

# Environmental Social Governance

Report 2022

**VARO** 

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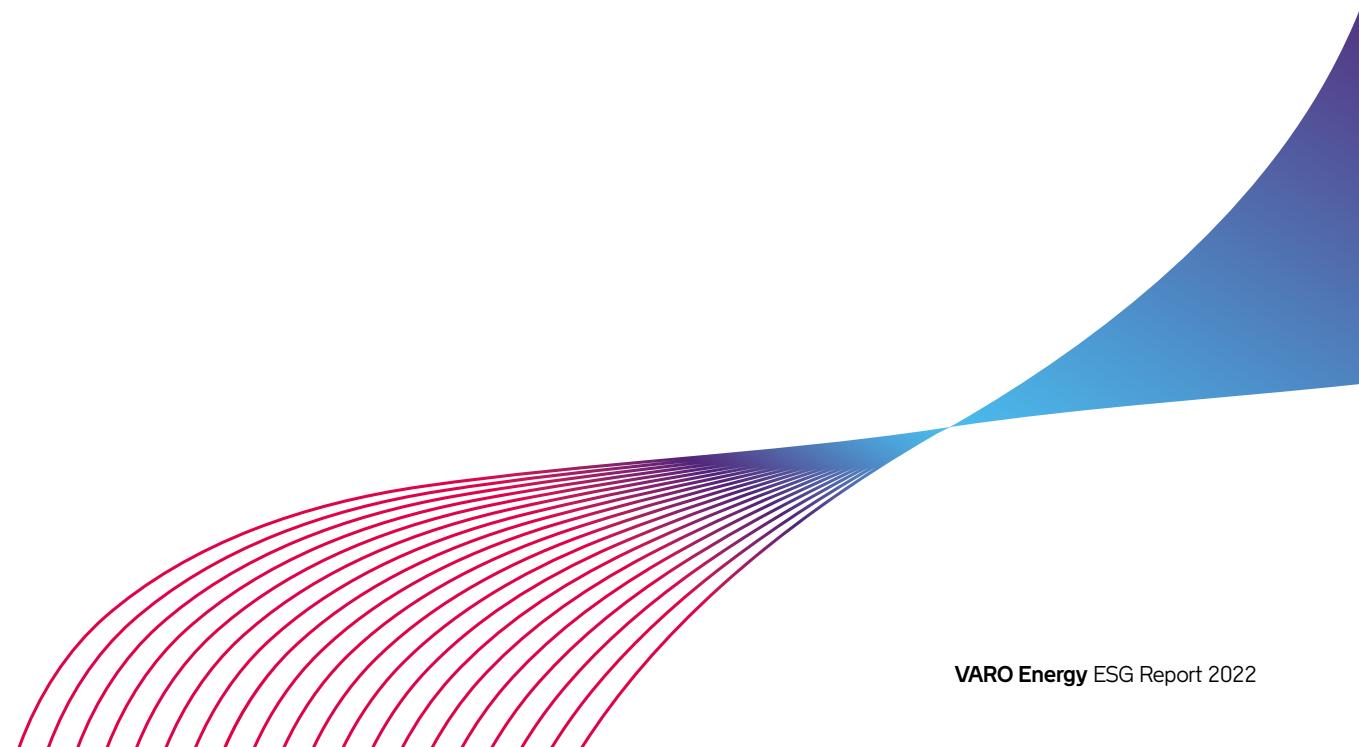
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Part I

# Empowering energy solutions



# How we are driving change

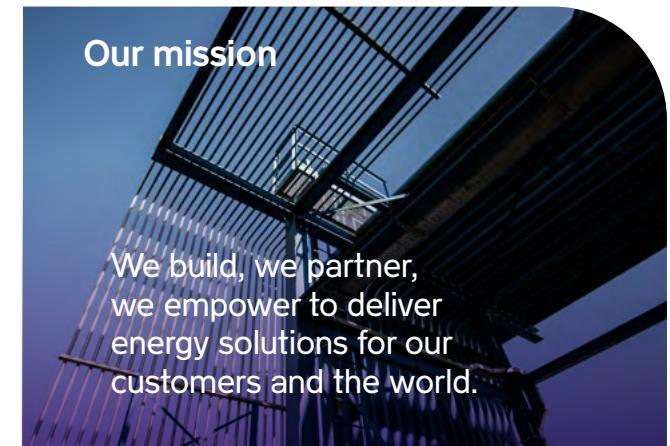
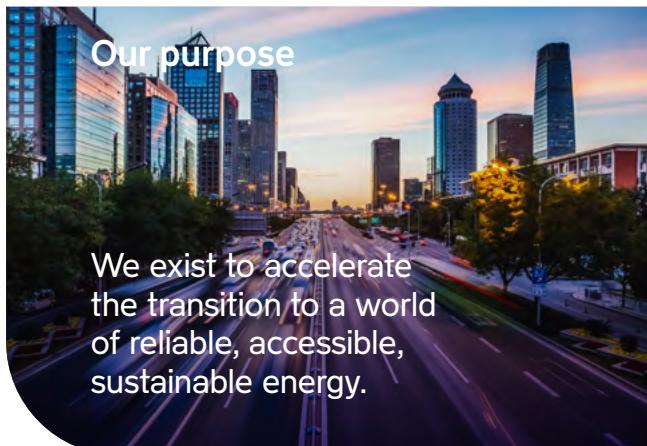
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“We exist to accelerate the journey of every business and at every stage of their energy transition. We are building an integrated portfolio of accessible, reliable and sustainable solutions to shape a more sustainable future, drive innovation and accelerate the energy transition.”

**Dev Sanyal, CEO**

# What we stand for

As a leading European energy company, we understand our responsibility to help society transition to secure, reliable, sustainable energies and to drive the pace of change.



# Letter from the CEO

2022 was an unprecedented year for the energy industry, with extraordinary macro and geopolitical challenges. It was also a transformational year for VARO – we delivered significant operational and business milestones, functionalised our organisation, brought in talented people with new capabilities to complement our already outstanding teams, announced our ONE VARO Transformation strategy with ESG embedded at its core, and published our first ESG Report.



**Dev Sanyal,**  
Chief Executive Officer

## Energy security under threat

The conflict in Ukraine is a tragic reminder of the importance of global energy security. The knock-on effects have reverberated around the world, with profound consequences.

After years of under-investment in conventional energies, weak investment in sustainable energies, and a lack of energy supply diversification, energy security is now a top priority in Europe. We face the short-term challenge of stabilisation and the long-term challenge of transformation as the world seeks secure, affordable and sustainable energy.

Throughout 2022, our teams worked tirelessly to maintain energy supplies to our customers. VARO's priority has been to continue to supply Europe with energy, while also investing in low-carbon energy that creates decarbonisation solutions to meet changing customer needs.

I strongly believe that we must innovate, invest and diversify to bring sustainable energy solutions at scale to the market. This is the most impactful antidote to mitigate the global challenges we face. The energy transition may lose public support and momentum if we fail to ensure secure energy that is both accessible and affordable. This belief is at the very essence of our purpose – to accelerate the transition to a world of reliable, accessible and sustainable energy – and of our twin-engine business strategy.

## VARO's strategy to promote the transition

VARO is well positioned to play a major role in the sustainable energy transition and we are transforming from being a supplier to becoming the energy transition partner of choice by helping our customers achieve their own transformation.

The energy crisis has underlined the relevance of VARO's business model. We announced our ONE VARO Transformation strategy in July 2022. At the core of our strategy are our 'twin-engines' for conventional and sustainable energies, which will enable us to ensure energy security for our customers while decarbonising their energy use at pace. Engine 1, our conventional energies business, is about ensuring energy security today while continuing to drive reliability, efficiency, decarbonisation and repurposing. Engine 2, our sustainable energies businesses, has five strategic growth pillars that we believe offer the most attractive low-carbon growth opportunities, which play to our strengths and create a sustainable energy portfolio that is fit for the evolving needs of our customers. To scale at pace, we plan to invest USD 3.5 billion between 2022 and 2026, with two thirds committed to sustainable energies. We will decarbonise our current conventional asset infrastructure and convert it into sustainable manufacturing and distribution

hubs over time. This represents a ‘just transition’ as we intend to transform our existing infrastructure and capabilities for the future.

## Achieving our commitments

We are undertaking a significant transformation and want to ensure we do it the right way. Our talented team is excited about the future possibilities that this energy transition brings – particularly as we build on our great progress in 2022. Environmental, social and governance (ESG) commitments are a fundamental part of our ONE VARO Transformation strategy. We have defined our baseline figures and are enhancing the transparency of our reporting, with actions and milestones to decarbonise our company. Our ambitions are centred around a bold and industry-leading target to achieve net-zero emissions by 2040, which lies at the core of our sustainability agenda. We aim to reduce our scope 1 and 2 emissions by 40% by 2030 and our scope 3 carbon intensity by 15% by 2030 compared to 2022.

We are committed to using more than two-thirds of renewable electricity in our operations by the end of 2023 and made some good progress with 100% renewable electricity sourced for our operations in Cressier in 2022. We announced the installation of the largest ground-mounted solar farm in Switzerland in Cressier during 2023 to generate renewable electricity. We have also made progress with our 125 MW

electrolyser project to produce green hydrogen at our Bayernoil manufacturing hub.

ESG is now being integrated into all our decision-making processes. For example, we have introduced internal carbon pricing, and integrated ESG and CO<sub>2</sub> target impacts in all our M&A and business development decisions. As we transform and invest in new sustainable energies, it is vital that we create high standards of accountability, and during 2022 we established a new ESG governance framework, including an ESG committee at the Executive Board level.

## Prioritising safety

Safety is a key priority at VARO. We are committed to ensuring everybody returns home safely to their families and loved ones every day – both physically and mentally. We continuously reinforce a safety culture throughout the organisation to prevent accidents at our sites and offices. Safety is a long journey that requires continuous improvement and sustained dedication. During 2022, we initiated a multi-year and company-wide plan to systematically improve Health, Safety, Security and Environment performance through our Operations Excellence Management System and to avoid potentially serious injuries and incidents.

## People with world-class expertise

To lead our business into the future, we need people with world-class expertise, proven track records and diversity of thought. The energy system must transform and diversify. This is a complex task that requires partnerships, collaboration, new skills and infrastructure, as well as the ability to navigate market complexity, including changing regulations.

Our people and culture, both guided by our values to embrace challenge, aim high, drive pace and solve together, will be essential for our continued success. I was delighted to welcome industry-leading talent to VARO in 2022, which further enhanced our existing teams. Together, we will accelerate our transformation.

To name a few, we were pleased to welcome: Fatemeh Rezazadeh, VP Hydrogen; Christian Cuenot, VP Biogas; Irene Franck, HR Director; Jens Bruno, ESG Director; Jessica Kaneli, Corporate Finance Director; and Jason Wood, Engineering and Project Director.

As we grow in different geographies and businesses, ensuring we promote positive working environments is vital. We are committed to providing equal opportunities for our diverse workforce.

As part of our Equity, Inclusion and

Diversity Policy, we have set new targets to increase female representation as we continue to increase diversity. In 2022, the representation of women in VARO’s senior leadership team increased from 14% to 16% and by June of this year to 18%. We still have more work to do, but I am convinced that we are heading in the right direction.

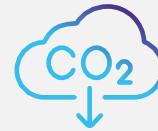
## Leading the energy transition

VARO has the clear ambition to be a leader in providing sustainable energy solutions and I believe that our culture and capabilities are the key ingredients to ensure we accelerate the energy transition. Over the coming year, we will further embed ESG into our organisation and focus on growing our business in line with our ESG targets. We will do this by relentlessly working on creating a safe working environment, decarbonising our business, diversifying our workforce and developing a quality supply chain. We face profound challenges in the energy system but I believe VARO has both the ambition and capabilities to drive our transformation for our people, customers and partners – as well as society at large.

