green fertilizer
- Food prices

Stakeholders’ expectations

- Clear guidance on carbon credits and markets
- Understanding of in-field practices and actions to achieve sustainability
- Incentives for adopting climate-neutral practices

How we responded

- Expanded work on carbon footprint calculations, p. 95
- Engaged in partnerships and joint trials with food companies, p. 26
- Participated in the development of carbon farming, p. 100

Challenges

- Building capacity to deepen our engagement with food companies
- Creating understanding for the cost of decarbonizing fertilizer
- Developing a decarbonization business model attractive for all parts of the food chain

- Demonstrated the advantages that green fertilizers bring to decarbonization goals, p. 91
- Participated in the Farm to Market Alliance and other key initiatives, p. 29
- Developed low-carbon solutions for key stakeholders, p. 99
### Local communities

**How we engage**
- Partnerships
- Community projects
- Internships
- Donations

**Material Topics**

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<tr>
<th>Key topics in 2022</th>
<th>Stakeholders’ expectations</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>• Food security</td>
<td>• Sensitivity to local needs</td>
<td>• Handling and resolving local controversies related to the environmental performance of facilities.</td>
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<tr>
<td>• Fertilizer prices</td>
<td>• Environmentally efficient operations, with low emissions and no spillsages</td>
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<tr>
<td>• Rising living costs</td>
<td>• Traffic safety actions</td>
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<tr>
<td>• Impacts of the pandemic</td>
<td>• Job creation, income generation, and tax payments</td>
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<tr>
<td>• Diversity, Equity, and Inclusion</td>
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<tr>
<td>• Health and safety</td>
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<td>• Security and emergency response</td>
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<td>• Humanitarian aid</td>
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**How we responded**
- Continued the Environmental Roadmap Program to decrease the environmental impact of our production plants. \(p. 146\)
- Supported efforts to preserve the cultural heritage of the Murujuga area. \(p. 64\)
- Launched the Yara Leadership Academy. \(p. 116\)
- Engaged in numerous community projects. \(p. 129\)
- Addressed findings from human rights impact assessments (HRIA). \(p. 61\)

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### Academia

**How we engage**
- Dedicated R&D team with more than 120 full-time employees
- Scientific and field trials
- Lectures and trainings
- Events and meetings
- Publications
- Networks and coalitions

**Material Topics**

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<th>Key topics in 2022</th>
<th>Stakeholders’ expectations</th>
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<tbody>
<tr>
<td>• Low carbon food</td>
<td>• Science-based data</td>
<td>• Prioritizing topics for future R&amp;D programs and aligning with megatrends</td>
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<tr>
<td>• Soil health</td>
<td>• Consistent interaction and dialogue</td>
<td>• Ensuring knowledge flow towards application and product development</td>
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<td>• Nutrient use efficiency</td>
<td>• Support and guidance in fields of expertise</td>
<td>• Broadening Yara’s collaboration with academia and external scientific communities</td>
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<tr>
<td>• Digital solutions</td>
<td>• Reducing the fertilizer industry’s environmental footprint</td>
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<tr>
<td>• Regenerative agriculture</td>
<td>• Co-creation for innovation</td>
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<tr>
<td>• Biotimulants</td>
<td>• Visibility and transparency</td>
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<tr>
<td>• Crop Resilience to abiotic and biotic stresses</td>
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<tr>
<td>• Crop Quality</td>
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**How we responded**
- Continued to expand R&D capabilities particularly in novel technologies such as green fertilizer. \(p. 91\)
- Invested in trials at own R&D centers and in collaboration with institutions and universities worldwide. \(p. 88\)
- Promoted sustainable farm practices, including regenerative agriculture and nutrient use efficiency. \(p. 85\)
How we perform

Our reporting reflects the way we manage our performance – holistically. Commitments, indicators, and oversight are integral to making progress on our People, Planet, Prosperity, and Governance pillars.
People

Our employees and culture are important success criteria for Yara. We measure how we develop a culture of safety, engagement, diversity, and inclusion among our employees.

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CASE: DIVERSITY PROGRAMS

Developing an inclusive workplace

In the 2021 Sustainability Report we wrote about two programs that aim to make a step change in Yara’s efforts to become a thriving and inclusive workplace: The Black Talent Initiative, and the Women in Agronomy program. Both programs reached major milestones in 2022.

Women in Agronomy

Representing almost half (43%) of the world’s agricultural workforce, women are typically the backbone of rural economies and play an essential role throughout the entire food production chain. To develop, retain, and attract more women to agronomy-related areas of work, Yara is addressing the hurdles women face in the field through the Women in Agronomy program.

The mentoring program links new and developing talents with employees in senior roles across the company to increase their opportunities for knowledge exchange, self-development, and counselling. To date, 240 women have benefited from mentoring, knowledge-sharing, and visibility channels.

In 2022, the program grew beyond Yara when it was extended to 16 of Yara’s strategic distributors in Colombia, empowering 33 agronomists and technicians through mentoring, networking, and visibility. This year, the program also published its book “The Courage to Be”. In it, 43 women share their experiences and reflections to promote diverse career paths within agronomy and challenge traditional stereotypes in the sector.
**Black Leaders Development Program**

At Yara, we not only want to create the right conditions to have conversations about race and ethnicity, but, overall, we want to create an inclusive culture where Black leaders at Yara are fully appreciated, valued, and thrive. Originating from the Black Talent Initiative launched in 2020, 2022 saw the launch of Yara’s first Black Leaders Development Program, a program designed to meet the leadership development needs of Black (emerging) leaders at Yara.

With this program, Yara acknowledges the unique challenges faced by Black leaders and gives the participants an opportunity to connect with other Black leaders across Yara in a powerful network of influence and mutual support. The Black Leaders Development Program aims to increase leadership confidence, authenticity, effectiveness, and impact as Black leaders and develop renewed clarity, commitment, and strategies for pursuing career ambition at Yara.

Eighty participants have been chosen for the program. The program will run over six months and includes eight modules, consisting of individual coaching sessions, action learning sets, manager workshops, and other events. We successfully ran our first program cohort in late 2022, with 20 highly motivated and curious leaders, and we look forward to continuing the program in 2023.
We care for our employees and contractors, and safety is therefore a high priority at Yara. Our belief is that all accidents are preventable. We want to be the best and safest company in our industry. When our people, products, and processes are safe and compliant, that allows us to concentrate on reaching our goals and making the world a better place. Zero harm – that is our goal through hands-on leadership, efficient use of tools, increased coworker ownership and engagement. We have a responsibility to develop a safe and healthy workplace with minimum exposure to the risks generated by our processes.

Priorities

Safe by Choice
Safe by Choice is our company-wide journey to develop a value-based and sustainable HESQ culture to reach our ultimate goal of zero harm. Our ideal culture is one in which each one of us is held accountable for our own well-being and that of others.

The Safe by Choice way of working ensures that we are all well-informed of our responsibilities and expectations. We have the necessary skills and competencies, and we operate in a standardized way. We are committed to conducting our business in a responsible manner in accordance with applicable laws, regulations, and Yara’s policies and procedures. Furthermore, we constantly strive to improve our standards and management system.

In 2022, we continued implementing Safe by Choice as an integrated framework to strengthen and improve all our HESQ objectives, not just safety. See Codes, policies, and key processes chapter for more details on this way of working.

Safety Committee
Our corporate HESQ Committee, which is chaired by the CEO and attended by the members of Yara’s Group Executive Board, HESQ, and employee representatives, is at the top of the organizational structure, followed by the Regional HESQ Committees. Our corporate Safety Committee consists of regional and key HESQ representatives, Yara’s labor union representative, Yara’s Executive Vice Presidents, and Yara’s CEO. Regional and local HESQ committees provide the basis for managers and employees to manage HESQ at the departmental and site level. These committees are responsible for implementing the direction Yara sets to fulfill the HESQ Policy requirements and realize the ambition of zero harm.

Annual Health & Safety Day
We have celebrated annual Health & Safety Days for decades and have timed the event with the United Nations’ World Day for Safety & Health at Work since 2016. Especially during the last few years, we have seen that caring for each other is one of Yara’s strengths. Nowadays, this quality is necessary more than ever, and that is why the theme for the 2022 Health & Safety Day was “Together we care”. The day focused on the areas of mental health, psychological safety, and risk assessment. As always, the day was kicked off by a personal message from Yara’s CEO.

Incident reporting system
Our Corporate HESQ function manages a company-wide system for the reporting and handling of incidents.
HESQ-related accidents, breaches, near-misses, and hazardous conditions. All such incidents are systematically investigated according to defined severity levels, and lessons learned are shared across all units. We use independent off-site experts to conduct investigations of the most severe incidents. Classification of personal injuries is aligned with Occupational Safety and Health (OSHA) requirements.

**PSIF program**

Our Potential Severe Injuries and/or Fatalities (PSIF) program ensures that we review, investigate, and share lessons learned from incidents with high potential severity in a structured manner and establish effective improvement actions. PSIF cases are discussed monthly on a corporate-wide platform with participants from across the organization, including Yara management.

**Process safety**

Process safety is a prerequisite for our license to operate and has our continuous commitment. We have established a risk-based process safety management system, serving our final objective of mitigating and managing risks generated by our processes to prevent catastrophic accidents. We develop this system continuously, informed by events that occur within our own operations as well as in the industry.

On a monthly basis, all high potential process safety events are discussed on a corporate-wide platform with participation from across the organization.

**Performance**

We believe every accident is preventable. Our goal is to drive the Total Recordable Injury (TRI) rate down to 1.0 or less by 2025, a steppingstone to achieving our ultimate goal of zero injuries. In 2022, we recorded a TRI rate of 1.1, in line with our 2025 goal and lower than industry benchmarks. However, it was a minor increase from the previous year, which was attributable to an increase of the TRI rate for contractors. In recent years, the safety performance of the contractors has been brought down to a level similar to that of Yara employees. The increase this year may be caused by the number of turnarounds and specific projects associated with high-risk activities.

Yara has made significant progress in reducing the severity of injuries over time, and the likelihood of a fatal accident has been greatly reduced. Notably, the last fatal accident occurred in 2018.

**PSIF rate**

The PSIF rate was introduced in 2020 to enable us to work more systematically on the prevention of major incidents with potential for severe injuries or fatalities. In 2022, we recorded 38 incidents with potential for severe injuries and/or fatalities which results in a PSIF rate of 0.7. The decrease in the rate is attributed to strong leadership and employee engagement focusing on the Golden Rules. Yara’s Golden Rules focus on our highest risk activities and summarize our mandatory safety requirements.

**PS index**

In 2020, we launched a new internal target to measure our process safety performance and promote a mindset of continuous learning and improvements, the PS index.
Through systematic follow up, but also efforts and focus on efficient competence development and sharing of lessons learnt within Yara’s global Process Safety Community of Practice, we achieved a PS index of 85% in 2022, above our target of 70%.

HESQ Index
In 2021, Yara established the leading indicator, the HESQ Index, to support developing an even stronger HESQ culture. The index is an internal measure, and is regularly updated and strengthened to ensure continuous improvement.

National Safety Council (NSC) Safety Barometer Survey
Yara has a strong safety culture which has been measured through biennial NSC Safety Barometer surveys since 2015. The latest was carried out in 2022. The survey elicits employee responses to 50 statements regarding foundational safety elements grouped into six performance categories of safety excellence. Yara’s overall response rate for 2022 was 80.3%, with an overall percentile score of 85.9%, indicating that only 14.1% of benchmarked companies have a stronger safety culture.

Yara’s top strengths include thorough near-miss investigations, supervisors providing helpful safety training, management setting annual safety goals, employees understanding safety regulations, and management setting a positive safety example. The top focus areas for improvement are the sufficiency of medical resources, emergency response procedure testing, job stress for employees, workforce stability, and management including safety in job promotion reviews. Yara communicates the survey results to all sites and requests actions to improve relevant topics that should be taken into their local business plans.

Safety Award
The Yara Safety Award was established over 25 years ago. While safety performance and results are essential, the award aims to recognize and motivate both systematic and innovative activity intended to bring about sustainable improvements in safety behaviour and culture.

The way forward

Occupational Safety:
In 2023, we will keep focusing on the basic elements of Safe by Choice and simultaneously develop a human factor program to help understand how our behaviors influence accidents, so we can begin to reduce and eventually eliminate human error.

Process safety:
We will keep focusing on sharing the learnings of incidents with the entire organization in order to enhance the process safety culture together through competence building and with incorporating smaller units into our risk-based process safety approach.

Training:
We will develop and improve the HSE training across Yara by working with Human Resources to include training within the existing training systems such as People Path and Degreed.
At Yara, we believe that creating a diverse, equitable, and inclusive work environment is both the right and the smart thing to do. In a diverse, equitable, and inclusive work environment employees feel valued for their uniqueness and safe to speak up, which benefits our business. When a variety of perspectives are present in a company, teams can make better decisions, increasing their ability to perform well in a fast-changing environment.

Priorities
Yara aims to create an inclusive work environment and a psychologically safe workplace for all employees. We want to provide equitable access to growth opportunities and are determined to continue removing barriers from processes and practices. Numerous activities and initiatives were run throughout 2022 in pursuit of these objectives.

Awareness days
Yara is committed to attracting, developing, and retaining diverse talents. As a key initiative, Yara includes awareness dates in the yearly calendar to promote visibility, safe environment, and improve employee’s experiences. Five days were celebrated with learning activities, communication, and engagement: the International Women’s Day, Pride Day, International Day for people of African Descent, Global Diversity, Equity and Inclusion (DEI) Day with a focus on allyship and International Day of Persons with Disabilities.

Equitable treatment and opportunities
At Yara, we acknowledge that people have different needs, experiences, and backgrounds. Only by recognizing and addressing these differences can we create a more inclusive workplace where everyone can succeed, regardless of their starting point. One such example is Yara’s Black Leaders Development Program, a program designed to meet the leadership development needs of Black (emerging) leaders at Yara. With this program we not only want to create the right conditions to have conversations about race and ethnicity, but we want to create an inclusive culture where Black leaders at Yara are fully appreciated, valued, and thrive.

Equity Escape Room
Yara introduced the Equity Escape Room in 2022, focusing on explaining equity and inclusivity. The digital Equity Escape Room “gamifies” learning, where participants engage with inclusion content through puzzles before debriefing on their experience and consolidating their learning. In 2022, we introduced this learning activity in English, Spanish, and Portuguese.

Performance
Balanced representation among all employees
Over the past five years, the percentage of women in permanent positions at Yara has steadily increased. At the end of 2022, 26.1% of Yara employees overall were women. Our goal is to continue to improve the representation of women across all levels of the company. To achieve this, we have implemented several initiatives to make Yara more attractive to women.
Additionally, we closely monitor retention rates to identify any disparities between men and women and positions where women are less likely to stay. With more women applying for positions at Yara, we believe that we will be able to accelerate the growth of women’s representation in the company.

Examples of initiatives include women’s mentoring programmes such as Women in Agronomy, providing safe transportation for women in the field, and the increase of parental leave practices from three to six months. Equally, in Brazil, our Women in Maintenance program aims to hire and train women in traditionally male-occupied roles such as maintenance. The program started in the Rio Grande unit in 2019 and has since been held annually with over 100 hours of training. As a result, eight women were hired as permanent employees in the unit, increasing the number of women from 3% to 7%.

In 2022, the number of women joining Yara was greater than the number of women leaving. We also work to increase representation of other groups in our workforce through dedicated programs, such as those aimed at hiring people with disabilities. Due to legal considerations and the sensitivity of the data, we are not able to track and report representation in terms of ethnicity, sexual orientation, religion, or other parameters of diversity in all our locations.

In the countries where we can report employees with disabilities according to the local legislation and labor laws, they accounted for 2.8%, 325 employees of a total of 11,469. We continue to raise awareness and take concrete actions, outlined in our Diversity, Equity, and Inclusion program.

Women in Yara

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>25.6%</td>
<td>23.6%</td>
<td>21.6%</td>
<td>20.7%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Non-permanent</td>
<td>33.2%</td>
<td>32.8%</td>
<td>30.8%</td>
<td>33.3%</td>
<td>28.6%</td>
</tr>
<tr>
<td>Overall</td>
<td>26.1%</td>
<td>24.2%</td>
<td>22.3%</td>
<td>21.6%</td>
<td>20.7%</td>
</tr>
</tbody>
</table>

In 2022, the Diversity and inclusion index remained high (75%). However, the index was two percentage points lower compared to 2021, and the target for 2022 (76%) was not met. The biggest decrease in the index compared to 2021 was related to the fear of speaking up. This is an area of concern that we will focus on moving forward, highlighting our commitment to building a psychologically safe work environment.

Balanced representation in senior leadership

In this subset of senior leadership positions, 28.9% of our senior leaders were women at the end of 2022, a slight decrease from 29.1% at year-end 2021. Given that we were not able to increase the hiring of women in 2022 compared to the previous year, accelerated efforts will be needed to achieve the 2025 target of having 40% female senior managers. Inclusive talent management initiatives are vital to raise awareness about possible biases in decision making on both promotions and new hires. Some initiatives include setting
targets for women in leadership positions and measuring the number of applications per gender.

At year-end 2022, Yara’s Group Executive Board comprised nine members, five of whom were women. Six management team members were Norwegian, one was French, one was Spanish, and one was British. 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.

Prevention of discrimination and harassment
In 2022, Yara’s Ethics and Compliance Department received a total of 60 notifications classified as harassment or discrimination. Of the 60 notifications, 53 were resolved within the reporting period and 28 of these were substantiated.

The cases resolved within the reporting period resulted in the following disciplinary measures:
- Seven employees were dismissed
- 11 employees were given a written warning
- 13 employees received coaching/training
- Zero cases without disciplinary measure
- Zero cases pending outcome

Preventing and raising awareness of discrimination and harassment has high priority at Yara. In addition to our formal Ethics and Compliance training, available in both face-to-face and e-learning, Yara has implemented several other initiatives on this issue in the Diversity, Equity, and Inclusion program.

Pay equality
Yara is committed to paying employees fairly, regardless of personal beliefs or any individual characteristics. In accordance with the compensation policy, individual remuneration will vary based on specific factors such as country of employment, market conditions, position, performance, and competence. However, we are committed to ensuring equal pay for equal work (gender pay equality), and we have monitored and published developments of our gender pay gap analysis since 2018.

Due to new variables included in the analysis from 2022, such as roles, learning personas, and location type, results from 2022 are not comparable with results from 2021 and earlier, but the outcome insights are still valuable to understand how we can improve pay equality in our locations of operation. The 2022 analysis covered 25 countries and around 8,000 employees. Employees covered by tariff agreements were excluded from the study, because tariff schemes provide strong protection against gender bias. The gap reported ranged from zero in several countries to 10.2% in the United Kingdom.

Defying hate and discrimination
On Saturday, June 25, Yara planned to participate in Oslo Pride, Norway for the first time to show our commitment and support to the LGBTQ+ community and colleagues. However, the parade was cancelled after a devastating mass shooting, which left two people dead and 21 wounded at locations associated with Oslo Pride the night before the parade. Instead of celebrating love and diversity, we grieved together with the people of Oslo, and the whole LGBTQ+ community. Later, in September, Yara employees participated in a rainbow parade through the streets of Oslo to celebrate diversity and love, in memory of the people who lost their lives and to show support to the LGBTQ+ community.

<table>
<thead>
<tr>
<th>Unadjusted gender pay gap</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unadjusted gender pay gap</td>
<td>0.5%</td>
<td>(1.4%)</td>
<td>(0.4%)</td>
<td>(2.6%)</td>
</tr>
<tr>
<td>Average female salary over average male salary</td>
<td>99.5%</td>
<td>101.4%</td>
<td>100.4%</td>
<td>102.6%</td>
</tr>
<tr>
<td>Employees covered</td>
<td>91%</td>
<td>85.2%</td>
<td>84.6%</td>
<td>83.9%</td>
</tr>
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</table>
Recruiting program for people with disabilities

Yara Brazil’s “Inclusion in Action” program promotes the hiring and development of people with disabilities. The one-year program includes a technical and behavioral development process. The program continued its 3rd edition in 2022, totaling 60 attendees. Additionally, the “Best buddies organizational alliance” program at the Cartagena plant focuses on hiring people with intellectual and developmental disabilities. For over eight years the plant has been successfully hiring people with autism and Downs syndrome, promoting inclusion and sensitivity towards people with disabilities within the company.

To provide a more easily comparable figure over the years, we have also included the so-called unadjusted gender pay gap in this report. It shows the difference between male average salaries and female average salaries in percent, irrespective of any other characteristics. In 2022, the unadjusted gender pay gap was 0.5% based on 91% of our workforce. Employees without salaries registered in the Yara PeoplePath system were omitted from the analysis due to local data privacy constraints.

Yara is committed to ensuring a more balanced representation at the top levels and in the company overall, while providing equal pay for equal work. We have implemented stricter rules for salary review and recruitment processes and other actions are being managed and adopted by each unit as permitted by local laws.

The way forward

Increase representation of underrepresented groups:
Gender pay gap analysis, training, performance, and development programs will be used to identify the needs of underrepresented groups but also to remove the systemic barriers that may be found at Yara.

Employee Resource Groups:
In 2023, four Employee Resources Group (ERG) will be launched: Gender Equity, LGBTQ+, Race and Ethnicity and Persons with Disabilities. ERGs are voluntary, employee-led groups that are formed to act as a resource for the underrepresented groups. With the ERGs we aim to provide a better employee experience and communication channels to underrepresented groups, as well as increasing Diversity, Equity, and Inclusion actions at Yara.

Black Talent Initiative:
To advise and support the Diversity, Equity, and Inclusion strategy Yara will promote a development program to build capability and upskill our Human Resources professionals.

Allyship initiative:
Yara will provide “train the trainer” sessions globally on allyship and concrete actions that can be taken as an ally. With these sessions, the regions and business units will be able to equip themselves with efficient tools as well as increased awareness of the importance of allyship.

Women in Agronomy:
For 2023, the program hopes to continue expanding its horizons with the goal to achieve a 50/50 gender balance across the agronomy teams in Yara and contribute to even better working conditions for women in the crop nutrition business. Key actions for 2023 will focus on talent development and attraction to influence retention levels.
Our people are our greatest asset. Internal surveys consistently show that our employees are proud of working at Yara, are engaged, and would recommend Yara as an employer. We rely on their motivation to drive innovation, productivity, and continuous improvement. We set out to build a culture of entrepreneurship and believe that a growth mindset and trusting environment will encourage employees to embrace change and develop new skills.

Priorities

Upskilling, reskilling, and learning
Knowledge is part of our DNA and key to our future success. Learning enables employees to embrace change, develop new skills, and improve overall performance. Our learning activities provide opportunities for both upskilling and reskilling. Upskilling aims to enhance employees’ current skills and capabilities to advance in their existing or a similar role, whereas reskilling enables them to take on new roles within the company.

Leading change
In 2022, we identified the need to foster trust and assurance in our senior leaders to effectively lead in complex, changing environments. To address this, we launched a set of five leadership behaviors, referred to as “Courage to Lead.” These behaviors include embedding Yara’s strategy in our daily work, embracing and dealing with change, learning from mistakes, building trust, and growing through continuous improvement and lifelong learning.
Performance

Employee engagement and enablement
In 2022, the employee engagement index remained high (78%). This index measures how motivated and committed employees are to the company, and how willing they are to put in extra effort for the organization. We consistently score well against the industry benchmark on questions related to employee engagement, and similarly to previous years, we see that most employees are proud to work at Yara. Despite a small decrease of one percentage point in our engagement score compared to 2021 (79%), the target for 2022 was met, and our score keeps us in the top quartile when compared to the benchmark.

In addition to employee engagement, we also track employee enablement. While engagement measures the degree of employees’ “willingness” to work, enablement measures the degree of “ability” to work, based on employees’ access to tools and support, as well as skills and processes. In 2022, our employees reported that the level of employee enablement was good (74%), the same as in 2021 (74%). However, we scored four percentage points below the benchmark of industries in the top quartile, highlighting employee enablement as an area of potential improvement.

The 2022 survey had a response rate of 82% among all eligible employees, an increase from 79% in the 2021 survey. This was a result of active communication and engagement regarding the survey, as well as the extended deadline of one week compared to last year, to ensure that as many employees as possible could have the opportunity to complete the survey.

Career and performance management
Career advancement is a vital aspect of the employee’s experience and retention at Yara. We believe that each employee is responsible for their own career path, and we encourage them to shape it based on their personal goals, abilities, and internal opportunities. In 2022, all Yara employees had the chance to take part in the Performance Management and Talent Development processes. These job appraisal processes are based on an annual cycle. Managers are expected to provide regular feedback, coaching, and support to their employees.

In 2022, we created a new program to improve the Performance Management and Talent Development processes called People Connect, which will be launched to all employees and leaders in the beginning of 2023.

The objectives of People Connect, among others, are to strengthen the employee’s engagement, create a more psychologically safe workplace, retain talent, and create more fairness by including feedback from colleagues. People Connect includes three overall activities: goal-setting, regular check-ins, and feedback.

Learning
In 2022, we expanded the opportunities for upskilling and reskilling in both technical and power skills to
enable Yara’s ongoing transformation and change efforts. Due to significant investments in competence development, we established a Learning Experience Platform, Degreed. It is a hub for all learning in Yara, connecting guided skills development with digital learning content employees demonstrate interest in or skills that are required by their current roles or career aspirations. Through this platform employees can access over 300,000 learning assets from learning providers as well as bespoke internal training courses developed for and by Yara, such as courses (43,000), articles (160,000), podcasts (2,000), and video (3,500).

We place a strong emphasis on digital learning offerings yet recognize the importance of in-person training. In 2022, we made it a priority to invest in the learning and development of all employees, by offering a wide range of programs both online and in-person, to meet the diverse needs of our employees. By providing learning and development opportunities for all, we can attract and retain highly skilled workers at all sites, ensuring our company’s long-term success. In addition to online courses, our sites around the world conduct a number of regional and local training activities. These include mandatory training related to, for example, HESQ and leadership development adapted to local or regional needs. In 2022, Yara spent approximately USD 7.1 million on locally managed training, equating to approximately USD 405 per employee. Of the 17,506 employees and contractors working for Yara in 2022, 16,119 completed training courses on our learning platform or in person.

**Leading change**

At Yara, we define leadership as the ability and motivation to influence, inspire, and help others become their best selves, building their skills, and achieving goals along the way. To enable all employees who want to acquire leadership skills, Yara offers the workshops Fundamentals of Collaboration and Radical Collaboration. They are open to all employees and are delivered virtually and in person. Additionally, Yara has partnered with Harvard Business Publishing to co-create and deliver the leadership program Leading for Growth to prepare our leaders with the mission to improve the practice of management and its impact on a changing world. In 2022, 581 employees attended global leadership development programs, not taking into account the number of employees also attending regional and/or local leadership or mentoring programs.

Global equity programs are put in place to increase the number, retain, and develop leaders from minority groups. Yara has partnered with WeQual and LEAP for senior women leaders (external) while also continuing its internal Women in Agronomy program and Black Leaders Development Program. For more information on global equity programs, consult the Diversity, Equity, and Inclusion chapter.

In 2022, we set a target to complete leadership training for at least 80% of senior leaders throughout the year. We successfully reached this target by year-end, equipping our senior leaders with confidence and knowledge to successfully guide and support their organizations in a rapidly changing world.

**Transition programs**

Another relevant aspect of career management is when employees leave the company. Yara sites and locations...
have the autonomy to tailor their provision of transition assistance programs to local needs, regulations, and expectations. To consult the share of countries that provide assistance programs in our regions of operation and the types of assistance offered across all countries, see People metrics, page 79.

The way forward

Talent management:
Our new performance management and talent development process, People Connect, will be launched in the beginning of 2023 for the entire company. The implementation will include a mix of global, regional, and local activities. All people managers and employees will receive training in the new way of working. We will monitor the activities and adoption throughout 2023 and initiatives will be adjusted to fit the employee’s needs.

Learning:
In 2023 there will be an increased focus on learning for operators and field workers. Deliverables include access to more relevant content for these target audiences on Degreed.

There will also be initiatives investigating opportunities for language learning to enable increased language proficiency and an effort factor to support digitalization processes.

Change and agility:
We will continue efforts to develop and reinforce the Change management capability throughout Yara, by equipping line HR community, line managers, and employees to lead through change and build resilience. We will pilot and further deploy the trainings for line managers and develop a toolkit on change.

On September 27-29, Yara gathered 300 global leaders in Oslo for our three-day event Knowledge Exchange 2022 (KX). The purpose of the event was for Yara leaders to meet and share knowledge, enhance skills, and develop strategies to achieve the goal of a nature-positive food future. KX provided a platform for exchanging ideas and insights through a combination of main stage presentations by both external and internal experts, and workshops where leaders could collaborate to generate actionable ideas. Additionally, for the first time, all employees were given the opportunity to participate in the event through a live stream.
Yara’s activities places the company at the intersection of energy, climate, food security, and geopolitics, and the company operates in an increasingly complex world, with emergencies stemming from threat actors and hazardous conditions. Teams on all levels of the organization work with preparedness, prevention, and response to mitigate these risks and maintain business continuity. To enable Yara’s values and ensure business continuity, the security effort will protect people, environment, assets, and reputation from intended harm or hazardous conditions. We do so by building resiliency, restraining the freedom of action for malicious actors against our installations, and preparing units for emergency response and crisis management.

Priorities
In 2022, we experienced challenges becoming increasingly interlinked: climate change, supply chain vulnerabilities, making the energy transition, the pandemic, and inequities. Securing people and assets in the organization is our highest priority and the risk appetite is low. To secure people, environments, assets, and reputation in Yara, we place emphasis on preparing the organization, by fostering a security culture, and by taking charge of what we control internally, while seeking understanding of the external threat environment. Security is included in Yara’s Safe by Choice programs and within corporate HESQ. There is a security and emergency response support organization tailored to mirror the Yara organization. This unit is responsible for ensuring that Yara adheres to its own regulations, relevant policies and codes, and national legislation. For more information on operations in areas of conflict consult Key concerns raised in 2022 and Yara’s responses, page 32.

Emergency preparedness
Emergency preparedness requires a strong business continuity program along with a process for the early detection of risks. We have access to different security information services to enable early warning and preparedness that help us prevent incidents and ensure business continuity. Our Security key functions constantly monitor these platforms and ensure relevant regions are informed when needed. This enables our organization to remain agile, adaptive, and successful in responding to crises.

Training of security personnel
We proactively plan and train for emergency events to protect our workforce, the environment, and the communities in which we operate. Because of the pandemic, we adapted our training practices to keep our people safe while making sure that they had the skills to conduct their job safely and effectively. We transitioned to virtual training platforms and incorporated safety measures when in-person training was required. In 2022, all Yara security personnel and contracted security guards were trained in line with requirements from our Ethics and Compliance Department. In industrial parks or shared office buildings, where we do not directly control security arrangements, we met with the managers of the security guards to communicate Yara’s policy on security and human rights.
Security and human rights
As a response to our commitment to the Voluntary Principles Initiative on Security and Human Rights (VP), we rolled out a specific training program incorporating Yara’s program for human rights and VP training material. The training material continues to be mandatory for relevant internal staff and contracted security providers. Yara has been a member the Voluntary Principles Initiative on Security and Human Rights (VP) since 2020. Yara has decided to end its membership with the Voluntary Principles Initiative as of 31.12.22, as we are no longer mining/extracting in areas of particular risk. Yara has implemented the recommendations and guidance on security and human rights into internal procedures and will continue to conduct security operations while respecting human rights. The training material will continue to be mandatory for relevant internal staff and contracted security providers.

Crime, product theft, misuse of products
In 2022 we saw an increase in the organized theft of Yara products in Latin America and Africa. We also saw an increase in counterfeit products on the market in Latin America, Africa, and Asia. Misuse of products for terrorism was confirmed in Sweden. An analysis is currently ongoing with support from Yara Product Stewardship to identify best practices to mitigate risk to staff and financial loss based on procedures developed by Yara Brazil.

Cyber security and privacy
Yara is undergoing a digital transformation. We are building new digital products, digitizing our internal processes, and modernizing our factories. In this journey, and in order to address exposure to cyber incidents, Yara has invested in the ability to detect and respond to cyber incidents, to manage and minimize relevant vulnerabilities, and to improve time needed to recover in case of incidents. Yara proactively monitors threats, vulnerabilities, and the effectiveness of security controls in order to continuously improve, and campaigns and training sessions are held regularly for employees globally to raise awareness of cyber risks and threats.

Performance

Customer privacy
Yara has not identified any substantiated complaints concerning breaches of customer privacy from outside parties or regulatory bodies. In 2022, there were three minor instances of potential customer data leaks.

Geopolitical risk monitoring
The rising number of dysfunctional, vulnerable, and fragile states across the globe, combined with the increasing risk of persistent geopolitical confrontations, represent a security risk for Yara operations. The Geopolitical Risk Monitoring project was established in 2022 to maintain country archetypes composition based on quarterly input from information service providers and on a Yara Global Risk Scenario 2025 analysis focusing on geopolitical scenarios that could impact Yara. These scenarios are evaluated on an annual basis. In 2022, The Geopolitical Risk Monitoring provided relevant information on resources and provided support to country and regional management teams.
Emergency preparedness during Hurricane Ian

The importance of preparedness, prevention, and proper response measures was clearly demonstrated when Hurricane Ian struck Florida and the rest of southeastern United States in September 2022. Good preparation by local crisis management teams at Yara Tampa and Yara North America enabled business continuity and only minor impacts on operations. Similarly, preparedness and use of early warning systems also proved their worth at other locations impacted by natural hazards in 2022.

Preparedness:
Yara corporate security has, together with security information provider S&P Global, carved out new macro scenarios for 2023 at a global and regional geopolitical level. The purpose is to stress-test Yara preparedness for realistic geopolitical scenarios. The Security and Emergency Preparedness structure will remain the same in 2023. We are preparing to operate in an environment with more criminals, terrorists, activists, cyber actors, and politically challenged states. We need to be prepared to support operational level crisis management simultaneously in different countries and regions, without losing focus on preparedness and prevention activities.

The way forward

Food insecurity:
Food insecurity is likely to remain a major challenge in 2023, increasing the risk of political instability. The access, availability, affordability, stability, and usability of food is under global pressure. The war in Ukraine impacts heavily on global food security, but there are other drivers of food insecurity as well. Armed conflict and war, alongside climate-induced challenges like heat waves, drought, soil erosion, and flash flooding are the root causes of famine.