# Our sustainability highlights in 2022



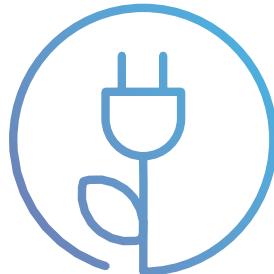
Net-zero  
emissions by  
**2040**



**2.3 million** tonnes  
CO<sub>2</sub> emissions saved  
by VARO customers  
by using VARO distributed  
biofuels (up 10% vs. 2021)



**~29 million GJ**  
of sustainable energy  
supplied to VARO's  
customers



**100%**  
electricity from renewable sources  
at our Cressier manufacturing hub

(electricity generated by on-site PV solar panels and  
sourced from the electricity grid with green certificates)



**97%** reliability  
of assets in 2022

**16%**  
women in senior  
positions at VARO



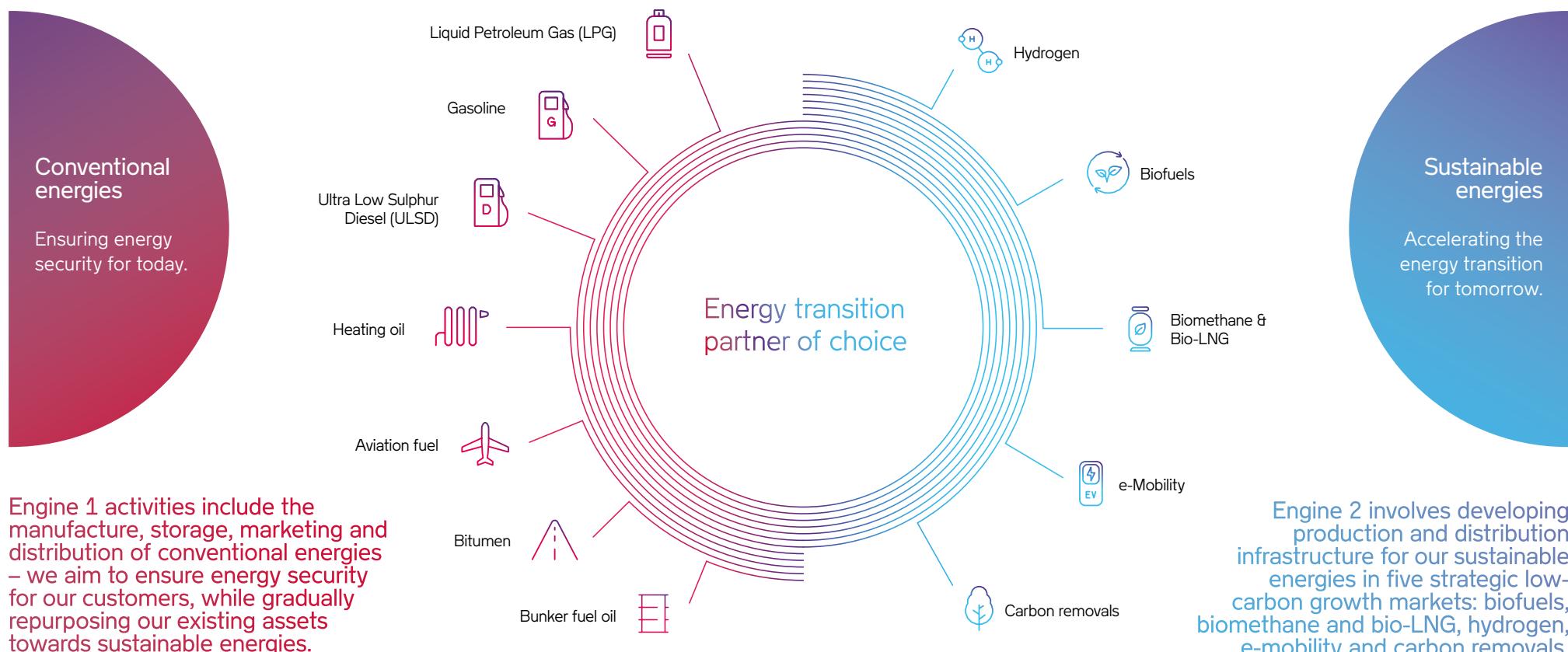
**<10%**  
difference in pay in Benelux and  
Germany (following Switzerland in 2021)

Increasing energy investment to  
**USD 3.5 billion**

between 2022 and 2026 – with  
at least two thirds invested in  
sustainable energies

# The ONE VARO Transformation strategy

Our ONE VARO Transformation strategy lays out our path to become the energy transition partner of choice, by providing customers with the sustainable and reliable energy solutions they need to achieve net-zero emissions.



Engine 1 activities include the manufacture, storage, marketing and distribution of conventional energies – we aim to ensure energy security for our customers, while gradually repurposing our existing assets towards sustainable energies.

Engine 2 involves developing production and distribution infrastructure for our sustainable energies in five strategic low-carbon growth markets: biofuels, biomethane and bio-LNG, hydrogen, e-mobility and carbon removals.

# VARO in a transitioning energy market

Over the past year, the world has learnt that energy security cannot be taken for granted, and that the energy transition and energy security need to combine to create a more sustainable future.

## Energy security, supply and affordability

VARO's priority in 2022 was to maintain energy supplies in Europe. But the world needs new and more diverse forms of energy to mitigate climate change and meet changing customer needs.

After years of under-investment in conventional energies and a lack of investment in sustainable energies – global primary energy capex fell 40% over the past decade from USD 1.3 trillion in 2014 to USD 0.8 trillion in 2021 – the Ukraine war sparked further supply disruption.

Today's energy markets face a complex interplay of soaring energy prices and unreliable energy. This has made energy security, affordability and sustainability top priorities in Europe. The market environment has highlighted the need for diverse forms of energy and multiple suppliers to avoid demand and supply asymmetry.

## The importance of energy in reducing carbon emissions

Throughout 2022, the impact of global climate change was evident from flooding in Asia and droughts in Africa, to heatwaves and wildfires in Europe and North America. Greenhouse gas emissions have risen again to record levels following the COVID-19 pandemic. Keeping the global temperature rise to below 1.5°C now requires a fall in emissions every year of the same magnitude as the pandemic brought about.

To reduce energy emissions, we need an orderly transition. We are committed to both ensuring energy security and accelerating this transition.

## Ensuring a 'just transition'

The energy transition is one of the most ambitious endeavours of our time. The need to provide credible, affordable and reliable energy source alternatives has never been greater. But we understand that transitions are often disruptive, and the shift towards cleaner, more affordable and more sustainable energy sources can have significant impacts on our employees, communities and stakeholders. Our focus extends beyond reducing carbon emissions as we strive to ensure that this transition is fair, inclusive and equitable for all – to achieve a just transition.

We are dedicated to supporting our employees through reskilling and upskilling programmes, ensuring that they can thrive in the evolving energy landscape. Promoting large-scale investment requires long-term and predictable policy and attractive financing solutions. We need to work together with policymakers to ensure regulation that develops at pace and supports new energies in a sustainable and cost-efficient manner. We are convinced that repurposing our assets, including converting them to be able to co-process renewable feedstock, is the right approach to create value for both VARO and society.

And we will engage with local communities to understand their needs and aspirations by working collaboratively to create new opportunities and mitigate any adverse effects of this transition.

## What the energy transition means for VARO

The transformation of the energy industry presents opportunities for VARO. We are accelerating the energy transition and empowering companies to achieve net-zero emissions by improving access to sustainable liquid biofuels, biomethane, green hydrogen, EV charging solutions and carbon removals.

We are committed to providing energy security, affordability and accelerating the transition. Our industry-leading net-zero target not only drives the ambitions for our operations, but also our commitment to supporting our customers to decarbonise.

Our ambitious ONE VARO Transformation strategy is using the opportunities of the energy transition to create value, and is based on protecting and promoting people, our values, our operations and our customer's energy needs. Only by investing, innovating and diversifying will we find sustainable energy solutions to tackle global challenges – by developing new business models, policies, skills and approaches. With our track record of building new businesses and customer solutions, executed by an entrepreneurial team, VARO is perfectly poised to be a leader in the transition.

# Sustainability milestones

## Launched our ONE VARO Transformation strategy and net-zero 2040 ambition

In July 2022, we launched our ONE VARO Transformation strategy that lays out our ambition to accelerate the energy transition. The strategy also provides the basis for our ambitious target to achieve net-zero emissions across the value chain by 2040.



## Sustainable Aviation Fuel agreement signed with Lufthansa

Our new Memorandum of Understanding with Lufthansa Group explores the production and supply of Sustainable Aviation Fuel (SAF). Our long-term target is to produce more than 500,000 tonnes of SAF each year. Read more on [page 45](#).

## Plans to develop one of the largest biogas facilities in Northern Europe

We acquired a major European biogas producer and will double capacity at our new Bio Energy Coevorden BV (BEC) biogas facility in the Netherlands to 650 GWh. This will boost Europe's energy security and accelerate the energy transition. Read more on [page 38](#).

## Support for Ukraine

We made monetary donations to organisations providing direct aid to people who fled Ukraine and donated to local refugee shops in Switzerland.

Read more on [page 60](#).



## Creating a more gender diverse company

Our new hiring plan to promote gender equality resulted in the recruitment of more than 50% women for strategic positions in 2022. Read more on [page 53](#).



## Strategic cooperation to source renewable crude tall oil

We signed a strategic agreement in June to purchase crude fatty acid produced from a by-product of softwood pulp to produce crude tall oil (CTO), which is an advanced biofuel. Read more on [page 32](#).

## End to sourcing all Russian crude

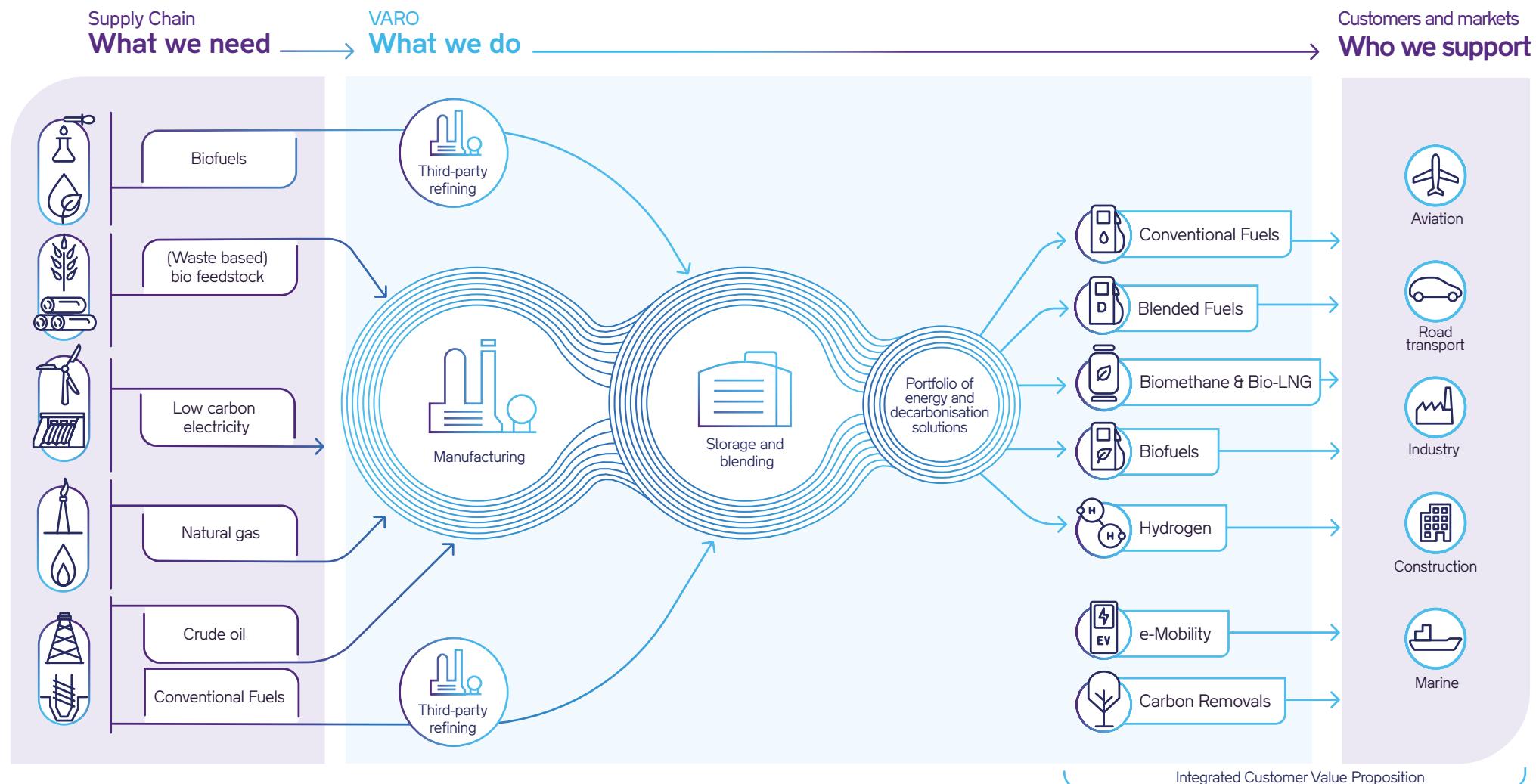
In March, we stopped buying Russian crude oil and found alternative suppliers. This involved diversifying our supply chain to ensure supply chain security.