Cyber and information security:
Given the geopolitical situation and the increasing digitalization, Yara will continue to strengthen our defense against cyber attacks, increasing our abilities to detect and respond when something happens, and ensuring cyber and service resilience across our technology and digital services.

In 2022 Yara Corporate HESQ has provided input to:

| Local Crisis Management Team meetings for Ethiopia, Myanmar, and Ukraine | 748 |
| Emergency Response and Security Team meetings | 20 |
| Operations Crisis Team meetings | 40 |

For more information on Yara Climate Scenarios, see page 20 in our Integrated Report.
Yara is committed to respecting internationally recognized human and labor rights in our own operations and throughout the value chain – not only because it is the right thing to do, but because it makes business sense. Respecting human rights is fundamental to sound risk management and Yara’s value creation. We value our good relations with employees, suppliers, and business partners, and engage with them frequently.

This section on Human Rights and Labor Practices has been developed to comply with the legal requirements as stated in the act relating to enterprises’ transparency and work on fundamental human rights and decent working conditions, the Transparency Act (Åpenhetsloven). It follows the six steps and supporting measures set forth in the OECD Due Diligence Guidance for Responsible Business Conduct and illustrated below. The information is valid for Yara International ASA and its subsidiaries.

### Commitments

**Human rights management, own operations:**
By 2025, conduct human rights impact assessments (HRIAs) and address findings in all countries where we consider that our operations have the highest impact on human rights, focusing on China, Tanzania, Zambia, and South Africa in 2022
- **On track**

**Human rights management, supply chain:**
Respect the rights of people in the supply chain by continuing our human rights due diligence activities, including audits and training, directed at high-risk business partners
- **On track**

**Living wage:**
Establish living wage benchmarks and conduct gap analyses for all our countries of operation by 2023, and close living wage gap in all our countries of operation by 2025
- **On track**
Priorities

1. Governance and policies

Based on Yara’s governance model, 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 of the company, including on human rights issues. This is handled through Yara’s Steering System, about which more details can be found on Governance bodies page 150. Yara’s key policies and commitments on human rights are the following:

Supporting established principles

As a global company, Yara is committed to respecting and protecting the rights of stakeholders that may be impacted by our business operations. We support the United Nations Global Compact, 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).

> Living by high standards, page 25

Code of Conduct

The Code of Conduct outlines Yara’s commitment to ethical and compliant business practices, including human rights, and it is valid for all employees, the Group Executive Board, and the Board of Directors. It gives us the framework for upholding Yara’s core values in our daily work. The 2023 Code of Conduct is available in 18 languages on our website.

Sustainable Procurement Policy

Yara’s Sustainable Procurement Policy was launched in June 2022. This policy outlines how we intend to deliver sustainable value by promoting transparency and a higher standard of our suppliers’ sustainability performance. It sets out a specific expectation on Yara’s part that suppliers respect the United Nations Guiding Principles on Business and Human Rights and details how Yara plans to follow up on supplier compliance and performance management. The Sustainable Procurement Policy also forms the basis of the Sustainable Procurement Program launched in December 2022. More information is available in the Sustainable Supply Chains chapter of this report.

Code of Conduct for Yara’s Business Partners

The Code of Conduct for Yara’s Business Partners is the Yara policy that outlines the legal obligations and the integrity standards Yara expects its business partners to uphold. It includes requirements related to the most salient human rights issues in this context: child and forced labor, discrimination, safe and healthy work environment, freedom of association and collective bargaining, equal pay and working hours, and indigenous peoples. It also includes requirements on grievance mechanisms. The Code of Conduct for Yara’s Business Partners is available in 18 languages on our website.

> Managing compliance in the supply chain, page 161

Stakeholder engagement

Our stakeholder engagement process is described on page 31 of this report, including a summary of the issues raised by each stakeholder group and how Yara responded.

Raising human rights awareness

Human rights are included in all Code of Conduct trainings, including mandatory e-learning for new hires and face-to-face training programs. In 2022, we designed and implemented a Yara Business and Human Rights e-learning course available to all employees. Additional e-learning modules are also available to our employees, covering topics such as ethical conduct and reporting concerns, with specific sections on human rights, harassment, discrimination, and gender bias. Human rights were one of the two main topics for discussion during Yara’s Ethics Day in 2022. For more information on security and human rights, consult our Security, Emergency, and Data Privacy chapter.

2. Impact identification

Human rights impact assessments

Conducting targeted human rights impact assessments (HIRAs) is an integral part of meeting our due diligence obligations. Each HIRA we have conducted to date has proven highly valuable in identifying human rights impacts from Yara’s operations, and in evaluating how our human rights policies are implemented on the ground. Findings have been presented to the Group Executive Board and the Board of Directors, and mitigating actions remain a local management responsibility. The Ethics and Compliance Department monitors implementation and reports on progress.

Our human rights and geopolitical risk assessments rank our countries of operation, as well as countries from which we source raw materials, in terms of human rights risk exposure. The 2022 country human
rights risk assessment identified 17 high-risk countries, down from 19 in 2021. This guides our focus on where to conduct targeted human rights impact assessments (HRIA). In addition, HRIA findings have helped form our understanding of what Yara’s main risks to people’s human rights are, as presented in our Code of Conduct. We recognize that this landscape may change, and that we need to continuously monitor the potential impacts from our operations and in the supply chain.

Impact assessments have been performed by independent external subject matter experts for a representative number of high-risk countries where Yara operates.

Human rights due diligence in the supply chain
In 2022, we established our Sustainable Procurement Policy, which is communicated to all suppliers. A key initiative for putting the policy into practice is the Supplier Compliance Management Process, which has been finalized and will be implemented in 2023. These are specific measures to monitor compliance with the Code of Conduct for Yara’s Business Partners, advance our human rights due diligence efforts, and raise the sustainability performance of our suppliers.

Our human rights due diligence follows UN Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance for Responsible Business Conduct. We use the Integrity Due Diligence (IDD) process along with our Sustainable Procurement Policy and Supplier Compliance Management Process (under implementation) to identify our human rights risk exposure and manage compliance in the supply chain.

In addition to the regular integrity due diligence questionnaire including key human rights-related questions, specific human rights due diligence has been performed on strategic sourcing partners. These sourcing partners were selected based on geopolitical risks in country of origin, strategic importance, spend, and product category. Findings were mostly related to environmental concerns, and no significant breaches of human rights were identified. Nevertheless, we recognize the importance of continuous dialogue and monitoring. Structured communications aimed at creating awareness of human rights standards and including contractual obligations to support Yara in complying with the Norwegian Transparency Act are ongoing.

Given the complexity of Yara’s supply chain beyond the raw material sourcing, a risk-based prioritization of suppliers for social and human rights due diligence and audits is crucial. We reviewed the human rights-related integrity due diligence responses of suppliers within...
3. Mitigation of impacts

We recognize that we have better control and improvement opportunities of risks related to our own employees at Yara sites than for sites operated by third parties, contracted workforce, and in the supply chain. It is, however, important to address risks and implementation plans for all areas, both to comply with Yara’s Code of Conduct, and obligations and expectations in legislation and recognized international standards.

In 2022, we continued the implementation of policies and projects that were initiated globally on the basis of previous HRIA findings, including a global policy on Physical Requirements to the Work Environment, a living wage project, and mapping and assessing the effectiveness of our grievance channels. Accessibility to grievance channels in local languages has been improved and raising awareness of grievance processes in general continues. Findings related to discrimination have, in many instances, been perceived risks and have been mitigated by clarifying communication and transparency of internal processes. Initiatives related to Diversity, Equity, and Inclusion are key in the continuous efforts of eliminating discrimination and harassment at Yara. For more information go to Diversity, Equity, and Inclusion.

Other actions implemented to reduce the identified exposure to risks at third-party sites or within the contracted workforce and supply chain include:
- Influence contractors to provide workers decent employment conditions and predictable working hours according to the expectations set in the Code of Conduct for Yara’s Business Partners.

Main human rights identified to be at risk across sites assessed, per rights-holder group

Yara employees
- Harassment or discrimination based on gender and race
- Occupational health and safety; exposure to dust, noise, heat, and manual labor
- Mental health risks due to stress from excess workload
- Lack of guaranteed living wage
- Access to adequate grievance mechanisms in local language

Contracted workers at Yara sites
- Conditions of employment
- Working conditions; heat stress exposure, access to water and sanitation, excessive working hours and overtime
- Lack of guaranteed living wage and use of piece-rate-pay
- Occupational health and safety, including manual labor
- Restrictions on freedom of association
- Lack of effective grievance mechanisms

Workers in supply and value chain (including third-party warehouses)
- Health, safety, and labor rights risks due to low standards and high use of casual workers at third-party warehouses
- Labor rights and working conditions for truck drivers
- Child labor and labor rights violations in the agricultural sector

Local communities and wider society
- Livelihood affected by emissions, dust, and water usage
- Lack of grievance mechanisms and stakeholder engagement through meaningful engagement between Yara and local communities
• Extend Yara’s physical requirements to the work environment to include contracted labor at Yara sites and raise awareness of our standards and expectations at third-party sites.
• All Yara sites have a dedicated go-to person and physical “suggestion boxes” are available at sites where the online grievance channel is deemed not to be adequately accessible.
• Yara encourages contractors providing workforce to our sites to provide workers freedom of association where this right may be limited, emphasized through our Code of Conduct for Yara’s Business Partners.
• Environmental assessments are performed, and possible complaints addressed according to established procedures. Stakeholder engagement is a priority at our plants, warehouses, and other operational units.
• Yara does not source from the Chinese region of Xinjiang, nor do we sell directly to the region. Monitoring of the situation is continued by the Yara China management.

No significant breaches or human rights impacts related to forced labor were identified in 2022 in our own operations or in the supply chain. Yara does not consider any of its fully owned operations to be at significant risk of child or forced labor, however we recognize that we are likely exposed to these risks given the complexity of our value chain and high number of business partners. The risk of child exploitation in the Brazilian logistics industry is an area of high concern that we monitor closely. We therefore continuously work to improve our due diligence processes to identify and mitigate human rights impacts and expect the same from our business partners.

Managing human rights impacts in Brazil.
In our Integrated Report, page 46

Murujuga rock art
Our Pilbara operations is located on an area known as Murujuga, a culturally significant landscape that hosts one of the world’s largest collections of indigenous rock art, one that is currently being considered for World Heritage listing. Yara Pilbara understands and respects the cultural significance of Murujuga to the Traditional Owners and the local, national, and global importance of the ancient rock art.

For many years there has been concern that industrial air emissions pose a threat to the rock art and there has been considerable study undertaken to evaluate this risk. These studies, to date, have not identified any measurable impact to the rock art or other cultural values as a result of industrial emissions. Nonetheless, a further expansive monitoring program is underway as a part of the Murujuga Rock Art Strategy (MRAS), led by the Western Australia Government in collaboration with the Murujuga Aboriginal Corporation (MAC).

Yara is an active supporter of the MRAS, which is intended to inform the management of Murujuga’s rock art into the future.

Our company is committed to working with MAC to preserve the cultural heritage of the area and Yara Pilbara welcomes its nomination for the UNESCO World Heritage List.

Engaging with unions
Yara values its good relationship with employees and their organizations and engages with them on a regular basis. The freedom to collective bargaining is not only the right of employees, but it is also a useful tool to engage and negotiate solutions and build trust with our employees if conflicts arise. Each region and location have autonomy to establish relations with unions, building good relationships, and respecting local legislation and requirements.

For a full breakdown per region, go to People metrics, page 80.

Topics covered in collective bargaining agreement

<table>
<thead>
<tr>
<th>Topic</th>
<th>% of employees covered by topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and safety</td>
<td>66.5%</td>
</tr>
<tr>
<td>Diversity, discrimination and/or harassment</td>
<td>35.3%</td>
</tr>
<tr>
<td>Working conditions</td>
<td>68.8%</td>
</tr>
<tr>
<td>Training and career management</td>
<td>35.3%</td>
</tr>
</tbody>
</table>

Human rights training
Yara’s Human Rights Policy is included in our Code of Conduct. All employees receive regular training on the Code of Conduct. Since introducing human rights in our training portfolio in 2018, 1,399 Yara employees have received specific human rights training. In addition, the e-learning on Business and Human Rights launched in 2022 has been completed by 209 employees.

Business Integrity, page 139
A living wage

Yara believes that paying a living wage is key to meeting the goal of providing decent work and reducing inequality. Therefore, in 2021, in partnership with an external consultancy, the living wage project was launched with the target of ensuring a sustainable compensation structure primarily for Yara employees.

In 2022, the project aimed first to pilot the living wage gap analysis, testing and validating assumptions, for a select group of 11 countries, 22 sites, and 3,589 employees (about 20% of Yara’s workforce).

The project assumed a family setup of two adults and two children in order to allow a consistent approach across different locations and assessed three purchasing package configurations to establish what would be Yara’s standard. The “decent package”, representing the purchase of necessary goods and services to provide a healthy and decent standard of living and which meets the employees’ needs in modest surroundings, was the one that Yara decided to be the anchor of its Compensation Policy.

In the first round of assessments, we only included employees with lower salaries to target the most vulnerable. Results of the assessment showed that around 5% of employees within the scope of lower paid employees, 193 individuals out of 3,589, are earning below the “decent package” standard.

The second phase, in the plan for 2023 and forward, will scale the analysis to all the remaining countries and prioritize closure of identified gaps.

In 2022, about 69% of Yara employees were covered by collective bargaining agreements.

For those not covered by collective bargaining agreements, working conditions and terms of employment are determined by local laws and market practices.

Yara does not consider any of its fully owned operations to be at significant risk of violating employees’ right to freedom of association or the right to collective bargaining, and no specific concerns were identified in 2022.

When operating in countries where the right to freedom of association and collective bargaining is limited through local legislation, we seek to take mitigating actions in accordance with local conditions and regulations. One example of this is 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 the Code of Conduct for Yara’s Business Partners.

Managing restructurings and closures

In 2017, Yara and the European Works Council (EWC) agreed on guidelines for organizational restructuring with the purpose of creating a fair and transparent framework that is both respectful, professional, and in accordance with national laws and the EWC agreement. The document outlines a set of measures to...
mitigate any negative impacts on our employees from downsizings, clearly establishing terminations as the last resort. The guidelines also describe measures for managing facility closures and protecting the jobs of the people working there, whether it be by retaining critical personnel, selling the facility and transferring the employees, or supporting the employees in finding alternative jobs. In 2022, 348 Yara employees were affected by layoffs: 

- 226 in Brazil due to the closing of the units Cambé and Catalão. We carefully managed this process to minimize impacts on the people and communities involved. Some of the employees were reallocated to other roles at Yara, while others were offered a benefits package and development opportunities. For operational units, decommissioning plans were drawn up and followed to avoid negative impacts. Local governments and the community were involved in the process and invited to dialogue.

- 62 in Vietnam due to a restructured organization chart and plant sale. 37 of all 108 employees were reallocated to position in the new company and 25 were terminated. The remaining 46 employees were reallocated to new positions. A Restructuration Employment Plan was created in partnership with the unions where all redundancies were made following established criteria, payments and allowances were paid according to the law, and psychological support was offered to employees.

- 14 in Philippines due to a new business model.

- Nine in Mexico due to a warehouse closure.

- 14 in France, seven in Germany, and two in Italy due to the United Europe project, which transferred part of HR operations to Vilnius.

- Six in the United Kingdom due to the closure of the Grimsby Office, as finance activities were moved to Lithuania.

- Five in Australia due to a supply chain location restructuring.

- Three in Mozambique due to an organizational restructuring in Beira.

- Two in Ethiopia, as Yara’s share of Dallol Ethiopia was sold.

**Decent work and reduced inequalities**

Another dimension of decent work is the offering of stable jobs. Yara continuously internalizes talents and competences, particularly in units with high representation of position contractors and non-permanent employees. In 2022, 392 employees on temporary contracts were employed on a permanent basis. Over the years, this practice has increased the share of permanent employees among the overall workforce:

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>16,080</td>
</tr>
<tr>
<td>Non-permanent</td>
<td>1,140</td>
</tr>
<tr>
<td>Position Contractors</td>
<td>286</td>
</tr>
</tbody>
</table>

At Yara, and especially in countries with the necessary legislative flexibility, the decision to work part-time is entirely up to each individual employee. Yara does not offer part-time positions to candidates and nor have we had to use this practice to prevent layoffs. In 2022, 1.8% of our employees worked part-time. None of them are working part-time involuntarily.

Yara upholds international and national laws on hours of work and rest periods, as stated in our Code of Conduct. This is crucial for protecting the rights and well-being of our employees. We also track and report employees’ weekly working hours.

In addition to weekly working hours, we report the number of locations that compensate employees for working additional hours/overtime. In 2022, 53 countries compensated employees for working overtime, with monetary and/or social benefits. Certain locations are not compensating employees for working overtime. Employees in Taiwan and Hong Kong work in flexible working hours. Bulgaria and Romania, they have fixed working hours and do not track hours worked. Indonesia exchanges overtime for holidays. In Singapore, employees are not eligible by local law to work overtime, and Spain does not have formal agreements for compensating overtime.
The way forward

4. Monitoring

Human rights impact assessments:
Human rights impact assessments or equivalent assessments of key projects and operations have been performed for high-risk countries where Yara has operations, as per the dedicated human rights risk assessment. Where the risk of negative human rights impacts from our operations has been identified, action plans were developed. Regular status monitoring continues up until completion. Going forward, it is recommended that overall human rights risk exposure continues to be monitored as part of our geopolitical risk assessment. In 2023, instead of continuing to perform HRIAs per country, the focus will be on the salient risks of negative impacts consistently identified in HRIAs performed to date. Global initiatives to eliminate or minimize possible negative impact from Yara’s operations on affected rights-holders’ human rights is our main priority. These initiatives include the implementation of all requirements set forth in our policy on physical working environment and continuing the rollout of the living wage project.

Sustainable supply chains:
Implementation of the Supplier Compliance Management Process will be completed in 2023. This process includes key information sources, namely product category risk assessments, pre-qualification assessments, integrity due diligence, and third-party sustainability ratings. These sources of information will support us in the risk-based selection of suppliers for social and human rights audits according to the OECD Guidelines for Multinational Enterprises and the Norwegian Transparency Act. In 2023, the priority will be the product categories of logistics and packaging. Social audits on basic human rights and working conditions will be performed on a sample of suppliers within these product categories, based on adverse responses to human rights questions in the integrity due diligence or low sustainability ratings.

Living wage project:
We are committed to paying employees fairly and based on a decent living wage. This year we ran the living wage analysis in 11 countries and defined a decent living wage benchmark for the locations in scope. In 2023 and beyond we plan to scale the analysis to all the remaining countries where Yara operates, work to close the assessed gap from 2022, as well as embed a living wage in our compensation processes.

5. Communicating outcomes

The Human Rights and Labor Practices section of this report constitutes Yara’s legally required disclosures under the Norwegian Transparency Act for 2023.

Further information is available on our dedicated webpage, including how to submit requests for information in accordance with §6 of the Transparency Act.

6. Remediation

See notable examples of remediation efforts:

» Regulatory Changes and Compliance, page 146
» Actions from the human rights impact assessment conducted in Brazil in 2021, page 46 of our Integrated Report.

Our grievance mechanisms are described on page 163 of this report. Anyone who wishes to raise a concern can follow the procedures communicated there.
Health and Well-Being at Work

Commitments

Work-Life Balance and Well-Being:
Ensure that we live by our Work-Life Balance and Well-Being Framework throughout our operations

Priorities

Work-life balance, hybrid work, and flexitime
In 2022, our focus was on engaging with all local units to develop new or amend existing policies and practices in line with the Work-Life Balance and Well-Being Framework. In 2022, we also measured how many locations had implemented practices from the framework, by using indicators that measure local parental leave practices and employees’ flexibility in terms of working hours and locations. In addition to measuring the implementation of our Work-Life Balance and Well-Being Framework, we provided practical guides for employees and managers available on selected topics to support the adaptation to new practices.

Improving the physical and psychosocial work environment
In 2022, we rolled out two new procedures developed to enhance the physical and psychosocial work environment and to establish practices to ensure an engaging, fair, psychologically safe, and healthy work environment. The roll out included trainings and webinars to the global HESQ and HR community.

A cross-functional project to align our policies, procedures, and ways of working with the new ISO 45003:2021 guideline for psychosocial health and safety at work was completed in 2022. This led to several initiatives and updated procedures addressing psychosocial hazard and risk assessment, workplace monitoring, employee involvement, stakeholder engagement and communication, contractor management, and manager and employee training.

New guidelines were developed to support sites in performing psychosocial risk assessments to ensure relevant aspects are covered and to provide clarity. Well-being committees were established at many Yara sites, and a guideline was developed to help sites establish such committees.

Development of training material was in focus in 2022 and interactive working groups to improve the psychosocial environment in teams and departments were rolled out in 2022. Training was also developed on the new interactive training platform, Degreed, and through Together We Learn, an interactive training used under the Safe by Choice umbrella in HESQ.

Initiatives to monitor the development of the work environment and occupational health were launched to facilitate improved registration of health incidences and work-related sick leave. Employee surveys were updated to better reflect factors important to work environment and occupational health.
To follow up the implementation of work environment programs, including risk assessments and progress monitoring, occupational health was a focus area for corporate HESQ audits in 2022.

**Recognition of World Mental Health Day**

In 2022, we marked World Mental Health Day globally to increase awareness on mental health and to create opportunities to discuss the work environment, insecurity, safety, and more. In connection with World Mental Health Day, the Yara Well-Being Challenge was put in place to encourage employees to pursue and log well-being activities like exercise and hobbies. A global webinar was held to address the stress and mental burden related to the war in Ukraine. The theme of the Health & Safety Day in 2022 was Together We Care with a focus on mental health and psychological safety.

In Yara Africa & Asia, a regional mental health initiative was put in place after employees and leaders reported high levels of stress and poor work-life balance following the pandemic. Part of the initiative was to reduce the number and lengths of meetings across the region, as well as blocking Friday afternoons from meetings to free up time for personal development. The initiative was formally launched in November 2022 and has received positive feedback from employees and managers involved.

**Performance**

**Sickness rates and work-related diseases**

We are determined to ensure a safe and healthy work environment for all our employees. Monitoring sickness rates and work-related diseases helps ensure compliance with relevant laws and regulations, as well as identifying issues that may be negatively impacting employee well-being. Including Covid-19 cases, the sickness rate for Yara in 2022 was 3.9% and 83.4% of the sick leave hours came from male employees, a slightly higher proportion than the 74.4% of workforce constituted by men. The rise in sickness rate in 2022 can be attributed to the rate including Covid-19 cases and a better reporting system for sickness in some locations.

**Parental leave**

Yara’s global standard of parental leave for Yara employees consists of six months of paid leave for primary caregivers and five weeks, on average, of paid leave for secondary caregivers. In 2022, 96% of our employees who were eligible for parental leave, were covered by this global standard. Yara’s parental leave standard is in addition to any applicable benefit from national social security schemes, personal insurance schemes, or equivalent. Yara shall pay the difference where Yara’s global standard is higher than the accumulated benefit of parental leave support from other schemes. The table on page 70 presents our current average number of weeks by gender and the number of employees who received this benefit.
Provision of health services and employee benefits

Our provision of health services, life insurance, pension plans, and disability coverage go hand in hand with our focus on the well-being of our employees. It is our ambition to increase the share of employees with access to programs that support flexibility and security. Our benefits schemes provision and governance are framed and guided by our Benefits Procedure. The table on page 80 shows the current share of employees eligible to receive the core benefits broken down by type of contract.

The types and value of benefits provided vary between geographies, depending on market practices, cost, and tax legislation.

Flexible working hours represent any kind of local system which does not restrict employees to a pre-established working shift, allowing employees and leaders to agree working and compensatory hours.

Flexible working locations represent any kind of local system which does not restrict employees to a working shift, being able to decide, in accordance with local leadership, their working locations. Flexible working locations can be working from home/remote at least one day during the working week.

Health care facilities/subsidies cover medical assistance or treatment needed by our employees, according to prevalent local market practices, in countries where the public health service does not cover basic needs for required medical treatment or hospitalization. The benefit can either be provided by health insurance, subsidies, or a facility administered by Yara.

Sick leave rate

<table>
<thead>
<tr>
<th>year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>sick leave rate %</td>
<td>2.8</td>
<td>3.4</td>
<td>3.2</td>
<td>3.4</td>
<td>3.0</td>
<td>3.9</td>
</tr>
</tbody>
</table>

The rate is calculated as the percentage of Yara employees’ sick leave hours against the total number of working hours.

Parental leave

<table>
<thead>
<tr>
<th>Average number of weeks of parental leave</th>
<th>Entitled to parental leave</th>
<th>Took parental leave</th>
<th>Returned to work after parental leave ended</th>
<th>Still employed 12 months after their return from parental leave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6.1</td>
<td>534</td>
<td>511</td>
<td>504</td>
</tr>
<tr>
<td>Female</td>
<td>36.4</td>
<td>229</td>
<td>229</td>
<td>163</td>
</tr>
</tbody>
</table>

The “Estar bem Yara” program, or “Being Well Yara” in English, is an example of a local initiative created in 2021 in response to the pandemic and feedback from employees on well-being and stress. The program offered Brazilian employees a source of support and care, including a well-being thermometer, live meetings, guides, podcasts, online meditation, medical, and psychological support. Since then, the program evolved into “Viva Yara”. A chatbot sends automatic messages to employees through Microsoft Teams, asking them to rank how they are feeling. Employees classifying themselves as feeling “bad” or “very bad”, receive immediate human and professional support. In two years, the program received more than 58,000 responses, with 3% of the total cases considered needing attention and around 190 referrals for psychological support.
Retirement/pension plan are benefits for employees to use upon retirement, and can be in the form of either a salary, a lump-sum payment, or a fund that the employee can access after certain retirement criteria are met (for example, a certain age, stop working etc.). This is usually not insurance, and will last through the employee’s life, even after they leave the employer.

Life insurance refers to a risk insurance of any form of compensation in the case of the death of an employee, in an accident or otherwise. The benefit is only valid while the employees are working and usually below the retirement age. It will not carry over if they leave the company, retire, etc. It can be either provided by an insurance coverage, social security, or may be included in a pension plan in some jurisdictions but is a different benefit than life insurance and pension plan itself. The payout might be a one-time lump sum, an annuity, or monthly instalments.

At a minimum, all Yara employees shall be covered with life and accident insurance, covering at least:

- Two years’ salary including any social security, individual pension plans paid by the employee, and/or company-paid pension plans
- An additional minimum benefit of one year for related accidental death or disability

Disability coverage refers to risk insurance of any form of income protection that the employee is eligible for in case they become temporary or permanently unable to work. The benefit is only valid while the employees are working and usually below the retirement age. It will not carry over if they leave the company, retire, etc. It can be either provided by insurance coverage, social security, pension plan paid by the company and/or the employee. The payout might be a one-time lump sum, an annuity, or monthly instalments.

The way forward

Work-life Balance and Well-Being Framework:
We will continue to improve policies and practices in line with the Work-Life Balance and Well-Being Framework.

Physical Work Environment Procedure implementation:
We will implement the requirements of the new global procedure by 2023.

Mental health and psychosocial work environment:
We will continue our activities to raise awareness and promote mental health and roll out the new interactive training on the Management of Stress and Mental Health throughout Yara. Furthermore, we plan to develop additional trainings on the psychosocial work environment and psychological safety and continue to develop monitoring of occupational health and the psychosocial work environment indicators at Yara.
We are committed to protecting human health and the environment from any adverse effects that may arise from the use of our products at any stage of their life cycle. To accomplish this objective, we provide relevant information to our customers and the public, promote awareness of potential hazards, and share knowledge on how to minimise risks and use the products safely, always complying with regulatory requirements. Our comprehensive global HESQ Steering System provides a strong framework for our product stewardship process.

Priorities

Product stewardship
To guarantee responsible management of our fertilizer products, we prioritize the principles of product stewardship. We take careful steps at every stage of the fertilizer value chain, from sourcing raw materials to production, transportation, and distribution, all the way to usage at the farm. Our product stewardship program addresses critical areas such as product safety, environmental protection, safe food production, and protection against theft and misuse. To ensure compliance, our program mandates regular assessment of health, safety, and environmental impacts across all significant product categories. These evaluations encompass the full life cycle of our products, including their use in fertilizer and industrial applications, and align with product stewardship guidelines in the fertilizer sector and relevant legislations.

Our operations are certified to the fertilizer sector’s product stewardship programs (Fertilizers Europe Product Stewardship Program in Europe and the International Fertilizer Association’s program outside Europe) and are regularly subject to third-party audits. Our European fertilizer activities were re-certified to the Fertilizer Europe Product Stewardship program in 2020, valid until 30 June 2023. Outside Europe, certification and recertification to the IFA Protect & Sustain program continued in 2022. All units certified in 2022 achieved the ‘Excellence’ level of the program. In 2023, we will focus on maintaining, embedding, and anchoring the ‘Excellence’ levels.

Chemical compliance and safety
Products in EU/EEA markets are subject to strict regulations under the European chemicals’ REACH and CLP legislations. Our procurement process adheres to all the necessary requirements, including formal chemical compliance checks and all relevant substances being registered accordingly.

Yara’s products and raw materials primarily consist of inorganic commodity chemicals, such as ammonia, inorganic acids, and their inorganic salts. Organic chemicals of concern are not used in any of our products, raw materials, or intermediate materials. Whenever possible, we avoid procurement of chemicals classified as most hazardous such as carcinogenic, mutagenic, persistent, or bio-accumulative. We have a well-defined process for phasing out Substances of Very High Concern. If substitution of such chemicals is not feasible, the necessity of using them on an industrial scale is strictly assessed and subject to rigorous site management approval. All such substances are monitored and managed in our Substance of Concern list and in the Chemsoft tool for chemical management.
Our Corporate HESQ team centrally tracks and manages all chemical substances of concern, taking defined responses according to the regulatory processes. We make new insights available through ongoing dialogue with representatives of politics and science, as well as the interested general public.

**Safety data sheets and labelling for products**

As part of our commitment to the safe and sustainable use of our products, we take responsibility for ensuring that our customers and markets are informed about the safety aspects of our products. Our HESQ Policy guides us in classifying and labelling our products in compliance with relevant regulations.

Our safety data sheets provide crucial information such as the properties of each chemical, health, physical, and environmental hazards, protective measures, and safety precautions for storing, handling, and transporting the chemical.

We verify the hazard classifications against local and regional legislation and publish this information digitally on country-specific safety data sheets in multiple languages and on our product labels. We maintain electronic copies of the data sheets and update them if there are relevant changes and also during the regularly scheduled three- to five-year review cycle. Most of our communication about this information is through digital channels, but paper safety data sheets are still prevalent.

**Performance**

**Ammonium nitrate safety**

After the devastating blast in Beirut, Lebanon in August 2020, we started an in-depth verification and audit process to ensure that not only all relevant units in Yara, but also third-party facilities and transport companies fully adhere to established safety and security procedures. A global taskforce with a clear mandate was established to execute remote audits. The taskforce mandate was completed during 2022 after auditing a total of 217 locations throughout 2021 and 2022. The audits were undertaken in three waves based on a risk mapping.

Zero major findings were reported but improvement areas were identified. The main improvement areas are related to ammonium nitrate risk awareness and training, review of risk assessments, and emergency preparedness and exercises, including technical lines of defence. Based on the taskforce outcomes, we concluded that we have sufficiently strong standards in place related to the production, handling, and storage of ammonium nitrate and high nitrogen containing products, including in rented warehouses.

**Compliance**

In 2022, Yara recorded no significant incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of its products or services. We follow up all reported incidents related to chemical hazards through our Emergency Services support.

**EU Fertilizing Products Regulation**

In 2022, Yara implemented Conformité Européenne (CE) marking for a wide range of product sold in the European Economic Area (EEA) market. The CE mark is the EU’s mandatory conformity marking for regulating the goods sold within the EEA. Doing so declares that these products are compliant with the new EU Fertilizing Products Regulation (FPR). The CE marking represents a manufacturer’s declaration that products comply with EU safety, health, and environmental requirements, and allows for the free movement of products within the European market. For all our CE-marked products, we carried out a conformity assessment, set-up a technical file, issued an EU declaration of conformity, and updated the labels in line with the new FPR labelling requirements.

**The way forward**

**Product stewardship for organic fertilizers:**

Yara is expanding its product portfolio in the field of organic fertilizers and organo-minerals. To ensure product safety and security we are implementing the necessary competencies and processes to maintain compliance.

**Labelling of Yara products:**

Yara is delivering a global process and tool for labelling of our products, ensuring that we are meeting the requirements set in new and/or revised regulations.
People metrics

Occupational and Process Safety

PSIF rate, PS index

<table>
<thead>
<tr>
<th></th>
<th>2022 target</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSIF rate</td>
<td>&lt;1.0</td>
<td>0.7</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>PS index</td>
<td>&gt;70%</td>
<td>85%</td>
<td>82%</td>
<td>73%</td>
</tr>
</tbody>
</table>

The PSIF (Potential Severe Injuries and/or Fatalities) rate is defined as the number of PSIF incidents per million hours worked by both employees and contractors.

The Process safety (PS) index combines several indicators to gain more focus on the quality, reporting, and closing of process safety incidents and reports.

Diversity, Equity, and Inclusion

Diversity and inclusion index, questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>2022</th>
<th>Benchmark General Industry P75</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotions and assignments are made fairly in Yara.</td>
<td>54%</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>Yara values and promotes employee diversity.</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
</tr>
<tr>
<td>In my work environment, everyone is treated fairly regardless of personal background or characteristics.</td>
<td>81%</td>
<td>81%</td>
<td>80%</td>
</tr>
<tr>
<td>I am treated with respect as an individual.</td>
<td>89%</td>
<td>86%</td>
<td>90%</td>
</tr>
<tr>
<td>I can freely express my views without fear of negative consequences.</td>
<td>67%</td>
<td>73%</td>
<td>74%</td>
</tr>
<tr>
<td>DEI index</td>
<td>75%</td>
<td>74%</td>
<td>77%</td>
</tr>
</tbody>
</table>

Senior leadership personnel movements

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Female movement rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal movements – in</td>
<td>15</td>
<td>44</td>
<td>25%</td>
</tr>
<tr>
<td>External hires</td>
<td>1</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Terminations</td>
<td>4</td>
<td>19</td>
<td>17%</td>
</tr>
<tr>
<td>Internal movements – out</td>
<td>18</td>
<td>38</td>
<td>32%</td>
</tr>
</tbody>
</table>

Female movements in permanent positions

<table>
<thead>
<tr>
<th></th>
<th>Africa</th>
<th>Asia &amp; Oceania</th>
<th>Brazil</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of female hires (%)</td>
<td>46%</td>
<td>41%</td>
<td>36%</td>
<td>47%</td>
<td>41%</td>
<td>19%</td>
<td>41%</td>
</tr>
<tr>
<td>Ratio of female terminations (%)</td>
<td>19%</td>
<td>25%</td>
<td>25%</td>
<td>29%</td>
<td>31%</td>
<td>17%</td>
<td>26%</td>
</tr>
</tbody>
</table>
Equal pay for equal work
– analysis per country

The 2022 study covered 25 countries and around 8,000 employees in positions graded by Willis Towers Watson methodology and those not covered by tariff agreements, as tariff schemes provide strong protection against gender bias. Our study is based on ordinary least squares (OLS) regression to measure the impact of gender on pay after we have statistically controlled differences in other factors, such as job level (grade), job role, local market conditions, performance, and time in the role.