## One-off payment to compensate employees for higher living costs

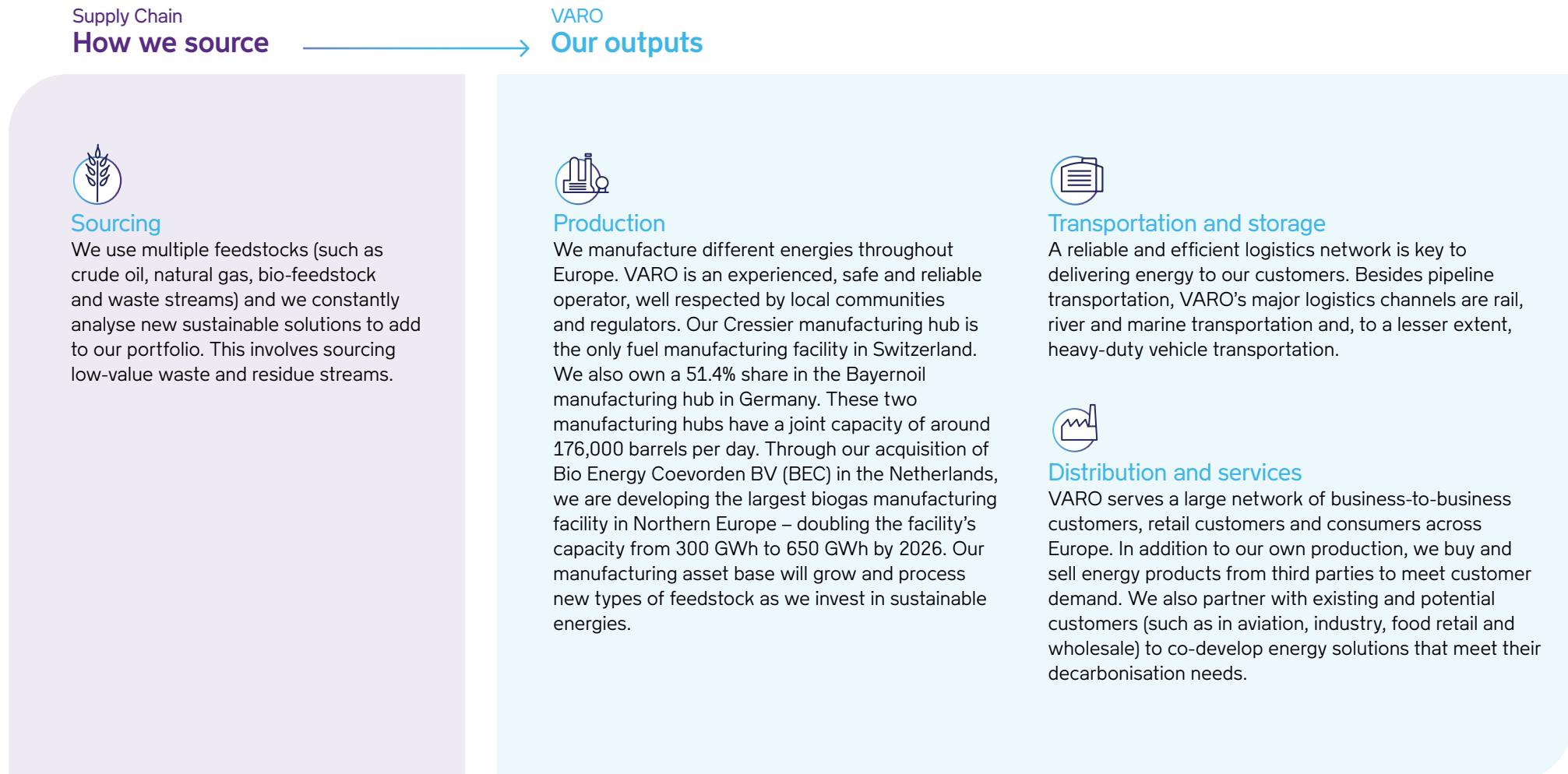
In October 2022, we made a one-off payment to help compensate our employees with lower salaries for higher living costs in society.

# VARO's business model

Our integrated business creates value by providing energy and decarbonisation solutions to our customers, so they can decarbonise and achieve their own emission targets.



## VARO's business model



# Our five strategic growth pillars

We are scaling up our key growth markets of biofuels, biomethane and bio-LNG, hydrogen, e-mobility and carbon removals.

“We are building on our deep expertise in complex market environments, bio-capabilities and logistics optimisation to support our customers’ transition to sustainable energies.”

**Theo Pannekeet**

EVP New Energies and Innovation

## Biomethane and bio-LNG

Biogas has an important role to play in providing customers in harder-to-abate sectors such as heavy-duty transportation and shipping with a cost-competitive and low-carbon fuel supply. It also plays an important role in the decarbonisation of the agricultural sector and contributes to the circular economy.



### Our biomethane and bio-LNG scale-up plan

- Establish strong biomethane plants, develop feedstock sourcing channels and transform our engineering capabilities into an integrated platform for further growth.
- Selective acquisitions while building industrial-scale greenfield projects.
- Monetisation focused on injection into the gas grid and bio-LNG.

## Hydrogen

We are leveraging our position as a significant hydrogen consumer with expertise in H<sub>2</sub>-handling to develop hydrogen production hubs. We expect additional green and biogenic production to lead to offtake opportunities for industry, heavy transport and synthetic fuels.



### Our hydrogen scale-up plan

- Phased approach with initial investment in a 125 MW electrolyser in Bayernoil (Germany).
- Serve industry, heavy transport customers and explore synthetic fuels.



## Our five strategic growth pillars

### e-mobility

VARO is already at the heart of the EV ecosystem. We aim to provide a turnkey charging solution for customers transitioning to e-mobility and are developing partnerships and acquisitions to create new businesses and enter new, less mature, markets. Our E-Flux business provides expertise and presence in the e-mobility ecosystem.



### Carbon removals

We want to be a fully integrated player with expertise in voluntary carbon removals through investing in forestry projects. VARO owns a 51% stake in SilviCarbon, a global leader in nature-based Carbon Dioxide Removals (CDRs).



### Biofuels

VARO is a leading biofuels marketing and distribution franchise in Europe, blending biofuels with conventional fuels. We have deep expertise with biofuels and bio-feedstock sourcing, blending and marketing.

We have pioneered the introduction of biofuels in our markets. VARO was the first company to introduce the material quantity of advanced bioethanol in Switzerland. In 2015, we invested in blending facilities to blend bioethanol (from waste) into gasoline and introduced the E5 grade. In 2016, we added biodiesel blending facilities to produce B7.



### Our biofuels scale-up plan

- Minimise the use of first generation (1G) biofuels from food, feed and crop-based feedstocks.
- Build manufacturing assets to produce advanced 2G biofuels from waste and advanced feedstocks (Annex IX A and B of the RED regulations), notably SAF and Hydrotreated Vegetable Oil (HVO).
- Build long-term partnerships to secure advanced feedstocks.

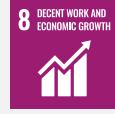
Read more about our approach, progress and future plans for our sustainable energy growth markets in the Sustainable product stewardship and innovation section on [pages 26-31](#).

# Our ESG approach

The ONE VARO Transformation strategy and ESG programme are inextricably linked – driving our commitment to accelerating the energy transition. We believe that sustainable practices are not only essential for creating long-term stakeholder value, but are also integral to our transformation strategy.

Our comprehensive sustainability framework and ESG targets permeate our entire business and are based on four key areas: our operations, our customers, our people, and our responsibility. By focusing on these areas, we aim to drive positive change, create long-term value, and contribute to a more sustainable future.

The main UN SDGs supported by our ESG strategy.



“We are redefining customer solutions to enable the transition to sustainable energies.”

**Ernestina Benedetto**  
EVP Strategy and Transformation

 Our operations

We have developed a comprehensive roadmap to decarbonise our operations and aim to reduce our GHG emissions (scopes 1 and 2) by 40%, compared to our 2022 baseline by 2030. We are working to achieve this by implementing a range of initiatives, including energy efficiency measures and using renewable electricity. Switching from grey to green hydrogen is another measure to reduce our carbon footprint. Building on our decarbonisation roadmap, we will work towards achieving our targets.

Health and safety in our operations is a priority and an essential part of our manufacturing strategy. Working in line with best practice means that we operate in a way that protects our people and the environment, while respecting our neighbours. We recognise that the well-being and safety of our employees, contractors, and surrounding local communities, are fundamental to our operations.

 Our customers

We are committed to delivering reliable, accessible and sustainable energy solutions that align with our customer's requirements while contributing to a more sustainable future. We promote the global energy transition by actively working with our customers to decarbonise their operations.

As part of the ONE VARO Transformation strategy, we are actively building our sustainable energies business, and investing and partnering to accelerate the energy transition. We collaborate closely with our customers to build a diverse and resilient portfolio of sustainable energies and solutions that will facilitate the transition to a low-carbon society. We expand our sustainable energies portfolio through strategic investments and partnerships, and champion innovative solutions that drive the shift to clean and sustainable energy sources.

Overall, our target is to reduce the carbon intensity of the products we sell by 15% by 2030, while supporting our customers in their decarbonisation journey. As we focus on delivering tangible progress during this pivotal decade, our ambition is to achieve net-zero emissions across our value chain by 2040.

 Our people

We value our employees as the driving force behind our success, and we are dedicated to their well-being, growth and development. Our ESG strategy encompasses a strong focus on our people – to ensure a diverse and inclusive workplace where everyone is respected, supported and offered equal opportunities. We invest in training and development programmes to enhance their skills and capabilities to foster a culture of continuous learning and professional growth. By prioritising the well-being and satisfaction of our employees, we strive to create a collaborative and high-performing workforce.

Diversity is a fundamental driver of our transformation agenda as we firmly believe that a diverse workforce brings a variety of perspectives, experiences and ideas that are essential for innovation and growth. Embracing diversity in all its forms – including gender, ethnicity, age and background – creates an inclusive environment where every individual feels valued, respected and empowered to contribute with their unique strengths.



By fostering diversity and non-discrimination, we tap into a rich pool of talent to unlock a wide range of insights and creative solutions that enable us to tackle complex challenges and drive meaningful change. Moreover, diversity enhances our ability to connect with a diverse customer base, understand their needs, and deliver products and services that cater to their diverse preferences. We recognise that building a diverse workforce and an inclusive culture is not only the right thing to do, but is also a strategic imperative that drives our transformation agenda forward – to position us for long-term success in an ever-evolving global landscape.

## Our responsibility

Our ESG strategy reflects our commitment to responsible and ethical practices. We believe in transparent and accountable governance, and align our decision-making processes with sustainable principles. To further reinforce our commitment, we have implemented measures to link executive pay to our ESG performance, which ensures alignment between our values and our actions.

We take a firm stance to ensure that we and our partners operate in full compliance with all laws and regulations. Measures to promote anti-corruption and anti-competitive behaviour are integral parts of our way of working.

The energy transition involves a large-scale societal transformation. To support this process at the pace needed to combat climate change, we need new public policy and technologies. We want to be a positive force in this respect and engage in dialogue and advocacy to create the frameworks that accelerate the transition.

We aim to contribute positively to the local societies we impact. In doing so, we aim for open dialogue with our stakeholders to ensure we understand how we impact them and their expectations.

We understand that our impact and responsibility extends into society and our value chain. For example, we work to ensure that decarbonising our feedstocks does not cause negative impact on other ESG topics, and that we focus on waste-based renewable feedstocks.

## CASE STUDY

### Carbon pricing to reduce our emissions

We have implemented an internal carbon pricing for our scope 1 and 2 emissions. Carbon pricing is included in business case evaluation for our M&A and business development projects as of 2023.

**Scope 1 emissions** ( $tCO_2$ ) are to be calculated for all projects as part of their investment case. Financial scope 1 impact will be priced with a centrally agreed carbon price.

For **scope 2 emissions**, the cost is calculated as the anticipated cost of acquiring renewable electricity to avoid an increase in scope 2 emissions.

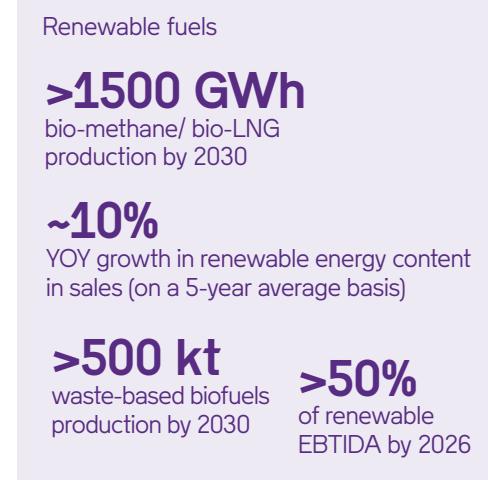


# Our commitments

## Our operations



## Our customers



\*Total Tier 1 Process Safety: Events per 200,000 work hours. \*\*Total Recordable Incidents per 200,000 work hours. \*\*\*Carbon intensity measured as gCO<sub>2</sub>e/MJ of energy content in marketed energy.

# Reducing our emissions – how we will get there

We aim to be the energy partner of choice for reliable, accessible and sustainable energy solutions and are taking action to reduce our own emissions, as well as supporting our customers on their paths to net zero.

We have set ambitious ESG targets. Our main driver is our push to achieve net-zero emissions by 2040 in scopes 1, 2 and 3, with intermediate milestones.