Depending on the job roles present in each country and availability of data, the percentage of permanent employees covered in the analysis varies significantly. Countries such as Finland, France, and Germany, for example, heavily composed of production plants and employees covered by tariff schemes, have lower coverage in this study.

The R2 measure presented on the right represents the strength of the relationship between the linear regression model and the dependent variable “Base salary” on a 0 – 1 scale. The closer to one it gets, the better we can trust in the evidence found in the study. We adopted a threshold for a country to be included in the analysis of at least 25 employees from each gender and a minimum 10% female ratio.

The gaps reported ranged from zero in several countries to 10.2% in United Kingdom. The table shows the results from 2022 for each country in the scope of the analysis.

<table>
<thead>
<tr>
<th>Country</th>
<th>Gender equal pay for equal work gap inference</th>
<th>R2*</th>
<th>Women in scope</th>
<th>Men in scope</th>
<th>% of permanent employees covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.0%</td>
<td>0.94</td>
<td>40</td>
<td>93</td>
<td>100%</td>
</tr>
<tr>
<td>Australia</td>
<td>0.0%</td>
<td>0.70</td>
<td>30</td>
<td>100</td>
<td>57%</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.0%</td>
<td>0.84</td>
<td>75</td>
<td>185</td>
<td>46%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.1%</td>
<td>0.97</td>
<td>847</td>
<td>1132</td>
<td>41%</td>
</tr>
<tr>
<td>Canada</td>
<td>0.0%</td>
<td>0.83</td>
<td>30</td>
<td>61</td>
<td>40%</td>
</tr>
<tr>
<td>China</td>
<td>0.0%</td>
<td>0.86</td>
<td>62</td>
<td>71</td>
<td>83%</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.0%</td>
<td>0.93</td>
<td>182</td>
<td>192</td>
<td>56%</td>
</tr>
<tr>
<td>Finland</td>
<td>0.0%</td>
<td>0.76</td>
<td>65</td>
<td>151</td>
<td>27%</td>
</tr>
<tr>
<td>France</td>
<td>0.0%</td>
<td>0.79</td>
<td>74</td>
<td>428</td>
<td>91%</td>
</tr>
<tr>
<td>Germany</td>
<td>0.0%</td>
<td>0.75</td>
<td>70</td>
<td>141</td>
<td>26%</td>
</tr>
<tr>
<td>India</td>
<td>5.4%</td>
<td>0.86</td>
<td>87</td>
<td>631</td>
<td>76%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.0%</td>
<td>0.84</td>
<td>28</td>
<td>44</td>
<td>97%</td>
</tr>
<tr>
<td>Italy</td>
<td>0.0%</td>
<td>0.81</td>
<td>42</td>
<td>171</td>
<td>58%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.0%</td>
<td>0.86</td>
<td>308</td>
<td>154</td>
<td>93%</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.0%</td>
<td>0.84</td>
<td>79</td>
<td>114</td>
<td>51%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.0%</td>
<td>0.86</td>
<td>44</td>
<td>294</td>
<td>41%</td>
</tr>
<tr>
<td>Norway</td>
<td>0.0%</td>
<td>0.89</td>
<td>374</td>
<td>573</td>
<td>67%</td>
</tr>
<tr>
<td>Singapore</td>
<td>7.5%</td>
<td>0.88</td>
<td>87</td>
<td>66</td>
<td>94%</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.0%</td>
<td>0.94</td>
<td>30</td>
<td>49</td>
<td>33%</td>
</tr>
<tr>
<td>Spain</td>
<td>0.0%</td>
<td>0.95</td>
<td>37</td>
<td>45</td>
<td>99%</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.0%</td>
<td>0.82</td>
<td>37</td>
<td>76</td>
<td>35%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.0%</td>
<td>0.80</td>
<td>27</td>
<td>29</td>
<td>97%</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.0%</td>
<td>0.92</td>
<td>46</td>
<td>54</td>
<td>99%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10.2%</td>
<td>0.93</td>
<td>95</td>
<td>159</td>
<td>98%</td>
</tr>
<tr>
<td>United States</td>
<td>0.0%</td>
<td>0.91</td>
<td>75</td>
<td>154</td>
<td></td>
</tr>
</tbody>
</table>
People, Culture, and Leadership

At the end of 2022, Yara had 17,506 employees globally, of which 16,080 were employed on a permanent basis, representing a decrease of 580 employees compared to the previous year. The main variations were in Brazil (-404), Vietnam (-62), Lithuania (143), and Sweden (70). The overall headcount decrease is attributable to divestments and closures.

In relation to contractors, Yara had 286 position contractors and 3,041 external contractors globally, representing a decrease of 144 in both types compared to the previous year. The main changes were seen in Africa (-168), Asia & Oceania (-44), and Europe (57).

Engagement index, questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Favorability %</th>
<th>Benchmark General Industry P75</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel proud to work for Yara.</td>
<td>89%</td>
<td>87%</td>
<td>90%</td>
</tr>
<tr>
<td>I would recommend Yara as a good place to work.</td>
<td>88%</td>
<td>82%</td>
<td>88%</td>
</tr>
<tr>
<td>I feel motivated to do more than is required of me.</td>
<td>76%</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td>Yara motivates me to do more than is required.</td>
<td>65%</td>
<td>70%</td>
<td>68%</td>
</tr>
<tr>
<td>Given your choice, how long would you plan to continue working for Yara?</td>
<td>69%</td>
<td>73%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Employee engagement: 78% 2022, 78% 2021, 79% 2020

Enablement index, questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Favorability %</th>
<th>Benchmark General Industry P75</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job makes good use of my skills and abilities.</td>
<td>80%</td>
<td>82%</td>
<td>83%</td>
</tr>
<tr>
<td>My job provides opportunities to do challenging and interesting work.</td>
<td>84%</td>
<td>83%</td>
<td>93%</td>
</tr>
<tr>
<td>Conditions in my job allow me to be as productive as I can be.</td>
<td>67%</td>
<td>74%</td>
<td>66%</td>
</tr>
<tr>
<td>There are no significant barriers at work to doing my job well.</td>
<td>64%</td>
<td>70%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Employee enablement: 74% 2022, 78% 2021, 74% 2020

Part-time employees

Part-time and full-time employees in 2022 by gender and region.

<table>
<thead>
<tr>
<th>Employee category</th>
<th>Gender</th>
<th>Africa</th>
<th>Asia &amp; Oceania</th>
<th>Brazil</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time employees</td>
<td>Female</td>
<td>135</td>
<td>526</td>
<td>1,287</td>
<td>1,760</td>
<td>457</td>
<td>150</td>
<td>4,315</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>503</td>
<td>1,406</td>
<td>3,888</td>
<td>5,210</td>
<td>1,048</td>
<td>546</td>
<td>12,601</td>
</tr>
<tr>
<td>Part-time employees</td>
<td>Female</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>170</td>
<td>0</td>
<td>1</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>125</td>
<td>2</td>
<td>0</td>
<td>128</td>
</tr>
</tbody>
</table>

Employees with regular job appraisals

<table>
<thead>
<tr>
<th>Gender</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>87.1%</td>
<td>82.5%</td>
<td>77.9%</td>
<td>76.0%</td>
<td>78.6%</td>
<td>76.6%</td>
</tr>
<tr>
<td>Male</td>
<td>69.7%</td>
<td>70.1%</td>
<td>63.7%</td>
<td>63.1%</td>
<td>66.1%</td>
<td>73.9%</td>
</tr>
</tbody>
</table>

Employee turnover rate

The employee turnover rate is calculated as the number of permanent employee terminations in the period divided by the starting permanent employee headcount. Turnover rates vary considerably between our regions due to different labour market characteristics. For 2022, our regions had the following turnover rates: Brazil, 20.8%; rest of Latin America, 14.4%; Asia & Oceania, 22.3%; Europe, 8%; North America, 8.8% and Africa, 8%.  

<table>
<thead>
<tr>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5</td>
<td>11.5</td>
<td>10.4</td>
<td>14.4</td>
<td>11.4</td>
<td>17.3</td>
</tr>
</tbody>
</table>
### Total number of employees
**Employees by employment contract and gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Africa</th>
<th>Asia &amp; Oceania</th>
<th>Brazil</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Permanent</td>
<td>119</td>
<td>503</td>
<td>1,135</td>
<td>1,800</td>
<td>416</td>
<td>140</td>
<td>4,113</td>
</tr>
<tr>
<td>Male Permanent</td>
<td>478</td>
<td>1,363</td>
<td>3,664</td>
<td>4,983</td>
<td>951</td>
<td>528</td>
<td>11,967</td>
</tr>
<tr>
<td>Total Permanent</td>
<td>597</td>
<td>1,866</td>
<td>4,799</td>
<td>6,783</td>
<td>1,367</td>
<td>668</td>
<td>16,080</td>
</tr>
<tr>
<td>Female Non-permanent</td>
<td>16</td>
<td>28</td>
<td>152</td>
<td>130</td>
<td>41</td>
<td>11</td>
<td>378</td>
</tr>
<tr>
<td>Male Non-permanent</td>
<td>25</td>
<td>44</td>
<td>224</td>
<td>352</td>
<td>99</td>
<td>18</td>
<td>762</td>
</tr>
<tr>
<td>Total Non-permanent</td>
<td>41</td>
<td>72</td>
<td>376</td>
<td>482</td>
<td>140</td>
<td>29</td>
<td>1,140</td>
</tr>
<tr>
<td>Total permanent and non-permanent</td>
<td>638</td>
<td>1,938</td>
<td>5,175</td>
<td>7,265</td>
<td>1,507</td>
<td>697</td>
<td>17,220</td>
</tr>
<tr>
<td>Female Position contractors</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>46</td>
<td>0</td>
<td>6</td>
<td>58</td>
</tr>
<tr>
<td>Male Position contractors</td>
<td>23</td>
<td>3</td>
<td>1</td>
<td>191</td>
<td>0</td>
<td>10</td>
<td>228</td>
</tr>
<tr>
<td>Total position contractors</td>
<td>27</td>
<td>4</td>
<td>2</td>
<td>237</td>
<td>0</td>
<td>16</td>
<td>286</td>
</tr>
<tr>
<td>Total permanent, non-permanent and position contractors</td>
<td>665</td>
<td>1,942</td>
<td>5,177</td>
<td>7,502</td>
<td>1,507</td>
<td>713</td>
<td>17,506</td>
</tr>
<tr>
<td>Female External contractors</td>
<td>166</td>
<td>946</td>
<td>856</td>
<td>292</td>
<td>774</td>
<td>7</td>
<td>3,041</td>
</tr>
<tr>
<td>Male External contractors</td>
<td>166</td>
<td>946</td>
<td>856</td>
<td>292</td>
<td>774</td>
<td>7</td>
<td>3,041</td>
</tr>
<tr>
<td>Grand total</td>
<td>1,531</td>
<td>7,909</td>
<td>17,429</td>
<td>24,031</td>
<td>4,221</td>
<td>1,403</td>
<td>54,765</td>
</tr>
</tbody>
</table>

*Excluding Yara Marine Technologies.

### New employee hires
**New permanent employee hires in 2022, by age, gender, and region.**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age group</th>
<th>Africa</th>
<th>Asia &amp; Oceania</th>
<th>Brazil</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Under 30</td>
<td>6</td>
<td>96</td>
<td>88</td>
<td>120</td>
<td>38</td>
<td>3</td>
<td>351</td>
</tr>
<tr>
<td></td>
<td>30–50</td>
<td>12</td>
<td>49</td>
<td>73</td>
<td>147</td>
<td>31</td>
<td>10</td>
<td>322</td>
</tr>
<tr>
<td></td>
<td>Over 50</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>No age informed</td>
<td>1</td>
<td>17</td>
<td>0</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>Total female</td>
<td>19</td>
<td>166</td>
<td>163</td>
<td>286</td>
<td>71</td>
<td>15</td>
<td>720</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Under 30</td>
<td>11</td>
<td>128</td>
<td>124</td>
<td>119</td>
<td>37</td>
<td>6</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td>30–50</td>
<td>8</td>
<td>100</td>
<td>158</td>
<td>168</td>
<td>66</td>
<td>20</td>
<td>520</td>
</tr>
<tr>
<td></td>
<td>Over 50</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>27</td>
<td>0</td>
<td>8</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>No age informed</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Total male</td>
<td>22</td>
<td>238</td>
<td>291</td>
<td>327</td>
<td>104</td>
<td>36</td>
<td>1018</td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>41</td>
<td>404</td>
<td>454</td>
<td>613</td>
<td>175</td>
<td>51</td>
<td>1738</td>
<td></td>
</tr>
</tbody>
</table>

*Excluding Yara Marine Technologies.
Employee exits
Permanent employee exits in 2022, by age, gender, and region.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age group</th>
<th>Africa</th>
<th>Asia &amp; Oceania</th>
<th>Brazil</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Under 30</td>
<td>2</td>
<td>35</td>
<td>121</td>
<td>30</td>
<td>32</td>
<td>1</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>30–50</td>
<td>6</td>
<td>45</td>
<td>161</td>
<td>72</td>
<td>25</td>
<td>7</td>
<td>316</td>
</tr>
<tr>
<td></td>
<td>Over 50</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td>37</td>
<td>3</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>No age informed</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Total female</td>
<td>Under 30</td>
<td>9</td>
<td>99</td>
<td>288</td>
<td>149</td>
<td>60</td>
<td>10</td>
<td>615</td>
</tr>
<tr>
<td>Male</td>
<td>Under 30</td>
<td>12</td>
<td>95</td>
<td>250</td>
<td>45</td>
<td>43</td>
<td>5</td>
<td>450</td>
</tr>
<tr>
<td></td>
<td>30–50</td>
<td>19</td>
<td>163</td>
<td>530</td>
<td>151</td>
<td>87</td>
<td>28</td>
<td>978</td>
</tr>
<tr>
<td></td>
<td>Over 50</td>
<td>8</td>
<td>26</td>
<td>98</td>
<td>152</td>
<td>3</td>
<td>16</td>
<td>293</td>
</tr>
<tr>
<td></td>
<td>No age informed</td>
<td>0</td>
<td>21</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Total male</td>
<td>Under 30</td>
<td>39</td>
<td>305</td>
<td>868</td>
<td>360</td>
<td>133</td>
<td>49</td>
<td>1754</td>
</tr>
<tr>
<td></td>
<td>30–50</td>
<td>57</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 50</td>
<td>49</td>
<td>5.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>30.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>3.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>3.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Excluding Yara Marine Technologies

Top 5 countries with new permanent jobs

<table>
<thead>
<tr>
<th>Country</th>
<th>Net job creation</th>
<th>Job growth by country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>140</td>
<td>28.2%</td>
</tr>
<tr>
<td>Norway</td>
<td>57</td>
<td>4%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>49</td>
<td>5.9%</td>
</tr>
<tr>
<td>China</td>
<td>43</td>
<td>30.7%</td>
</tr>
<tr>
<td>India</td>
<td>34</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Top 5 functions with new permanent jobs

<table>
<thead>
<tr>
<th>Function</th>
<th>Net job creation</th>
<th>Job growth by country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>110</td>
<td>11.9%</td>
</tr>
<tr>
<td>Sales</td>
<td>26</td>
<td>1.5%</td>
</tr>
<tr>
<td>Technical Expertise and Support</td>
<td>26</td>
<td>3.9%</td>
</tr>
<tr>
<td>Research and Technology Product Development</td>
<td>25</td>
<td>11.9%</td>
</tr>
<tr>
<td>HR</td>
<td>21</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Headcount increase and job creation

Yara’s workforce has grown steadily over the last five years, but in 2022 we experienced a decrease in our total headcount, mainly due to headcount reductions in Brazil. The headcount reduced mainly due to divestment of the Serra do Salitre mining unit, as well as the closing of the Cembé and Catáte units.

Our operations in Lithuania have seen the largest growth in permanent positions, most of them in finance; explaining the overall increase of finance roles in 2022. Growth in our head-quarters and production and maintenance roles explain the increases in Norway and the Netherlands. The increase in China is mainly related to our digital solutions and sales.

Net job creation

<table>
<thead>
<tr>
<th>Type</th>
<th>2022</th>
<th>Change</th>
<th>Last 5 years</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>(19)</td>
<td>(0.1%)</td>
<td>2305</td>
<td>14.3%</td>
</tr>
<tr>
<td>Non-permanent</td>
<td>(201)</td>
<td>(19.0%)</td>
<td>(612)</td>
<td>(53.7%)</td>
</tr>
<tr>
<td>Overall</td>
<td>(220)</td>
<td>(1.3%)</td>
<td>1693</td>
<td>9.8%</td>
</tr>
</tbody>
</table>
Yara Voice, Entrepreneurship

Percentage of countries that provided transition assistance programs

<table>
<thead>
<tr>
<th>Region</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>91%</td>
<td>20%</td>
<td>33%</td>
<td>50%</td>
</tr>
<tr>
<td>Asia &amp; Oceania</td>
<td>86%</td>
<td>54%</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>Brazil</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Europe</td>
<td>46%</td>
<td>38%</td>
<td>40%</td>
<td>64%</td>
</tr>
<tr>
<td>Latin America</td>
<td>0%</td>
<td>11%</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>North America</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>Yara</td>
<td>60%</td>
<td>37%</td>
<td>34%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Types of transition assistance offered

<table>
<thead>
<tr>
<th>Assistance Type</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of countries that offer assistance when</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transit to retirement</td>
<td>31%</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Percentage of countries that offer outplacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services</td>
<td>21%</td>
<td>27%</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Percentage of countries that offer pre-retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>planning</td>
<td>26%</td>
<td>18%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>Percentage of countries that offer severance pay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55%</td>
<td>32%</td>
<td>32%</td>
<td>41%</td>
</tr>
<tr>
<td>Percentage of countries that offer training for</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ones continuing professional career</td>
<td>15%</td>
<td>17%</td>
<td>16%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Yara is responding effectively to changes in the external business environment.

77% 79% 76%

We use the different perspectives, backgrounds, and experiences that our employees have to help deliver better business outcomes.

73% 76% 75%

We continuously look for ways to improve our organization to better serve our customers.

80% 85% 83%

It is acceptable to make mistakes as long as we learn from them.

82% 83% 82%

I am encouraged to come up with new or better ways of doing things.

78% 80% 79%

Entrepreneurship

78% 81% N/A
Human Rights and Labor Practices

Employees covered by collective bargaining agreements

<table>
<thead>
<tr>
<th>Region</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>16%</td>
<td>23%</td>
<td>26%</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Asia &amp; Oceania</td>
<td>3%</td>
<td>12%</td>
<td>12%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Brazil</td>
<td>100%</td>
<td>92%</td>
<td>90%</td>
<td>91%</td>
<td>100%</td>
</tr>
<tr>
<td>Europe</td>
<td>82%</td>
<td>75%</td>
<td>82%</td>
<td>80%</td>
<td>79%</td>
</tr>
<tr>
<td>Latin America</td>
<td>35%</td>
<td>30%</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>North America</td>
<td>21%</td>
<td>20%</td>
<td>27%</td>
<td>29%</td>
<td>30%</td>
</tr>
<tr>
<td>Yara</td>
<td>69%</td>
<td>66%</td>
<td>67%</td>
<td>70%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Programs for assisting employees, families, and community members affected by serious diseases

We want our employees to be able to care for immediate family members who have been diagnosed with a serious medical condition or critical illness. We aim to develop our support in these areas alongside the development of our Work-life Balance and Well-Being Framework. This table shows the share of countries of operations in which we have programs for assisting employees, families, and community members affected by serious diseases: occupational or non-occupational related impairment of health with serious consequences for employees, their families, and communities, such as HIV/AIDS, H1N1 influenza virus, SARS, diabetes, RSI, and stress.

Health and Well-Being at Work

Provision of health services and employee benefits

<table>
<thead>
<tr>
<th>Services and benefits provided</th>
<th>Permanent</th>
<th>Non-permanent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible working hours</td>
<td>62%</td>
<td>50%</td>
</tr>
<tr>
<td>Flexible working locations</td>
<td>36%</td>
<td>20%</td>
</tr>
<tr>
<td>Healthcare facilities/subsidies</td>
<td>97%</td>
<td>73%</td>
</tr>
<tr>
<td>Retirement/pension plan</td>
<td>88%</td>
<td>61%</td>
</tr>
<tr>
<td>Life insurance</td>
<td>97%</td>
<td>74%</td>
</tr>
<tr>
<td>Disability coverage</td>
<td>93%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Programs for assisting employees, families, and community members affected by serious diseases

<table>
<thead>
<tr>
<th>Region</th>
<th>% countries with programs</th>
<th>% of countries with programs contemplating Counselling</th>
<th>% of countries with programs contemplating Education or Training</th>
<th>% of countries with programs contemplating Prevention and risk assessment</th>
<th>% of countries with programs contemplating Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>100%</td>
<td>91%</td>
<td>100%</td>
<td>82%</td>
<td>91%</td>
</tr>
<tr>
<td>Asia &amp; Oceania</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>36%</td>
</tr>
<tr>
<td>Brazil</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Europe</td>
<td>38%</td>
<td>29%</td>
<td>21%</td>
<td>29%</td>
<td>38%</td>
</tr>
<tr>
<td>Latin America</td>
<td>88%</td>
<td>78%</td>
<td>89%</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td>North America</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Yara overall</td>
<td>69%</td>
<td>53%</td>
<td>53%</td>
<td>52%</td>
<td>52%</td>
</tr>
</tbody>
</table>
Our ambition is to become climate-neutral by 2050, and to grow a nature-positive food future. Decarbonizing our own operations is critical, but we also want to contribute to reducing emissions and impacts on nature from our supply chain and our operations with farmers and other customers who use our solutions.
On the road to climate neutrality

Yara is working to become climate-neutral by 2050. To reach that ambition, reducing our own direct emissions is key. In 2022, several projects were completed, moving us one step closer to climate neutrality.

Long track record of emissions reductions
Reducing scope 1 and 2 emissions intensity by 10% by 2025 is the first milestone targeted, and we are well on our way. This corresponds to a reduction of 2.2 million tonnes CO₂e per year in absolute terms. 77% of the 2025 target is already in execution phase. The massive work to reach our commitments currently counts 102 projects at plants in all regions at an estimated investment of USD 320 million.

“Yara has reduced its emissions by almost 50% since becoming a listed company and we are on our way to reaching our 2025 target. Approaching 2030 and beyond, emissions are harder to abate. We must rely on our knowledge, innovation capacity, and entrepreneurial spirit, as well as on the development of step change technologies and regulatory framework conditions to take us the next steps,” says Trine Kopperud, VP Energy & Environment.
Tackling our scope 1 and 2 emissions, our non-GHG environmental impact, as well as our scope 3 emissions is key to transforming our business.

Full steam ahead towards 2025
2022 saw the completion of two of the high-impact projects in the GHG portfolio, with a combined annual reduction of around 200,000 tonnes of CO₂e. Both projects utilize Yara’s own developed nitrous oxide (N₂O) abatement technology.

In Sluiskil, the Netherlands, more N₂O abatement catalysts were installed into the new ammonia burner to reduce N₂O emissions. The project encountered some challenges after installments, and damage to wall coils had to be repaired. After analyzing and tackling the root cause of the challenges, the team in Sluiskil were able to successfully complete the project and develop some important learnings for the rest of the organization as well.

In Uusikaupunki, Finland, an old boiler needed replacement. By installing more N₂O abatement catalysts in the basket of the new and larger boiler, more N₂O emissions were converted into harmless nitrogen and oxygen. Although the team in Finland encountered some challenges related to installing the newest and more innovative equipment, the project was successfully completed in 2022.

In Sluiskil, we managed to reduce N₂O emissions by more than 90% and in Uusikaupunki by 95%.

Because consumption of natural gas for ammonia production is both Yara’s main variable cost and driver of GHG emissions, energy efficiency improvements come with a dual bottom line and climate benefit. In 2022, several energy efficiency projects were completed. In Belle Plaine, Canada, the steam turbine of the synthesis gas compressor of the ammonia plant was upgraded, leading to an annual reduction of 20,000 tonnes of CO₂e. In Babrala, India, the replacement of the steam turbine of a boiler feedwater pump resulted in an annual decrease of 3,000 tonnes of CO₂e.

“I am very proud to say that the emissions reductions and energy efficiency projects completed in 2022 have delivered both major emissions reductions and important learnings for the organization. Integrated business processes, a collaborative spirit, and the global scale means the learnings from these projects are a big benefit for similar projects elsewhere,” says Trine Kopperud.

To 2030 and beyond
At the ESG investor seminar in 2020, Yara committed to reduce its absolute GHG emissions by 30% by 2030 from a 2019 baseline. Currently, Yara can meet around 70% of its target by completing low- and medium-risk projects. Getting to 100% requires us to make some bold decisions and work closely with regulators and authorities, but we are working hard to get there. Key projects in the 2030 portfolio include the carbon capture and storage (CCS) project in Sluiskil and the decarbonization of Yara’s Porsgrunn plant. Read more about the Sluiskil project on page 15 in Yara’s Integrated Report.

Tackling our scope 1 and 2 emissions, our non-GHG environmental impact, as well as our scope 3 emissions is key to transforming our business in response to the nature and climate crises. Yara is currently working on a Climate and Nature roadmap to guide Yara towards becoming climate-neutral by 2050 and deliver on our ambition of Growing a Nature-Positive Food Future.
Climate and Nature roadmap: Developing Yara’s scope 3 actions through a collaborative process

We have a portfolio of projects to cut our scope 1 and 2 emissions. However, we have also committed to reducing the emissions from the use of our products - the emissions from the fields of farmers. Here’s how we will determine and roll out Yara’s downstream scope 3 emissions and regenerative agriculture KPIs.

1. Define & Design

- Submitting targets to SBTi
  - Scope 1-2: -30%
  - Scope 3: -11.1% (use of products)

- Engaging
  - Sharing knowledge and experience within Yara; engaging in global processes

- Ambition
  - Growing a Nature-Positive Food Future

- Rolling out targets
  - Allocate targets among the regions and develop strategies for delivering on respective commitments

- Governance for target setting and MRV
  - Provide governance to harmonize corporate and regional requirements

2. Execute & Improve

- Planning
  - Harmonize regional planning with corporate requirements

- Continuous improvement
  - Adapt and improve to respond to new market developments and learnings to reach goals; improving models and developing business

- Sharing and communicating
  - Publishing commitments, progress, and results

- Verifying
  - Verifying disclosures and data, through e.g. external audit

- Tracking progress
  - Quarterly and annually reporting, internally and externally

- We don’t travel alone!
  - We engage and co-create with global partners sharing our values and objectives

The roadmap will support regions, enabling and catalyzing action with the business line, increasing regional ownership of the roadmap over time.
Yara aims to support agriculture in its transformation towards climate neutrality and becoming nature-positive. We do this by developing and facilitating sustainable farming practices that impact positively on crop and soil quality, increase nutrient, water, and land-use efficiency, and reduce GHG emissions from agricultural soils. Backed by more than 60 years of research activities and deep agricultural knowledge, we intend to create measurable, positive global impact and deliver actions that protect climate and nature and improve livelihoods.

Priorities

Regenerative agriculture
In order to serve the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework, Yara sees regenerative agriculture as a systematic approach to adopt the best sustainable farming practices that positively affect nature and climate, across five recurrent themes: Climate, Soil health, Resource use efficiency, Biodiversity, and Prosperity. The current climate and biodiversity emergency tells us it is time to act, and regenerative agriculture is a way towards a structural transformation of our agri-food system.

Climate: Regenerative agriculture manages nitrogen within the regional and planetary boundaries, optimizing nitrogen use to minimize greenhouse gas emissions, enhancing carbon sequestration and improving crop resilience for climate shocks.

Soil health: Regenerative agriculture improves the state of soil through increased biomass supply e.g., via higher yields leading to a higher provision of root and harvest residues to feed the soil, maximizing the periods during which the soil is covered by crops, minimizing soil disturbance and soil erosion, avoiding soil mining by balanced nutrition, and thereby preventing soil degradation.

Resource use efficiency: Managing the nutrients within the planetary and regional boundaries requires a high nutrient use efficiency (NUE). This is of critical importance for nitrogen and phosphorous, as they are at risk of exceeding the regional and planetary boundaries. Managing nutrients with high efficiency requires taking all available nutrient sources into account, so that every nutrient matters, be it circular, organic, or mineral. With the existing fertilizers, farming technologies, and knowledge, it is possible to achieve high yields with a high nutrient use efficiency, using only as much mineral fertilizer as needed to fill the nutrient gap. Therefore, mainstreaming best practice for crop nutrition management is high on the agenda of regenerative agriculture. Positive side effects of better nutrient management are increased crop yield, which optimizes land use efficiency, and a higher water use efficiency, which reduces the stress on freshwater reserves.
**Biodiversity:** As pollution is one of the key drivers of aquatic biodiversity loss, a high use efficiency of nitrogen and phosphorous are critical contributors to reducing the pressure on biodiversity. A more diverse crop rotation, the use of cover crops, reduced pesticide usage, and land sparing through agroforestry, hedges, or the establishment of nature corridors can support biodiversity on farms. At the same time, a higher productivity of the existing agricultural land can indirectly protect existing natural habitats by reducing the pressure on land use change and deforestation. Furthermore, the regeneration of existing degenerated land opens up opportunities for land sparing for nature, for example by enabling afforestation.

**Prosperity:** Regenerative agriculture improves long-term farmer livelihood through reduced costs, improved crop yield and crop quality, and greater resilience to market volatility and extreme climate events. It also opens new green revenue streams for the farmer, such as rewarding them for carbon capture and storage in the soil.

To feed the world’s growing population with healthy and affordable food and preserve the ecosystem, we believe it is important to take a holistic approach, to understand and to meet the specific needs of farmers with solutions and supporting them in the adoption and transition. Focusing on the required outcomes of
regenerative agriculture provides the required flexibility for regional adaptation and encourages further improvements and innovation. Yara offers solutions that positively impact the five themes of regenerative agriculture in a measurable way.

**Soil health and soil carbon**

Soils are the foundation of agriculture and our food system. Soil health is a prerequisite for sustainable crop production and food security. Comprised of minerals, organic matter, air, water, and living organisms, soils provide a rooting medium and nutrient source for plants. Soils contain a wealth of biodiversity and play a key role in regulating, storing, and filtering water. In addition, due to their ability to store carbon, soils play an important role in climate change mitigation.

Soil quality or soil fertility typically refers to the ecosystem services soils provide, such as adequate crop yields. Soil health, in a broader sense, emphasizes the role of soil as a living ecosystem that sustains the well-being of organisms, including animals and humans.

According to the FAO, an estimated one third of agricultural soils are degraded, leading to loss of agricultural productivity and putting global food production and food security at risk.

Sustainable cropland management aims at improving soil health and the proper functioning of the wider agro-ecosystem. Sustainable management practices include crop rotations, cover crops, reduced tillage, optimized nutrient applications, incorporating organic fertilizers and balanced use of mineral fertilizers, liming, and prevention of soil compaction. Applying these practices over time will likely maintain and improve soil health.

Best practice crop nutrient management, ensuring balanced fertilization suited to local conditions, is essential in all good agricultural practices. When crops are harvested, nutrients are removed from the soil. If these nutrients are not replaced, soil health will decline and eventually lead to soil degradation. Applying adequate amounts of organic biomass and required nutrients, in the form of organic or mineral fertilizers, maintains or increases crop growth, which in turn provides larger quantities of crop residues to be returned to the soil. This contributes to the nutrition of soil organisms and the improvement of soil organic matter content and soil carbon sequestration.

Yara takes a long-term view on soil health. By providing farmers with tools and services enabling a precise and balanced nutrient management in combination with suitable fertilizer products, we help them preserve and improve the fertility and health of their soils, a benefit that carries forward to future generations.

**Scope 3: GHG emissions from fields**

Nitrous oxide ($\text{N}_2\text{O}$) is the third most important greenhouse gas globally, after carbon dioxide (CO$_2$) and methane (CH$_4$). Most N$_2$O emissions occur in the agricultural sector and are emitted directly from agricultural soils. They are driven by nitrogen inputs from various sources, such as nitrogen fertilizer, manure application, and grazing animals. In total, N$_2$O accounts for about 10% of the anthropogenic global
warming effect and for approximately 6% of all GHG emissions in Europe. About one third of the N₂O emission from agricultural soils are attributed to the use of mineral nitrogen fertilizers.

Yara has developed a high level of expertise in N₂O emission research based on more than a decade of field, greenhouse, and lab trial work. The research focuses on:

• the manyfold factors influencing N₂O emissions from fertilizer use in the field,
• a more accurate accounting of in-field N₂O emissions (scope 3 downstream),
• the development of innovative fertilizer products reducing N₂O emissions and
• the development of recommendations for climate-friendly fertilizer management for farmers.

The knowledge derived from our research initiatives will be used to improve Yara’s current carbon accounting and to define N₂O mitigation strategies, which will help reduce both Yara’s emissions as well as those from agriculture and food production in general.

Biostimulants’ role in sustainable agriculture
Plant biostimulants can enhance tolerance to abiotic stress, nutrient use efficiency, and crop quality and yield, and are becoming increasingly important tools for achieving sustainable crop production. They are complementary to fertilizers by improving the availability, uptake, and use of nutrients. This makes biostimulants an essential element in Yara’s crop nutrition solutions and contributes to the ambition on Growing a Nature-Positive Food Future.

Soil health: Certain biostimulants can improve soil health and fertility, impacting positively on biodiversity, soil restoration, and water use efficiency.

Tolerance to climate change: Biostimulants can enhance plants’ tolerance to abiotic stress, such as drought or extreme temperatures, and help plants to adapt to climate change, enabling continued crop quality and marketable yield, thus reducing waste.