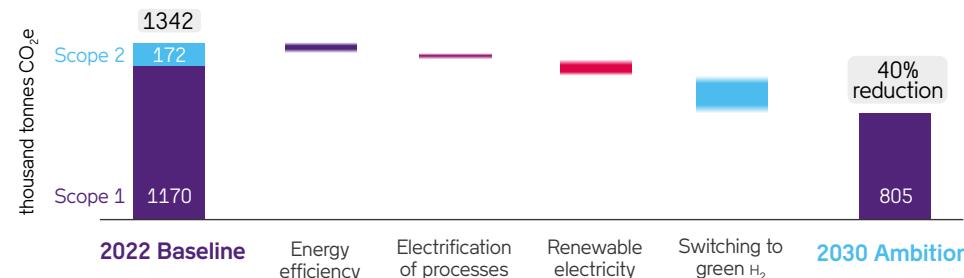
## Scope 1 and 2 target

**40% absolute reduction of scope 1 and scope 2 greenhouse gas emissions by 2030 (vs. 2022).**

## How we will do it:

Implement clearly defined decarbonisation initiatives in our manufacturing hubs, including energy conservation measures, sourcing and producing green electricity, and replacing grey hydrogen with green and waste-based biogenic hydrogen.

## VARO manufacturing scope 1 and 2 plan for 2030



## Scope 3 target

**15% reduction in scope 3 greenhouse gas emissions (GHG) intensity by 2030 (vs. 2022).** We define GHG intensity as the CO<sub>2</sub> emitted over our value chain in relation to the amount of energy we put on the market. It is measured as gCO<sub>2</sub>e/MJ.

## How we will do it:

Ensure security of supply while supporting customers during the energy transition towards sustainable energy solutions by growing our portfolio of biofuels, biomethane, bio-LNG, hydrogen, high-quality nature-based carbon removals and e-mobility solutions.

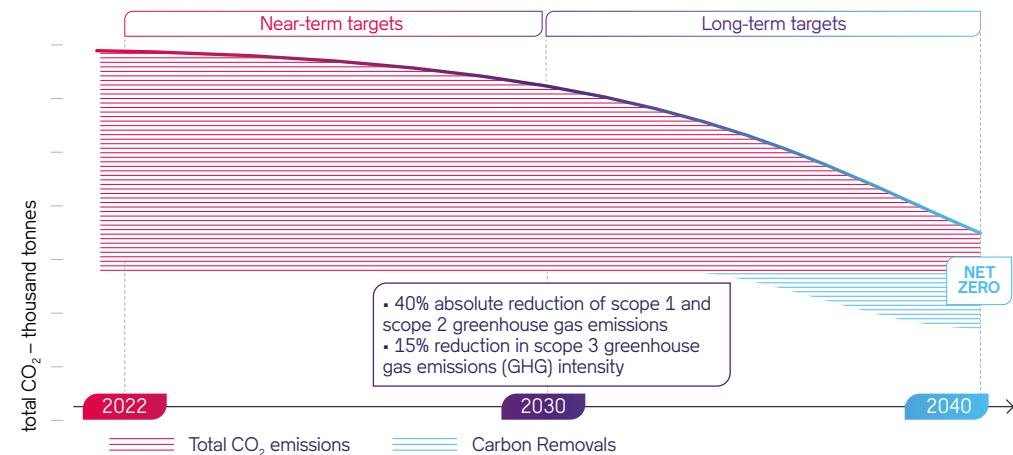
## 2040 net-zero target

Achieve full value chain net-zero emissions by 2040 by large scale emission reductions combined with CO<sub>2</sub> removals for residual emissions.

## How we will do it:

Leverage our ONE VARO Transformation strategy and decarbonisation efforts. This means further repurposing our manufacturing hubs, and providing future-proof sustainable energy solutions tailored to the future needs of customers – to drive strong growth in our sustainable energies product portfolio. We will continue decarbonisation projects to drive absolute emission reductions in our manufacturing and supply chain. Any remaining impact will be neutralised through internal or external CO<sub>2</sub> removal projects.

## VARO's net-zero 2040 pathway



The VARO net-zero pathway (illustrative) builds on clear targets for absolute reductions in our scope 1 and 2 emissions – combined with the scale up of our low-carbon offerings and the repurposing of our assets for conventional fuels. Carbon removals will be used to offset any remaining emissions to achieve net-zero emissions.

# Material sustainability topics

Our materiality assessment considers the most important topics related to our business activities, from an environmental, societal and economic point of view.

We have prioritised 23 topics of particular importance for VARO, based on the impact of our business and potential relevance for our stakeholders. We have mapped these topics based on input from our internal and external stakeholders.

## Our stakeholders and stakeholder engagement

Stakeholder engagement is a key part of our day-to-day business activities in the local communities in which we operate. As part of our materiality assessment, we identified our most important stakeholder categories based on their importance to our business and our impact on them.

Stakeholder category	Focus of engagement	Form of engagement
<b>Employees</b>	Health and safety, professional development, equal opportunities and salaries.	Training, internal initiatives, group and one-to-one meetings, networks, internal communication and surveys.
<b>Investors and banks</b>	Financial performance, competitive business, cost efficiency, reputation and licence to operate.	Regular communication and cooperation in the development of the VARO ESG strategy.
<b>Partners and suppliers</b>	Business continuity, long-term cooperation, reliability and trust.	Strategic partnerships with suppliers and business partners, and cooperation with associations and networks.
<b>Customers</b>	Reliable product supplies, product safety and quality, and more sustainable product solutions.	Customer services to ensure customer needs are met, and strategic cooperation with the providers of sustainable products and services.
<b>Membership organisations</b>	Collaboration to overcome challenges in the energy industry.	Participation in various associations and membership institutions.
<b>NGOs</b>	Sustainable business conduct and performance.	Communication with local NGOs on specific topics that may impact communities or the environment.
<b>Local authorities and communities</b>	Regulation compliance, minimising negative impact and local socio-economic contribution.	Communication and dialogue with local communities and the authorities on topics and initiatives that affect them.

# Our materiality assessment process

We conducted our materiality assessment with senior management, employees, stakeholders and our shareholders, representing our Supervisory Board, to analyse the most relevant topics for the energy industry and our value chain.

## VARO's materiality matrix



We consolidated the results from 21 stakeholders interviews and 358 employee survey responses to assign a weight to each of our 23 material topics.

### We then mapped material topics on a matrix with two axes:

- importance for stakeholders
- economic, environmental and social impact

Our senior management team used the results of the materiality matrix to inform our ESG strategy, which focuses on managing the performance of and reducing negative impacts related to these material topics, as well as amplifying their positive benefits.

At the top right of our materiality matrix are our most material topics:

- health and safety
- sustainable energies
- GHG emissions
- employee satisfaction and development
- sustainability reporting
- energy efficiency of operations
- equity, diversion and inclusion

## Our work in 2023 and beyond

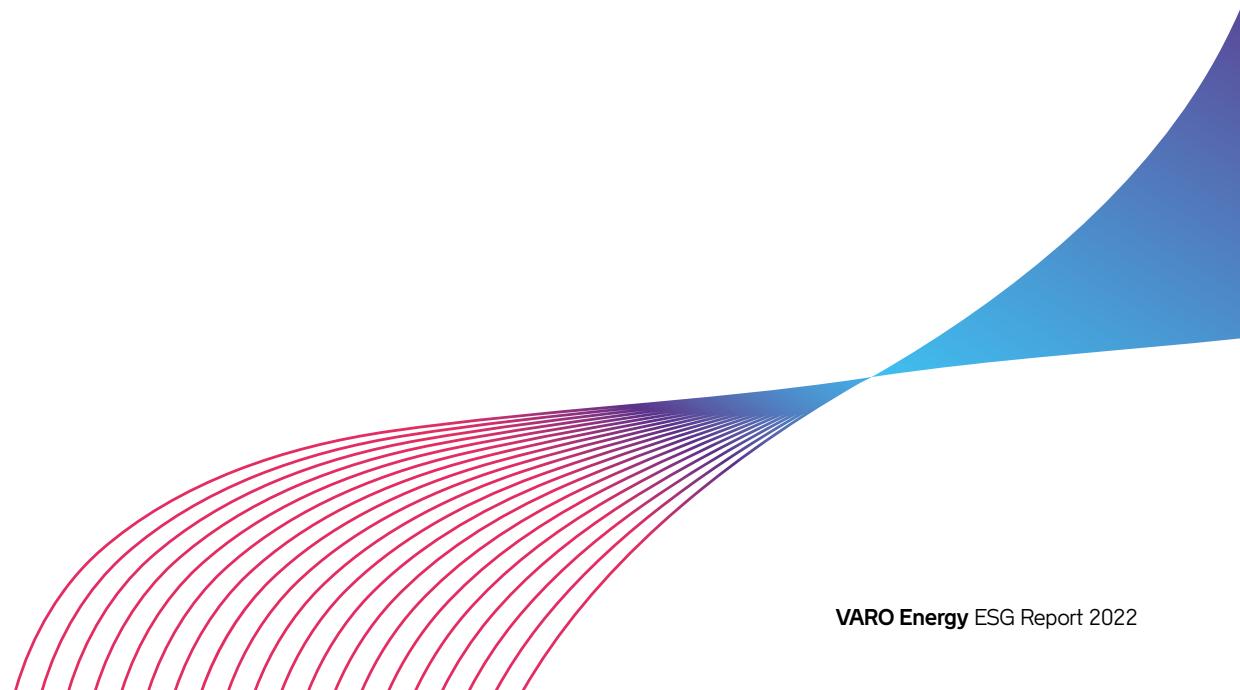
We continuously engage with our stakeholders to ensure our ESG strategy and targets are relevant. In upcoming materiality assessments, we will implement the concept of 'double materiality' to align with the latest reporting standards, including the mandatory ESG reporting requirements under the EU Corporate Sustainability Reporting Directive (CSRD). We will assess the materiality of the sustainability topics related to our industry from two perspectives:

**1. Financial materiality** – impact assessment of ESG topics in terms of economic value creation for VARO for the benefit of investors (shareholders).

**2. Impact materiality** – the economic, environmental and social assessment of VARO's impacts throughout the value chain for the benefit of multiple stakeholders, such as investors, employees, customers, suppliers and local communities.

Part II

# Environmental, Social and Governance Topics



# Environment

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- 42 Biodiversity and land use
- 43 Waste and effluents



# Mitigating our environmental impacts

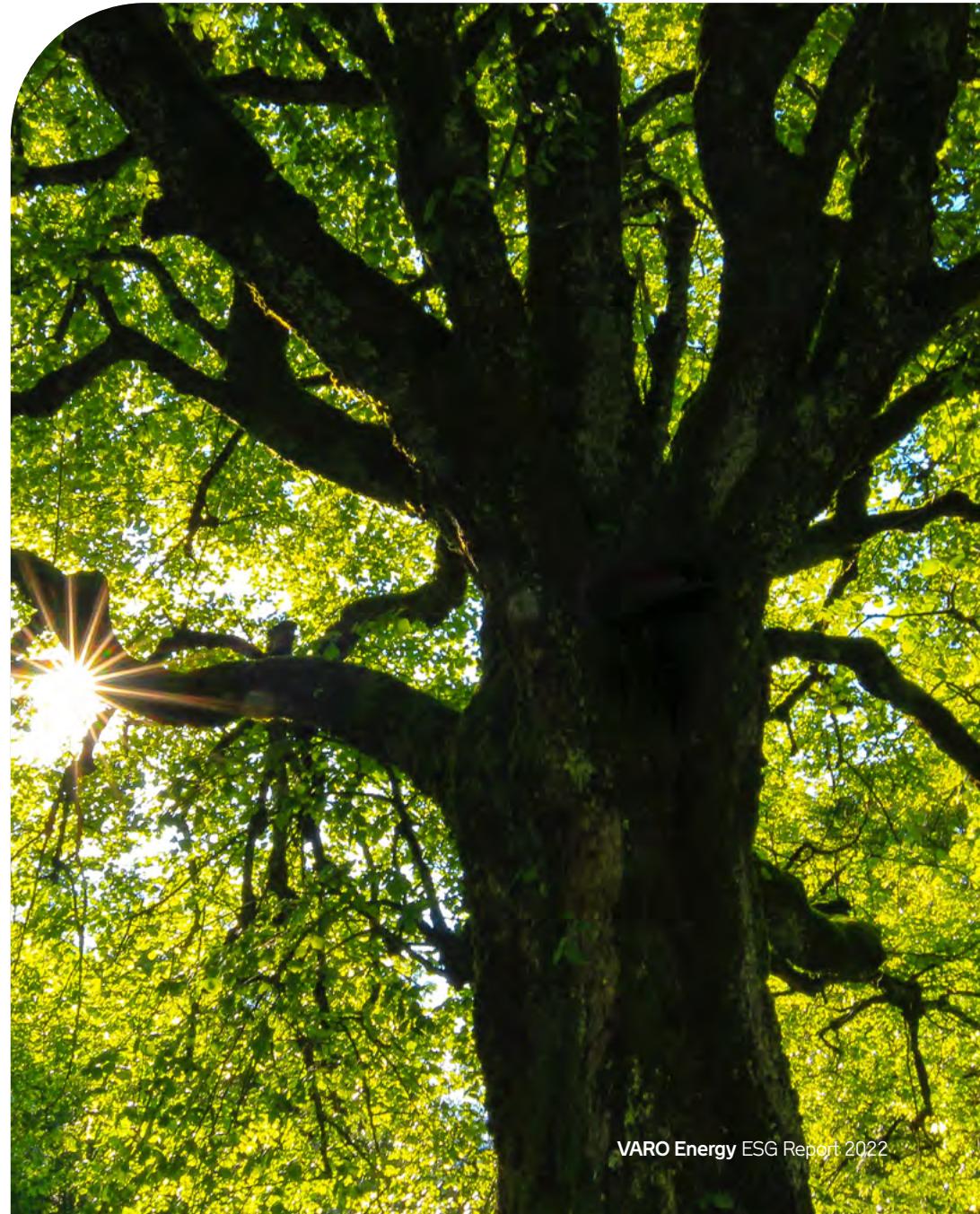
We work proactively to mitigate the environmental impacts of our operations by reducing emissions, avoiding spills, protecting biodiversity, and minimising waste and effluents. Minimising the impact of the energy our customers need is also central to our ONE VARO Transformation strategy.