Nutrient use efficiency: Biostimulants can support root development or improve nutrient availability in soil, supporting higher nutrient use efficiency and reducing nutrient losses to the environment.

Crop quality: Biostimulants can improve crop quality and yield and contribute to more vigorous and healthy plants, supporting farm profitability and reduction of food waste.

Water in farming
There is significant potential for better water management and improved water use efficiency in agriculture. There is a fundamental and close relationship between crop nutrition and crop water productivity and our R&D activities have convincingly demonstrated the positive effects of good crop nutrition on water use efficiency. We continue to investigate this relationship through agronomic trials, and to bring this knowledge to growers across the world.

We also offer innovative technologies to advance water use efficiency and offer solutions for water-scarce agriculture. In the US, our Farm Water Advisor uses a range of data including field-specific weather, soil, and irrigation system information to advise farmers when, where, and how much to irrigate for the coming seven-day period.

Expanding in organic and organo-mineral fertilizer
The EU has set an ambition to boost organic farming to reach at least a quarter of the region’s agricultural land use by 2030. Organic-based fertilizers are a clear strategic priority for Yara in coming years. We support all farmers in implementing efficient, sustainable agricultural practices. Our precision farming tools, crop nutrition solutions and deep knowledge of the best nutrient management practices are relevant for all farming systems, including organic farming.

We offer a broad portfolio of organic and organo-mineral fertilizers for a variety of crops, including cereals, grassland, oilseed, potato, horticulture, vineyards, and olives. Whereas organic fertilizers contain carbon and nutrients of solely biological origin, our organo-mineral fertilizers are combinations of inorganic and organic nutrients and carbon. Both kinds contribute to a circular economy by using nutrients derived from plant material, animal byproducts, or recycled biowaste.
Sustainable nutrient management

Plants provide food, but plants also need food in the form of nitrogen. Increasing the efficiency by which we use nitrogen in crop production can save money and resources and reduce pressure on climate and nature.

Roughly half of the world population is fed using nitrogen mineral fertilizers. Nitrogen is essential for plant and human life but can also threaten our existence if mismanaged.

Today, cropland across the world receives about 180 million tonnes of nitrogen from mineral fertilizers and other sources each year. Less than half of this nitrogen is harvested with the crops. The remaining half is a potential loss for the farmers and a waste of resources and brings the risk of polluting the environment and contributing to biodiversity loss and climate change.

Improved nitrogen use efficiency can save farmers money and boost crop production, reduce emission from fields, and enable healthier soils.

At Yara, we therefore believe that managing the nitrogen use within planetary and regional boundaries is a cornerstone of regenerative agriculture.

Knowing exactly how much nitrogen to apply is decisive for crop yield and quality, soil health, emissions, and protection of nature.

**TOO MUCH**
- Lower return on investment
- Excess GHG emissions from fields and fertilizer production
- Nutrient losses
- Biodiversity loss

**JUST RIGHT**
- Optimum return on investment
- More food with less emissions
- Better soil health
- Increased carbon sequestration in soils

**TOO LITTLE**
- Food security at risk
- Farmer at financial risk
- Reduced yield
- Poorer crop quality
- Reduced soil health
Performance

Biostimulants
Our trials repeatedly demonstrate the benefits of integrating biostimulants in crop nutrition programs. Thirty-five data points from replicated trials on potatoes showed that Yara biostimulants produced a higher yield in 89% of the cases versus the control by increasing the average yield by 6.8%. Trials on other crops showed that our biostimulant programs can improve crop quality and reduce waste. For example, results from a replicated trial on two cherry varieties showed that the program that included Yara biostimulants improved fruit firmness and sugar content (10.4% and 10.9% on average) and reduced the number of unmarketable fruits seven days after storage by 65.6% on average.

Organic-based fertilizers
We have expanded our range of organic-based fertilizers in recent years through strategic partnerships, the acquisition of the Finnish recycled fertilizer producer Ecolan, and R&D activities at our research centers in Germany and Finland. At year-end 2022, we offered a variety of organic and organo-mineral fertilizers under the brands YaraSuna™ in Finland, and Yara Nature® in Italy, Spain, and the UK. We are also partnering in European funded projects exploring opportunities for nutrient recovering and upcycling from organic streams.

Organic-based fertilizers can play a key role in regenerative agriculture. In 2022, we joined the European Consortium of the Organic-Based Fertilizer Industry (ECOFI), underlining our commitment to playing a bigger role in the circular economy and in organic and regenerative farming systems.

The way forward

Regenerative agriculture:
We will continue to expand our offering of tools, services, and products to deliver tailored solutions to the specific regenerative agriculture farmer needs and enable them to manage the adoption in a well-informed and efficient manner. Yara is also committed to engaging in strategic partnership and memberships, for more information consult Key memberships and alliances, page 27–30.

Organic-based fertilizers:
We believe that each market behaves differently, farmers and key stakeholders’ needs vary, and raw material availability and sourcing is key to success in each region. We will continue to grow in areas where we see potential.
Green fertilizers to hit markets in 2023

Green fertilizers will be key to decarbonizing food production. In 2022, groundbreaking contracts brought the world closer to fossil-free food chains.

The first commercial contract
In 2022, Yara and Lantmännen became the first companies to sign a commercial agreement to bring fossil-free fertilizers to market.

Yara and Lantmännen, northern Europe's leading agricultural cooperative with operations from field to fork, began testing the commercial viability of green fertilizers in 2019 with a common goal of realizing the world’s first fossil-free food chain. The collaboration has resulted in a commercial contract for green fertilizers, which will be produced by Yara and marketed by Lantmännen in Sweden, starting in 2023.

The fertilizers, with an 70 to 90% smaller carbon footprint, will be key to realizing the world’s first food value chain practically fossil free.

Sustainable potato chips
In 2022, Yara signed a memorandum of understanding with El Parque Papas, the biggest potato farmer in Argentina, to deliver green fertilizer in 2023/2024. Led by Walter Hernández, the company supplies 14,000 tonnes of potatoes every year to the Argentinian potato industry, including the production of some of the most popular chips in the country.

“My mission is to introduce a completely green, emission-free potato in 2024. To do that, every company in the supply chain must take climate action. Collaboration is the only way to ensure that the end product is climate-neutral. A farmer can only do so much. Yara helps us make the last piece of the puzzle emissions-free – the fertilizer itself,” said Walter Hernández, CEO of El Parque Papas.

Changing the game
Yara is a global driver of green fertilizer development. Yara has a portfolio of clean ammonia projects in Norway, the Netherlands, and Australia, and is working actively to expand its clean ammonia business. By choosing green fertilizers from Yara, food producers can lower their carbon emissions, support a more resilient food system, and reach their climate commitments.

Benefits of green fertilizer

Fossil free: Green fertilizers are fossil free, enabling us to decarbonize the food system and support the transition to a fossil-free economy.

Impactful: Green fertilizers will significantly lower the carbon footprint across the food value chain, from fertilizers to food. Green fertilizers can cut the carbon footprint of crops by up to 30% and of certain food items by as much as 20%.

Effortless: Green fertilizers are a simple way for food companies and farmers using nitrate-based fertilizers to reduce the carbon footprint of their crops and food products without needing to change their operations, agricultural practices, or processes.
Climate change is a major global challenge, raising risks across sectors, not least for food and agriculture where impacts are already being felt in many parts of the world. At the same time, the food system is a significant contributor to global greenhouse gas emissions. Reducing emissions in energy, industry, but also in the food sector is essential in the fight against climate change. We are committed to supporting the regulatory and consumer drive for transition, and respond by reducing our own carbon footprint, developing sustainable solutions for farmers and food companies, and enabling the hydrogen economy.

Priorities

The road towards climate neutrality
Our ambition is to become climate-neutral by 2050. We have set the intermediate targets for carbon intensity and absolute GHG emission reductions to reach our main goal. We are developing a roadmap for achieving our ambition of Growing a Nature-Positive Food Future, including a long-term plan for becoming climate-neutral by 2050.

To reach the 2030 KPI, Yara has set up a centrally managed program to identify opportunities, manage project execution, and coordinate and track progress.

Our core processes, including the production of nitrogen fertilizers and industrial chemicals, rely heavily on natural gas as the primary energy source and feedstock. However, our use of natural gas in the ammonia process generates significant CO₂ emissions, making ammonia production responsible for almost 80% of our direct greenhouse gas (GHG) emissions. As a result, reducing GHG emissions from our ammonia production is a critical priority for us.

We have already taken significant steps towards reducing our GHG emissions, including the development and implementation of N₂O catalyst technology in our nitric acid plants. This technology has proven to be highly effective, removing approximately 90% of N₂O emissions, and is available for use by third parties as well. Coupled with our energy efficiency initiatives, this has resulted in an about 45% reduction in our scope 1 emissions since 2005.

Looking forward, we have set a target to reduce our carbon intensity by 2025, which corresponds to approximately 2 million tonnes of CO₂e. This target includes several projects, such as reducing our N₂O emissions to the absolute minimum, increasing energy efficiency, the electrification of machinery, and replacing natural gas with biobased sources.

In addition to these projects, our roadmap to the 2030 target includes plans to substantially reduce emissions from ammonia production through step change projects such as the electrolyzer and carbon capture and storage projects. Yara will also explore sourcing renewable natural gas as an alternative to fossil based natural gas in locations in which it can be sourced sustainably.

» Yara Clean Ammonia, in Opportunities in Clean Tech, page 99
Progress on GHG 2025 Program

We are committed to improving the reliability and energy efficiency of our production plants through continuous investment, as well as actively managing our project portfolio to reduce GHG emissions. Our 2025 carbon intensity target will be achieved through the implementation of more than 100 profitable projects across our plants and regions, at an estimated investment of over USD 320 million. The collective impact of these projects is expected to reduce GHG emissions by approximately 2 million tonnes of CO₂e by 2025. In 2022, 41 projects were completed, resulting in a reduction of 0.7 million tonnes of CO₂e emissions, including reductions of 100 kilotonnes CO₂e at the Sluiskil nitric acid plant and 90 kilotonnes CO₂e at the Uusikaupunki nitric acid plant.

Another 32 projects were in the execution phase. We remain well-positioned to achieve our 2025 target, with completed and ongoing projects at year-end 2022 already yielding a reduction of 1.7 million tonnes of CO₂e emissions per year.

Yara Ammonia Transfer System

Yara’s end goal is to operate a network of GHG emission-free assets by 2050 and to source low-to-zero emissions raw materials. During the transition phase towards 2050, Yara will use hybrid plant concepts and intermediary solutions like permanent carbon capture and storage. Initially, clean products will only be

Our climate roadmap to 2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Catalyst installations</th>
<th>Energy efficiency</th>
<th>GHG projects and effect from reduced ammonia production</th>
<th>GHG, 2025 portfolio: Catalyst installations, energy efficiency, electrification of machinery, renewable energy sourcing and expected volume effects</th>
<th>Green and low carbon ammonia projects, optimization and upgrade of production units and renewable energy sourcing</th>
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</thead>
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<td></td>
<td>13.0</td>
<td>18.5</td>
<td>16.3</td>
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<td>&lt;1.0</td>
<td>2.5²</td>
<td>15.9</td>
<td>3.3²</td>
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<tr>
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<td>16.3</td>
<td></td>
<td>3.3²</td>
<td>2030</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Notes:

² N₂O abatement in nitric acid plants
³ Sum of GHG program and production volume effects
available in a few sites, which makes it challenging to supply such products to customers globally. The Yara Ammonia Transfer System has been designed to enable the distribution of green and low carbon ammonia during Yara’s transition to full decarbonization. Using this mechanism, customers can purchase clean ammonia-based products globally using a corporate mass balance mechanism. To facilitate the consumption of this ammonia, a virtual exchange mechanism is employed to transfer the ammonia from production plants to consumers. All these exchanges are accounted for within Yara’s third-party verified carbon accounting system utilizing an in-house developed digital tool called Carbon Watch.

This ensures that double selling of available ammonia volumes does not take place, and that Yara’s global carbon balance is accurately calculated.

Climate Scenario Analysis
Yara has conducted risk and opportunity analyses under various climate scenarios in 2021 and 2022. Although the results are currently qualitative, they are gradually being integrated into core company processes, such as strategic planning, business operations, and risk management. Quantitative results are expected to be available in 2023. Capital value projects are screened for climate risks, when relevant.

The analysis was based on three Representative Concentration Pathways (RCPs) from the Intergovernmental Panel on Climate Change (IPCC) fifth assessment: the stringent mitigation scenario (RCP2.6), an intermediate scenario (RCP4.5) and the very high emissions scenario (RCP8.5). The scope of the analysis covered Yara’s entire value chain, including suppliers, logistics, own operations, and the agricultural and industrial markets. Throughout the process, the Task Force on Climate-related Financial Disclosures (TCFD) risk and opportunity categories were applied. The outcomes focused on impacts in 2030 and 2050.

The physical climate risks covering Yara’s own production and supply chain assets were then analyzed using state-of-the-art climate modelling tools and high-resolution analysis. The timeframe was extended to 2100, thus covering the plants’ expected lifetime. If any site activity is assessed to be at risk, a vulnerability assessment will be conducted to assess the materiality of the risk, taking the local conditions into account. This will enable the identification of adaptation or mitigation solutions to reduce the risk, quantify the consequences, and understand the effects on revenue, CapEx, OpEx, productivity, and asset reliability.

Science-based targets
In order to ensure that our GHG emission reduction targets are in line with independent climate science and to deliver on the Paris Agreement, we are in the process of defining science-based targets for our scope 1, 2, and 3 emissions. Yara has made significant progress, but due to complexities linked to scope allocation of specific emissions, the process is taking longer than expected.

For more information on Yara Climate Scenarios, see page 20 in our Integrated Report.
Performance

Reducing our GHG emissions intensity
We remain on track to reach the 2025 goal of a GHG intensity of 2.7 tonnes CO₂e/tonne N. In 2022, we reduced our own production due to gas curtailment resulting in an absolute emissions reduction. However, emissions intensity has increased due to lower productivity. To reach the 2025 GHG intensity target, we need to maintain normal production levels, target energy efficiencies and successfully implement the remaining projects.

Reducing our scope 1 and 2 emissions
For more than a decade, we have made good progress in reducing GHG emissions from our operations. In 2022, our scope 1 and 2 (market-based) GHG emissions totalled 15.9 million tonnes CO₂e, a 14% reduction from our 2019 baseline. While GHG project implementation has been responsible for the reduction in our Scope 1 and 2 (market-based) GHG emissions in recent years, the 14% decrease this year from our 2019 baseline can be largely attributed to the curtailment of production due to the energy crisis and market conditions.

Indirect emissions
The use phase accounts for 57% of all GHG emissions over the fertilizer life cycle, underlining the importance of developing and adopting sustainable practices in the food chain. In 2022, we sold significantly less fertilizer with high nitrogen content, resulting in a 25% decrease of scope 3 GHG emissions from the use of sold products from 2021 to 2022. Despite Yara’s global supply chains, transport accounts for a modest 4% of GHG emissions over the fertilizer life cycle.

Product carbon footprint
Our product carbon footprints are calculated using Fertilizer Europe’s product carbon footprint methodology and our own production data.

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European Emissions Trading System
Yara’s European nitric acid and ammonia plants are covered by the EU Emissions Trading System (EU ETS). In 2022, Yara emitted approximately 7.0 million tonnes CO₂e from our plants in Europe. Yara will receive approximately 8.2 million EUAs (EU Allowance unit, one tonne of CO₂ under the EU ETS) in total, creating a surplus in allowances of approximately 1.3 million tonnes CO₂ for 2022.

The primary reason for the surplus is the curtailment of production in Europe together with our N₂O catalyst technology, which was developed and introduced shortly after the EU ETS took effect. This technology has generated a surplus of EUAs from our nitric acid plants since 2008, balancing out the GHG emissions from our ammonia production.

We have implemented a system of carbon pooling at the corporate level to redistribute the surplus EUAs from the nitric acid plants to plants facing shortages (ammonia plants). This strategy has so far enabled us to avoid purchasing EU ETS allowances externally, meaning that the net financial impact of the EU ETS (at consolidated level) is 0.

The way forward
GHG roadmaps:
In order to continue reducing our GHG emissions, we have systematically assessed opportunities for improvements in our operations, developed roadmaps for each production site, and integrated them in business plans. Towards our 2030 target our roadmap shows that 70% of our initiatives are low or medium risk projects, whereas 30% remain in a higher risk category. Mitigation plans to secure the target are under development, including taking into consideration external context and regulative aspects.

Managing climate risks:
In 2023, vulnerability assessments for physical climate risks will start for production sites in which any activity is assessed to be at risk.

Science-based targets:
Yara remains part of the Sectoral Decarbonization Approach process, which will determine a 1.5°C-aligned aligned GHG emissions reductions pathway for the chemical industry, including the fertilizer industry.

Reduced product carbon footprint:
We will continuously update and refresh our product carbon footprints within our carbon footprint management program, to always deliver accurate information to our customers. We will continue to engage with our suppliers and customers to collect and share accurate product carbon footprint data and increase accuracy of carbon accounting. We will continue to collaborate with industry associations to ensure that a conservative industry consensus approach is adopted for the calculation of clean product carbon footprints.
Yara’s energy consumption is largely driven by the production of ammonia, the key component in our fertilizers, accounting for almost 90% of our energy consumption. We focus on improving the energy efficiency and intensity of our ammonia units to reduce GHG emissions. To achieve this, we set specific energy and GHG reduction targets for each plant, benchmark our performance, conduct energy efficiency diagnostics and audits, and implement the resulting systematic improvement actions. Yara also continues to explore renewable energy sources and advanced technologies to produce zero-emission fertilizer and clean ammonia.

Priorities

Energy management
Yara’s aim was to have all major production sites certified to the ISO 50001 Energy Management standard by 2022. However, both Covid-19 restrictions and the curtailment of production due to the energy crisis and market conditions have slightly hampered progress on this goal. Accordingly, a new target year of 2024 has been established. By end of year 2022, 16 of Yara’s sites were ISO 50001 certified, the remaining six certifications are ongoing. We expect two more to be certified by the end of 2023 and the remaining sites in 2024. Yara has also started the process of including ISO50001 into its umbrella certificate, which ensures that energy management is driven centrally and figures as a predominant part of Yara culture.

Raising energy awareness
Our Community of Practice for Energy & Environment is a thriving network that unites employees from diverse disciplines such as chemical engineers, HESQ personnel, plant operators, energy sourcing, and plant management, drawn from our global organization. These bi-weekly meetings are aimed at enhancing energy awareness and capabilities while facilitating the exchange of knowledge and experiences across the plants globally.

Improving energy efficiency and plant reliability
To enhance energy efficiency and plant reliability, we rely on fundamental principles that we have acquired through experience. These principles are embedded in our Yara Productivity System (YPS), which serves as a universal framework outlining standard procedures and behaviors for managing and enhancing performance, as well as mandatory and suggested approaches, methodologies, and tools. By utilizing the YPS system, we can spot energy efficiency risks and opportunities, some of which have been included in our GHG project portfolio.
Performance

Energy efficiency
In 2022, we used 0.6% more energy per tonne produced ammonia than we did in 2021. Energy efficiency was 2.6% (0.9 GJ/t) above the target set for 2022, mainly due to production curtailment as a consequence of high natural gas prices. Also, reliability issues in some of our production units – Brunsbüttel, Tringen, and Pilbara – impacted the overall energy consumption negatively. Benchmarks show that the average energy intensity in our ammonia plants in 2019-2020 was four percentage points better than the 2019-2020 benchmark: global average of ammonia plants. We remain on track to reach the 2023 energy efficiency target of 32.7 GJ/t.

In 2022, we reduced own production due to high natural gas prices resulting in absolute energy reduction. However, energy efficiency has decreased due to lower productivity. To reach the 2023 target, we need to maintain normal operational levels (avoiding frequent start up and shutdown of plants), together with successfully implementing the remaining energy efficiency projects.

In 2022, Yara’s total energy consumption in production was 246 million GJ. 86% of the energy was consumed as feed or fuel in ammonia production. Natural gas is the main fuel source for Yara, with close to a 93% share of all fuel consumed.

Renewable and low carbon energy use
We purchased about 2,184 GWh of electricity for use in production, of which about 14% was certified low carbon.

The way forward

Energy management:
We aim to certify two major production sites in 2023, the remaining certifications will take place in 2024 to complete the process of attaining energy management system certification for all major sites. We also aim to achieve umbrella certification to ISO 50001 before the end of 2024.

Yara Improvement Program 2.0:
We will continue to target improvements in energy efficiency and plant reliability in the Yara Improvement Program 2.0, which is firmly anchored in our corporate strategy.

Renewable energy use:
We will procure renewable and low-carbon energy to reduce scope 2 emissions in accordance with the company’s guidelines.

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Renewable energy use:
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Clean technology and the pursuit of decarbonization have expanded our business model and influenced our operations and markets. Based on a century of ammonia manufacturing, we are ideally positioned to lead the development of clean ammonia as a tool to decarbonize agricultural production, shipping, and the energy sector. Our portfolio already includes emission abatement solutions for the transportation and maritime sectors along with products for water treatment, odor control, and solar power plants.

Priorities

Clean Ammonia

Yara Clean Ammonia (YCA) was established in 2021 as a dedicated segment to develop and capture opportunities from decarbonizing ammonia production and hard-to-abate sectors. YCA focuses on developing markets and demand for zero- or low-carbon ammonia in fertilizer production, deep sea shipping, and coal-based power production in countries with limited production of renewable energy, such as Japan and South Korea. YCA aims to be the world’s largest shipper and distributor of ammonia in this emerging market.

Clean ammonia comprises both blue and green ammonia:

- **Blue ammonia** is derived from blue hydrogen, produced based on natural gas, with the CO\(_2\) stored in permanent reservoirs after a carbon capture and storage process (CCS).

- **Green ammonia** is produced carbon free by using green hydrogen produced based on renewable energy.

Beyond fertilizers, three opportunities guide the work of Yara Clean Ammonia in the next five years:

1. Utilizing Yara’s existing infrastructure, global ammonia supply network, and century-long experience in ammonia handling to provide ship owners with reliable supplies of clean ammonia
2. Working with partners to enable safe and reliable clean ammonia bunkering solutions for ship owners in all major shipping hubs
3. Developing clean ammonia value chains that enable low carbon ammonia to be used for co-firing in existing coal-fired power production

Making fertilizers green

Ammonia is the nitrogen source and starting point for all nitrogen fertilizers, and its production is our primary source of direct GHG emissions. Our initiatives in clean ammonia are therefore crucial in enabling us to produce green fertilizer. In 2022, we signed groundbreaking agreements to bring fossil-free fertilizers to market.

Green fertilizers to hit markets in 2023, page 91

Marine Technologies

Shipping is an effective freight transport mode, but the sector accounts for 3% of global GHG emissions alongside considerable emissions of hazardous pollutants, including particulate matter and sulphur oxides. To address these issues, the International Maritime Organization (IMO) has capped sulphur emissions and
is aiming to reduce GHG emissions from a global fleet almost completely reliant on fossil fuels.

Yara Marine Technologies provides technologies to enable a greener maritime industry and works closely with ship-owners, yards, and naval architects to drive sustainability in the sector. Our products can reduce emissions immediately to support the decarbonization of the industry:

- Our Vessel Optimization solutions enhance vessel efficiency. FuelOpt reduces emissions by up to 15% and Fleet Analytics by up to 10%.
- Our Emission Abatement technologies include scrubbers which remove SO₂ from exhaust gases.
- Our WindWing technology enables the use of wind power, reducing fuel consumption by circa 1.5 tonnes per wing per day on average global routes, equalling 4.7 tonnes of CO₂ per wing per day if the vessel is running on heavy fuel oil.
- Our Shore Power solutions eliminate emissions at berth, cutting up to 25% of all emissions while reducing noise.

Yara Marine X, our startup accelerator program, had another successful iteration in 2022. It offered a maritime industry startup access to our network and resources and allowed us to discover collaborations and commercial prospects based on green marine technology advances. We also commercialized a research project called Route Pilot AI, a ship operation support system powered by artificial intelligence helping ship operators calculate the most energy efficient operational parameters for an upcoming voyage.

**Industrial solutions**

Yara Industrial Solutions helps clean the air, purify water systems, and optimize processes and products across sectors and industries. Our portfolio includes emission abatement solutions for the transportation sector along with products for water treatment, odor control, and solar power plants. We are the world’s leading manufacturer of diesel exhaust fluid, called DEF in the US, AdBlue® in Europe and ARLA 32 in Brazilian markets.

**Agoro Carbon Alliance**

Agoro Carbon aims to reduce GHG emissions from farms and ranches, while improving farmers and ranchers’ livelihoods, reducing food insecurity, and offering high-quality carbon credits to companies looking to meet their carbon-neutral pledges. Backed by Yara, Agoro empowers farmers and ranchers with agronomic expertise and carbon credit incentives to change from conventional to regenerative agriculture practices aimed at improving soil health, building climate resilience, and sequestering carbon in their soils to counteract climate change.

Since its commercial launch in June 2021, Agoro Carbon has given farmers and ranchers USD 12 million in practice transition incentives and enrolled enough acres to potentially sequester approximately 3.5 million tonnes of carbon in the soil over the next 10 years. In late 2022, Agoro Carbon and its partners were awarded a USDA Climate-Smart Commodities grant of USD 3.8 million to incentivize the establishment of cover crops in orchards.

**Wind and Solar Energy**

Wind and solar energy are subject to massive investments but have a common characteristic and constraints – they are weather dependent and not consistently available 24/7, year-round. Storing the wind and solar energy is therefore key. With about half of the global energy consumption driven by heating and cooling, thermal energy storage systems are a highly relevant means of increasing energy efficiency. Yara has developed and patented a new and innovative molten salt mixture to enable more efficient thermal energy storage. The molten salt can either be used as a “heat battery”, or as a heat transfer fluid. In 2022, Yara Industrial Solutions made its first delivery of this product to Denmark, where it now enables the transition from fossil coal to renewable wind energy.
Varda was established in 2021 as an autonomous portfolio company, sponsored by Yara, to foster greater collaboration and facilitate field data discovery and sharing in order to support the transition towards a nature-positive food system.

The complexity and fragmentation of agricultural activities along with the lack of a harmonized geospatial reference system has challenged the collection and interpretation of data from fields and farms. To address these issues, Varda has developed the Global Field ID service that allocates a unique identifier to every plot of land, offering a common spatial reference system to make the aggregation of farm and field data easier.

Global Field ID enables, for example, farmers to share soil data from their fields with a crop nutrition tool to improve recommendations. The service also supports traceability, allowing farmers to share Field IDs with buyers to verify the crops’ origin. Field ID also enables Yara to precisely monitor and report its nature-positive ambition progress by facilitating more accurate reporting of in-field GHG emissions. Industry collaboration is needed to make Field ID the standard for field identification and data sharing. Wider adoption of the service will open new applications and multiply the benefits of this common reference system.

Varda released the initial version of Global Field ID in the UK and France in 2022. In January 2023, the first partnership agreement was signed with Syngenta for the adoption of Global Field ID as a tool to exchange data and support other use cases.

Yara Growth Ventures

Disruptive innovation is needed to build a sustainable future food and transform energy systems. Yara Growth Ventures was established to meet this need and to invest in startups on behalf of Yara International. Armed with USD 125 million in venture capital over five years, Yara Growth Ventures focuses on investments in entrepreneurs across agriculture and green hydrogen. Since its launch in spring 2021, it has built a portfolio of nine startups and two funds, together spanning all of Yara’s key regions of operation. Within agriculture, Yara Growth Venture invests in three priority areas, all with the common thread of driving sustainability:

1. Science-driven products for soil health and plant resilience
2. In-field decision support and supply chain optimization
3. Financial enablement and innovation for agri-food operators

Yara Growth Ventures also invests in startups accelerating the green hydrogen revolution. The investments focus on companies offering breakthrough performance for high-efficiency and low-cost hydrogen and novel solutions for ammonia technologies and applications.

Performance

NOx abatement

According to the WHO, 4.2 million people die from outdoor air pollution each year. Reducing dangerous NOx emissions is key to achieving better air quality. Yara is a major supplier of emission abatement solutions for various sectors, including transportation, industrial, and marine. Our catalysts and solutions play a crucial role in helping to cleanse emissions from vehicles, vessels, and industrial plants by converting harmful NOx into nitrogen and water. Our SCR (Selective Catalytic Reduction) and SNCR (Selective Non-Catalytic Reduction) systems are developed to meet the highest standards and performance. More than 600 such systems have been installed globally helping to significantly reduce emissions. Altogether, our deliveries of diesel exhaust fluid, air abatement reagents, and DeNOx systems reduced NOx emissions by 1,637,014 tonnes globally in 2022. This equals almost a doubling of the NOx abated by our products over the last decade.
SOx abatement
At year-end 2022, Yara Marine Technologies had installed emissions abatement systems in over 500 vessels, and close to 300 vessels used our Vessel Optimization solutions. In 2022, we successfully managed sea trials of our scrubbers, helping our customers achieve necessary certifications, and completed the commissioning of 41 FuelOpt systems enabling automated and direct fuel savings.

In total, our installation of emissions abatement solutions in the maritime sector helped to reduce SOx emissions by 320,606 tonnes globally in 2022.

The way forward

Build momentum for clean ammonia:
Due to the limited availability of renewable power and high electrolyzer technology costs, large-scale green ammonia projects require incentives and public support schemes to become economically viable. Yara will continue to lead the technology development, advocate for incentive mechanisms, and develop clean ammonia certifications.

Sustainable Industrial Solutions:
Yara Industrial Solutions will continue to explore ways of reducing emissions from transportation, utilities, and industrial processes. In 2023, we will move forward with R&D and projects that can potentially deliver step-change GHG emission reductions in the latter half of this decade.

Adopting new marine technologies:
Yara Marine Technologies will continue to adopt promising new technologies, through R&D, collaborations, and acquisitions. We will also continue the Yara Marine X startup accelerator program for clean marine technology.

Agoro Carbon’s future growth:
In due course, Agoro Carbon will offer farmers and ranchers additional income through quality verified carbon credits for carbon sequestered in their operations. Agoro Carbon has already enrolled hundreds of farmers and ranchers across the US and plans to continue growing in addition to gaining traction in Brazil in 2023.

Varda:
Varda’s two main objectives are to expand the number of users of its services and to develop added-value applications for Field ID. Wider adoption of Field ID can increase industry efficiency, facilitate data discovery, enable traceability, and enhance the reliability of land-based carbon credits and regenerative agriculture claims.

Yara Growth Ventures:
Yara Growth Ventures will continue to grow the startup portfolio and deal flow in key regions to ensure that we are the preferred source of capital for socially- and sustainability-driven agriculture and green hydrogen startups.
We recognize the urgent nature of the climate crisis, and we are positioning Yara to play an important role in driving change and value creation for the future.

We will expand our knowledge sharing to create a measurable, positive global impact in order to help feed the world and contribute to a responsible food system while protecting nature, reducing emissions, and improving livelihoods. Our ambition of Growing a Nature-Positive Food Future entails a commitment to helping stall the new cultivation of natural land while protecting precious water, soil, health and biodiversity.

Priorities

We consider ecosystem impacts both directly at our operational sites, and indirectly – through our raw materials and the use of our agronomic products and services.

Fertilizer Environmental Footprinting

We are continuing the project to assess life-cycle impacts of mineral and organic fertilizers and related intermediates. The purpose is to increase awareness of the key impact categories and impact pathways along the entire product life cycle. Results from the footprinting work will serve the Climate and Nature roadmap work to analyze the value chain, and to set fact-based and focused actions to prevent damage to ecosystems, human health, and resource availability.

We will also assess life-cycle impacts of our industrial products, with special emphasis on the allocation principles in co-production facilities and expanding impact awareness beyond GHG emissions.

Preserving soil, groundwater, and biodiversity at Yara sites

Yara maintains an up-to-date assessment and reporting of risks and impacts to the ambient environment, ecosystems, soil, and groundwater caused by all of its operational units. Yara has stringent technical and operational standards aiming to build high-integrity...
plants and to operate them in a safe manner, thus protecting the ambient environment from pollution, spills, and leakages. Remediation actions are taken when an existing condition could cause environmental damage or when there is a contractual or regulatory obligation. Provisions account for any current and foreseen liabilities according to the International Financial Reporting Standards (IFRS) rules.

Specific investigations such as biodiversity risk assessments are carried out if the local risk level requires further analysis, to gauge our understanding that our impact is minor or even positive. We see biodiversity impacts as an emerging topic, calling for more in-depth awareness and availability of data to carry out fact-based assessments of impacts.

Assessment of impacts and dependencies on nature
As a part of the Climate and Nature roadmap work, we are establishing workstreams to utilize nature and biodiversity impact guidelines, including the TNFD LEAP process and the SBTN process. We are prioritizing a gap assessment to determine the impacts’ primary data availability and potential need for secondary data. These assessments are conducted on core operations, upstream and downstream where possible, as many of the methodologies are still in the draft phase. Yara sees this as a high priority.

Performance
Biodiversity
There are no significant biodiversity impacts from Yara’s mining activities. Additionally, biodiversity impacts from the EU taxonomy-eligible activities are currently being mapped as part of the Do No Significant Harm (DNSH) criteria.

Yara is also proactively engaged in external nature-positive frameworks. Yara participated at the 2022 UN Biodiversity Conference (COP15) in Montreal where we joined the #MakeItMandatory campaign, calling for mandatory assessments and disclosures on nature. This requirement was included in the Kunming-Montreal Global Biodiversity Framework (GBF) adopted at the conference, a framework that Yara fully supports and is working to implement.

Product life-cycle impacts
In 2022, we expanded our work on product life-cycle impacts through our Product Carbon Footprint work and the Product Environmental Footprint pilot. The pilot was run for an organic product and a mineral and chemical fertilizer product. The outcome of the pilot included an overview of existing in-house data relevant for Life-Cycle Assessment (LCA) calculations and identification of gaps, especially within upstream data.
Biodiversity monitoring in Yara Uusikaupunki

Yara Uusikaupunki is located on an island in the archipelago of Uusikaupunki, which means that operations may have a direct effect on the surrounding ecosystem. Therefore, in addition to emissions monitoring we are also monitoring biodiversity status parameters to protect the surrounding ecosystem.

Monitoring is performed by a third party and the analyses are done in an accredited laboratory. The monitored characteristics include abiotic physico-chemical properties (including pH, salinity, nutrients, oxygen level) and biological parameters (algae and fauna). This also includes monitoring of the fish ecosystem through surveys assessing the type and number of fish species, and analyzing the condition of breeding sites and guppy production. The fishing club of Yara Uusikaupunki has participated in the monitoring since the 1980’s by performing fishing campaigns and recording the fish caught.

Key learnings included that further work will be needed to:
- develop industry-recognized standards for fertilizer Product Category Rules for LCA calculations
- develop guidelines on fertilizer use from an input provider perspective
- create clarity on allocation rules for certain raw materials and environmental impacts in co-production facilities, and
- reduce scarcity of data for environmental impacts beyond GHG for upstream industrial processes

Animal-based raw materials can have significant impacts on organic products’ environmental footprints. This is due to a high variability of impacts based on animal sources, animal production locations, processes, and especially the allocation method. As such, the high variability of raw material impacts based on specific supply chains requires transparent collaboration with suppliers, and these markets are developing in their maturity.

In 2023 and beyond, Yara aims to continue this LCA work, in conjunction with environmental roadmaps to collect data on in-house impacts, the Sustainable Procurement Policy, and the regenerative agriculture work. In 2023, we are establishing LCA calculation pilots for a key production plant to explore the sensitivity of raw material source and internal allocation.

Soil and groundwater quality

The Environmental Roadmap Program portfolio covers projects to prevent any potential active soil or groundwater pollution caused by Yara’s production operations.

Remediation actions are ongoing in the Yara Pilbara nitrates plant after the losses of containment of nitrate-rich wastewater to the ground at the early stages of commissioning. Continuous monitoring is in place and shows no signs of short-term impact or long-term harm to the ambient environment. In addition, remediation actions are ongoing in Cubatao and Paulinia, Brazil, to eliminate contamination sources by upgrading the source processes with improved containment, and to clean up the contaminated areas. Treatment of closed phosphogypsum landfilling areas is ongoing in two sites which operated a phosphoric acid plant in the past: Uusikaupunki, Finland, and Landskrona, Sweden. Siilinjärvi, Finland, has a legal after-care liability to landscape the mining and landfilling areas. Remediation projects are ongoing in closed sites to clean them up to an acceptable condition.

For more information, see note 5.6 on page 204 in the financial statements in our Integrated Report.

Biodiversity impacts of the Siilinjärvi mine

Total area of land disturbed and rehabilitated in the Siilinjärvi mine, Finland, is now 2,652 hectares, of which 195 have been rehabilitated. In 2022, 30 hectares were taken into use and 2 hectares were rehabilitated.
No significant, negative impacts on biodiversity, protected habitats, or endangered species have been identified nor reported as a consequence of our mining operations. On the contrary, the tailings areas are resting and nesting areas for birds, some of which are endangered species. Meadows, wetlands, and dead-wood areas have been formed in the tailings areas, providing suitable living environments for various species. Some rare inland plants grow in the tailings area.

Monitoring of biodiversity impacts and success of preservation actions continues in Siilinjärvi. It has been observed that the mining activities have weakened a small territory of flying squirrels. Less butterfly orchid (Platanthera bifolia) and Drummond’s plagiojnum moss (Plagiojnum drummondi) grow next to a pit which was opened in 2022. Those plants are being moved to a new location, and the success of the move will be monitored.

**Mining operations**, page 167

**Sustainable farm management**
Enabling and supporting sustainable farming practices has a major role in Yara’s Climate and Nature roadmap. Read about our efforts and achievements in this area in the Sustainable Farm Management and Regenerative Agriculture chapter.

**The way forward**
To proceed with the nature-positive work, Yara is getting involved in the development and testing of key nature frameworks, including:

**Taskforce on Nature-Related Financial Disclosures (TNFD):**
Yara has joined the TNFD Forum, and we will establish a project to trial the TNFD LEAP methodology. This project will then create an inventory of nature interfaces and impacts, and through this prioritize areas for further efforts and target setting. We chose to engage with a draft methodology as Yara believes nature impacts should be assessed and considered, and we are engaging in co-creation to ensure relevant impacts are considered in sector-specific guidances for our entire value chain.

**Science Based Targets Network and Science Based Targets for Nature (SBTN):**
Yara is engaging with SBTN and aims to establish a project to trial the SBTN methodology for our upstream, core, and downstream operations. This will be connected to the TNFD and CSRD work.

**Corporate Sustainable Reporting Directive (CSRD):**
Yara is preparing to disclose according to CSRD for FY 2024. We are establishing workstreams to assess readiness and prepare necessary data collection processes.

These workstreams are also highly relevant for implementing the frameworks of TNFD, SBTN, and others.

**Biodiversity screening information:**
With increasing demand for biodiversity screening information from CSRD, GRI, the EU taxonomy and frameworks such as TNFD and SBTN, we are establishing tools to collate location-based biodiversity information in a central manner to develop an inventory, with which a gap assessment and prioritization can be developed. Existing local regulations, such as, for example, water discharge is also motivating developments from bottom-up.
We recognize the potential negative impacts that the production of fertilizers can have on both air and water quality, as well as the health of nearby communities. As a result, we have made a commitment to constantly improve and invest in our production facilities to minimize harm to the environment and our neighbors.

We understand the importance of managing our water usage sustainably and closely monitor water withdrawal, consumption, and discharges, recognizing that the ratio of total water withdrawals to available renewable surface and groundwater supplies is a key indicator of water stress, which poses significant global challenges to the environment, public health, and economy.

Our circular economy strategy is aimed at reducing our strain on natural resources and biodiversity and minimizing GHG emissions. Our focus is on promoting nutrient recycling and implementing circular practices in the pursuit of innovative packaging solutions and in our procurement processes.

Priorities

Maintaining compliance
All our production units shall comply with environmental permits. Compliance with these permits and statutory requirements is a minimum expectation for all our operations. The control of discharges and emissions complies with each site’s environmental permits and is monitored and reported to the local environmental authorities, as required. Any exceedances and incidents related to any non-compliance with permits and statutory requirements are reported, investigated, and corrective actions are taken. Any foreseeable risks of non-compliance with known future regulatory and permit requirements are also identified as environmental critical issues to ensure requisite follow-up and closure.

Managing our water use
Water is primarily used for cooling purposes in our production units, with a smaller portion used for steam production and the manufacturing of liquid products. As a result, almost all of the water that we withdraw is returned to the water source in its original state. The principal concern in the wastewater discharges from our production units is nitrogen and phosphate, both of which are nutrients that can lead to waterway eutrophication. Based on these assessments, local improvements have been developed. These include feasibility studies and the development of projects and targets for 2023 and beyond, all of which address critical issues and are managed through an environmental portfolio.

Assessing water risks
Yara’s production units are situated across different continents, resulting in varying operating environments.
All sites underwent an initial water risk assessment using the World Resources Institute’s Aqueduct water risk atlas tool. This tool considers physical risks quantity, such as water stress, physical risks quality such as coastal eutrophication potential and regulatory and reputational risks.

Of the 28 production sites, 15 were identified as having a high or extremely high risk of riverine and/or coastal flooding. Three of these sites (which account for 2% of total fresh water withdrawn) are situated in areas with extremely high or high risk of baseline water stress. Two of these sites are collaborating with local authorities to decrease their freshwater intensity, and several other production sites, not facing very high water stress, are also doing the same. All Yara plants now report monthly on water intensity and effluent discharge quality in line with Yara’s increased focus on the topic. Our Climate Scenario Analysis also includes water management and risks associated with water availability, quality, and accessibility, thus forecasting the risk development under different climate risk scenarios and in a longer time perspective.

Circular approach – nutrient recycling and upcycling

We are moving towards a circular economy by maximizing resource efficiency and improving waste management and recycling efforts. We have forged strategic partnerships with waste management and food companies, whilst also committing to augmenting our range of organic based fertilizers. By transitioning the initiative from a global function to regional ownership in 2022, we have gained the necessary flexibility to explore creative approaches to recycling nutrients that
would otherwise be wasted. Our rigorous production methods and extensive agronomic expertise enable us to promote sustainable practices that optimize yields and address the demands of both the market and the environment. Through our efforts to implement circular economy principles within agriculture, we aim to generate positive environmental outcomes and establish new revenue models and markets for organic or recycled nutrients.

The new EU Fertilizing Products Regulation was designed to enable the use of certain industrial byproducts and circular materials as fertilizer components provided that they comply with the environmental requirements of the new legislation. Yara actively contributed to the development of the regulation and collaborated with our suppliers to assess our raw material portfolio against the regulation and explore opportunities for using more circular materials. In 2022, we used about 265,000 tonnes of industrial byproducts in our production, those being mainly salts of ammonium or sulphate, gypsum, and certain micro-nutrients.

Circular packaging
Yara remains committed to promoting responsible plastic waste management and engaging in collaborative efforts with stakeholders to achieve this goal. We have continued to contribute to the collection and recycling of both agricultural plastics and our product packaging materials through collaborations with various stakeholders.

Waste from production plants
The fertilizer industry experiences fewer waste-related challenges compared to other industries due to the extensive internal recycling and reprocessing of nutrient streams at production sites. The only sector-specific waste streams are apatite mining-related wastes, phosphogypsum generated in phosphoric acid production, and iron oxide generated in the sulphuric acid production based on pyrite.

At Yara, we prioritize waste management to minimize environmental impacts and recycle valuable materials. We adhere to relevant regulations and follow a waste hierarchy of avoidance, reduction, recycling, and disposal operations to manage non-hazardous and hazardous waste based on risk assessment. Our high purity phosphogypsum is used in certain NPK product grades. It is also used as a soil improver in agricultural fields, where it efficiently traps phosphorus leakages. We continue to assess potential use of phosphogypsum for further product grades.

Performance

Emissions to air from Yara production plants
The main emissions to air from fertilizer plants and phosphate mines are nitrogen oxides (NO\text{x}), sulphur oxides (SO\text{x}), ammonia (NH\text{3}), fluorides (F), and dust. We regularly monitor and work to reduce these emissions.

As Yara’s products and raw materials are inorganic chemicals that provide plant nutrients for agriculture, pollutants with carcinogenicity, mutagenicity, or reproduction toxicity are not relevant environmental
aspects of our production process and therefore, such pollutants are not monitored.

All of our production plants have environmental permits or legal requirements in place, which specify limits for emissions to air for relevant key emission parameters in accordance with applicable local legislation. The decrease in NOₓ, SOₓ and dust emissions can largely be attributed to the curtailment of production due to the energy crises. The NH₃ emissions are in line with previous years and corresponding production volumes. The decrease in fluorides in 2021 and 2022 is due to the improved quality of our raw materials.

**Water management**

While we use some water for steam and to produce liquid products, a majority of the water we withdraw is used for cooling purposes. In 2022, our total water withdrawal amounted to 860,190 megaliters, of which 93% was discharged. This percentage is in line with the years previous to 2021. In 2021, the Salitre mine (which was sold to Eurochem at the beginning of 2022) was under commissioning and consequently consumption was higher in that year.

**Water withdrawn in Yara’s production sites**

<table>
<thead>
<tr>
<th>Year</th>
<th>Megaliters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,022,170</td>
</tr>
<tr>
<td>2019</td>
<td>1,045,257</td>
</tr>
<tr>
<td>2020</td>
<td>1,011,731</td>
</tr>
<tr>
<td>2021</td>
<td>966,182</td>
</tr>
<tr>
<td>2022</td>
<td>860,190</td>
</tr>
</tbody>
</table>

The total withdrawal figure is given here. In Yara’s production, water is primarily used for cooling purposes. Thus, over 90% of the water withdrawn in 2022 was returned to the water course.

**Fresh water withdrawal in water-stressed areas**

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3</td>
</tr>
<tr>
<td>2019</td>
<td>2</td>
</tr>
<tr>
<td>2020</td>
<td>2</td>
</tr>
<tr>
<td>2021</td>
<td>2</td>
</tr>
<tr>
<td>2022</td>
<td>2</td>
</tr>
</tbody>
</table>

Yara’s plants are located across several continents and operate under highly variable environments. Our sites undergo water risk screening using the WRI Aqueduct water risk atlas tool. The figure shows the percentage of freshwater withdrawals that occur in areas of high or extremely high baseline water stress.

**Water consumption in Yara’s production sites**

<table>
<thead>
<tr>
<th>Year</th>
<th>Megaliters</th>
<th>Consumption as a percentage of withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>72,686</td>
<td>7%</td>
</tr>
<tr>
<td>2019</td>
<td>86,547</td>
<td>8%</td>
</tr>
<tr>
<td>2020</td>
<td>70,239</td>
<td>7%</td>
</tr>
<tr>
<td>2021</td>
<td>99,620</td>
<td>10%</td>
</tr>
<tr>
<td>2022</td>
<td>62,818</td>
<td>7%</td>
</tr>
</tbody>
</table>

Water consumption is the sum of all water withdrawn and used in our operations, primarily in liquid products or for steam, and therefore not released back to water bodies.
Environmental roadmaps and compliance
In 2022, air emission exceedances accounted for a quarter of Yara’s reported environmental compliance issues and wastewater discharge quantity and/or quality accounted for another third. Our environmental roadmap process, taking into consideration regulatory developments and available technologies, revealed that many of these challenges necessitate investments in cutting-edge technologies beyond the mature, conventional ones. During 2022, work was executed on over 90 environmental projects at an investment of USD 17 million, resulting in the completion of 19 environmental projects and closure of related non-compliance issues and risks.

Furthermore, upcoming EU regulatory changes are expected to tighten the emission limits and introduce a stricter focus on wastewater discharge issues. Accordingly, air emissions and wastewater discharges will remain key focus areas requiring investigations, research, development, and investments.

Waste generation
Typical non-hazardous wastes from our operations are construction and demolition materials and scrap generated through investment and demolition activities. Typical hazardous wastes from fertilizer manufacturing are waste oils, catalysts removed and replaced during shutdowns, chemical residues, and other wastes from maintenance activities. Consequently, depending primarily on the investment, divestment, and maintenance activities on site, the volume of both non-hazardous and hazardous waste will vary from year to year.

Waste treatment
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. In 2022, 33% of our non-hazardous waste was recycled and 55% was stored in offsite landfills.

Mine tailings and waste rock
Tailings are a byproduct of our mining activities. Currently Yara operates one phosphate mine at Siilinjärvi in Finland.

Yara’s mining operation dealt with approximately 22 million tonnes of materials from extractive activities, made up of waste rock, overburden, tailings, and slurges. These were stored onsite in tailing ponds and stockpiles.

There are two wastes, specific to fertilizer manufacturing, that are generated in the production of phosphoric acid and sulfuric acid: phosphogypsum and iron oxide, respectively. In 2022, we sold close to 485,000 tonnes of gypsum as byproduct to the construction industry with the remainder being stored onsite in landfills. Currently, thanks to a strong collaboration between our Siilinjärvi plant, procurement logistics, and customers, we sell all iron oxide waste as byproduct to steel manufacturers. In the near future, as the result of a project to use sulphur instead of pyrite as the raw material in the sulphuric acid production, we expect that the generation of iron oxide will be fully halted.

Reducing plastic use and waste
In 2022, we made significant strides towards reducing our plastic use and increasing our use of recycled plastic. In Europe, we introduced big bags and sacks made of at least 30% recycled plastic, with the goal of replacing 3,000 tonnes of virgin plastic annually. In response to the plastic tax introduced in the UK and Ireland, we introduced big bags containing 31% recycled plastic in those markets, successfully replacing 166 tonnes of virgin plastic so far. We are currently finalizing the process of assuring the quality of bags made with recycled plastic in all European markets and plan to switch to such bags in these markets in 2023.

In Brazil, we are working with a supplier to jointly develop a revolutionary new type of big bag made entirely from recycled PET. This new type of bag will reduce GHG emissions by almost 50% compared to conventional bags while maintaining the same properties. The project aims to replace 2,000 tonnes of virgin plastic and reduce GHG emissions by 2,000 tonnes each year. PET can be recycled endlessly without losing strength and quality, making it an excellent material for sustainable packaging.

We have also implemented projects in Thailand, India, and West Africa to optimize bag specifications, reduce plastic use, and replace virgin plastic. These initiatives have already led to an 850 tonne reduction in our virgin plastic use in 2022. We continue to work on similar projects in all markets worldwide to reduce our overall and virgin plastic use in packaging materials.

In Germany, we offer farmers a free pick-up service for empty Yara big bags, with around 40% of our big bags
collected and recycled to produce cable ducts and other materials for the construction industry. This initiative not only reduces GHG emissions but also provides farmers with an easy method of handling plastic waste. Additionally, we have recently begun similar initiatives in New-Zealand, India, and Colombia.

As the world’s largest producer of AdBlue®, Yara and its customers consume considerable amounts of plastic in the form of canisters, where packaged product is required. However, our patented innovation, the AdBlue® pouch, offers significant reduction in weight, saving approximately 75% of the plastic required for canisters of comparable size. As a result, a major UK retailer completely replaced their plastic canisters with Yara’s AdBlue® pouch in 2022. This transition is projected to remove an estimated 200,000 kilos of plastic from the UK market annually.

Environmental Roadmap Program:
We will continue to review the project portfolio monthly to ensure that the identified projects are proceeding as planned. We will also introduce water intensity KPIs for the production plants in water stress areas, to ensure that progress is being made to reduce water intensity in the short term and plan for future requirements.

Reducing byproducts:
Continued investment in a project in Siilinjärvi, Finland, to use sulphur instead of pyrite as raw material in the sulphuric acid process is expected to fully halt the generation of iron oxide. The investment is expected to be completed in the coming year resulting in a reduction in the potential waste of approximately 300 – 350 thousand tonnes a year (based on 2020 and 2021 data).

The way forward

New EU LVIC-BAT:
The ongoing revision of the Best Available Technology (BAT) requirements for the production of Large Volume Inorganic Chemicals (LVIC BREF) is expected to tighten permit requirements of our plants. In 2023, we will continue our project to advocate for feasible emission limits, to assess the impacts to Yara, and to prepare for timely compliance.

Physical climate risk assessments:
In 2023, vulnerability assessments for physical climate risks will start for production sites where any activity is assessed to be at risk.

The Yara Babrala plant in India won the Confederation of Indian Industry’s (CII) National Award for Excellence in Water Management in September. Situated in an area with extreme baseline water stress, Yara Babrala has tackled this challenge head on and succeeded in becoming one of the most water efficient units among similar fertilizer plants in India. The next milestone for the Babrala team is to reach their bold target of reducing ground water consumption by 20% by 2024.
In 2017, in alignment with the Greenhouse Gas Protocol and the European Emission Trading sector guidance, Yara included CO\textsubscript{2} used as feedstock in on-site chemical production processes, such as urea production, in scope 1 emissions. From 2018 onwards, scope 1 includes CO\textsubscript{2} emissions from the generation of own electricity. The greenhouse gases relevant to Yara’s production plants are CO\textsubscript{2} from the use of fuels, N\textsubscript{2}O from nitric acid and NPK production, and CO\textsubscript{2} generated in calcium carbonate processing. These are calculated as CO\textsubscript{2} equivalents using the following factors, corresponding to the emissions factors in IPCC Fourth Assessment Report (2007), that is CO\textsubscript{2} to air: 1 and N\textsubscript{2}O to air: 298.

No change in the methodology of calculating Scope 1 and 2 emissions nor in the calculation of Scope 3 Category 3, 4 and 9. When calculating the Scope 3 Category 1 emissions, the extent of the data used to calculate the indirect emissions from purchased raw materials was widened during 2022 to include traded and third-party produced products (TPP) and also other materials & services on a spend-based analysis. The same widening of the scope, that is including traded and TPP products, was implemented when calculating the Scope 3, Category 11 emissions.

**Climate change**

**Carbon emissions calculations**

Our scope 3 emissions for the use of fertilizer are estimates based on emission factors in the IPCC 2006 Guidelines for National Greenhouse Gas Inventories and IPCC Fourth Assessment Report (2007). A template has been developed to calculate the carbon footprint of purchased raw materials. For the indirect emissions from upstream and downstream transport we use a calculation tool based on sales figures.

While GHG project implementation has been responsible for the reduction in our GHG emissions in recent years, the overall decrease this year compared to 2021 can largely be attributed to the curtailment of production due to the energy crisis and market conditions.

**GHG scope 1, 2, and 3 emissions**

<table>
<thead>
<tr>
<th>Million tonnes CO\textsubscript{2}e</th>
<th>2022</th>
<th>Recalculated 2021\textsuperscript{a}</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 (\textsuperscript{1(2,2)})</td>
<td>14.9</td>
<td>16.5</td>
<td>16.5</td>
<td>16.6</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>Scope 2 (location based) \textsuperscript{b}</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Scope 2 (market based) \textsuperscript{c}</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Scope 1+2 (market based)</td>
<td>15.9</td>
<td>17.5</td>
<td>17.5</td>
<td>17.7</td>
<td>18.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Scope 3 Category I &amp; 3 \textsuperscript{d(2)}</td>
<td>8.8\textsuperscript{d}</td>
<td>13.4\textsuperscript{d}</td>
<td>8.6</td>
<td>8.5</td>
<td>9.0</td>
<td>8.7\textsuperscript{11}</td>
</tr>
<tr>
<td>Scope 3 Category 4 &amp; 9 \textsuperscript{e}</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Scope 3 Category 11 \textsuperscript{f(2)}</td>
<td>35.3\textsuperscript{f}</td>
<td>44.0\textsuperscript{f}</td>
<td>46.6\textsuperscript{12}</td>
<td>42.3</td>
<td>43.8</td>
<td>40.5</td>
</tr>
<tr>
<td>Scope 3 Total</td>
<td>46.8\textsuperscript{g}</td>
<td>59.7\textsuperscript{g}</td>
<td>57.8</td>
<td>53.4</td>
<td>55.7</td>
<td>52.1</td>
</tr>
<tr>
<td>Scope 1+2 (market based) \textsuperscript{+3}</td>
<td>62.7\textsuperscript{h}</td>
<td>77.2\textsuperscript{h}</td>
<td>75.4</td>
<td>71.1</td>
<td>74.2</td>
<td>70.6</td>
</tr>
</tbody>
</table>

\textsuperscript{1} In 2017, in alignment with the Greenhouse Gas Protocol and the European Emission Trading sector guidance, Yara included CO\textsubscript{2} used as feedstock in on-site chemical production processes, such as urea production, in scope 1 emissions.

\textsuperscript{2} From 2018 onwards, scope 1 includes CO\textsubscript{2} emissions from the generation of own electricity.

\textsuperscript{3} The greenhouse gases relevant to Yara’s production plants are CO\textsubscript{2} from the use of fuels, N\textsubscript{2}O from nitric acid and NPK production, and CO\textsubscript{2} generated in calcium carbonate processing. These are calculated as CO\textsubscript{2} equivalents using the following factors, corresponding to the emissions factors in IPCC Fourth Assessment Report (2007), that is CO\textsubscript{2} to air: 1 and N\textsubscript{2}O to air: 298.

\textsuperscript{4} No change in the methodology of calculating Scope 1 and 2 emissions nor in the calculation of Scope 3 Category 3, 4 and 9.

\textsuperscript{5} Scope 3 Category 1 – GHG emissions from purchased goods and services.

\textsuperscript{6} Scope 3 Category 4 – GHG emissions from fuel and energy related activities.

\textsuperscript{7} Scope 3 Category 11 – GHG emissions from the use of sold products.

\textsuperscript{8} Corrected values due to errors identified in 2019 during the development of the GHG intensity KPI.

\textsuperscript{9} Scope 3, category 11 value for 2021 accidentally included some non-fertilizer volumes with fertilizer-use related emission factors. This was corrected in the recalculated 2021 figure.
Air, Water, and Waste

Water withdrawal, discharge, and consumption
Total for Yara’s production sites

<table>
<thead>
<tr>
<th>Megaliters</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water withdrawal</td>
<td>960,190</td>
<td>966,182</td>
<td>1,011,731</td>
<td>1,045,257</td>
<td>1,022,170</td>
</tr>
<tr>
<td>Fresh surface water</td>
<td>41%</td>
<td>40%</td>
<td>39%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Brackish surface water/seawater</td>
<td>57%</td>
<td>58%</td>
<td>59%</td>
<td>45%</td>
<td>44%</td>
</tr>
<tr>
<td>Groundwater</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Produced water</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Third-party</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Total water discharge</td>
<td>797,372</td>
<td>866,562</td>
<td>941,493</td>
<td>958,710</td>
<td>949,484</td>
</tr>
<tr>
<td>Fresh surface water</td>
<td>15%</td>
<td>15%</td>
<td>17%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Brackish surface water/seawater</td>
<td>85%</td>
<td>84%</td>
<td>82%</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>Groundwater</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Third-party</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Total water consumption</td>
<td>62,818</td>
<td>99,620</td>
<td>70,239</td>
<td>86,547</td>
<td>72,686</td>
</tr>
</tbody>
</table>

Discharge as a percentage of withdrawal
93% | 90% | 93%<sup>2</sup> | 92% | 93%
Consumption as a percentage of withdrawal
7% | 10% | 7%<sup>3</sup> | 8% | 7%

Emissions to air

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt; (as NO+NO&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>7,600&lt;sup&gt;2&lt;/sup&gt;</td>
<td>8,700</td>
<td>8,300</td>
<td>8,500</td>
<td>9,400</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt; (as SO&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>1,800&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2,000</td>
<td>2,100</td>
<td>2,100</td>
<td>2,800</td>
</tr>
<tr>
<td>NH&lt;sub&gt;3&lt;/sub&gt;</td>
<td>3,700</td>
<td>3,700</td>
<td>4,100</td>
<td>4,000</td>
<td>4,800</td>
</tr>
<tr>
<td>F</td>
<td>16</td>
<td>16</td>
<td>20</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>Dust</td>
<td>2,500&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2,900</td>
<td>2,800</td>
<td>2,500</td>
<td>3,900</td>
</tr>
</tbody>
</table>

<sup>1</sup> Prior to 2022 NO<sub>x</sub> from our production plants was reported as NO<sub>2</sub>.
<sup>2</sup> The decrease in NO<sub>x</sub>, SO<sub>x</sub> and dust emissions in 2022 can largely be attributed to the curtailment of production due to the energy crises.

Waste handling
By waste type and disposal method (excluding phosphate mining-related wastes, gypsum, and iron oxide)

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery operations</td>
<td>26,998</td>
<td>18,974</td>
<td>27,696</td>
</tr>
<tr>
<td>Storage onsite</td>
<td>7,997</td>
<td>5,149</td>
<td>5,985</td>
</tr>
<tr>
<td>Landfill</td>
<td>45,000</td>
<td>50,139</td>
<td>31,292</td>
</tr>
<tr>
<td>Incinerated</td>
<td>1,944</td>
<td>649</td>
<td>3,040</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery operations</td>
<td>2,112</td>
<td>1,691</td>
<td>2,399</td>
</tr>
<tr>
<td>Storage onsite</td>
<td>37</td>
<td>188</td>
<td>78</td>
</tr>
<tr>
<td>Landfill</td>
<td>19,610</td>
<td>18,641</td>
<td>15,885</td>
</tr>
<tr>
<td>Incinerated</td>
<td>1,288</td>
<td>2,645</td>
<td>2,001</td>
</tr>
</tbody>
</table>

Nitrogen and phosphorus discharge
Total in wastewater from production sites

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (as total N)</td>
<td>2,626</td>
<td>3,030</td>
<td>3,369</td>
<td>3,606</td>
<td>4,056</td>
</tr>
<tr>
<td>Phosphorus (as P)</td>
<td>151</td>
<td>187</td>
<td>284</td>
<td>347</td>
<td>470</td>
</tr>
</tbody>
</table>

Handling of byproducts
Byproducts sold/stored in 2022

<table>
<thead>
<tr>
<th>Iron oxide</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold as byproduct</td>
<td>343,987</td>
<td>483,904</td>
</tr>
<tr>
<td>Stored in on-site landfill</td>
<td>1,630,392</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Numbers adjusted from 2017, as a cooling water stream withdrawn from, and discharged to, brackish surface water at Yara Sluiskil was included in the reporting.
<sup>2</sup> Corrections made due to either transposing errors, minor adjustments in historical data or errors identified in 2022.
<sup>3</sup> Produced water is water that enters an organization’s boundary as a result of the use of any raw material and has to consequently be managed by the organization (Source: CDP, CDP Water Security Reporting Guidance, 2018; modified). Note not all our production sites are able to monitor these volumes.
<sup>4</sup> Previously reported as 0%.
Prosperity

Yara’s leading position within food solutions, technology, and ammonia makes us well positioned to meet the challenges ahead. We aim to improve the profitability of our operations and grow new business areas to create value for our customers and society at large, and to deliver superior returns to our shareholders.
Growing prosperity through community leadership

Yara wants to lead a food system transformation through actions that reduce emissions, protect nature, and improve livelihoods. To deliver on the latter and create measurable positive social impact, Yara Africa & Asia launched the Yara Leadership Academy to develop the skills and leadership capacities of micro, small, and medium enterprises in Yara’s supply chain.

Pillars of local communities

Yara’s distribution network for fertilizer in Africa and Asia is very fragmented and adapted to local realities, and these businesses are vital for the local communities in which they operate. Developing and improving the business skills of these enterprises positively impacts their resilience, efficiency, and financial profitability, and ultimately improves Yara’s value chain. Launched first in Kenya and India, the Yara Leadership Academy (YLA) targets 1,000 owners and managers of micro, small, and medium enterprises (MSMEs) in Yara’s distribution channel.

“The thousands of MSMEs in Yara’s value chain play a vital role in connecting Yara to farmers all over the world, and are enablers of knowledge transfer and support among farmers in their local communities. In addition, the revenue they generate means job creation and
economic development in many communities,” says Carol Mumo, Manager Social Impact in Yara Africa & Asia.

**Future-proofing MSMEs**
Extensive assessments involving field visits and business interactions in both India and Kenya demonstrated the need for mentorship and knowledge-sharing to increase profitability and prosperity.

The YLA is structured as a 12-week program with MBA-inspired modules. Through the program, participants will learn how to assess their skills and assets, understand their customers and competitors, manage finances, and track their progress and profitability. The course is online to accommodate for vast geographical distances and built around an app developed specifically for the program.

**The plus-one model**
After opening the application period in India, the program did not attract as many female entrepreneurs and business owners as intended.

“After looking into the reasons behind the low number of female applicants, we launched the plus-one model, an innovative way to accommodate for local customs and culture and ensure female participation. When male participants were selected, they were encouraged to bring a plus-one to the program, and most chose their wife, increasing the number of women in the program and contributing to inclusive economic growth,” says Marisa Soares, Senior Vice President Innovation and Impact in Yara Africa & Asia.

Sapna Pratap Singh, the plus-one of Vijay Pratap Singh from the Sanibhal district has grown her business skills through the program. “Yara’s leadership program is like a revolution for the agriculture business. Attending three sessions of this program so far has helped me a lot to understand my business. It also helped me to improve my business skills” she says.

The plus-one model is a clear example of the need for customization of programs to local culture and tradition. To ensure truly inclusive growth, barriers to participation for marginalized groups must be identified and addressed on a case-by-case basis.

**Creating lasting social impact**
Yara Leadership Academy for MSMEs is part of a broader Social Impact 2030 framework that Yara Africa & Asia announced in 2022. It aims to increase digital access and enablement, ensure inclusive economic development, and reduce hunger.

To deliver on our ambition of Growing a Nature-Positive Food Future, we need to contribute to prosperity in the communities in which we operate. Making Yara’s ambition tangible, Yara Africa & Asia’s Social Impact 2030 framework will create thousands of new jobs, digitally and financially empower farmers and business owners, and the Yara Leadership Academy is an important milestone on the journey to 2030.

To learn more about Yara’s Social Impact Framework, see Socioeconomic Impacts on Communities, page 129.
Sustainable finance is growing in force and impact. Capital is increasingly channelled towards organizations and activities that manage their economic, social, and environmental (ESG) impacts well, driven by responsible investments, ESG and credit ratings, and regulations such as the EU taxonomy. We welcome sustainable finance as a means to translate our ambitions and achievements into value and reinforce Yara as an attractive investment.

Priorities

Competitive access to capital
Investors’ interest in our ESG profile and performance has risen markedly in recent years. Communicating Yara’s strategy and ongoing transformation to investors and credit markets is therefore a priority. We are continuously monitoring developments in the credit markets to evaluate how we can leverage our integrated strategy to secure competitive access to capital through green financing. We are putting considerable effort into meeting the reporting requirements of the EU taxonomy which is intended to direct capital to environmentally sustainable activities.

Yara Green Financing Framework
With the Green Financing Framework, Yara aims to further underline its commitment to sustainability. It represents an additional step in Yara’s commitment to Sustainable Finance, after the signing of its sustainability-linked revolving credit facility in 2019. Yara has established this Green Financing Framework as an overarching platform under which the company intends to issue green financing instruments, which may include bonds (including private placements), loans, guarantees, hybrids, and any other financial instrument where the proceeds will be exclusively allocated to finance and/or refinance eligible green projects as defined in the framework. The eligible green projects are expected to create substantial environmental benefits by decarbonizing the food chain, including fertilizer production and application, and limiting the need to expand farmland. CICERO Shades of Green has provided the second party opinion and rated the framework medium-green.

Making investments greener
Our approach to green investments is currently defined by our Capital Value Process (CVP). HESQ and compliance requirements are integral parts of the decision-making process for new projects. Any investment above USD 25 million requires the involvement of Sustainability Governance and considerations of ESG and carbon pricing impacts. When relevant, the project shall present an analysis of its impact on Yara’s climate targets.

» Yara Green Financing Framework
» Second party opinion from CICERO Shades of Green
Performance

Attractive investment
We believe that our unique opportunities and focused strategy reinforces Yara as an attractive investment. Thanks to our resilient business model and strong organizational performance, we returned 65 NOK per share to our shareholders in 2022 (paid and proposed, assuming approval of 2022 dividend by 2023 Annual General Meeting).

CICERO Shades of Green
Yara has engaged Cicero Green to assess the ‘greenness’ of our revenues and of our CapEx. The analysis is published separately as a Cicero Shades of Green company report.

» Yara Shades of Green Assessment Update 2023–CICERO

EU taxonomy
The EU taxonomy is designed to support the objectives of the EU Green Deal by channeling investments towards a transition to green economy. Yara is reporting on the EU taxonomy on a voluntary basis since the Taxonomy Regulation was not yet enforced in Norway at year-end 2022. Yara’s first Taxonomy Report was published in 2022, covering information on the taxonomy-eligible activities of the group for the reporting period 2021. In the current version of the regulation, the economic activities relevant to Yara are the manufacturing of anhydrous ammonia and nitric acid and sea freight and water transport. In its 2022 report, Yara disclosed the share of its taxonomy-eligible as well as taxonomy-aligned activities for the reporting period 2022 as per Turnover, CapEx and OpEx. Further descriptions, disclosures, and accounting policy used can be found in Yara’s EU Taxonomy Report 2022.