We strive to continuously improve environmental performance throughout our operations and value chain, while ensuring open communication on environmental topics with all stakeholders. Our operational environmental risks relate to emissions, potential spills, water and energy use, waste generation and land use, as well as transportation via pipelines, sea, road and rail. We proactively assess and mitigate environmental risks, drive energy efficiency measures, promote the use of renewable energy, and protect and support biodiversity through various initiatives.

Environmental management is an integral part of our HSSE work.

Our manufacturing hubs have comprehensive processes to assess, minimise and report on environmental impacts. Regular Environmental Impact Assessments (EIAs) or similar assessments are conducted that focus on emissions to air, water and land, waste, noise pollution, energy and water use, odours, and potential impacts from incidents.

Our scope 3 emissions represent 98% of our overall value chain emissions. By developing our five strategic growth pillars, we are helping our customers to decarbonise, while decreasing our overall scope 3 carbon intensity.



# Developing more sustainable products

We are increasingly offering more sustainable products and energy solutions to help customers lower their environmental impact and decarbonise.

In July 2022, we launched our ‘twin engine’ ONE VARO Transformation strategy to develop a wide range of sustainable energy solutions.

While the emissions generated from the use of our products represented 83% of our scope 3 emissions in 2022, we are increasing our offering of sustainable energy solutions in Europe and significantly reducing our carbon intensity.

## Our targets

- CAPEX investments of USD 3.5 billion between 2022 and 2026 – including over two-thirds invested in sustainable energy solutions.
- A 15% reduction in the carbon intensity of our sold products by 2030 (helping our customers to annually avoid more than 5 million tonnes of emissions), compared with 2022.
- Net-zero emissions from our products by 2040.

## Our progress in 2022

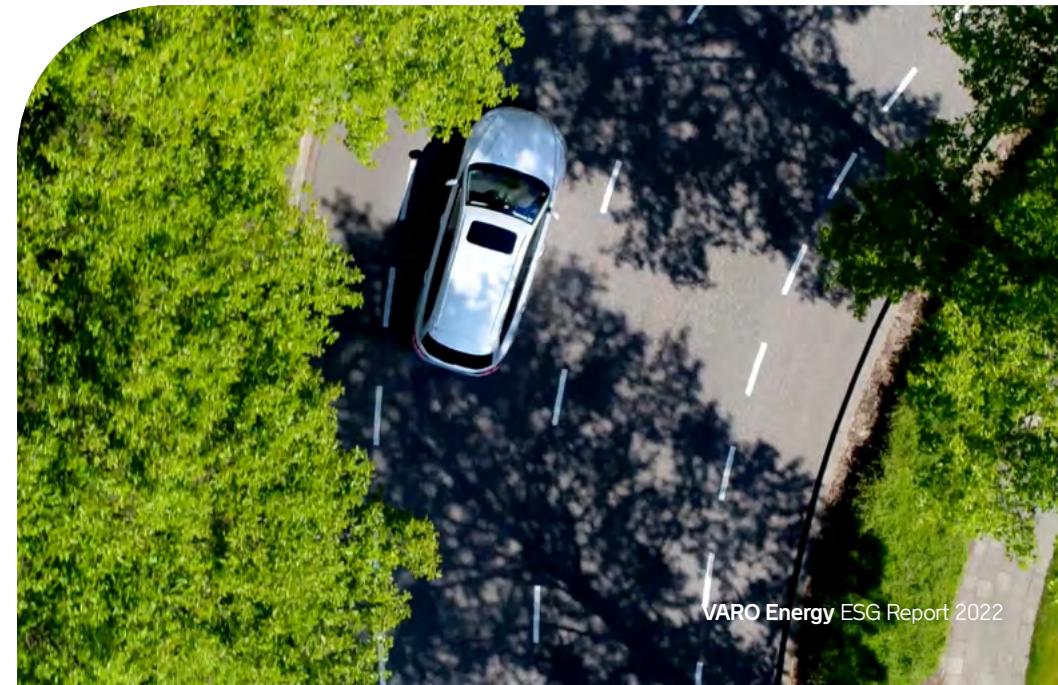
- VARO’s sold products had a carbon intensity of 83 gCO<sub>2</sub>/MJ, which equates to a 5% reduction compared to our 2020 baseline of 87 gCO<sub>2</sub>/MJ.

## Our approach

Our ONE VARO Transformation ‘twin-engine’ strategy seeks to invest the cash flows generated by our conventional energies business (Engine 1) into our sustainable energies business (Engine 2). In so doing, we aim to create a diverse portfolio of sustainable, accessible and reliable energy solutions.

Our ONE VARO Transformation strategy includes an ambitious plan to accelerate growth in our sustainable energies business by focusing on five key strategic growth pillars:

- Biofuels
- Biomethane and bio-LNG (liquefied natural gas)
- Hydrogen
- e-mobility
- Carbon removals



## Biofuels

We aim to become an integrated producer of second generation (2G) advanced biofuels, which are produced from waste and advanced feedstocks, such as Sustainable Aviation Fuels (SAF) and HVO. We are building new renewable manufacturing facilities as well as repurposing older assets and developing long-term partnerships to secure advanced feedstocks. We produce biofuels through tolling agreements for bio feedstock at third-party producer locations.

Our blended renewable fuels are supplied from our network of inland truck-loading racks that offers products with a higher proportion of biofuels (typically B20, B30 and B100). With increasing mandates for renewable fuel content, HVO will remain an important (drop-in) biodiesel.



### Sustainable biofuels according to Swiss legislation

Switzerland has established strict ecological and social requirements on imported biogenic components. Biofuels obtained from waste, and residues from agriculture, forestry, and restoration (deep-frying oil), automatically qualify as tax-free when blended with conventional fuel. Other fuels must be proven to have an acceptable environmental and social impact throughout the entire value chain – from feedstock collection to segregation, transportation, production and storage. Mixing various types of bio-components is prohibited. This means that all stages of the value chain must be completely segregated and traceable. VARO has implemented a system of controls to ensure compliance with all the environmental and social criteria established in Article 12b of the Mineral Oil Tax Law.

Furthermore, companies that blend biofuels, and suppliers that import bio-components from abroad, must have a special licence. All of our bio-component suppliers hold BTCert, which means they undergo regular auditing to achieve maximum security and compliance with the approval criteria. Even for certified suppliers, VARO conducts random checks on compliance with the licence criteria. This helps us avoid running the risk of a supplier's licence being revoked in the event of a licence breach on their side.

## Responsible sourcing of feedstock

We work to ensure that all the biofuels we source from trading companies and biofuel producers are fully compliant with all relevant local (EU or national) regulations. We realise the importance of the impact that feedstock type and quality can have on the transition to clean energy.

Since the adoption of the Renewable Energy Directive (RED), the transition to biofuels has been considered an important element of EU policy on transport decarbonisation. Biofuels represent a major source of renewable energy, and they play an important role in the realisation of the UN Sustainable Development Goals, particularly in the context of energy security and climate change. The production of sustainable biofuels can also promote health, employment, economic growth, rural development, soil management and water quality.

VARO purchases ethanol, FAME (Fatty Acid Methyl Ester, fettsyrametylestrar), HVO, ETBE (Ethyl Tertiary Butyl Ether) and

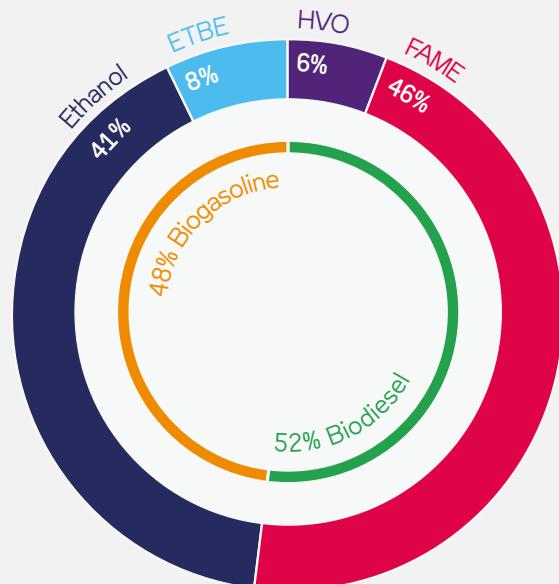
bio-naphtha products from a wide variety of producers that are certified under one of the voluntary certification schemes. Most producers we source biofuel products from are International Sustainability and Carbon Certification (ISCC)-certified, while others are certified through the Roundtable on Sustainable Biomaterials (RSB), RedCert-EU or 2BSVS. These certifications for biofuel producers involve regular audits for re-certification to verify their ongoing compliance.

About 40% of the total volume of our biofuels are waste-based, and about 60% is certified crop-based. We are committed to gradually minimising the use of crop-based biofuels and are focusing on promoting advanced biofuels and other low-carbon fuels.



## Type of biofuels provided

Share (in %)



## CO<sub>2</sub> reductions per category

(in thousand tonnes)



## Our approach

### Biomethane and bio-LNG

Our ambition is to be a leading producer of biomethane and bio-LNG, which can help customers to reduce their emissions by over 90% while also promoting energy security. We are developing a product portfolio through selected acquisitions and industrial-scale projects that draw on our production and construction expertise and capabilities. We are also developing our customer relationships in our fuels business and our expertise in bio-feedstock sourcing.

### Hydrogen

We are building on our position as a significant hydrogen consumer with expertise in H<sub>2</sub>-handling to develop hydrogen production hubs. We expect additional green and biogenic production to lead to offtake opportunities for industry, heavy transport and synthetic fuels. Our plan involves a phased approach with an initial investment in a 125 MW electrolyser at the Bayernoil manufacturing hub.

### e-mobility

We aim to become a significant player in the Electric Vehicle (EV) ecosystem by offering a comprehensive charging solution

that provides customers with a supply of low-carbon energy. We have a strong emphasis on commercial fleet clients in our primary countries and are actively seeking partnerships and acquisitions to expand our presence in less-developed markets.

### Carbon removals

With expertise in carbon, forestry and agro-forestry markets, SilviCarbon selects and participates in scalable afforestation, reforestation and regenerative farming projects that provide tangible long-term economic and social benefits. By leveraging VARO's trading and marketing capabilities, this provides carbon removal credits and an integrated energy offering to customers to meet their net-zero climate targets.

Through SilviCarbon, we own 35,000 hectares of degraded land at an existing plantation in Laos that will be used for future afforestation projects. The site has the potential to sequester approximately five million tonnes of CO<sub>2</sub> from the atmosphere.

## Upstream emission reduction for fuels

Upstream Emission Reduction certificates (UERs) are an instrument designed to achieve significant reductions in CO<sub>2</sub> emissions through upstream projects in the transport-fuel supply chain. UERs are generated by projects that reduce GHG emissions in upstream oil and gas production, typically implemented in countries outside Europe. UERs can be used to comply with Fuel Quality Directive (FQD) obligations in the EU, with Germany being the most significant UER market.

In 2020, VARO was the first German-obligated company to introduce UERs as a means of meeting FQD obligations. Among a comprehensive list of regulatory rules, projects must be newly built and deliver proven additional CO<sub>2</sub> reduction benefits, and the emission reductions achieved can only count for one year in Germany. In 2022, VARO was involved in 15 out of 23 UER projects approved by the German government, which involved 277,000 million tonnes of CO<sub>2</sub>e of UERs and accounted for approximately 12.5% of the total UER market in Germany.

## Progress in 2022

### Biofuels

In 2022, 84% of VARO's bio-gasoline components were derived from ethanol (made from sugars distilled from biomass). About 16% of our bio-gasoline was ETBE, made from bio-ethanol and isobutylene and improves the combustion characteristics of gasoline.

The majority (88%) of our biodiesel was FAME, about half of which originated from waste-based feedstock (which falls under Annex IX part A & B published in the EU RED). This resulted in a greenhouse gas emissions saving of 86% or higher, which equated to 13 gCO<sub>2</sub>/MJ. The other half of our FAME volume was derived from crop-based feedstocks, such as oil crops, which equated to about 33g CO<sub>2</sub>/MJ.

HVO (hydrogenated vegetable oil), which represents 12% of the total volume of biodiesel that we offer in Europe, originates from a mixture of crop-based and waste-based products.

### Biomethane and bio-LNG

In December 2022, we signed an agreement to acquire 80% of Bio Energy Coevorden BV (BEC) in the Netherlands, one of the largest biogas manufacturers in Europe. We plan to develop the largest biogas manufacturing facility in Northern Europe by doubling the current facility capacity from 300 GWh to 650 GWh by 2026. The acquisition will have a substantial contribution of 20-25% of VARO's Engine 2 (renewable energies) EBITDA by 2026. Read more in the Case Study on [page 38](#).

As part of our biodiesel offering, we also supplied 65 km<sup>3</sup> of HVO, which originates from a mixture of crop and waste-based feedstocks.

### Hydrogen

During 2022, we identified e-fuels as an important product to offer our customers and help them to achieve their decarbonisation targets. We are exploring and evaluating suitable partnership opportunities, including offtakes and

co-investment in production and marketing in advantageous locations.

### e-mobility

In 2022, our initial investment in E-Flux proved invaluable in creating a foothold in the e-mobility sector and our E-flux business continued to grow in the Netherlands, Belgium and Germany.

### Carbon removals

In 2022, SilviCarbon continued to provide advisory services to plantation owners in Laos and Paraguay.

SilviCarbon is currently involved in eight projects, which provide the company with rights of approximately 10 million tonnes of CO<sub>2</sub>e removals over their lifetime. We have also continued to make good progress at our plantation in Laos. Our new plantation nursery is building on our recent research that will contribute to significantly greater growth rates at the plantation.

## Our work in 2023 and beyond

### Biofuels

In 2023, we signed a Memorandum of Understanding with the Lufthansa Group to explore the production and supply of Sustainable Aviation Fuel (SAF). See the Case Study on [page 45](#).

We will continue our work to source and develop advanced feedstock streams, as well as explore investment opportunities to acquire and develop additional biofuel manufacturing capacity. By 2026, we aim to produce at least 250,000 tonnes of advanced biofuels.

### Biomethane and bio-LNG

In 2023, we will continue to work with BEC (read more in the Case Study on [page 38](#)), and plan to increase capacity to 650 GWh.

We are investigating additional acquisitions and projects to develop our integrated value chain – from advanced feedstock sourcing to providing customer products. By 2026, we plan to produce 1 TWh of biomethane / bio-LNG.

Feedstock from waste streams and manure have the potential to reduce our annual scope 3 emissions by 220,000 tonnes, compared with fossil natural gas. Our investments will also support the circular economy and create new employment opportunities.

### Hydrogen

In 2023, we will continue to develop our 125 MW electrolyser and will make a final investment decision by Q3 2023. We are also exploring other hydrogen production options related to our manufacturing hubs and SAF project.

Our long-term goal is to serve industry, heavy transport, shipping and aviation with hydrogen and its derivatives.

### e-mobility

We will invest in partnerships focused on commercial fleet charging, project development, and power supply optimisation to establish scalable solutions throughout the value chain and deliver an integrated charging offering. In 2023, we expect to have a comprehensive offering in place to help our current and new customers transition to e-mobility.

### Carbon removals

We will develop and increase our carbon portfolio of high-quality removals while expanding our sourcing and trading activities. We will continue to invest in scaling up our plantation in Laos, as well as expanding the SilviCarbon team in South East Asia and Latin America.



**CASE STUDY**

# Strategic partnership drives growth in advanced biofuels

VARO has signed a strategic offtake agreement with Fintoil to purchase a by-product from its refinery to produce advanced biofuels.

The agreement is to buy crude fatty acid, which can be used to produce second-generation biofuels. The agreement covers a significant part of Fintoil's crude fatty acid production from its Hamina biorefinery in Finland. The raw material is a by-product of softwood pulp, crude tall oil (CTO), which qualifies as an advanced biofuel as defined by the European Commission as it does not compete for the resources with the food or feed chain. Fintoil is part-owned by Taaleri.

"Taaleri and VARO have a similar strategy and common ambitions, and our intention is to develop and deepen our cooperation in several areas," says Juhani Elomaa, Chairman of the Board of Taaleri Plc.

## Partnering around a common sustainability ambition

"We are already a leading player in the marketing of biofuels and want to be a frontrunner in advanced biofuels," says Marcel Andreessen, VP Biofuels at VARO. "Through our partnership with Fintoil/Taaleri we have secured advanced feedstock, which plays a critical role in minimising the use of food and feed. Biofuels will continue to play a key role in meeting the need of our customers to decarbonise as they progress in the energy transition while ensuring the reliability of supply."



Fintoil's Hamina biorefinery became operational in Q3 2022. The biorefinery has an annual refining capacity of 200,000 tonnes of CTO feedstock. When fully operational, the Hamina biorefinery will be the fourth largest of its kind in the world.

# CO<sub>2</sub> emissions

We are working towards a 40% reduction in our scope 1 and 2 emissions by 2030. In 2022, we set our target to achieve net-zero CO<sub>2</sub>e emissions by 2040.

## Our targets

### Scope 1 and 2 emissions

- 40% absolute reduction in scope 1 and 2 CO<sub>2</sub>e emissions by 2030 compared with 2022.

### Scope 3 emissions

- 15% reduction in scope 3 intensity in marketed energy by 2030.

## Our progress in 2022

- Defined new 2022 baseline for our CO<sub>2</sub> targets.
- Renewable certificates purchased for 100% of electricity use at the Cressier manufacturing hub and our terminals in Switzerland.
- Saved 2.3 million tonnes CO<sub>2</sub> emissions by enabling VARO customers to replace conventional fuels with renewable alternatives.
- Finalised the acquisition of the biogas company Bio Energy Coevorden BV in January 2023, which made us a major European biogas producer.

## Managing scope 1 and 2 CO<sub>2</sub>e

The majority of VARO's scope 1 and 2 greenhouse gas emissions are related to energy use and hydrogen production at our Cressier and Bayernoil manufacturing hubs. Mitigating these emissions is therefore essential in our work towards our 2030 target to reduce our scope 1 and 2 emissions by 40%.

Emission reduction measures include energy efficiency, process optimisation, switching to green hydrogen, electrification and sourcing renewable electricity. The co-processing of bio-feedstock and CO<sub>2</sub> capture provide other promising opportunities for emission reduction.

## Planning for de-carbonisation

We are following an energy transition and de-carbonisation masterplan towards our 2030 scope 1 and 2 targets. Our decarbonisation plan provides the basis for technical project planning at our manufacturing hubs, as well as insights into how our emissions are expected to develop over time. It provides a feedback loop to ensure our planned investments support our CO<sub>2</sub>e reduction targets.



## Progress in 2022

In 2022, our absolute scope 1 and 2 emissions amounted to 1.4 million tonnes of CO<sub>2</sub>e, which was a 22% increase compared to the previous year. Volumes produced in 2021 were relatively low due to the economic impact of the COVID-19 pandemic. A planned maintenance stop at our Cressier manufacturing hub and production disruption at the Bayernoil manufacturing hub also contributed to lower volumes in 2021.

During 2022, demand recovered following the pandemic and due to Russia's invasion of Ukraine, which created an energy crisis with shortages in European imports of conventional fuels. Supporting energy security in Europe was a major priority for VARO in 2022. We ensured high manufactured volumes and improved reliability and production efficiency, resulting in a 33% and 28% increase in throughput at Cressier and Bayernoil respectively. A state-sanctioned switch to the use of LPG to reduce natural gas dependency in our manufacturing processes in Germany also increased scope 1 emissions.

Additionally, we updated our CO<sub>2</sub> accounting methodology in 2022 to include the dual reporting of our scope 2 data. To align with our goal to source low-carbon electricity in our operations, our reporting

includes a market-based approach. In 2022, we saw a positive accounting effect in our Swiss operations from the purchase of renewable electricity. However, the accounting method generated higher scope 2 emissions in other markets compared to using factors based on national electricity grid averages. The combined effect of increased production

and the shift in accounting method resulted in a 10% increase in our scope 2 emissions compared to 2021.

Overall, our manufacturing volumes increased at a faster rate than our scope 1 and 2 emissions, which resulted in strong improvements in CO<sub>2</sub> efficiency for both our manufacturing hubs.

CO <sub>2</sub> emissions (thousand tonnes)	Category	Development vs. previous year	2022		
			2022	2021	2020
Purchased raw materials and products	Scope 3.1	5%	12,595	11,944	11,089
Manufacturing	Scope 1 & 2	22%	1,407	1,155	1,142
	Scope 1	24%	1,217	982	991
	Scope 2, Market based	10%	190	173	151
	Scope 2, Location based	-	112	-	-
Use of sold products	Scope 3.11	11%	65,099	58,845	54,669
Other	Scope 3, cat. 2, 3, 4, 5, 6, 7, 9, 12	16%	757	652	740
Sum	Scope 1, 2 & 3	10%	79,859	72,596	67,639
Carbon intensity of manufacturing (kg CO <sub>2</sub> e/boe)	Scope 1 & 2	-6%	21	23	-
Carbon intensity of sold products (tCO <sub>2</sub> e/MJ)	Scope 1, 2 & 3	-1%	83.7	84.5	87.4

## Emissions at the Cressier manufacturing hub

Our Cressier manufacturing hub is relatively energy efficient, due to a limited need to cool and heat intermediate products. This reduces heat loss and additional energy requirements.

We have also implemented many energy efficiency improvement projects over the past decade. We achieved a 6.6% energy efficiency improvement in 2022 compared with 2014 – nearing our target to increase energy efficiency by 6.8% in 2023. Operational measures and higher throughput improved the energy efficiency of manufacturing by over 10% compared to 2021, measured as Solomon Ell.

During 2022, we focused on project pipeline planning to support the energy transition and our 2030 target of a 40% reduction in scope 1 and 2 emissions. Cressier and our Swiss terminals also sourced 100% of their electricity through renewable certificates in 2022, which reduced our CO<sub>2</sub>e emissions by around 6,000 tonnes.

## Emissions at the Bayernoil manufacturing hub

2022 was a year of high production at Bayernoil and to ensure high process efficiency and energy security in our markets, a higher-than-normal proportion of the production capacity was used at the joint venture. Consequently, scope 1 CO<sub>2</sub>e emissions allocated to VARO increased by 24% compared to 2021.

In 2022, workers at the Bayernoil hub volunteered to act as 'energy scouts' as part of a new long-term programme. Employee engagement on identifying and energy saving initiatives increased substantially through improved dialogue on issues, ideas, the status of energy savings measures and decided actions.

Operational focus supported by the 'energy scouts', as well as good process reliability in the second half of the year, improved the energy efficiency of the Bayernoil manufacturing hub by over 8% in 2022, measured as Solomon EII.

During 2022, we continued project pipeline planning to support the energy transition and our 2030 target to reduce scope 1 and 2 emissions by 40%, and we are planning several high-impact projects. We are also planning to source renewable electricity covering 100% of VARO's proportion of the Bayernoil joint venture in 2023.

### Our 2022 emissions baseline

We have set 2022 as the baseline year to monitor our progress on our 2030 and 2040 scope 1, 2 and 3 emission targets as part of the ONE VARO Transformation strategy.

However, the year was impacted by the European energy crisis caused by Russia's invasion of Ukraine. Our scope 1 and 2 emissions are also affected by the operations of our manufacturing hubs,

including maintenance and unplanned stops. Providing a truly representative baseline for a business such as VARO's will always be challenging and it is also necessary

In setting the 2022 baseline, we have updated our GHG accounting practices:

- **For scope 1** – expanded the emission consolidation approach of our Bayernoil joint venture manufacturing hub to reflect our extended utilisation during 2022.
- **For scope 2** – introduced 'dual reporting' split in market and location-based approaches for greater clarity and to support our decision to source low-carbon electricity.
- **For scope 3** – updated our calculations for category 1 scope 3 emissions (sourced crude oil and renewable products and feedstock) and switched to a more precise quantification of upstream crude oil extraction and transportation. This will provide better precision compared to using generic factors and allows us to consider CO<sub>2</sub> in sourcing.
- **Category 11 scope 3 emissions**, refined the use of emission factors for the use of our products by using readily available external databases.

to monitor long-term developments and transition planning.

### Our work in 2023 and beyond

As part of our 2030 decarbonisation masterplan, Cressier developed a list of decarbonisation projects that could result in estimated annual savings of 100,000 tonnes of CO<sub>2</sub>e by 2030. These initiatives include electrification measures, such as replacing the large steam turbine that drives the recycle gas compressor of the catalytic reformer with an electric motor, and hydrogen recovery for use in refinery processes.