» Yara EU Taxonomy Report 2022

ESG ratings
We consider ESG ratings as valuable internal benchmarking tools to map best practices and improve sustainability performance. Years of interaction with external benchmarking initiatives and ESG analysts have helped us to close several information gaps and driven transparency in our reporting. Not only has this ensured more consistent and accurate scores in ESG rating, but it has also helped us to evolve our sustainability governance and reporting. Several policies, processes, and targets have been amended in recent years based on feedback from benchmarking initiatives.

Green bond ratio
Following the issuance of its debut green notes in November 2022, Yara’s Green bond ratio is 21.8%. As per the EU Guidelines on reporting climate-related information, the climate-related green bond ratio is calculated as the carrying amount of green bonds outstanding at year-end divided by a five-year rolling average of total unsecured debenture bonds, cf. Yara’s consolidated financial statements note 5.3 on page 196 of the Integrated Report.

MSCI and Sustainalytics ratings

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI</td>
<td>6.9</td>
<td>6.3</td>
<td>4.8</td>
<td>3.5</td>
<td>4.3</td>
<td>4.3</td>
<td>A</td>
</tr>
<tr>
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MSCI rating is scored on the scale: 0.0-1.4: CCC, 1.4-2.9: B, 2.9-4.3: BBB, 4.3-5.7: BB, 5.7-7.1: A, 7.1-8.6: AA, 8.6-10.0: AAA
Sustainalytics risk ratings are shown as higher figures presenting higher residual ESG risks. Risk brackets are 0-10: Negligible, 10-20: Low, 20-30: Medium, 30-40: High, 40+: Severe.
Delivering and adding value

In 2022, our total revenue amounted to USD 24,159 million. Of this, about 74% went to purchasing costs and other operating expenses. The remaining USD 6,232 million was distributed to our employees, shareholders, and other providers of capital, paid in taxes to governments, or retained in the company.

The graph shows our direct economic value generated in 2022, of which USD 17,928 million went to operating costs and expenses. A large part of these costs were purchases of raw materials, energy costs, and freight expenses.

The pie chart shows our value distribution in 2022, excluding purchasing costs and operating expenses. The retained value, ‘To Yara’, amounted to USD 3,020 million.

To shareholders: USD 1,054 million was paid to shareholders. We increased cash returns in 2022, bringing total dividends and share buybacks paid and proposed to NOK 65 per share.

To employees: USD 1,284 million was paid in employee wages and benefits. Every employee has received extraordinary USD 1,000 bonuses in 2020, 2021 and 2022, acknowledging their exceptional efforts during the pandemic.

To Yara: USD 3,020 million was retained in the company, reinforcing Yara’s robust financial situation.

To governments: USD 627 million in income taxes was paid to governments, as detailed in our 2022 Country-by-Country Report available on yara.com.

To banks: USD 227 million was paid in interest expenses to banks.

To communities: USD 18 million was paid in donations and sponsoring, largely related to pandemic relief, food security, and inclusive growth.
The way forward

CDP Climate Change benchmark:
The CDP benchmark continues to be a priority for 2023. Yara is progressing its work to set science-based targets, which we expect will be a positive contribution.

Expand our target setting:
We will continue our target setting for tier 2 topics, prioritizing quantitative targets. We believe this will help to focus our work in several areas, strengthen our reporting, and improve our performance.

EU taxonomy:
The EU taxonomy currently has criteria for the climate objectives, which Yara is reporting on. In 2023, we are expecting criteria for the remaining four environmental objectives to be published, making our fertilizer and industrial production eligible activities. We will continue to follow up on the regulatory developments closely and implement new requirements, if any arise.
Digitalization touches every part of our business and markets and will play a significant role in our efforts to deliver on our ambition and strategy. Digital technologies will allow a step change in food production and is already driving improvements in the way we produce and distribute fertilizer and run our overall business. We have stepped up our digital efforts significantly in recent years, focusing on digital farming as well as introducing digital tools in our production system and core business processes.

Priorities

Digital farming
Yara’s digital farming solutions combine our crop nutrition solutions and deep agronomic knowledge with new technologies to help farmers improve farm and field productivity while reducing environmental impacts. With over 60 years of research and development, and decades of soil analytical services, we are uniquely positioned to offer our customers digital solutions that support higher nutrient use efficiency (NUE), reduce GHG emissions, and deliver nature-positive outcomes.

Farm and field connectivity
We have been innovating digital farming products and services for farmers and other stakeholders in agriculture for several years. By engaging with growers across geographies and crop segments, we continue to identify new use cases and develop tools for farms and farmers of all kinds and sizes.

In 2022, we further accelerated our digitization efforts on-farm by building up more regional and local competence across our three regional business units. This has enabled us to further scale our reach, accounting for 14.8 million active hectares acquired globally. Additionally, the regionalization of key digital capabilities enables a more localized approach to solution development, with a heightened appreciation of challenges faced by farming communities.

YaraFX Insight
Yara’s advice and recommendations are the product of over a century of unparalleled agronomic knowledge gained from field trial data plus the experience and expertise of local agronomists around the world. Previously only accessible from within our proprietary digital tools, the launch of YaraFX Insight in 2022, sees us availing these industry-leading capabilities through a suite of agronomic API’s. This enables partners to integrate Yara’s agronomic knowledge into their customer-facing digital solutions through dynamic field- and crop-specific advice throughout the crop cycle to help grow sustainable farming practices and outcomes, prosperity across the globe, and a nature-positive food future for all.

Digital Core Solutions
Digital solutions are key to optimizing our operations and improving safety, reliability, and product quality while reducing our environmental footprint. We are running several programs to leverage digital solutions in our core operations and deliver on the Yara Improvement Program 2.0.
Digital Production
Digital Production has been running since 2019 and is focused on improving reliability, safety, and optimizing our production processes. One of the focus points for the team is energy optimization in, for example, ammonia production. There is significant potential to continue improving the environmental performance of our production processes using digital solutions.

Digital Sustainability and Traceability
The Digital Sustainability and Traceability (DST) team was established in 2022. With a vision to digitally enable Yara to deliver on its ambition of Growing a Nature-Positive Food Future, DST aims to expand our knowledge-sharing capabilities through new, accurate, accessible, and verifiable digital solutions that deliver information to both internal and external stakeholders. DST is providing digital solutions to Yara’s business that enable and support our journey to deliver on our sustainability targets in a verifiable and accurate manner, as well as innovative tools that enable the physical and carbon footprint traceability of Yara’s products globally, delivering value in the areas of safety, statutory compliance, supply chain and new business.

In addition, we are considering digitalisation programs in other parts of our core business, including global planning, optimization, and supply chain. We are also continuing the required uplift of our Enterprise Resource Planning (ERP) systems and core systems, while establishing clearer interfaces with the regions. Regional digital strategies are being established to shape a scalable agenda for global digital units.
**Performance**

**Active hectares**
At year-end 2022, Yara had 14.8 million hectares under active management through our digital solutions. Our focus in 2022 was to expand our product strategy with the addition of the YaraFX suite of agronomic APIs, which accounted for more than 5% of the growth in active hectares.

**Digital Core Solutions**
In 2022, we were well underway to reach recurring gains from the digital solutions in our core operations. Our portfolio counted approximately 40 digital solutions at different stages of the product life cycle and more than 150 deployments across 16 production sites. Nearly all production sites are now connected to the Digital Production Platform (DPP), enabling us to tap into technologies such as cloud computing, machine learning, and robotics.

**The way forward**
Regional scaling of farm and field connectivity:
In 2023, we aim to further enable the regional business units to expand on their regionally tailored digital solutions portfolio, aimed at addressing farm-level productivity and sustainability.

**Digital Core Solutions:**
Going forward, we intend to continue scaling existing solutions to relevant sites and develop new solutions on a ‘value first’ basis. We will also continue the integration of the Digital Production Platform into our established business processes, while enabling the platform to evolve into an ecosystem for collaboration and innovation. Traceability continues to be a core focus in order to verify green fertilisers.

e.nable:
The e.nable program is an extensive transformation program that will affect all regions and most parts of Yara in the coming years. Building on industry best practices, it involves investments and improvements in processes, people’s work, and our core system to enable us to deliver our strategy.
Solutions and tools for modern farming

**AtFarm** is an integrated farmer services platform that provides accurate and efficient nutrient management planning, with remote monitoring, on-field imaging, and Variable Rate Application (VRA) throughout the season, and introduces post-season sustainability calculations.

**Ayra** is an advisor tool using Yara’s nutrition recommendation engine, agronomic knowledge, and commercial portfolio to provide crop- and region-specific advice on how much and when to apply macro, secondary, and micronutrients to obtain a target level of productivity.

**Adapt-N** equips agronomists to advise farmers on optimal nitrogen application based on farm characteristics and weather in order to reduce excessive use and optimize yield while minimizing environmental impact due to nitrogen loss.

**Soil 2.0** expands our soil analytical services digitally to support product growth and to develop soil health services such as an industry Soil Health Score to focus on sustainability outcomes.

**FarmCare** is a mobile-only solution targeting small-scale farmers growing field crops such as rice, wheat, sugarcane, and maize. It provides crop advisory and a fertilizer calculator to optimize crop nutrition input.

**N-Sensor** is a tractor-mounted tool that allows growers to measure a crop’s nitrogen requirement as it passes across the field, and to optimize fertilizer application rates at each individual part of the field.

**N-Tester BT** is a hand-held device that measures the nitrogen status of a crop from the chlorophyll content of its leaves, helping farmers, agronomists, and advisors measure optimal nitrogen rates in real-time.

**Yara Connect** is our retailer connectivity solution. It serves as a loyalty platform and delivers value-added services to the retailer through knowledge, insight, and connectivity.

**YaraBodega** is an online retail tool that empowers Yara retailers to list and sell products online. It drives retailer-farmer connectivity by leveraging the retailer as a trusted advisor to the farmer.

**YaraFX Insights** is our industry leading suite of Crop Nutrition Knowledge APIs, offering our partner platforms enhanced features with research-backed nutrition management tools and services that bring complementary insights to on-farm practices.
The Yara brand is recognized globally, and our products are known for their high quality and reliability. High product quality enables us to differentiate our products in the market and add value to our customers in the form of higher productivity and better sustainability performances. We engage directly with farmers and partners in the food chain to share our knowledge, demonstrate our solutions, and tailor our offering to local conditions.

Priorities

Connecting with our customers
Yara has a wide range of customers worldwide, mainly wholesalers, distributors, and farmers, but also actors of the food value chain. We engage with them in several ways and carry out research and surveys to assess customer satisfaction and to gather customer feedback in our regions and markets. In addition, we spend significant resources on sharing knowledge through both on-the-ground and digital support.

Our more than 1,000 agronomists and sales agronomists work actively in fields across the world to help farmers use fertilizers in the most efficient way in order to grow a high yielding, top quality crop. Their agronomic knowledge and expertise in local markets and crops helps to set us apart and drive better farming practices. Among the activities they run are crop clinics, field days, demonstration trials, and numerous training sessions for farmers.

Digital solutions play an increasingly important role in connecting to and engaging with farmers. Particularly in smallholder markets, digital solutions enable us to disseminate knowledge and provide farmers with crop nutrition recommendations and support tools, such as hyperlocal weather forecasts, in an efficient and inclusive manner.

Net Promoter Score (NPS) surveys
We continue to implement automated Net Promoter Score (NPS) surveys as a means of monitoring customer satisfaction. Net Promoter Score (NPS) is a customer loyalty and satisfaction measurement with a score reflecting the share of customers who promote the company’s products and services. Additional open-ended and qualitative questions, and the possibility for following up individual respondents, provides further insight into our customers’ experience with us.

In 2022, we rolled out automated NPS surveys across fertilizer markets in Germany, France, Poland, and Italy, and to all customers of our industrial nitrates and base chemicals in Europe.

Product quality
Yara’s Product Quality Strategy is based on customer and legal needs, with the objective of differentiating our products in the market and offering added value to our customers. We regularly run product quality surveys in fertilizer markets in Asia, Europe, North America, and Latin America. In 2021 and 2022, we conducted in-depth customer satisfaction research among users of our fertilizers in ten countries, focusing on the following characteristics:
• Physical and visual
• Technical and mineral
• Performance and sustainability
• Commercial, image, and brand

The insights from the 2021 research spurred several actions and new initiatives throughout 2022 in the participating countries. It also guided new research projects on product robustness and agronomic efficiency.

We observed an overall increase in Net Promoter Scores and customer satisfaction across the ten countries surveyed in 2022. Based on customer feedback, it is evident that product quality is a main driver across all impact categories. Furthermore, results indicate that Yara’s product characteristics are very well aligned with what customers rank as most important.

**Raw material management**

The sanctions imposed after Russia invaded Ukraine have impacted our supplies of raw materials and, in some case, the appearance of our products. Different phosphate rock sources can, for example, cause color variations in our finished fertilizers. Throughout 2022, we paid extra efforts to ensure that the nutrient content of our products met specifications and customer requirements, and to communicate proactively about any physical changes in our products to the market. This will remain a priority in 2023, as we continue to monitor and review the effects of supply changes and to ensure that we meet high quality standards.

**Authenticating Yara products**

Counterfeit products represent a challenge in several of our markets. These products appear with similar bags, labels, and names in the marketplace, as suppliers try to exploit the reputation of genuine brands. Some counterfeit products are simply low-quality fertilizers that stunt crop growth and lead to lower yields. Others contain fillers and even chemicals that can damage crops and harm people. Either way, they are a threat to farmers and the Yara brand.

We apply different strategies to fight counterfeiting and protect our brand. Product authentication is one of them. In China, we have for several years used the Yara WeChat account to help customers authenticate our products. In 2022, Yara’s WeChat account had more than 780,000 followers and handled more than 117,000 scans to authenticate Yara products. Following a rise in counterfeit products in Latin America, we are also exploring other technologies to track and trace our products.

**Building and sharing knowledge**

We believe that everyone involved in food production should have a basic understanding of agronomy and sustainability. To this end, we have condensed our century-long knowledge and expertise in agriculture and crop nutrition into targeted learning programs, adapted to the different needs of the audiences.

Yara’s Agronomy Competence Model (ACM) is one such program. It was established a decade ago to raise the overall agronomic knowledge of our agronomists and sales agronomist, counting more than 1,900 employees in 48 countries. Since 2021, the program

**Better coating from customer feedback**

In 2022, Yara introduced a new coating on all YaraLiva™ TROPICOTE™ and NITRABOR™ products. This was a direct outcome of feedback from customers experiencing moisture absorption and dust issues in blending and abrasive handling operations. A fast-track project led to a new and more robust coating which has received accolades from customers providing testimonials of much better handling properties and significantly less dust.

**Fighting fraudulent products**

Witnessing a rise in counterfeit products, our security team in Latin America in 2022 assessed the situation and planned mitigative measures. Pilot projects are planned for 2023, in which we will be testing security tags, QR codes, and other technologies for the tracing of fertilizer bags and authentication of genuine Yara products.

117,000 scans to authenticate Yara products through WeChat in China.
has been provided through a digital learning platform, where we distribute e-courses, videos, and other content developed by Yara experts. Learning paths include topics like soil health, agronomic techniques and tools, and fertilizer production. New content on climate, sustainability, and the food value chain was added in 2022. The ACM had more than 850 active users from 48 countries in 2022, with each user spending well over three hours studying content on the platform.

Launched in late 2022, our Agronomy for All program targets all Yara employees not working directly in agronomy with the basics of agriculture and the fertilizer market. An e-learning module lets participants deep dive into crop nutrients, soil health, climate change and the pathway to achieving a nature-positive food future. Agronomy for All was evaluated by about 40 early adopters in 2022 and will be relaunched in 2023 with added material and in Spanish and Portuguese language versions.

The way forward

Raw material management:
Managing the impacts of supply changes on product quality and characteristics will remain a priority in 2023. We will continue to monitor the effects of different raw materials and ensure that we always meet high quality standards.

Product quality governance:
We will establish regional or local product quality forums to raise awareness and enable faster decision-making on topics related to product quality. In addition, we are establishing a notification system to enable early response to non-conformities and ensure that marketed products are of the right quality.

Expansion of NPS surveys:
In 2023, we plan to introduce automated NPS surveys in the remaining fertilizer markets in Europe and to customers of our emission abatement reagents.

Knowledge building:
Our objective is to keep democratizing access to knowledge. In 2023, the ambition will be to duplicate the number of users supported. Yara’s learning offerings will be focused on accelerating our ambition and on developing the knowledge and skills towards regenerative agriculture by engaging Yara’s organization subject matter experts and external partners on the topic.
We aim to create shared value for the company and society. Empowering the 20 million farmers that buy our products to succeed is essential to achieving this, as is engaging in communities in which we operate. We are involved in numerous community projects to drive local prosperity, reduce inequality, and aid those in need. Trust and support from local communities is fundamental to Yara’s license to operate.

Priorities

Yara Social Impact 2030 framework
In 2022, Yara announced an ambitious Social Impact 2030 framework in Yara Africa & Asia (YAA), in line with the company’s strategic ambition to advance prosperity for 50 million farmers by 2030. While Yara has a proud history of supporting farmers and communities, the new framework marks a move from isolated projects and islands of impact to weaving deliberate and relevant impact concepts into Yara’s business strategy. Smallholder farmers and the distribution channels are priority impact target groups, and we intend to create innovative inclusive business models to empower farmers and business owners in the supply chain.

Four ambitions will frame our effort to make lasting social impact in YAA in the coming years:
• Driving digital inclusion for farmers and agribusinesses
• Enabling economic opportunities for women and youth in agriculture
• Accelerating growth for micro, small, and medium agri-business channel partners within our communities
• Continuing our contribution to food security

In 2022, we launched the first YAA Social Impact project, Yara Leadership Academy in Kenya and India, to develop the skills and leadership capacities of local businesses in Yara’s supply chain.

Engaging in our communities
The energy crisis, supply chain disruptions, and high inflation were felt throughout the many communities in which we operate in 2022, and in many cases slowed recovery from the pandemic. We initiated and engaged in a wide range of projects to address these challenges. A selection of these activities is presented below.

Sustaining food production
The war in Ukraine has compromised access to affordable fertilizers everywhere, hampering farmers’ ability to feed their communities and threatening food security across the world. When these challenges surfaced in Africa at the beginning of the planting season, Yara decided to commit USD 26 million to address the fertilizer crisis. We initiated and engaged in two major projects to help alleviate the situation.

The first one is Grow Ghana, where we offered farmers every third bag of fertilizer for free, thereby reducing the price of their inputs significantly. This effectively reduced fertilizer cost per acre by a third. We also worked alongside smallholders and trusted partners to

Commitment
By 2030, advance prosperity for 50 million farmers
On track
secure access to crop nutrition solutions, deliver lasting impacts for farmers and, ultimately, help strengthen food security in Ghana. In 2022, a total of 9,200 tonnes of free fertilizers were distributed to 51,000 farmers through the Grow Ghana initiative.

The second project is Sustain Africa, an emergency response and resilience coalition launched together with Rabobank to address the fertilizer supply deficit in other African countries. Much like the Grow Ghana initiative, Sustain Africa offered farmers a price relief of about 30%. We also leveraged the commitment to mobilize additional support. In addition to Yara and Rabobank, the coalition now includes partners such as the Bill & Melinda Gates Foundation, AGRA, and the International Fertilizer Association (IFA), and it is engaging with a broader set of fertilizer companies to close the gap of unmet demand. Sustain Africa has to date delivered solutions to Uganda, Madagascar, Malawi, and Mozambique.

In Tanzania, we enrolled more than 80,000 rice farmers on AfricaConnect, our digital platform designed to raise the profitability of smallholder farmers by improving their access to financing, farm inputs, knowledge, and markets. In 2022, more than 1,400 smallholder farmers were granted loans for the purchase of farm inputs and 2,000 tonnes of rice was successfully brought to the market.

**Improving livelihoods**

In Malaysia, Yara has partnered with Procter & Gamble and The Center for Sustainable Small-Owners at Asia School of Business in the Livelihood Improvement Initiative to help improve the livelihoods
of oil palm smallholders. The objective is to increase yields by 30–50%. At year-end 2022, nearly 140 farmers had joined the program to receive training and guidance on implementation of best practice sustainable farming practices. The initiative also aims to certify 640 smallholders with Roundtable on Sustainable Palm Oil (RSPO) Certification and diffuse the learning to 8,000 smallholders.

**Protecting nature**
In Western Australia, Yara Pilbara in 2022 supported Murujaga Aboriginal Corporation and its partners in the planting of 900 mangrove seedlings at Cowie Cove, the first of several degraded areas in Murujaga National Park to be revegetated. The mangroves are vital to Pilbara's coastal ecosystems.

**Pandemic relief**
Throughout the pandemic, Yara Brazil provided relief and support to smallholder farmers and communities across the country. Adding humanitarian aid to its already extensive community program, Yara Brazil donated food, medical supplies, and equipment, purchased and redistributed produce from smallholders, and engaged with local organization to support the reopening of schools. Altogether, over 1,300 tonnes of food were donated to more than 129,000 families in need between 2020 and 2022. Purchases of produce also generated income of BRL 2,25 million for smallholders and artisanal farmers.

**Humanitarian donations**
In 2022, Yara made significant donations to the Norwegian Refugee Council, Red Cross, UNICEF, Save the Children, and SOS Children’s Villages to support their emergency relief efforts during the crisis in Ukraine. We also made donations to the same five organizations to provide emergency relief to the victims of the devastating earthquake in Türkiye and Syria in February 2023.

**The way forward**

**Yara Social Impact program:**
The Yara Social Impact program aspires to bolster resilience and advance prosperity for 50 million people by 2030 by focusing on four ambitions: digital inclusion, inclusive prosperity, local economic development, and partnerships for zero hunger. The program will be expanding to two additional countries in 2023.

**Engaging in our communities:**
We will continue our ongoing initiatives and collaborative efforts to support our communities globally, responding to emergencies and engaging in progressive grassroots initiatives.

**Partnering for the climate**
Yara is a long-term strategic partner with the Norwegian environmental foundation Zero Emission Resource Organisation (ZERO). ZERO is an independent, non-profit NGO dedicated primarily to lifting zero emission solutions. ZERO is politically independent and uses an analytical and knowledge-based approach in their work. In addition to the ongoing partnership activities, Yara was a main partner at the 2022 Zero Emission Conference, one of the largest and longest running climate solutions conferences in Europe.

**Honoring our roots**
Yara also continued its long-term partnership with The Norwegian Industrial Workers Museum, authorized as the World Heritage Center for Rjukan-Notodden Industrial Heritage with venues at Vemork, Rjukan, and Telemark Kunstmuseum, Notodden, Norway.
Yara sources a wide variety of goods and services from roughly 30,000 suppliers worldwide. The sourcing of natural gas and nutrients constitutes a significant part of our purchases and operating expenses. We have developed strong relationships with key suppliers to ensure continuity and profitability in our business. Managing compliance in the supply chain has long been a priority, and in 2022 we stepped up efforts to integrate sustainability into our procurement processes and impact positively on our suppliers’ performance.

Priorities

Implementation of the new Procurement strategy
In 2022, we continued our work on the six pillars of the Procurement strategy that was launched in 2021:

1. Focus on sustainable value delivery
   Embed Yara’s sustainability ambitions into procurement and category strategies and actively explore, evaluate, and implement sustainable solutions.

2. Customer-centric operating model
   Be a strategic partner for our internal customers and improve our collaboration throughout the whole procurement function.

3. Digitally-enabled procurement function
   Leverage digital tools to enable advanced sourcing levers and automate procurement processes.

4. Efficient processes
   Review and improve our procurement processes to increase efficiency and effectiveness, including the measuring and follow-up of suppliers’ performance and compliance

5. Beyond savings performance management
   Establish a performance management methodology measuring our contribution to our internal customers’ strategic business priorities

6. Competence development
   Further strengthen Procurement teams by equipping them with training in new ways of working and with advanced techniques

Focus on sustainable value delivery
Yara’s first Sustainable Procurement Policy was launched in June 2022. This policy outlines how we intend to deliver sustainable value by promoting transparency and a higher standard of our suppliers’ sustainability performance. It also forms the basis of the Sustainable Procurement Program launched in December 2022.

Supplier audits, assessments, and monitoring
We conduct supplier audits and assessments in sectors in which we have identified risks through our Integrity Due Diligence process and through the implementation of the Supplier Compliance Management Process, which will be completed in 2023. This process includes
key information sources, namely product category risk assessments, pre-qualification assessments, integrity due diligence and third-party sustainability ratings. These sources of information will support us in the risk-based selection of suppliers for social and human rights audits according to the OECD Guidelines for Multinational Enterprises and the Norwegian Transparency Act.

In 2022, Yara did not record any significant environmental breach related to its supply chain. Social impacts and human rights due diligence in the supply chain are described in the Human Rights and Labor Practices chapter.

» Human rights due diligence in the supply chain, page 62

In 2022, we started the use of independent business sustainability ratings of our suppliers. Yara has chosen EcoVadis, a global business sustainability rating company using international standards, to conduct individual sustainability performance assessments of our business partners. The use of these ratings is embedded in our Sustainable Procurement Policy and Sustainable Procurement Program.

One of our top priorities after the devastating blast of ammonium nitrate in Beirut Lebanon in August 2020 was to start an in-depth verification and audit process. These audits cover the entire supply chain, from transport companies via third-party facilities to our own facilities. The taskforce mandate was completed during 2022 after auditing a total of 217 locations during 2021 and 2022. Zero major findings were reported but improvement areas were identified. For more information about ammonium nitrate safety, consult the Product Safety chapter.

» Ammonium nitrate safety, page 73

Performance

Sustainable procurement practices
Our Sustainable Procurement Program builds upon various initiatives that we continuously work on, such as:

• Developing more environmentally friendly product coatings
• Launching a scope 2 GHG-reduction strategy in January 2022, aiming to reduce emissions in line with Yara’s overall GHG targets
• Re-use of iron oxide from sulfuric acid production
• Recycling and reuse of IT-equipment
• Cleaning and recovery of catalyst material in nitric acid plants
• Using electric-powered rolling equipment in material handling
• Optimizing employee transport and electrifying company car fleets
• Installing solar panels on warehouses
• Increasing the use of intermodal transport, reducing road transport
• Reducing virgin plastic use in packaging materials
• Installing high-efficiency electric motors
• Recycling electric motors

In 2022 we achieved the following results on our Sustainable Procurement Policy’s ambitions

35% of our spend is covered by third-party sustainability ratings

70% of our rated suppliers improved their sustainability performance compared to their previous (annual) evaluation
External certifications
Improving our current supplier audit process is a key initiative in our new Procurement strategy. The current supplier audit process is covered by our ISO 9001:2015 umbrella certificate, managed locally, and focused on topics such as health and safety, codes of conduct, and management system certifications. In 2022, we completed the Supplier Compliance Management Process, which ensures that suppliers are monitored for compliance to our requirements and standards throughout the contract life cycle, applying a risk-based approach and covering a broader set of sustainability topics. Implementation of this new process will commence 2023.

Mineral fertilizers are made from naturally occurring raw materials. In addition to air and natural gas, we use rock phosphate and potassium salts, as well as other crop nutrients that are sourced in smaller volumes. Natural gas is used as a feedstock to produce ammonia and, to a lesser extent, to provide process heat and energy. In 2022, the sharp reduction in phosphate and potash volumes were largely driven by third-party produced product (TPP) demand in Americas.

Natural gas
We source natural gas, and in some cases other forms of hydrocarbons, to produce nitrogen fertilizers and industrial products. Our largest suppliers are Gail (India), Engie (France), OMV (Austria), Santos (Australia), and the National Gas Company of Trinidad and Tobago (Trinidad).

Phosphate
Phosphorus (P) occurs in natural geological deposits as phosphate rock, which is mined from the earth’s crust. We source phosphate rock and phosphoric acid to produce granular and feed phosphates and NPK fertilizers. After suspending purchases from Phosagro (Russia) due to sanctions, the largest suppliers are OCP (Morocco), Foskor (South Africa), JPMC (Jordan), and Mosaic (Peru). We also mine phosphate rock in one fully owned site, Silllinjärvi, in Finland. The Salitre phosphate rock mine was sold to Eurochem, finalized in early 2022. In addition to phosphate rock, we also source granulated phosphates. The largest suppliers are Maaden (Saudi Arabia), OCP (Morocco), and Mosaic (Brazil).

Potash
We source two types of Potash (K): Muriate of Potash (MOP) and Sulphate of Potash (SOP). MOP is mined from naturally occurring ore bodies that have been formed over thousands of years. SOP is primarily produced by reacting MOP with Sulfuric Acid, while a lesser share of world SOP is mined from naturally occurring ore bodies. In 2022, MOP and SOP were mainly sourced from six suppliers: K+S (Germany), ICL (Israel), Canpotex (Canada), ArabPotash Company (Jordan), and Kemira and Tessenderlo (processors based in Sweden and Belgium respectively). We also produce SOP at our own site in Kókkola, Finland. MOP purchases from BPC (Belarus) and Uralkali (Russia) were suspended in early 2022 due to geopolitical situations in their respective countries.

For observations concerning the Russian situation, see Key concerns raised in 2022, page 32

Consumption of the three main raw materials

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1) This figure reflects sites where we have operational control, Hull and Freeport are excluded, and 100% of the Tringen volumes are included.
2) The scope of the indicator has been expanded to include third-party NPS and NPK products sourced by Yara. 2020, 2021 and 2022 figures are not directly comparable to previous years.
3) Due to a calculation error, this figure was adjusted upwards by appx. 153,000 tonnes after the first publication.
Reducing the carbon footprint of shipping
Transport accounts for an estimated 4% of Yara’s carbon footprint. This share, along with our position in the market for clean ammonia, has increasingly been the focus for creating a green shift in the way we ship and transport intermediaries and finished products. We expect ammonia-powered vessels to reduce the carbon footprint of our shipping in the future but are also looking to reduce emissions from our current shipping and transport activities.

» Opportunities in Clean Tech, page 99

The way forward
Execute Procurement strategy:
We will continue to execute our strategy by implementing the various elements of the Sustainable Procurement Program in 2023 and beyond.

Reduce scope 3 upstream GHG emissions:
We will continue to align our procurement standards and supplier base with our ambition of Growing a Nature-Positive Food Future to support more sustainable purchase decisions and to reduce our scope 3 emissions. In early 2023, we started a new project which aims to set a scope 3 upstream reduction target by 2024.

Sustainable Procurement Policy:
We will continue to improve our Sustainable Procurement Policy in collaboration with our main stakeholders, internal key functions, and suppliers.

Supplier audits, assessments, and monitoring:
We will implement a comprehensive Supplier Compliance Management Process to enable systematic and risk-based assessments and the monitoring of our suppliers’ compliance with requirements and standards. Independent sustainability ratings and supplier audits will be key elements of this process. Additionally, in 2023, Yara will pilot a corporate program to conduct supplier audits globally and aggregate information on locally executed audits in order to increase visibility and improve sustainability in our supply chain.
Governance

Sound governance is the foundation for living and reinforcing our purpose, as well as for progressing on the other three pillars People, Planet, and Prosperity.
Increased protection from retaliation

What is retaliation?
As defined in Yara’s Code of Conduct, retaliation is any unfavorable action, practice, or omission that results from or is a reaction to an employee’s prior reporting of an issue. Yara’s Ethics and Compliance Department categorizes retaliatory actions and behaviors as “direct” or “indirect”. (See fact box). All retaliatory actions pose serious threats to business integrity, employee engagement, and overall business performance.

“Yara does not tolerate retaliation against anyone who has reported something in good faith. We have developed this program to increase the comfort and safety of speaking up and raising concerns. Retaliation is detrimental to employees’ comfort, speaking up and preventing it is a top priority for the Ethics and Compliance Department,” says Cira Holm, SVP Chief Compliance Officer.

How it works
The Retaliation Monitoring Program is designed to offer additional protections to reporters by proactively monitoring retaliatory behavior and actions that the reporter may experience after reporting.
- Eligible reporters receive information about the program when the initially reported case is closed.
- When included in the program, reporters are contacted by the Ethics and Compliance Department for regular check-ins. The meetings are offered monthly during the first three months and thereafter quarterly for a year (or for a longer period when agreed specifically with the reporter).
For a one-year period, the Ethics and Compliance Department will also monitor indirect retaliation by reviewing performance and talent management trends, such as performance rating, bonus schemes, salary developments, or succession planning which may not be founded in performance.

Since the launch of the Retaliation Monitoring Program in May 2022, a total of 106 notifications were received, of which 19 were in scope of the program, based on the reporters’ disclosure of identity and the topic of the concern raised.

To deliver on our ambition and future-proof our business, we rely on attracting, retaining, and developing highly skilled professionals. The proactive Retaliation Monitoring Program strengthens our efforts to ensure a work environment where employees experience safety and trust, and ultimately, where they thrive – to the benefit of individuals and the company.

Direct retaliation

1. Disciplinary actions
2. Harassing/discriminatory behavior
3. Changes to role/responsibilities/working conditions, such as:
   - Excessive/removed responsibilities
   - Constant monitoring
   - Exclusion from group activities/assignments
   - Interfering with work conditions
   - Withholding necessary resources.

Indirect retaliation

As part of performance and talent management, such as:

- Setting unrealistic expectations/goals
- Lack of development opportunities, such as training, mentoring, projects etc.
- Unfair performance evaluation
- Unfair bonus payout, merit, salary developments
- Lack of recognition when earned/warranted
- Unfair succession planning.

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1. Eligible reporters are employees subject to bad-faith reporting and non-anonymous reporters whose reports concern discrimination and unfairness, harassment, inappropriate behavior, Ethics and Compliance matters against line management, allegations of retaliatory behavior within an ongoing investigation and Ethics and Compliance discretion.
As a global company, Yara is exposed to different cultures, traditions, labor conditions, and threats. We are dedicated to supporting responsible business conduct throughout our own operations and value chain. This means promoting accountability by maintaining proper policies and practices, having zero tolerance for fraud and corruption, upholding a culture of respect, honesty, and fairness, and contributing to transparency. Responsible business conduct is crucial in earning the trust of our stakeholders and key to our success.

Priorities
Managing 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, business partner integrity, and employee misconduct.