We are constructing the largest ground-mounted solar farm in Switzerland on an industrial site adjacent to the Cressier manufacturing hub. Almost 19,000 photovoltaic panels will annually generate around 8.4 GWh, equivalent to the annual energy consumption of over 2,000 Swiss households. At peak performance, the panels will produce up to 60% of the Cressier manufacturing hub's total electricity load. The project is being developed in cooperation with Groupe E and the Swiss Research and Development Centre (CSEM). It will become operational in Q2 2023 and will avoid around 1,700 tonnes of CO<sub>2</sub> emissions each year.

We are developing district heating systems to use waste heat from industrial processes at our Cressier manufacturing hub to heat homes in the adjacent

municipalities. The first of these systems will become operational in 2023 and will provide up to 5 MW of heat to the Cornaux and Cressier municipalities a year to avoid their annual CO<sub>2</sub>e emissions by 3,900 tonnes compared to using heating oil. The second network, which is planned for 2024-2030, will supply 3,500 households and businesses in the Canton of Neuchâtel and annually avoid 12,000 tonnes of CO<sub>2</sub>e a year.

A planned maintenance shutdown in January 2023 at the Cressier manufacturing hub included routine measures to improve energy efficiency, such as the cleaning of heat exchangers, decoking of furnaces, and changing catalysts in different reactors.

At the Bayernoil manufacturing hub, we have planned energy efficiency projects until 2025 that will save 10 MW of energy and avoid approximately 17,000 tonnes of CO<sub>2</sub>e per year. Additional initiatives with a combined energy saving potential of up to 12 MWh, equivalent to annual savings of 20,000 tonnes CO<sub>2</sub>e are being investigated.

We continue to plan for a 125 MW electrolyser at Bayernoil to produce green hydrogen that will replace the grey hydrogen generated from natural gas. It is estimated that the first phase of the project will annually avoid 65,000 tonnes of CO<sub>2</sub>e emissions.

## Managing our scope 3 emissions

To achieve net-zero emissions in line with societal and regulatory demands to combat climate change, we will decarbonise our product portfolio and replace conventional energy with sustainable energy solutions.

The customer use of our sold products and services generated 82% of our total value chain CO<sub>2</sub>e emissions in 2022. It is therefore imperative we reduce the carbon intensity of our product and service portfolio in order to achieve our 2030 carbon intensity target and our 2040 net-zero target. To achieve net zero, it will be necessary to reduce the volume of conventional fuels volumes in ‘easy to abate’ sectors, such as fuels for road transport and heating. This is expected to go hand-in-hand with the societal development to combat climate change.

External factors, such as technological and regulatory developments and customer preferences, will impact the pace of change in our product portfolio. Reducing conventional energies, while working towards our emission targets, will not help society unless alternatives are made available to the users of energy. This is why the ONE VARO Transformation strategy focuses on developing and promoting sustainable energy solutions. It is also why the energy efficiency of our bundled service offering is an important complement to our absolute emission reduction targets. Read more on how we drive this in the Developing more sustainable products section on [page 26](#).

## Progress in 2022

VARO’s total reported scope 3 emissions in 2022 increased by 11% compared with 2021 and by 19% compared to 2020, mainly due to a 10% increase in sold products as economies recovered from the COVID-19 pandemic.

We continued to drive emission savings through the sale of low-carbon fuels during 2022 and avoided 2.3 million tonnes of scope 3 CO<sub>2</sub>e emissions by enabling VARO customers to replace conventional fuels with renewable alternatives. This amounted to a 10% increase compared with 2021.

In 2022, we developed our carbon accounting methodologies for measuring upstream transport and emissions from crude oil extraction, so we can now account for the benefits of sourcing feedstock with lower carbon intensity. Upstream feedstock sourcing represented 16% of our total value chain emissions in 2022 and we will work actively to reduce this material emission source. There is inadequate regulation and/or financial incentive support to drive upstream emission reductions for conventional fuels. Consequently, driving emission reductions may involve financial costs that reduce competitiveness.

We have also expanded our carbon inventory to include additional scope 3 categories such as capital goods and end-of-life treatment.

## Our work in 2023 and beyond

VARO’s work to reduce scope 3 emissions is closely connected to the ONE VARO Transformation strategy and our work with more sustainable products on pages [26-31](#).

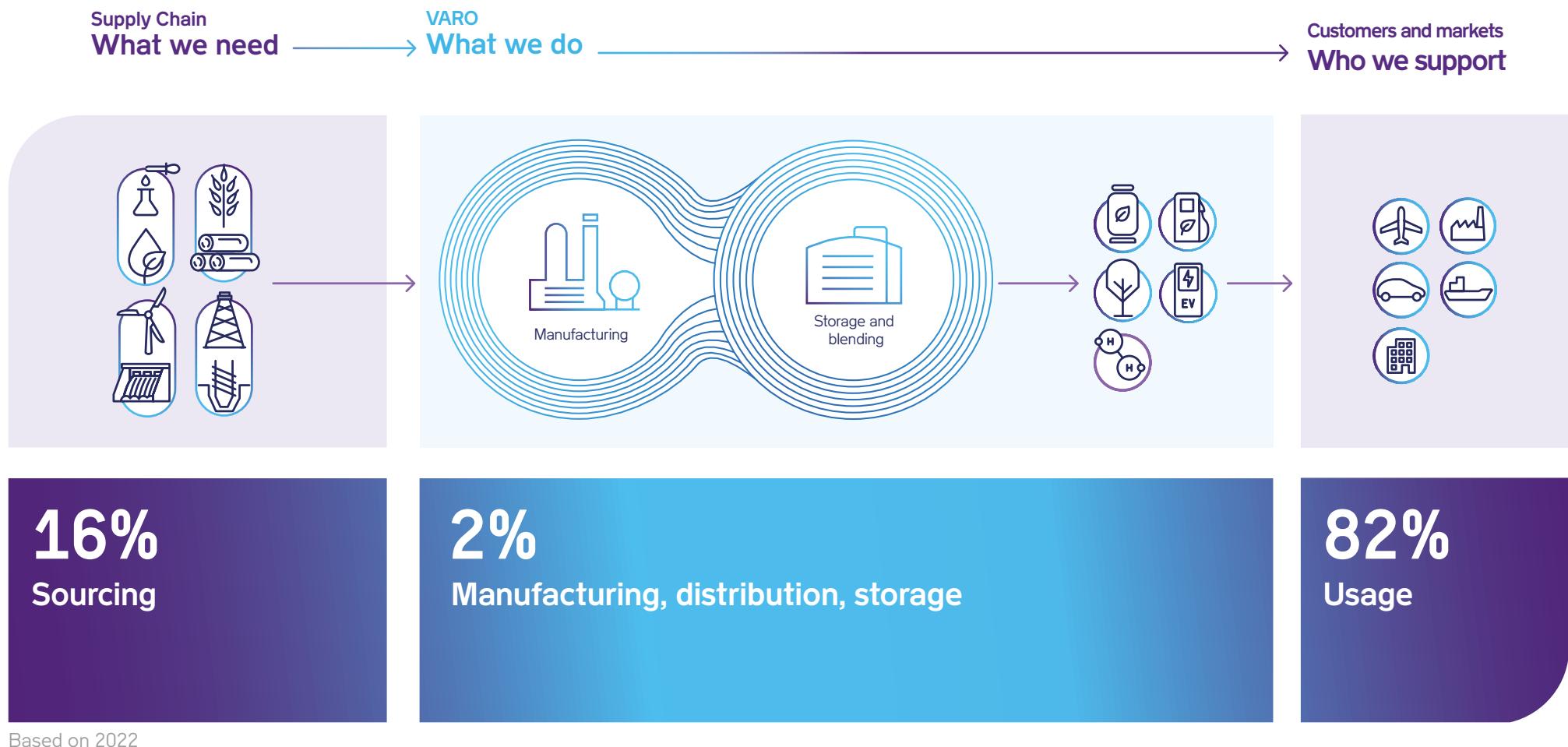
We expanded our renewable business in January 2023 when VARO acquired a majority stake in biogas company Bio Energy Coevorden BV. The acquisition makes us a major European producer of biogas - a low-carbon fuel that will support our scope 3 intensity target (read more in the Case Study on [page 38](#)).

We will develop our capabilities to decarbonise by reducing our scope 3 emissions, an integral component of our strategic business planning. We will also enhance our forecasting capabilities to cover not only our existing assets and production planning, but also the effects of planned mergers, acquisitions and business development activities.

In 2023, we will introduce internal carbon pricing as a component of our business case evaluations to promote low-carbon solutions (read more on [page 18](#)).



# Carbon emissions in our value chain



**CASE STUDY**

# Developing the largest biogas facility in Northern Europe

We plan to double the capacity of the Bio Energy Coevorden BV (BEC) biogas facility in the Netherlands, boosting Europe's energy security and accelerating the energy transition.

At the end of 2022, VARO announced the acquisition of 80% of BEC in the Netherlands, one of the largest biogas producers in Europe. We plan to invest EUR 100 million to double the biogas manufacturing capacity of the plant to 650 GWh by 2026, which will make it the third largest of its kind in Europe.

Demand for biomethane is expected to increase ten-fold across Europe by 2030, and bio-LNG is expected to grow ten-fold in Germany by the end of the decade. BEC will meet growing European demand for biogas and will accelerate the energy transition in the region.

"Large-scale biogas facilities have an important role in accelerating Europe's sustainable energy transition as they offer an alternative to conventional fuels at scale with emissions 90% lower than natural gas," says Dev Sanyal, VARO CEO. "The acquisition not only makes us a European biogas leader, but it will allow our refineries to replace their natural gas consumption with biomethane products with a lower carbon intensity."

**From waste to renewable energy**  
The expansion of the BEC biogas plant will source its feedstock from waste streams and manure to annually avoid 220,000



tonnes of CO<sub>2</sub> compared with fossil natural gas. This is a significant step towards achieving our net-zero scope 3 emissions target by 2040. The expansion will also support the circular economy and create new green jobs.

The BEC plant is located on the border between the Netherlands and Germany, close to large-scale agriculture providing an abundant supply of waste feedstock, and near major industrial centres that offer good market opportunities for biogas. The biogas plant is already highly efficient, with state-of-the-art monitoring and control, heat optimisation and recovery systems.

## Promoting energy security and the energy transition

The acquisition and planned expansion will boost energy security by diversifying Europe's sources of supply, while accelerating the energy transition by replacing conventional fuels with low-carbon alternatives. The expanded plant alone will meet 65% of VARO's 2026 target to generate 1 TWh of biomethane / bio-LNG. The acquisition will also contribute 20%-25% of VARO's Engine 2 (Renewable energies) EBITDA by 2026 and creates a platform for the growth of the biogas industry in Europe.

# Other emissions to air

We proactively work to minimise and reduce the non-greenhouse gas emissions emitted by our operations.

Our main sources of non-greenhouse gas emissions from our manufacturing hubs are emitted from furnaces and boilers in the production process, which generate SOx, NOx and dust as by-products of the heating process. Our processing facilities and terminals adhere to the relevant strict local or federal emission standards and compliance is regularly verified. The stacks at our manufacturing hubs are designed to optimise the dilution of this smoke and we recover diffuse emissions, such as volatile organic compounds (VOCs). Advanced equipment such as infrared and optical gas cameras allow the early detection of

any diffuse emission leaks, so we can take action quickly.

The storage and loading of gasoline can also cause emissions of VOCs, and we install Vapour Recovery Units where needed to ensure permit limits for VOC. Preventive maintenance helps to minimise emissions and ensure equipment operates as expected. For example, at our Birsfelden terminal, VOC emissions in 2022 were 0.18 kg/h, considerably lower than the 3 kg/h limit prescribed by the Swiss Clean Air Ordinance legislation.

## Progress in 2022

In 2022, our manufacturing hubs complied with all local environmental regulations and in line with our environmental permits.

NOx emissions increased at both of our manufacturing hubs in 2022, compared with 2021, due to a mandatory temporary switch from natural gas to Liquid Petroleum Gas (LPG) in the production process to reduce European gas usage amid the Russian-Ukrainian conflict. The Bayernoil manufacturing site experienced 16% higher annual NOx emissions compared to 2021 and will install ultra-low NOx burners to reduce NOx emissions.

At the Cressier manufacturing hub, annual NOx emissions were 9% higher in 2022 compared with 2021 and were close to its annual NOx allocated emissions quota. The relatively high crude processing volumes contributed to increased NOx emissions for the hub.

SOx emissions of both manufacturing hubs were low during 2022. At Bayernoil, SOx emissions have decreased by 28% since 2020 due to the installation of a sodium bicarbonate injection system in the flue gases of the fluid catalytic cracker (FCC). The Cressier manufacturing hub only released about 20% of its SOx quota due to the use of low-sulphur content gas in furnaces and boilers.