The Ethics and Compliance Department consists of 17 full-time employees, with a corporate team in Oslo supported by a network of Regional Compliance Managers. The Regional Compliance Managers 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. Preventive measures, awareness raising, and sharing of knowledge are key priorities in maintaining our zero tolerance of fraud and corruption policy.

Compliance culture
Promoting and upholding an ethical culture across Yara, where everyone feels comfortable speaking up and raising concerns, is healthy for our employees and for the business. We focus our efforts on guiding the business in making the right decisions and speaking up when situations fail to meet our standards. A highlight in 2022 was the celebration of Yara’s Ethics Day.

The Ethics and Compliance Department regularly updates and shares guidance through newsletters, our training program, and other communication efforts. Our Ethical Leadership Training module is continuously updated to reflect our business environment and to include relevant and targeted ethical dilemmas for discussion. In 2022, we also launched an e-learning course on Business and Human Rights.

Every three years we run an internal Ethics Survey to measure Yara’s culture of integrity and guide the work of the Ethics and Compliance Department. The survey was last conducted in March 2021 and showed that fear of retaliation is the most prevalent reason employees lack comfort in speaking up. In an effort to increase employees’ comfort in speaking up, we developed and implemented the Retaliation Monitoring Program in 2022.

Commitments
Number of face-to-face risk-based Ethics and Compliance trainings:
Continue delivering our face-to-face training on key ethics and compliance topics, reaching at least 3,500 employees in 2023
☑️ On track
Employees completion of Code of Conduct e-learning:
Improve and maintain a high completion rate in our Code of Conduct e-learning, achieving a 95% completion rate in 2022 and 2023
☑️ On track

» Embedding our commitments, page 153

» Ethics Day, page 143

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Business partner integrity
In order to drive change, we work to ensure that our partners stay in line with our mission and meet our integrity standards. In 2022, we focused on sustainable procurement and integrating our Integrity Due Diligence (IDD) process with key procurement processes through extensive cross-functional collaboration. We will continue to work on a holistic Supplier Compliance Management Process throughout the life cycle of a supplier engagement in 2023.

Transparency of tax reporting
Yara takes an operational and commercial approach to tax and is committed to transparency and an open dialogue with tax authorities. We do not seek artificial tax structures and believe tax should be paid where profit is generated. We report in line with local and global regulations and our Code of Conduct and produce a full country-by-country report in line with EU regulation 2013/34 and the Norwegian Accounting Act. Our Tax Policy and 2022 Country-by-Country Report are available at yara.com, on our Investor Relations page.

Public affairs and stakeholder dialogue
Both Yara’s ambitions and society’s expectations related to climate neutrality and sustainable food systems have increased in recent years. In order to be more present in the public debate, and to be in a position to turn our ambitions into reality, we have strengthened the organization’s involvement in public affairs activities.

Performance
Compliance risk management
All of Yara’s operations are assessed for compliance risks through the Enterprise Risk Management process and specific Ethics and Compliance risk assessments. Several types of corruption are covered in these processes, including bribery, illegal gratuities, economic extortion, facilitation payments, and conflicts of interest which may lead to corruption. At a Yara Corporate level, risk of bribery and corruption continued to be a key risk in 2022.

The number of notifications of misconduct in 2022 was lower than before the pandemic, as they also were in 2021. We saw a slight decrease in employee management-related notifications most likely caused by a more frequent use of home office.

Ethics and compliance training
Training and communication are key elements of our Compliance Program, which includes:
- The Ethics intranet: clear, practical guidance for all Yara employees
- Code of Conduct e-learning: mandatory to all new hires with access to a PC within the first three months of employment. Current employees repeat the training every two years.
- E-learning courses: available in 15 languages on several topics of the Code of Conduct, including a mandatory course on competition law.
- Face-to-face training program: interactive sessions covering topics from the Code of Conduct, including anti-corruption, facilitation payments, conflicts of
interest, ethical leadership, gifts and hospitality, and human rights
- Ethics and Compliance introduction: mandatory as part of the human resources onboarding
- Guidance sheets, newsletters, and manuals: on all topics covered by the Code of Conduct and available in several languages

In 2022, the total number of employees who had completed the Code of Conduct e-learning was 12,622 (of the 12,979 employees who had access to the learning platform), corresponding to an average completion rate of 97%. The mandatory e-learning covers all topics in the Code of Conduct, including anti-corruption and human rights.

All members of Yara’s Board of Directors and Group Executive Board are consulted on and approve annual updates to the Code of Conduct. Twice a year, the Board of Directors receives an update on the status of Yara’s Compliance Program from the Chief Compliance Officer. All members of the bodies are included in the online and face-to-face compliance training programs and in the biennial Code of Conduct e-learning retraining requirement.

Through Yara’s Integrity Due Diligence process, the Code of Conduct for Business Partners was communicated to close to 2,000 business partners during 2022. Business partners are, on a risk-basis, selected for additional due diligence work, including training and communications.

Face-to-face training in 2022

<table>
<thead>
<tr>
<th>Participants</th>
<th>Americas</th>
<th>Europe</th>
<th>Africa &amp; Asia</th>
<th>Corporate</th>
<th>other</th>
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<td>Corporate</td>
<td>938</td>
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</tr>
</tbody>
</table>

Our dedicated regional compliance managers delivered Ethics and Compliance training to 3,788 employees in 2022. This training includes anti-corruption as a distinct topic.

Ethics and Compliance in numbers

- **3,788** employees received face-to-face risk-based Ethics and Compliance trainings
  - **2022 target:** 3,000
- **97%** completed the Code of Conduct e-learning
  - **2022 target:** 95%
- **642** guidance requests
  - **2021:** 705 guidance requests
- **156** notifications of misconduct
  - **2021:** 155 notifications of misconduct
## Notifications of misconduct in 2022

Yara has an obligation to investigate all reports made, and all notifications are treated confidentially. In 2022, we recorded 156 notifications to the Ethics and Compliance Department, an insignificant increase from 155 in 2021. The number of notifications is still considerably lower than it was before the pandemic. We observe that awareness in the organization remains high but ensuring that employees’ trust in reporting channels and the investigation process is nevertheless crucial in maintaining our strong speak-up culture in Yara going forward.

Thirty-five of the notifications were classified within the risk category of corruption, covering the sub-categories conflicts of interest, bribery, and anti-trust. Of these notifications, 34 were resolved within the reporting period, and 13 were substantiated according to Yara’s Investigation Procedure. Disciplinary actions as a result of investigations in 2022 led to 21 dismissals and 28 warnings (there can be several disciplinary actions for each investigation).

» *Internal Investigation Procedure, page 162*

### Business partner monitoring

Yara had more than 30,000 active suppliers in 2022. Our risk-based Integrity Due Diligence (IDD) self-assessment questionnaire was completed by approximately 20% of the suppliers. In 2022, 3,376 IDD questionnaires were initiated, of which 2,008 were completed and approved, and 14 were completed and rejected. The remaining 1,046 IDD questionnaires were cancelled or not completed by the business partner.

The purpose of the IDD process is not to reject business partners, but to identify integrity risks and to mitigate these in order to safeguard Yara’s interests. If adverse responses are identified in the IDD self-assessment questionnaire, we initiate a dialogue with the business partner, and we are committed to influencing them to uphold the same integrity standards as at Yara. Fewer than 1% of our business partners are rejected annually.
The way forward

**Ethical culture:**
We are continuously working to promote a culture of high ethical standards at Yara. One way is through our Ethical Leadership Training for managers, which will continue in 2023, in addition to targeted risk-based training for all employees on ethics and compliance topics.

**Speaking up:**
Ensuring that employees trust our reporting channels and investigation procedure and are comfortable voicing their concerns is a key focus area for the Ethics and Compliance Department. The Retaliation Monitoring Program implemented in 2022 was our key initiative to increase employees’ trust and comfort speaking up. In addition, 171 key employees received targeted training on the Internal Investigation Procedure in 2022. These efforts will continue in 2023.

**Business partner integrity:**
Our goal is to develop relationships with business partners that share similar corporate values as Yara and conduct their business in an ethical manner. We will continue to work on improving our systems and processes to achieve this objective. Specific actions are planned to further embed Yara’s Integrity Due Diligence (IDD) requirements into the sustainable procurement and sales processes.

Yara Ethics Day

In 2022, we celebrated the UNs International Anti-Corruption Day and Human Rights Day by hosting Yara’s own Ethics Day, spotlighting two main topics:

1. Ethical values and behaviors
2. Human rights in Yara

The main goal of the Ethics Day was to raise awareness on business integrity, ethics, and human rights at Yara. Eight one-hour online sessions were held in three languages throughout the day. The sessions saw high engagement with employees contributing and participating in Q&As, polls, comments, writing statements on what ethical behavior at Yara means to them, and even making commitments to take concrete actions to make Yara a more inclusive workplace where everyone feels safe to speak up.

“We are thrilled with the participation and the engagement during and after the Ethics Day. We all have a role to play in ensuring business integrity in Yara, and it’s important that everyone embeds ethical values and behaviors in their everyday work and habits,” said Cara Holm, SVP Chief Compliance Office at Yara.
The regulatory landscape is changing rapidly, driven first and foremost by the need to speed up the transition to a sustainable future. We monitor policy processes to stay abreast of regulations and engage whenever we can support and accelerate change in our industry and agriculture. As a major producer of fertilizer, we are committed to driving excellence throughout our business and complying with applicable laws and other requirements in all our activities. Compliance is a minimum.

Priorities

Regulatory changes
Yara’s operations and use of our products fall under strict regulatory frameworks in most jurisdictions where we operate. We expect increased awareness of sustainable agricultural practices and an increasing pressure on sustainability from governments and regulators globally. GHG emissions, soil degradation, water stress, biodiversity loss, and nutrient pollution are all regulatory issues which can impact Yara’s operations and value chain. The regulatory drive for climate-smart agriculture can strengthen demand for our crop nutrition solutions.

The European Green Deal
The European Green Deal aims for the EU to be climate-neutral by 2050. To overcome the threats of climate change and environmental degradation, the European Green Deal framework of policy developments aims to transform the EU into a modern, resource-efficient, and competitive economy. In addition to climate-neutrality, it focuses on protecting our biodiversity and ecosystems, securing a healthy food system for people and the planet, and enabling a clean and efficient energy transition, among other topics. It also contains a pledge to mobilize sustainable investments to deliver on the ambitions.

In the energy, climate, and environmental area alone, numerous key EU directives and regulations are currently being reviewed. In Yara’s opinion, the EU proposals contain the right elements, such as a mechanism to drive up carbon prices, a combination of regulations and financial incentives, and a focus on renewable energy and hydrogen as core technologies. We also see opportunities to improve the legislative proposals in some specific areas, notably by enhancing the competitiveness for European low-carbon and environmentally friendly solutions on the global market and making the legislative frameworks more coherent.

EU taxonomy
The EU taxonomy is designed to support the objectives of the EU’s Green Deal by channeling investments towards the transition to a green economy. The economic activities relevant to Yara are the manufacturing of anhydrous ammonia and nitric acid, and sea freight and water transport. Yara is also following up the development of the Environmental Delegated Act, covering criteria for the four remaining objectives of taxonomy, and their application to Yara’s activities.
Fit for 55

The EU Fit for 55 package sets a target to reduce GHG emissions by 55% by 2030, and the Farm-to-Fork strategy aims to make food systems fair, healthy, and environmentally friendly. These ambitious strategies put the EU as a front-runner in the transformation of the global food industry. Yara believes that this transformation is already underway, and that the EU Green Deal will accelerate it.

At Yara, we have voiced our opinion on the Fit for 55 proposals that have the most significant implications for the global food system:

**ETS Reform & Carbon Border Adjustment Mechanism (CBAM):**
We welcome rising carbon prices as a driver for industrial decarbonization. CBAM is a necessary tool to restore the balance between production and imports on Europe’s internal market, but solutions must be found to address export competitiveness. Together with other export-oriented businesses, Yara has shared and continues to share data, insights, and recommendations with European authorities and national ministries about the future competitiveness of European low-carbon exports.

**Renewable Energy Directive (REDIII):**
REDIII needs to focus on the core drivers of renewable energy use in industry – availability and cost. The final mix of infrastructure development, financial support and demand creation will determine the success of RED III when implemented by Member States.

**Fuel EU Maritime Initiative:**
The new Fuel EU Maritime regulation, together with standards set by the International Maritime Organization, plays a key role in providing stronger incentives for zero-carbon fuels.

EU Best Available Techniques for Large Volume Inorganic Chemicals
Revision of the EU BAT reference document for production of Large Volume Inorganic Chemicals (LVIC BREF) is ongoing. In three to four years, the process is expected to result in the definition of BAT-associated performance and emission limits, which form the basis for our European plants’ environmental permits. Yara has a project structure with nominated resources actively contributing to the EU Commission’s work. The project follows up and ensures that our plants are in timely compliance with the new requirements. Revision of the underlying Industrial Emissions Directive is similarly managed.

**EU Fertilizing Products Regulation**
The new EU Fertilizing Products Regulation (FPR) came into effect in 2022, bringing major changes to the production, marketing, and labelling of fertilizer products. We implemented the new regulation through a centrally organized project and achieved timely compliance with no notable disturbances to sales or distribution of our products. We do not foresee any further disturbances to the product range or deliveries.

Global development of climate regulations
Yara is monitoring the development of climate and green energy related regulations in all relevant jurisdictions, including the Inflation Reduction Act in the US, to understand the impact and opportunities for us.

» Yara’s position paper on Fit for 55
Preparing for forthcoming regulations
In 2022, we mapped the policy positions of relevant industry associations to ensure alignment with the Paris Agreement and Yara’s position and strategy. Where necessary, we voiced our positions and concerns to influence associations’ advocacy work.

We started the implementation of a global HESQ Legal Compliance Tool and standardized global processes to strengthen monitoring of existing and upcoming regulations, in order to assess compliance and to initiate timely actions when needed.

Performance

Environmental compliance
Yara follows environmental compliance with a set of KPIs and performance indicators that highlight the severity of the consequences as well as the potential severity of breaches identified. Performance is reported and analyzed on a monthly basis.

High severity environmental incidents
Yara has a KPI with a target of zero high severity environmental incidents, defined as causing wide or long-term damage to the environment.

This target was reached as none of the incidents had such a magnitude. Porsgrunn, Norway, received a fine due to nitric acid leakage to the sea. The environmental impact of the leakage was, however, considered minor.

Legal claims for environmental breaches
Yara is party to several lawsuits related to laws and regulations in various jurisdictions arising from the conduct of our business. With regards to matters arising from or including environmental disputes, five cases were open in 2022. While acknowledging the uncertainties of litigation, Yara is of the opinion that based on the information currently available, these matters will be solved without material adverse effect.

France, Montoir
The Yara Montoir plant in France continues to face challenges with the authorities’ requirements related to the site’s wastewater discharges and dust emissions. The current permit requirements are tighter than the Best Available Technology defined for such processes. Regardless of improvements and investments made over many years and the limited impact of the site’s air emissions and water discharges on the environment, the authorities are imposing sanctions on the site. While Yara Montoir is studying the feasibility of emerging, novel technologies to abate these emissions, the site has also appealed the decisions and requested an annulment of the authorities’ orders.

France, Ambes
The Yara Ambes site in France continues to take action to prevent the nuisance caused by noise to a neighbor. While the site operates within a noise management plan under current noise limits, the physical location of the site by a riverbank seems to reinforce the nuisance. An

Environmental compliance
Zero high severity environmental incidents in 2022.

High severity environmental incidents, including spills, are incidents assessed as having severe environmental harm with long-lasting loss of natural value or restricted use of the area, or major environmental harm with extensive clean up, remediation, or compensation measures.

Socio-economic compliance
Zero major severity socio-economic cases in 2022.

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 total, fines of USD 523,000 have been registered for 2022 for laws and regulations other than environmental ones.
external investigator is studying the situation and the site conducts frequent monitoring to identify and mitigate the root causes.

Brazil
Yara was part of three ongoing cases in Brazil in 2022 that included environmental claims.

Due to the acquisition of Adubos Trevo from the Trevisa Group in the year 2000, Yara has, together with other companies related to the Trevisa Group, been cited in a lawsuit related to mine and lead industry activities performed by the former company. Yara has, together with the other companies, been sued by an association representing approximately 1,300 potential victims in two separate lawsuits. The lawsuits are related to mine and lead industry activities performed by the company Plumbum in two cities in Bahia state, Brazil. Plumbum was formerly part of the Trevisa Group. The lawsuits were filed in 2011 and 2021 but are still in the initial phase. Yara denies liability for any potential damage caused by the activities of Plumbum.

Yara is a party in a lawsuit in Barcarena, Brazil, related to potential soil and groundwater pollution caused by the industrial operators in the industrial district since the 1970’s. Yara operated a fertilizer blending unit there from 2013 to 2019. The case is currently suspended.

A case is open in the Superior Court related to an accidental release of sulphuric acid to the sea during a ship unloading in 1998 in a Rio Grande port. Several companies are involved, including Yara as a current owner of Adubos Trevo, who was one of the purchasers of the cargo. Yara denies liability as Yara or Adubos Trevo was neither involved in the unloading of the cargo nor were Yara or Adubos Trevo an owner or operator of the unloading terminal. Related lawsuits have been filed by local fishermen claiming compensation for loss of revenues since fishing activities were suspended for a period of time.

Fines and sanctions
No significant monetary fines or other sanctions related to environmental performance were issued to Yara units in 2022. In 2022, five sites received monetary penalties from authorities due to environmental breaches: Porsgrunn, Norway for a nitric acid leakage to the sea, Cubatão sites in Brazil for exceedance of air emissions and Rio Grande, Brazil for nutrient content in the discharge of rainwater. In addition, Sluiskil, the Netherlands, was fined for not reaching the energy reduction targets set by the Dutch government for the national climate goals. However, the penalties altogether remained below the significance threshold of USD 5 million. The root causes of all sanctions have been investigated and corrective measures have been or are being implemented to ensure future compliance.

Environmental compliance issues
In 2022, 20 production sites reported compliance issues related to permit and/or regulatory breaches. Root causes have been investigated, and corrective measures have been implemented or are being addressed as a part of the Environmental Roadmap Program.

The Environmental Roadmap Program aims to reduce the environmental footprint of our major production plants by establishing performance improvement roadmaps and focusing on compliance with regulations. The roadmaps cover significant environmental aspects, including water management, emissions to air, discharges and effluents, waste management, odor, and noise. All major production sites are now covered by the program. A portfolio of short- and long-term projects has been identified and included in our Capital Value Process. The majority of these projects are related to air emissions and water effluents, but also to groundwater, soil, accidental emissions and discharges, noise, and water intensity.

Environmental compliance indicators, by number

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<thead>
<tr>
<th>Indicator</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>High severity environmental incidents</td>
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<td>0</td>
</tr>
<tr>
<td>Legal claims for environmental breaches (open cases at year-end)</td>
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<td>4</td>
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<tr>
<td>Sites receiving fines or sanctions for environmental issues</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Sites reporting environmental compliance issues</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Environmental grievances received from stakeholders</td>
<td>59</td>
<td>100</td>
</tr>
</tbody>
</table>
Environmental grievances received from stakeholders

All complaints and concerns received from neighbors and other stakeholders are reported and investigated. In 2022, 13 Yara sites received a total of 59 stakeholder complaints and concerns related to their environmental performance. This was a significant reduction compared to reported complaints and concerns in 2021 (100 cases). Most of the complaints were related to noise nuisance and short-term exposure to the smell of ammonia.

The way forward

Environmental Roadmap Program:
In 2023, we will continue to review the project portfolio monthly to ensure that the projects are proceeding as planned.

HESQ Legal Compliance Tool:
In 2023, we will pilot and start global roll-out of the tool to major production sites and other Yara units.

Corporate Sustainable Reporting Directive (CSRD):
We are preparing to disclose in accordance with CSRD for the fiscal year 2024. We are establishing workstreams to assess readiness and preparing for the necessary data collection processes to be executed.
SUSTAINABILITY GOVERNANCE

How we work

Sustainability is fully embedded and integrated into Yara’s strategy and decision-making processes. We firmly believe that our knowledge and purpose give us a competitive advantage in a market that values sustainability, and our Sustainability Governance structure ensures that we meet our commitments and deliver on our ambition of Growing a Nature-Positive Food Future.
Integrated and holistic governance

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

Governing bodies

The President and CEO is responsible for the day-to-day management of the company. The Board of Directors has set out rules to govern the work and procedure of the President and CEO. The Board of Directors has the overarching responsibility for the management of the company. The Board consists of shareholder representatives elected by the General Meeting and employee representatives. The General Meeting ranks at the top of Yara’s corporate governance structure. The Board’s role and responsibility is also to supervise the company’s day-to-day management and the company’s activities in general. Yara’s Board has established written instructions for its work. These instructions are set out in the Rules of Procedure for the Board of Yara International ASA available at yara.com. The President and CEO’s further delegation of authority is defined in Yara’s Steering System. The Steering System is also one of the pillars of Yara’s internal control system and provides all employees with an overview of the prevailing corporate policies and procedures.

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 consulting the Board. The instructions for management and the function descriptions and authorizations issued to each member of management reflect the joint obligation of these members to safeguard the overall interests of Yara and to protect Yara’s financial position, and to enable delivery on the vision, mission, values, and ambition statement.

Yara continues to work to improve diversity. At year-end 2022, Yara’s Group Executive Board consisted of nine members: five were women and three were non-Norwegians (Spanish, French, and Brazilian-British).

In accordance with PLC § 6-35 (2), Yara and its employees have agreed to not have a corporate assembly and the company is thus required to include four employee-elected members on the Board. 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 responsibility for the day-to-day management has been delegated to the CEO as set out in the Rules of Procedure for the CEO, approved by the Board. The Board’s work follows an annual plan, and it conducts a yearly evaluation of its work and procedures.

The Yara Board consists of eight members, of whom four are elected by the shareholders, and four are elected by and among the employees. Four Board members are women, and four are men. At year-end 2022, women represented 25.6% of Yara’s employees in permanent positions and held 28.9% of the senior management positions.

Sustainability integration
The Board and the CEO’s procedures include responsibility for non-financial topics of material importance, covering the company’s significant stakeholders and materiality, and the short-, mid- and long-term time horizons. The Board’s Audit and Sustainability Committee oversees sustainability risks, governance, and disclosures.

Yara has co-organized the responsibilities both for financial and non-financial performance under the CFO area, in line with the objectives of integrated reporting. Yara measures its performance with KPIs under the themes of People, Planet, Prosperity, and Governance, ensuring a holistic approach.

Yara’s VP Sustainability Governance reports to the CFO and supervises the integrated and sustainability reporting processes. This work is closely aligned with the Corporate Performance and Risk functions, which oversee key parameters on strategy implementation, risk processes, and other core business processes such as the business planning process. The materiality process was updated in 2021, linking materiality to the strategy and risk functions, as well as anchoring the outcomes with the CFO and Board Audit and Sustainability Committee.

The VP Sustainability Governance is also responsible for systematically embedding ESG topics into the core business processes, such as the Capital Value Process (CVP), which integrates non-financial perspectives. An internal carbon price shall be applied to significant projects, which are defined as projects with costs above USD 25 million and which subsequently require CEO or Board approval. Yara has established a Sustainability Network, which ensures that Yara has clearly established accountability, processes, and systems in place for our ESG policies and non-financial performance indicators. The network includes representatives from our corporate functions: Sustainability Governance, Health, Environment, Safety and Quality (HESQ), Human Resources, Ethics and Compliance, Communications and Brand, Energy & Environment, and Enterprise Risk Management, as well as Procurement.
Governance model

Yara has established integrated and holistic performance management and governance. The Board Audit and Sustainability Committee reinforces Board oversight. Executives’ short-term incentives plan is tied to performance on People, Planet, and Prosperity indicators. The risk management process incorporates material sustainability issues, and lastly, the Sustainability Network connects corporate and operational functions all together. This model below illustrates the sustainability workflows.

Preparatory bodies for the Board

- **Board Audit and Sustainability Committee (BASC):** Supervision of accounts, reporting, internal control, risk management, and external and internal audits
- **HR Committee:** CEO performance and compensation, executive remunerations, People Strategy and employment matters
- **Compliance Committee:** Ethics and compliance matters
- **Board of Directors:** Supervision of management and activities, strategic direction, oversight of materially important topics. Signs Integrated Report
- **President and CEO:** Day-to-day corporate management, performance on materially important topics.
- **Nomination Committee:** Board member, Chair and Deputy Chair nominations, Board competencies and diversity
- **Corporate HESQ Committee:** HESQ strategy and improvement programs

Group Executive Board

- **Chief Financial Officer:** Financial and non-financial performance. Approves Sustainability Report
- **Sustainability Governance:** Integrated reporting and materiality processes, ESG topics, and Climate and Nature roadmap
- **Human Resources:** Execution of People Strategy
- **Digitalization:** Enable digital technology and solutions
- **Strategy:** Integrated strategy development and execution
- **HESQ:** HESQ strategy, best practices, and performance
- **Operational units:** Performance reporting Regional Units, Agoro Carbon Alliance, Clean Ammonia, Industrial Solutions
- **Global Optimization and Procurement:** Sustainability in supply chains
- **Project and Technology:** In-house GHG emissions, and new, sustainable solutions

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  - Nomination Committee
  - Corporate HESQ Committee

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  - Global Optimization and Procurement
  - Project and Technology
Embedding sustainability in our policies and processes

Sustainability is integrated into Yara’s core business principles and processes that govern how we strategize, make decisions, and conduct our everyday work.

All of our corporate codes, policies, procedures, processes, and guidelines are published on our intranet and in the Yara Steering System (YSS), our digital solution for managing global steering documents. It serves as a repository for all global mandatory requirements, supporting our organization in fulfilling the tasks required to achieve strategic goals and business objectives.

This section provides an overview of corporate policies and other steering documents related to our sustainability governance as well as the management of individual topics. The selection of documents also reflects information commonly requested by our stakeholders. We have published key, overarching policies on our website. Others are of an internal character and published internally only.
Our guiding policies and principles

| Our DNA |
|-------------------|-------------------|-------------------|
| **Our mission** | **Our vision** | **Our values** |
| Responsibly feed the world and protect the planet | A collaborative society; a world without hunger; a planet respected | Ambition, Curiosity, Collaboration, and Accountability |

### Development and strategy

- **Internal Audit**
  - Audit and Sustainability Committee Charter
- **Corporate Development and Strategy**
  - Strategy Development
- **CFO area**
  - Enterprise Risk Management process
  - Capital Value Process
  - Stakeholder Management Procedure
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- **Sustainability Governance**
  - Sustainability Governance Policy
  - Integrated Reporting Process
- **Ethics and Compliance**
  - Yara’s Code of Conduct
  - Yara’s Ethics and Compliance Commitment
- **Tax**
  - Tax Policy
- **Corporate Affairs and Global Initiatives**
  - Corporate Affairs Policy
- **HESQ**
  - HESQ Policy
  - Safe by Choice Process

### Operations

- **Product Management**
  - Product Quality Policy
  - Product Quality Process
- **People Process and Digitalization**
  - Performance and Development Process
  - Work-Life Balance and Well-Being Framework
  - Employee Travel Process
  - Recruitment Policy
  - Compensation Policy
  - Onboarding, Crossboarding and Offboarding Policy
  - Mobility Policy
  - Disciplinary Policy
  - Guidelines for Organizational Restructuring of Yara
  - Employee Data Privacy Notice
- **Information and Cyber Security**
  - Governance of Information and Cyber Security Policy
  - Information Handling Procedure
- **Legal and Compliance**
  - Contract Management Policy
  - Yara Data Privacy Policy for Customer Data
  - Yara Data Privacy Policy for Employee Data
  - Yara Data Retention and Deletion Procedure
- **Brand and Corporate Positioning**
  - Sponsorship Process

### Supply chain

- **Ethics and Compliance**
  - Code of Conduct for Yara’s Business Partners
  - Integrity Due Diligence Procedure
- **Procurement**
  - Procurement Policy
  - Sustainable Procurement Policy
  - Supplier Compliance Management Process

### Controls

- **Internal Control**
  - Internal Control over Financial and Non-Financial Reporting Policy
- **Internal Audit**
  - Internal Audit Charter
  - Internal Audit Process
- **Ethics and Compliance**
  - Internal Investigation Procedure
Development and strategy

Internal Audit
Our Audit and Sustainability Committee Charter outlines the responsibilities and authority of Yara’s Board Audit and Sustainability Committee (BASC). The charter was established in 2020, as we co-organized our financial and extra-financial reporting and renamed the Board’s Audit Committee as the Board Audit and Sustainability Committee (BASC).

Corporate Development and Strategy
Our Strategy Development Process drives Yara’s corporate strategy process and the communication of its outcomes, with the overall purpose of maximizing our value creation within defined risk levels. It mandates annual strategic updates based on analyses of our strategic environment, performance on strategic KPIs, and key strategic risks.

CFO area
Yara’s global Enterprise Risk Management Process aims to identify, assess, and manage risk factors that could affect the performance of any parts of the company’s operation. To this end, we have implemented a continuous and systematic process to mitigate potential damages and losses, and to capitalize on business opportunities.

Yara’s Board of Directors is responsible for defining risk appetite for all main risk categories relevant to the company. The Board oversees the risk management process and carries out annual reviews of the company’s most important risk categories and internal control arrangements.

The objective of the Capital Value Process (CVP) is to maximize value creation and manage risk by ensuring better decision-making and management of new projects. HESQ and compliance requirements, the latter particularly related to anti-corruption and human rights, are integral parts of the decision-making process. Investments above USD 25 million also require the involvement of Sustainability Governance. Furthermore, all projects that may have an impact of over 1,000 tonnes CO₂ shall be verified by Energy & Environment.

The CVP applies to all projects that imply evident changes to Yara’s long-term commitments or resources and consequently require formal authorization to proceed. This includes projects related to plant, property, and equipment (technical), mining, mergers and acquisition, divestments, joint venture and partnerships, resource intensive change, IT/digital, and venture capital investments. The CVP is approved by Yara’s Chief Financial Officer.

The Stakeholder Management Procedure ensures a structured approach to the way we manage relations with our stakeholders. It is accompanied by our Stakeholder Management Guideline, which provides further guidance and examples on how to carry out the steps described in the procedure, serving as a practical tool for anyone involved in stakeholder engagement processes.

Carbon pricing
Projects with costs above USD 25 million, which subsequently require CEO or Board approval, shall explicitly comment on ESG considerations in the decision gate memorandum. Specifically, they shall at least describe the current state and expected development of carbon pricing in the jurisdiction, along with a calculation of financial impacts based on Yara’s internal carbon price which also covers N₂O emission. When relevant, the project shall present an analysis of its impact on Yara’s climate targets.
Operations

Sustainability Governance
The purpose of our Sustainability Governance Policy is to integrate sustainability into core processes to manage risks and identify opportunities. It outlines the responsibilities of key governing bodies, including Yara’s Board of Directors, Group Executive Board, the Strategy and Risk functions, our Regional Boards, as well as our Sustainability Network, and describes our commitment to integrated reporting and conducting regular materiality assessments.

The Sustainability Governance Policy is complemented by our Integrated Reporting Process, which sets out responsibilities for our reporting on material topics and outlines how we ensure proper quality assurance, conduct materiality assessments, and respond to ESG benchmarking.

Ethics and Compliance
Yara’s Code of Conduct outlines our position and commitments on a wide range of topics and defines the key principles of our compliance program. The code includes our anti-corruption policies as well as a clear commitment to respecting internationally recognized human rights throughout our own operations, as well as in our supply chain.

The Code of Conduct applies to all Yara employees, whether full-time, part-time, permanent, or temporary, and to the members of the Board of Directors. It is available in 18 languages to make our message clear across our operations worldwide.

The Code of Conduct is reviewed and published on an annual basis. The current version includes an update to our safety commitment, clarification of situations which may lead to conflicts of interest and requirements for handling inside information and safeguarding Yara electronic devices.

Tax
Yara’s Tax Policy stipulates that we shall behave ethically and act in accordance with the values and principles detailed out in Yara’s Code of Conduct when dealing with taxes. We are committed to managing tax transparently. Our 2022 Country-by-Country Report is available on our Investor Relations annual reporting web pages.

Corporate Affairs and Global Initiatives
The Corporate Affairs Policy regulates our advocacy positioning of Yara’s interests vis-a-vis key stakeholders. Its purpose is to ensure that we stay on top of regulatory and policy change, provide proper and consistent advice to policy makers, build Yara’s reputation, and serve the best interests of our company and society. All activities under this policy shall be compliant with Yara’s Code of Conduct.

Our Code of Conduct outlines our stance on a range of topics, including:

- **Corruption**: Yara has zero tolerance for any form of corruption.
- **Fraud**: Yara has zero tolerance for fraud.
- **Working with our business partners**: Yara is firmly committed to being part of a responsible and sustainable value chain and will continue to work on improving our systems and processes to achieve this objective.
- **Human and labor rights**: Yara has made a commitment to respecting internationally recognized human rights throughout our own operations, as well as in our supply chain.
- **People**: At Yara we are committed to creating an equal opportunity workplace, free from discrimination and harassment.
- **Data privacy**: Yara is committed to protecting the privacy of its employees, customers, suppliers, and business partners.
- **Fair competition**: Yara has a strict policy of conducting business in full compliance with all applicable competition laws and regulations.
- **Environment**: As a global company, we acknowledge our impact and take responsibility to protect the environment in our operations and throughout the life cycle of our products.
- **Sustainability, our stakeholders, and our community**: In delivering on our mission and vision, Yara has an ambition of being at the forefront of developing sustainable agricultural practices and of becoming more sustainable in our own operations, and in our supply chain.
Embedding our commitments

Yara’s Compliance Program is instrumental in embedding our commitments and policies across our activities. Its purpose is to prevent corruption and human rights abuses and to promote a culture in which these matters are difficult to perpetrate.

The Compliance Program consists of 15 key elements, each of them helping to advance responsible business conduct throughout our organization. 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.

The 15 elements of Yara’s Compliance Program

1. Culture and tone at the top: Strong, explicit, and visible support and commitment to our policies from Yara’s directors and senior management.

2. Risk management/periodic risk-based review: Clearly defined responsibilities and authorities for the implementation and oversight of the Compliance Program and codes, policies, and procedures, and for reporting to independent monitoring bodies.

3. Compliance organization / proper oversight, independence and resources: Clearly defined responsibilities and authorities for the implementation and oversight of the Compliance Program and codes, policies, and procedures, and for reporting to independent monitoring bodies.

4. Compliance policies and procedures: Clearly articulated and visible corporate policies against violations of anti-corruption legislation.

5. Internal controls over key compliance areas (finance and accounting): A system of internal controls, designed to ensure the maintenance of fair and accurate books, records, and accounts in key compliance areas.

6. Training and communication: Effective communication of and training in codes and relevant policies and procedures of employees at all levels and, where appropriate, business partners.

7. Compliance consultation and guidance: A system for providing guidance and advice to employees at all levels and, where necessary, business partners, on complying with our codes, policies, and procedures.

8. Whistleblowing / internal reporting: Mechanisms for reporting concerns and protecting reporters, including our Ethics Hotline, available 24/7 in 60 languages for both employees and external stakeholders.

9. Investigation: A clearly defined and reliable process for responding to, investigating, and documenting allegations of violations of our codes.

10. Incentives and discipline: Mechanisms designed to enforce the Compliance Program, incentivize ethical business conduct, and discipline violations.

11. Business partner due diligence: Clearly defined responsibilities and authorities for the implementation and oversight of the Compliance Program and codes, policies, and procedures, and for reporting to independent monitoring bodies.


13. Post-acquisition implementation of Compliance Program: Proper communication, training, and reviews to ensure that our codes, policies, and procedures apply as quickly as possible to newly acquired businesses or entities.


15. Monitoring and testing effectiveness of compliance program implementation: Periodic reviews and testing to evaluate and improve the effectiveness of the Compliance Program.
HESQ
Yara launched a revised HESQ Policy in December 2021 in alignment with the nature-positive ambition. The policy serves as the framework for setting HESQ objectives, targets, and ways of working. The policy has been adopted by the Group Executive Board and applies to all employees and all activities. The policy is communicated via the Yara Steering System to all Yara employees, and it is publicly available at our website: HESQ Policy.

Through the HESQ Policy we commit to excellent HESQ performance, thus safeguarding our license to operate. The policy outlines Yara’s direction and intentions for HESQ performance and governance and provides a framework for HESQ objectives and targets.

The HESQ Policy is complemented by a comprehensive suite of policies and procedures governing our work to protect people and the planet. In 2022 we have continued implementing Safe by Choice as an integrated HESQ way of working to strengthen our management and improve our performance across all HESQ objectives. Safe by Choice is our company-wide journey to develop a value-based and sustainable HESQ culture to reach our ultimate goals of Zero Harm:

- We work towards Zero Injuries
- We work towards safe and sustainable use of chemicals
- We work towards Zero Harm to the Environment
- We protect our people, environment, assets, and reputation from internal and external threats and potential emergencies

The Safe by Choice way of working ensures that we are all aware of our role and expectations, we have necessary skills and competencies in place, and that we work in a standardized way. We commit to conduct our business responsibly in conformance with applicable laws and regulations, as well as with Yara’s policies and procedures. In addition, we continuously work to improve our standards and management system.

We hold a company-wide Multisite Certificate for the three management standards ISO 9001 (Quality management), ISO 14001 (Environmental management), and ISO 45001 (Occupational Health & Safety) covering Yara units in all regions, and are implementing ISO 50001 (Energy management) to large production sites. We have implemented third-party certified product stewardship systems to all our fertilizer operations, from product development to sourcing, production, supply chain, and sales – globally.

HESQ maintains a comprehensive set of process descriptions, procedures, operational standards, and guidance documents, which are applied by all units in Yara. Compliance with these requirements as well as KPIs introduced thereby are continuously monitored and reviewed by central, regional, and local KPIs and management reviews. These procedures cover all HESQ areas, including:

- Environmental management, covering management of environmental impacts, risks, liabilities, and compliance obligations throughout Yara’s value chain
- Occupational Health and Safety management, including safety principles and Golden Rules. Main focus is currently on physical and psychosocial work environment as well as prevention of incidents with high potential consequences.
- Security management, covering physical and personnel security but also security in the supply chain and, for example, during business travels
- Product Stewardship and Product Quality management, covering Product Safety, Product Security, and Product Quality, and related procedures such as our Recall Procedure and product quality in the supply chain. The objective of our Product Quality Policy is to optimize value creation for both Yara and our customers. It is complemented by our Product Quality Process, which establishes a framework for ensuring consistent and high-performing products by taking quality into consideration throughout the product life cycle, from selection of raw materials to application in the field for industrial uses.
- Process Safety management, covering procedures for identification of process safety hazards and management of related risks.
- Chemical compliance and Controlling of Chemical Risk related to people and the environment. This area also covers registration of chemical substances, classification of products, and provision of safety data sheets in all countries where our products are manufactured or sold. The Recall Process ensures a consistent approach to the withdrawal or removal of a Yara product from the supply chain in case of quality issues or any other identified issue that has an impact on safety, quality, security, or health.
- In addition, we maintain a set of common HESQ management system procedures such as HESQ risk assessment, performance monitoring, management of incidents and emergencies, HESQ audits, and management reviews.
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People, Process, and Digitalization

Our Performance and Development Process outlines the way we systematically manage the performance and development of employees to increase attraction, performance, engagement, and retention, and to ensure that all employees are treated in a fair, transparent, and consistent way. We carry out performance management job appraisal processes for all employees in annual cycles, with formal discussions as well as more frequent follow-ups. Managers are also expected to provide frequent feedback, coaching, and support to employees.

Yara’s Work-Life Balance and Well-Being Framework was launched in 2020 and clarifies our position on, among other things, flexible working hours, meeting times, frequent travelling, and family caregiver leave. It also includes a commitment to support mental health and well-being, a suggested company-wide standard for parental leave and for conversations to be had before, during, and after an employee goes on extended leave.

Ensuring work-life balance is also embedded in our Employee Travel Process. As a general principle, meetings and seminars shall be held virtually where this is possible and appropriate. Employee travels are used only when necessary for business reasons and each travel should be evaluated by the employees, in line with their work-life balance and the business requirements.

The purpose of our Recruitment Policy is to hire the right talent at the right time at the right place at the right cost, while ensuring a fair process and equal opportunities, and promoting diversity. The policy sets out roles and responsibilities to ensure that we treat all candidates professionally and expose internal career opportunities by making open positions visible to all employees.

Yara has a comprehensive Compensation Policy to ensure attraction, reward, and quality across all positions in the company, and to handle terminations consistently. While individual remuneration will vary based on specific factors such as country, employment market conditions, position, performance, and competence, we are committed to paying employees fairly, regardless of personal beliefs or any individual characteristics. To this end, we have installed a salary review process, in which HR staff support line managers in setting fair and unbiased salary increases and perform a global analysis to ensure that salary movements are aligned with the fair pay approach.

Our Onboarding, Cross boarding, and Offboarding Policy informs our employees, hiring manager, and HR about the mandatory elements of these processes. It also provides recommendations for all phases of onboarding, cross boarding, and offboarding processes to ensure that new hires are successfully integrated and that exiting employees leave with the feeling of having been treated in a professional way. It is supplemented by a Mobility Policy, which establishes responsibilities when employees are recruited and transferred to Yara companies in other countries. It also outlines our policies on compensation and reward packages in such cases.

The purpose of our Disciplinary Policy is to describe the disciplinary actions that shall be taken when a Yara employee or a contractor or consultant is in breach of our codes, policies, procedures or processes, or applicable national or local laws. This policy stipulates that a thorough investigation and assessment of evidence shall be conducted when there is suspicion of misconduct.

We have also adopted Guidelines for Organizational Restructuring at Yara developed by Yara’s European Works Council (EWC), as part of the Yara Improvement Program. It outlines recommendations for the downsizing or closure of operations and defines termination of employees as the final option.

Yara is committed to protecting the personal data of our employees. In our Employee Data Privacy Notice we inform our employees on how we collect, store, and use their personal data, as well as explain their rights regarding the processing of this data.

Information and cyber security

Our Governance of Information and Cyber Security Policy regulates our information security work, which focuses on cyber security, communication security, protection of printed information, and prevention against corporate espionage. It is supplemented by our Information Handling Procedure, which describes general procedures for the handling of all types of information created, received, and transmitted as part of Yara’s business activities.

Legal and Compliance

Our Contract Management Policy sets the minimum requirements for contract management at Yara. We are committed to protecting the privacy and personal data of our colleagues, customers, suppliers, and business partners. Our Data Privacy Policy for Customer,
Supplier and Business Partner Data, the Data Privacy Policy for Employee Data, and related procedures and guidelines, set out the framework for how personal data shall be processed at Yara. They are supplemented by our Data Retention and Deletion Procedure outlining requirements for establishing data retention periods, for retaining information in active storage, and for deleting personal data at the conclusion of retention periods.

Brand and Corporate Positioning
Yara’s Sponsorship Process outlines requirements for sponsorship activities at the corporate, global/regional, and plant and local level. It also stipulates that all activities sponsored by Yara must be in line with our mission and vision. In addition, we also sponsor institutions or activities that support our history or the economic development of the regions we serve.
Managing compliance in the supply chain

In 2022, we continued our work on developing and implementing policies and procedures that, along with our well-established Integrity Due Diligence procedure, will further strengthen our management of sustainability and compliance in the supply chain.

We are committed to conducting due diligence in accordance with the concepts and principles set forth in the UN Guiding Principles for Business and Human Rights and OECD Guidelines for Responsible Business Conduct. In 2022 we prepared for the Norwegian Transparency Act, which came into effect 1 July 2022. This chapter outlines our key policies and procedures for the management of sustainability and compliance in the supply chain.

Code of Conduct for Yara’s Business Partners
One of Yara’s goals is to develop relationships with business partners that share similar corporate values as Yara and conduct their business in an ethical and compliant manner. The Code of Conduct for Yara’s Business Partners (BPCoC) is the Yara policy that outlines the legal obligations and the integrity standards Yara expects its business partners to uphold. The BPCoC considers the same internationally recognized and endorsed standards for human rights, business ethics, and labor conditions as our Code of Conduct.

We expect our 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 BPCoC is communicated to all business partners, which includes both suppliers and customers, and shall be included in all agreements and contracts.

The BPCoC is reviewed periodically and was subject to updates and review by an external partner in 2021. The current BPCoC has been divided into two distinct parts; the obligations comprise non-negotiable standards and regulations and the expectations outline desired standards Yara expects its business partners to implement.

Integrity Due Diligence
Integrity Due Diligence (IDD) is the procedure for ensuring and monitoring the integrity of potential, new, and existing business partners. The procedure requires an initial assessment of all potential new business partners against established risk factors. If a risk is identified, the business partner is required to complete a self-assessment and declaration covering key business information and topics such as anti-corruption, human rights, labor rights, health and safety, and the environment. If said risk factors remain unacceptable, we may require an in-depth IDD, training, or other efforts.

As part of the IDD Procedure, we continuously monitor compliance in our supply chain by screening business partners against sanctions, watchlists, and compliance databases. On a risk-basis, certain business partners are selected for additional follow-up, including in-depth due diligence work, training and other communication efforts. Depending on the matter, this is conducted by either the Ethics and Compliance Department, other expert functions, or the business line.

Sustainable Procurement Policy
In 2022, we established our Sustainable Procurement Policy which is communicated to all suppliers. The policy describes how we want to cooperate with our suppliers to create transparency in our suppliers’ business sustainability performance and how to improve their performance, and with that our own performance, where required. This policy guides our global Procurement organization and the implementation of a Sustainable Procurement Program at Yara. The program was developed in 2022 and is planned to be fully rolled-out in our global Procurement organization in 2023. The end-to-end planning and execution of procurement at Yara is regulated by our overarching Procurement Policy.

Supplier Compliance Management Process
The objective of the Supplier Compliance Management Process is to describe what the minimum requirements for supplier pre-qualification, qualification, and supplier compliance monitoring are, including supplier auditing, where relevant, following a risk-based approach. This is a global process that allows cross-functional Procurement teams to cover increasing internal and external due diligence and reporting requirements, in addition to existing or upcoming legislation. The process document was finalized in 2022, its implementation plan will run during the course of 2023.
Controls

Internal Control
Our Internal Control over Financial and Non-Financial Reporting Policy outlines the scope of internal control over financial and non-financial reporting. Its objective is to provide reasonable assurance about the timeliness and reliability of Yara’s reporting in accordance with applicable laws and regulations. From 2020 onwards, the scope has included internal control over material non-financial measures that are used externally as part of the integrated reporting journey.

Internal Audit
The Internal Audit Charter sets out the mandate for internal audit at Yara as an independent, objective assurance and consulting activity designed to add value and improve our operations. The internal audit activity supports Yara in accomplishing its objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance processes. The charter is supplemented by the Internal Audit Process, which translates the International Standards for the Professional Practice of Internal Auditing into Yara Internal Risk and Audit’s (YIRA) purpose and way of working and describes the audit processes employed by YIRA.

Ethics and Compliance
The purpose of our Internal Investigation Procedure is to establish a standardized, structured, and effective process for investigations, whether they are based on notifications from internal or external reporters or initiated independently by the Ethics and Compliance Department based on observations, a mandate, media articles, or findings from Yara Internal Risk and Audit. The procedure specifies that all investigations shall be concluded with utmost confidentiality, observing the rights and guaranteed protections of all parties involved, within a reasonable period of time, and with continuous feedback to the reporter.
Grievance mechanisms and communication channels

We encourage and value open and direct communication among colleagues as well as with other stakeholders and the communities in which we operate.

Creating forums for dialogue and accessible mechanisms for reporting grievances are fundamental components of our Stakeholder Management Procedure. It requires that business units and project teams conduct regular stakeholder analyses and tailor ways to engage effectively with groups that are impacted by our activities.

Encouraging dialogue between colleagues
Facilitating communication among coworkers across the organization is a prerequisite for the business culture we seek to establish at Yara. We have placed efforts on establishing accessible channels that ensure open and direct communication at all levels of the organization, enabling employees to engage and participate actively on strategic forward-facing discussions regarding the organization’s present and future. In addition, these channels are leveraged to share specialized knowledge among coworkers, communicate professional milestones, and voice concerns to management without fear of reprisal.

The implementation of these company-wide channels, have enabled Yara to identify areas of improvement, process grievances, and remediate negative impacts for employees. These practices generate internal interaction and discussion and directly facilitate organizational improvement. We will continue to monitor and enhance the efficacy of each procedure, with the aim of ensuring cohesion across our regions and locations.

Employee – Manager relations
We believe that dialogue, respect, and discussion are necessary for establishing and maintaining good relations between management and employees. Employees who have work-related concerns are encouraged and able to communicate with their immediate supervisors, without fear of consequences. At Yara, we believe that the best way to communicate key messages and improve the employee experience is through team efforts based on the trust built between managers and the employees under their supervision. This is why all leaders are the very first point of contact for most concerns raised by employees.

Whenever an employee and a supervisor are unable to resolve an issue directly, Yara provides employees with tools and transparent procedures for elevating grievances to the next level of management, HR, or Ethics and Compliance.

We make every effort to settle issues on a fair and equitable basis. Yara has zero tolerance for retaliation, regardless of which reporting channel is used, and has implemented a Retaliation Monitoring Program to this end.

Impact mitigation
Yara’s core functions, alongside all the regional units, work together on a permanent basis, to identify, prevent, mitigate, and remediate, as far as reasonably possible, potential or actual adverse impacts that our operations may have on people and the planet. Further strengthening our management of sustainability and compliance in the supply chain will enable us to better reach our objectives.

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### Yara’s communication channels

<table>
<thead>
<tr>
<th>Channel</th>
<th>Participation/Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yara Voice</strong></td>
<td>82% participation among all employees</td>
</tr>
<tr>
<td><strong>Peakon</strong></td>
<td>79% ≈ participation among 4,000 employees</td>
</tr>
<tr>
<td><strong>Global townhall meetings</strong></td>
<td>85% outreach to employees with access to a computer or smartphone</td>
</tr>
<tr>
<td><strong>Performance and development discussions</strong></td>
<td>100% of employees are eligible</td>
</tr>
<tr>
<td><strong>NSC Safety Barometer Survey</strong></td>
<td>&gt;80% participation among all employees</td>
</tr>
<tr>
<td><strong>Intranet and internal social media</strong></td>
<td>85% outreach to employees with access to a computer or smartphone</td>
</tr>
</tbody>
</table>

**Yara Voice**

Annual global engagement and enablement survey that actively seeks employee feedback on our progress in topics like DEI, career and training, strategy, and others. Feedback from the survey is used to prioritize actions that enhance our employees’ experiences.

**Peakon**

Frequent employee surveys – pulse checks – that enable consistent feedback on matters such as autonomy, freedom of opinion, employee well-being, management, and organizational support. Line managers and HR are able to connect with anonymous responders, and feedback is followed up locally with the assistance of HR.

**Global townhall meetings**

Periodic digital meeting in which our CEO invites all employees to participate and submit any questions they may have, anonymously or otherwise.

**NSC Safety Barometer Survey**

The National Safety Council (NSC) is a global benchmark for safety culture used by thousands of organizations and businesses. The survey measures meaningful elements of safety excellence to establish a baseline on leadership engagement, supervisory support, employee participation, safety programs and activities, as well as safety and organizational climate.

**Performance and development discussions**

Regular job appraisals promoting face-to-face discussions between individual employees and their line manager on performance, development plans, and any other pertinent issue the employee wants to raise.

**Intranet and internal social media**

Our two platforms, Pulse and Yammer, enable employees to participate in a variety of groups, networks, and discussions across a wide range of topics. Additionally they are utilized for mass communications on which employees’ can comment, contact authors or request more information.
Our commitment to the environment
To prevent environmental damage near communities in which we operate, Yara proactively seeks to understand the risks and to reduce exposure to operational, environmental, and financial damage as much as practically possible. We consider environmental impacts and risks in all relevant business processes, including strategy, business planning, business transactions, and capital value processes. Through our stringent processes to investigate hazardous conditions, near misses and incidents, and to be aware of environmental conditions and liabilities in our operations, we can take adequate and timely measures and provide for foreseen costs to protect the soil, groundwater, and ecosystems.

Green lines, complaint handling, and grievances
The majority of Yara’s production sites have established green lines or similar communication channels for neighbours and other stakeholders to raise questions, suggestions, or grievances. Our local production units have systems in place to register and follow up complaints and other feedback from external stakeholders. Grievances related to our environmental performance are reported monthly to our central Corporate HESQ function. The SVP HESQ presents findings, concerns, and achievements to Yara’s Management and Board of Directors twice a year.

Yara has in place product quality complaint handling systems adapted to the various business models and operations throughout the world. Our country websites feature contact forms for anyone who wants to raise questions or provide feedback.

Yara is expanding and strengthening its social media presence to engage in a more direct manner with local communities that are increasing their use of social media to connect, raise issues, and share knowledge and good practices.

In view of our commitment to upholding internationally recognized policies and principles, Yara seeks to observe responsible business conduct recommendations on access to remedy provided in the UN Guiding Principles and the OECD Guidelines for Multinational Enterprises. In reference to the aforementioned, throughout 2023, Yara will continue to monitor and analyse our established grievance channels to improve the effectiveness of local channels through which our stakeholders can raise concerns about Yara’s potential or actual negative impacts on them.

Remediation efforts
Yara provides for or cooperates in the remediation of negative impacts from our activities as far as reasonably possible, given our level of impact and influence. With communities in close proximity to our operations, we aim to proactively engage in early dialogue in order to provide them with opportunity to voice their views and concerns to prevent or mitigate potential or adverse impacts. We seek to establish two-way dialogue with our stakeholders, and address third-party feedback or relevant findings thoroughly and to the greatest extent possible.

Remediation efforts are presented throughout the Performance sections and in Key concerns raised, page 32.

See notable examples of remediation efforts:

- Protection of Ecosystems, page 105
- Regulatory Changes and Compliance, page 146
- Actions from the human rights impact assessment conducted in Brazil in 2021, page 46 of the Integrated Report
Whistleblowing
We expect employees and business partners to report suspected violations of our Code of Conduct, other 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 24/7 in 60 languages, or contact the Ethics and Compliance Department directly.

Yara has an obligation to investigate all reports made, and all notifications will be treated confidentially. Our Internal Investigation Procedure describes a standardized, structured, and effective process for investigations, one that protects involved parties and ensures a consistent approach to the handling of allegations. Independence and competence are observed when determining the investigative party for the investigation of notifications. Adjustments to the whistleblowing process will be made according to the EU Whistleblower Directive in relevant jurisdictions. Retaliation against a reporter is not tolerated.

» Retaliation Monitoring Program, page 137
» Ethics Day, page 143
Mining operations

Premium compound fertilizers are an important segment of our product portfolio. In addition to nitrogen, the two primary nutrients in compound fertilizers are phosphorous (P) and potash (K).

At year-end 2022, Yara had one mining site in active operation: the phosphate rock mine in Siilinjärvi, Finland. Divestment of the Salitre site in Brazil was completed in February 2022, and the Dallol project phase site in Ethiopia was sold in July 2022. In addition, Yara carries out after-care monitoring in the closed Lagamar phosphate mine, Brazil.

At the corporate level, mining-specific topics are not assessed as material, per se. However, due to the operational mine in Siilinjärvi, Finland we implement the GRI Mining and Metals Sector Supplement to report in accordance with the GRI Standards. The disclosures in this section were identified as materially important specifically for our mine in Finland.

Divestment of mines in Salitre, Brazil and Dallol, Ethiopia

In August 2021, Yara signed a Share Purchase Agreement with EuroChem to sell the Salitre phosphate mining project in Brazil. The divestment was completed in February 2022.

The Dallol Potash mining project in the Afar region, Ethiopia, was a joint venture with Yara as the majority shareholder and chairing the joint venture board. In July 2022, Yara agreed to transfer full legal ownership interest in the project, together with all economic rights and all obligations and liabilities, to XLR Enterprises, which is one of the previous JV partners.

The divestments support Yara’s transformation by reallocating capital and risk appetite in the coming years towards Yara’s strategic focus areas: food solutions, premium products, and enabling the hydrogen economy.

Policies and commitments

Yara applies the same set of policies and standards to mining operations as for any other type of operations, in compliance with our Code of Conduct and other policies. We are committed to complying to all applicable laws, rules, and regulations in the countries in which we operate. For decision making we follow the strictest protocols, whether they are local or international laws and regulations, or our own policies and standards.

Our mine site is subject to the same policy implementation, internal audits, trainings, awareness building, and other procedures relating to the implementation and evaluation of performance, as all operational Yara sites. We monitor compliance and assess risks in order to fully adhere to changing and stricter laws and regulations and to engage with stakeholders to find new solutions that satisfy their needs. Furthermore, environmental and social impact assessments (ESIA) are conducted to evaluate the impact that mining operations have on local communities.

Preferably, we recruit the management and personnel locally. The freedom of association and the right to collective bargaining applies to all our operations, including mining. Generic closure plans are in place as part of the sites’ operational permits. To mitigate any negative impacts on local communities, we refine the closure plans for mines, where closure is pending.

Sustainable mining in Siilinjärvi, Finland

Our mine in Siilinjärvi is not located near protected areas or areas of high biodiversity, and does not have an obligation to prepare a biodiversity management plan. We, nonetheless, prepared one voluntarily in 2021 as a part of the national Sustainable Mining initiative.

No significant negative impacts on biodiversity, protected habitats, or endangered species have been identified nor reported as a consequence of our mining operations. On the contrary, the tailings areas are resting and nesting areas for birds, some of which are endangered species. Meadows, wetlands, and
deadwood areas have been formed in the tailings areas, providing suitable living environments for various species.

The Siilinjärvi mine biodiversity plan describes the flora and fauna in the area, biodiversity aspects, risk management, and the site’s goal with respect to biodiversity management, responsibilities, stakeholders/interested parties, actions, monitoring, and compensations. The plan applies operational and management principles necessary to protect the ecosystems, species, and habitats in the mining area, including e.g.:

- No net loss-principle in planning and commissioning of new land areas;
- Preservation of valuable biodiversity areas within the mining area;
- Sustainable Forestry principles at the forest areas of the mine;
- Combatting the threat of alien species.

In 2022, Yara started an environmental impact assessment (EIA) process in Siilinjärvi to prepare for the potential expansion of the mine area for the time period of 2035-2065. After preparation and stakeholder consultation of the EIA plan in 2022, the assessment work is now starting. Conclusions of the assessment are expected by the end of 2023. The stakeholders’ consultation brought valuable feedback, among others from the neighbourhood and impacted landowners.

Biggest concerns dealt with the expansion of deposits for overburden and rock. These concerns will be addressed during the impact assessment process.

Responsibilities and resources
As a consequence of the divestments, the mining-related Center of Expertise was moved to the Yara Europe region to be governed together with the Siilinjärvi mine. The resources needed to drive sustainable mining with a focus on safety, environment, cost through operational and capital efficiency, and contributing to the long-term security of mineral supply to Yara’s production facilities and markets, are now centralized together with the remaining active mine.
Yara’s mission is to responsibly feed the world and protect the planet. We strive for diligent and transparent sustainability reporting, and in order to ensure that we report on what matters, we have embraced the concept of double materiality.
Report scope and details

We continue to improve our disclosure and transparency on ESG topics, in line with developments in reporting guidelines and our stakeholders’ expectations, and to prepare for the EU Corporate Sustainability Reporting Directive. We have applied the Global Reporting Initiative (GRI) framework in our reporting since 2007 and were early adopters of GRI Universal Standards, which took effect in January 2023.

Reporting developments
For the reporting year 2022, new and notable developments in our reporting include:

- **Materiality**
  Through the 2022 materiality update, we deepened our approach to double materiality and strengthened the link between our stakeholder engagement and prioritizations. Certain topics were merged to clarify reporting, and two topics were moved from the tier 2 to the tier 1 materiality level, see page 19. This included the topic Security, Emergency, and Data Privacy, and we subsequently introduced the GRI disclosure 418-1 to cover the topic of Customer Privacy.

- **Transparency Act**
  We have implemented the reporting requirements of the Norwegian Transparency Act, which entered into force on 1 July 2022. See page 60, Human Rights and Labor Practices.

- **EU taxonomy**
  We report for the first time on taxonomy alignment in the separate Yara EU Taxonomy Report 2022.

- **Climate risks**
  We disclose findings from our Climate Scenario analysis, which was based on the recommendations of the Task Force on Climate-related Financial Disclosures, on page 84 of our Integrated Report.

Production curtailments
Due to the high natural gas prices, we curtailed production at several of our production plants in 2022. These production curtailments affected our overall use of energy and resources, production volumes, and emissions. Hence, a number of our People and Planet performance metrics for 2022 have been impacted by this.

Restatements
Notifications of restatements of information from previous reports are provided where relevant in this report.

Contact point for questions regarding the report
Any queries about Yara’s sustainability performance or reporting can be directed to: sustainability.disclosures@yara.com
## Relevance of GRI topics

The table below describes how our material topics relate to the topics defined in the GRI reporting framework. 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 operates a mine.

<table>
<thead>
<tr>
<th>Yara material topics</th>
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<td>Diversity, Equity, and Inclusion</td>
<td>405 Diversity and equal opportunity, 406 Non-discrimination</td>
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<td>People, Culture, and Leadership</td>
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<td>Security, Emergency, and Data Privacy</td>
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<tr>
<td><strong>Planet</strong></td>
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<tr>
<td>Climate Change</td>
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<td>Energy</td>
<td>302 Energy</td>
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<td>Opportunities in Clean tech</td>
<td>305 Emissions</td>
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<td>Sustainable Farm Management and Regenerative Agriculture</td>
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<td>Protection of Ecosystems</td>
<td>304 Biodiversity</td>
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<td><strong>Prosperity</strong></td>
<td></td>
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<tr>
<td>Profitability</td>
<td></td>
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<tr>
<td>Sustainable Finance</td>
<td></td>
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<tr>
<td>Digitalization</td>
<td></td>
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<tr>
<td>Customer Management</td>
<td></td>
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<tr>
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<td>Sustainable Supply Chains</td>
<td>301 Materials, 308 Supplier environmental assessment</td>
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<td>Regulatory Changes and Compliance</td>
<td></td>
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<tr>
<td>Board Composition and Oversight</td>
<td></td>
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<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>Mining operations</td>
<td>202 Market presence, GRI Mining and Metals Sector Supplement</td>
</tr>
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</table>
Report boundaries
We follow the operational control approach in our non-financial reporting. We define operational control as a Yara employee being the CEO (or plant manager, or similar) of a company/plant.

Consolidated data within this report covers the reporting year 2022, 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 Integrated Report 2022, note 8.4 on page 228.

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 2022 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.
• Yara sold its stake in the Dallol mining project in Ethiopia in 2022. The Dallol site was not operational at the time of the divestment, and data from the site has not been included in the 2022 HESQ data.
• Divestment of the Salitre phosphate mining site in Brazil was completed in February 2022, thus Salitre data is no longer included in the People and Planned indicators for 2022.

List of companies which represent special cases as of year-end 2022:

<table>
<thead>
<tr>
<th>Company / plant</th>
<th>Operational control</th>
<th>Covered by HESQ policy</th>
<th>Covered by Code of Conduct</th>
<th>Reported in Labor performance</th>
<th>Reported in EBC performance</th>
<th>Reported in HESQ performance</th>
<th>Type of ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Freeport</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Joint operation</td>
</tr>
<tr>
<td>Pilbara Nitrates (TAN)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Joint operation</td>
</tr>
<tr>
<td>Tringen</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Joint operation</td>
</tr>
</tbody>
</table>
Yara seeks 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 Sustainability Report 2022. 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, for the fourth consecutive year, Yara has chosen a reasonable level of assurance on GHG and energy reporting analogously.

Deloitte is independent from Yara. Deloitte also audits Yara’s financial records. The external assurance is presented to Yara’s management team and overseen by the Board Audit and Sustainability Committee. The auditor’s report is presented in the next section of this report.
INDEPENDENT AUDITOR'S ASSURANCE REPORT ON YARA'S SUSTAINABILITY REPORTING FOR 2022

Independent Auditor's Assurance Report to the Management of Yara International ASA (the "Company") on Yara Sustainability Report 2022 ("the Report") and selected information in section Responsible Performance (Selected information) in the Yara Integrated Report 2022 for the period ended 31 December 2022.

Limited assurance conclusion

Based on our procedures described in this report, and evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information, as described below, has not been prepared, in all material respects, in accordance with the Applicable Criteria.

Scope of our work

Yara International ASA has engaged Deloitte AS to provide Independent Limited Assurance in accordance with International Standard on Assurance Engagements 3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000 (Revised), issued by the International Auditing and Assurance Standards Board ("IAASB") and our agreed terms of engagement.

The selected information in scope of our engagement, as presented in the Yara Integrated Report and the Yara Sustainability Report, for the period ended 31 December 2022 is as follows:

In relation to the Selected Information, as listen in the above table, the Selected Information needs to be read and understood together with the Applicable Criteria.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other. In respect of their services to clients, DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see www.deloitte.no to learn more.
Our responsibilities
We are responsible for:
• Planning and performing procedures to obtain sufficient appropriate evidence in order to express an independent limited and reasonable assurance conclusion on the Selected Information.
• Communicating matters that may be relevant to the Selected Information to the appropriate party including identified or suspected non-compliance with laws and regulations, fraud or suspected fraud, and bias in the preparation of the Selected Information.
• Reporting our conclusion in the form of an independent limited and reasonable Assurance Report to the Management.

Key procedures
We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the description of activities undertaken in respect of the Selected Information is likely to arise. The procedures we performed were based on our professional judgment. In carrying out our Limited assurance engagement on the description of activities undertaken in respect of the Selected Information, we performed the following procedures:
• Obtained an understanding of the Company’s systems and processes for the identification, processing and controls associated with the Selected information.
• Made inquiries with relevant personnel to obtain an understanding of the process for collecting and reporting the Selected Information, and relevant internal controls; but did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness.
• Performed limited substantive testing on a selective basis of the Applicable Criteria to test whether data has been appropriately measured, recorded, collated and reported.

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

Our responsibilities
We have undertaken a reasonable assurance engagement of the greenhouse gas (GHG) emission intensity included in Yara Sustainability Report 2022 on page 95 and Yara Integrated Report 2022 page 60 for the period ended 31 December 2022.

Reasonable assurance Opinion
In our opinion, the Company’s corporate indicator on greenhouse gas (GHG) emissions intensity is prepared, in all material respects, in accordance with the applicable criteria.

Management responsibilities
Management is responsible for the preparation of the greenhouse gas (GHG) emission intensity measured in tonne CO$_2$ equivalents per tonne N in the Company’s products, presented on page 94 in the Report. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the greenhouse gas (GHG) emission intensity information that is free from material misstatement, whether due to fraud or error.

Our responsibilities
Our responsibility is to express an opinion on the greenhouse gas (GHG) emission intensity based on the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements ("ISAE 3410"), issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain reasonable assurance about whether the GHG statement is free from material misstatement.

A reasonable assurance engagement in accordance with ISAE 3410 involves performing procedures to obtain evidence about the quantification of emissions and related information with regard to the greenhouse gas (GHG) emission intensity. The nature, timing and extent of procedures selected depend on the practitioner’s judgment, including the assessment of the risks of material misstatement, whether due to fraud or error, in the reporting of greenhouse gas (GHG) emission intensity. In making those risk assessments, we considered internal control relevant to the Company’s preparation of the greenhouse gas (GHG) emission intensity information. A reasonable assurance engagement also includes:
• Assessing the suitability in the circumstances of the Company’s use of applicable criteria, applied as explained in Yara Sustainability Report 2022 on page 95 as the basis for preparing the GHG statement;
• Evaluating the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by the Company; and
• Evaluating the overall presentation of the greenhouse gas (GHG) emission intensity information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and quality management
We are independent of the company as required by laws and regulations and the International Ethics Standards Board for Accountants’ Code of International Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We apply the International Standard on Quality Management (ISQM) 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, and accordingly, maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Oslo, 23 March 2023
Deloitte AS

Espen Johansen
State Authorised Public Accountant

Frank Dahl
Sustainability expert

(This document is signed electronically)
GRI content index

The GRI content index provides readers with guidance on how Yara has applied the GRI Standards.

The index lists indicators from this reporting framework and points to where the information can be found in:

SR: Yara Sustainability Report 2022
IR: Yara Integrated Report 2022
RR: Yara Executive Remuneration Report 2022

To learn how we cover TCFD reporting, the EU Guidelines on reporting climate-related information, and the WEF Stakeholder Capitalism reporting framework, please refer to our Integrated Report 2022, page 84–86.

Yara International ASA has reported in accordance with the GRI Standards for the period 1 January – 31 December 2022.

GRI 1 used: GRI 1: Foundation 2021

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GRI standard and disclosure

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Material topics

GRI 3: Material Topics 2021

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Economic

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