<sup>1</sup> At Bayernoil: 13th Federal Emission Control Ordinance, 20th Federal Emission Control Ordinance, TA Luft 2021; at Cressier: Ordinance on Air Protection (Ordonnance sur la protection de l'air) at Cressier manufacturing hub.



Emissions to air (tonnes)	Development vs. previous year	2022	2021	2020
<b>Nitrogen oxides (NOx)</b>	+ 12%	686	610	651
<b>Sulphur oxides (SOx)</b>	+ 3%	900	873	1,186
<b>Diffuse hydrocarbons (VOC)</b>	+ 31%	417	318	372
<b>PM</b>	+ 28%	8	6	9

# Spills and spill prevention

Our comprehensive management systems minimise and prevent spills.

## Our approach

We work with comprehensive process safety to ensure that our processing plants, tank farms and loading systems are operated safely so we minimise and prevent spills.

Our operations are managed by a Safety Management System and Operating Regulations. We also implement state-of-the-art safety technology. VARO has a Safety and Response Plan procedure to manage our response related to spill incidents. The plan defines the measures and resources to be implemented in the event of an incident and coordinates action with the emergency services, if necessary.

Our process units are equipped and monitored by a variety of sensors, such as pressure and flow, to quickly identify potential problems that could lead to or indicate a leak. Our employees are dedicated to controlling the production process and make regular inspections of the process units, tanks and loading

facilities. We also conduct process Hazard and Operability Studies (Hazops) to help identify potential spill hazards.

As part of their safety training, we provide our employees and contractors with training on spill prevention and emergency spill management. All contractors and subcontractors must have the correct authorisation and follow our prevention plans, regular site audits and continuous surveillance.

We have comprehensive emergency planning and response procedures, and any leakage is immediately cleaned up according to our set procedures to minimise environmental damage and harm to people. We investigate and review the causes of any leak to inform future measures and minimise the chance of recurrence. Every two years, we hold a large training exercise involving local fire brigades, other emergency services and the local authorities. Smaller scale training is conducted more regularly.

Good dialogue and engagement with local stakeholders is an important part of our work with spill prevention. For example, at the Cressier manufacturing hub, we hold local stakeholder meetings each year to provide information on how we work to avoid spills from occurring and our processes in the event of an incident. We also provide local communities with a phone number to our control room that is available 24/7, and we have emergency response teams in the event of a spillage.



## Pipeline safety

The risk of spills also applies to the pipeline infrastructure that supplies our manufacturing hubs with crude oil, as pipeline ruptures can cause environmental damage. We regularly check above and below-ground pipelines for cracks, holes, deformations or deterioration of the pipeline walls due to corrosion or other faults, as well as internal inspections of pipelines with specialist equipment.

In France and Switzerland, we follow the strict French regulations that require pipeline inspections every four years. At the Bayernoil manufacturing hub, TÜV SÜD inspects and verifies compliance with regulatory requirements. Pipelines are also fitted with leak detection systems to alert in case of any decrease in flow or pressure. All pipelines are mapped with Geographic Information Systems and are clearly marked at ground level. Pipeline maintenance includes tree cutting and pruning.

## Progress in 2022

As part of our long-term Maintenance and Surveillance Plan, we replaced 9.2 km of pipeline delivering crude oil to the Cressier manufacturing hub in 2022 to maintain our high standards of equipment integrity. We have also refined and improved our fire procedures to include the risk of re-ignition after work has been completed. At the Bayernoil manufacturing hub, we installed a state-of-the-art emergency response

container to facilitate more effective intervention in the event of a hydrocarbon leakage.

We aim to avoid all spills, regardless of size. VARO has a strong reporting culture and every spill – from a couple of litres to large spills classified as Tier 1 and Tier 2, according to API RP754 definitions – is centrally recorded and investigated. Unfortunately, five Tier 1 spills occurred in 2022. Even though the majority of these Tier 1 spills were low in severity, their potential to do harm is taken very seriously.

Four Tier 1 spills were recorded at our terminal sites and one at the Bayernoil manufacturing hub. The majority of the spills recorded at the terminals occurred due to truck driver error when loading into secondary containment systems. One case was due to a failed isolation during maintenance work at a terminal. At the Bayernoil manufacturing hub, the Tier 1 incident occurred due to the corrosion of a rarely used crude oil pipeline on the site. There was no harm to personnel and the contaminated soil was excavated and the area cleaned up.

We introduced corresponding measures based on ‘lessons learned’ to help avoid similar spills from happening in the future. For example, we have modified the checklist for drivers loading at VARO terminals in Switzerland, which were communicated to the users of VARO’s terminals.

In 2022, we organised a Group-wide safety stand-down at all our sites – including offices, all operating sites and production facilities to make personnel aware of spills, their potential to do harm and how they can be avoided.

## Our work in 2023 and beyond

In 2023, we will implement a project at the Cressier manufacturing hub to further improve our leak detection and localisation capabilities. The project will involve the commissioning of a state-of-the-art leak detection system (LDS) that can detect very small leaks.

<sup>2</sup> The operational safety of pipelines delivering crude material to the Cressier manufacturing hub (SFPLJ pipeline in France, and OJNSA pipeline in Switzerland) is regulated by the French and Swiss regulations, such as the Ordinance OISTC on Pipeline Transportation Facilities Safety, the Ordinance OITC on Pipeline Transport Installations, the Directive IFP Federal Pipeline Inspection (in Switzerland), and the Ministerial Decree of 5 March 2014, which regulates the pipeline safety in France. VARO also uses safety management regulation such as the SGS Manual and OJNSA Operating Regulations.

<sup>3</sup> API RP 754 is a Recommended Practice of the American Petroleum Institute, which identifies process safety indicators for the refining and petrochemical industry.

<sup>4</sup> Five Tier 1 spillages occurred at four different terminals in Switzerland (1), Germany (1), Benelux (2), and at the Bayernoil manufacturing hub. The spills involved volumes of 0.5-1.5m<sup>3</sup>, 0.01 m<sup>3</sup>, 1m<sup>3</sup>, 4.7m<sup>3</sup>, and 46.5m<sup>3</sup> respectively.



# Biodiversity and land use

We proactively safeguard and enhance biodiversity on our sites and use a biodiversity mitigation hierarchy to guide our work.



## Our approach

The Cressier manufacturing hub is located between two areas of natural habitats: one adjacent to the north-east, and the other located about 600 metres to the south across the Thielle River.

At the Bayernoil manufacturing hub, the Neustadt site is located 200 metres from Lake Mauerner Badesee and adjacent to a forested area, and the Vohburg site lies to the north of a small forest and close to the Paar and Danube rivers. This is a Natura 2000 area that includes protected habitats and breeding grounds for rare and threatened species. There is one Flora Fauna Habitat (FFH) 300 meters from Vohburg and another four FFHs 5 km to 7 km from the site. The FFHs are home to beaver and several species of fish, toads and slugs.

Both manufacturing hubs have a long history of protecting and promoting local biodiversity. Our sites conduct Environmental Impact Assessments (EIAs) and Species Protection Assessments to evaluate the potential impacts of activities on biodiversity. We also minimise discharges to avoid damaging local ecosystems.

We work closely with the local authorities and with neighbouring communities at the Cressier manufacturing hub on local biodiversity initiatives. All our investments are subject to approval by the authorities and neighbouring communities can voice any concerns they might have regarding local natural habitats.

## Progress in 2022

Our operations were not subject to any fines or regulatory breaches related to adverse impacts on biodiversity in 2022.

We continued to apply our biodiversity mitigation hierarchy to assess planned investments. The hierarchy includes:

1. Completely avoid negative impacts on biodiversity.
2. Where avoidance is not possible – minimise the negative impact.
3. Where the impact occurs – remediate adverse effects.
4. If none of the above is possible – compensate by creating a positive impact on biodiversity elsewhere.

## Our work in 2023 and beyond

We will continue to use our biodiversity mitigation hierarchy to assess future investments and ensure we continue to protect and promote local biodiversity.

At our Bayernoil manufacturing hub, we are conducting an Environmental Impact Assessment for our Per- and polyfluoroalkyl substances (PFAS) groundwater control project. We are working on minimising the impact from reduced groundwater level.

# Waste and effluents

By recycling by-products back into our production, we produce relatively small amounts of waste. Effluent discharges are effectively managed and monitored by well-established processes.

## Our approach

### Waste management

Processing crude oil produces relatively small amounts of waste. By-products generated by processes are recycled and recovered back into production with residue undergoing the further cracking of larger hydrocarbon molecules to produce secondary products where possible. Sulphur produced during the sulphur purification process in hydrotreaters is also sold for use in other industrial processes.

Besides generating waste streams of paper, glass and organic waste, there are other waste streams such as residual waste, blasting sand, insulation material, spent lye, carbonate sludge, oil-containing waste and scrap metal. All waste from our manufacturing hubs is recycled or disposed of in accordance with the relevant waste management legislation and regular on-site checks are performed together with the authorities.

Bayernoil treats oil sludge with a decanter process, which separates the sludge into water and oil sludge. Cressier has an incinerator to combust oil sludge. In Germany, some waste from Bayernoil has secondary uses.

Bayernoil conducts audits of its waste management contractors and has established processes to ensure they abide by legislation. VARO has immediately ended agreements if waste contractors have inadequate plans for waste materials. We also conduct internal audits to ensure compliance with our waste management requirements.

**90% of the 30,627 tonnes of waste soil, concrete and railroad ballast generated by VARO was reused and diverted from landfill.**

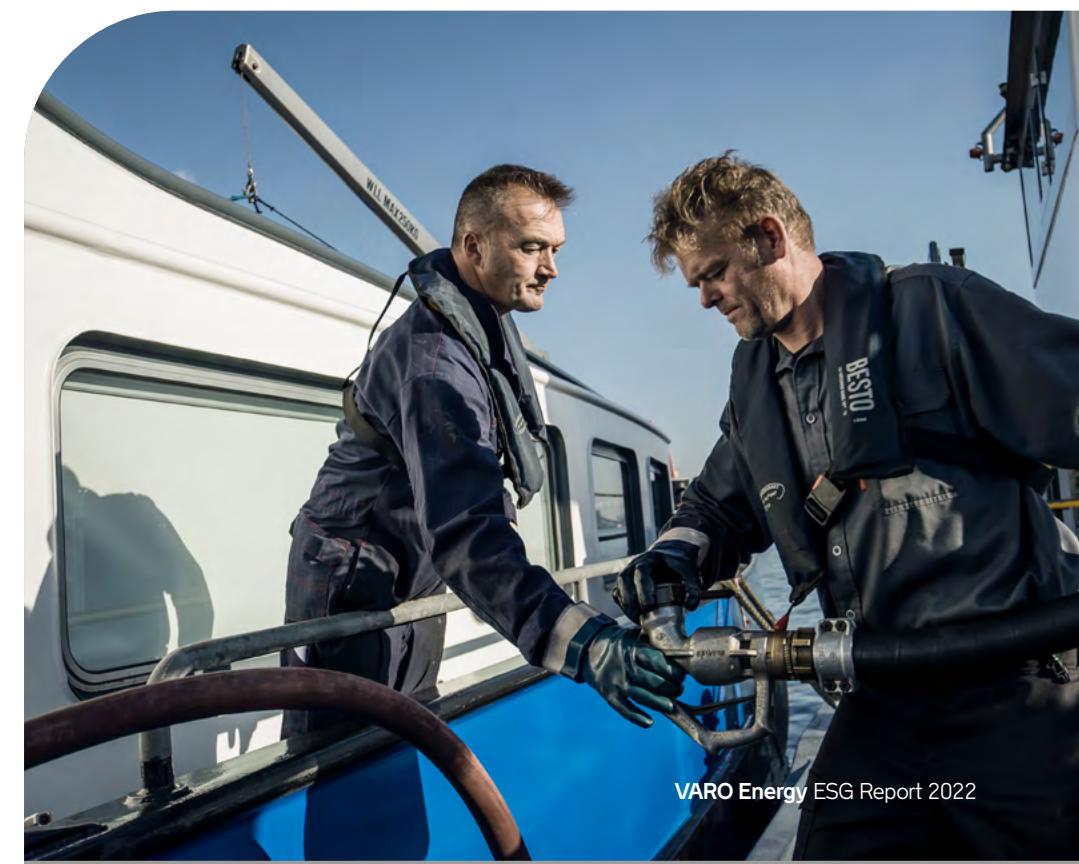
### Effluent management

We effectively manage and monitor any effluent discharges from our sites. We have our own wastewater treatment plants and take regular site samples of soils and groundwater. Our larger sites pump groundwater to create hydraulic dams to prevent pollution.

With processes involving flammable substances, high temperature and high pressure, fire is a major hazard in the petroleum refinery industry. We avoid the use of firefighting foams that contain

PFAS to minimise negative environmental impact. At our terminals, we use water for firefighting training.

The separation of hydrocarbon-containing waste streams takes place on site at our terminals where hydrocarbons are separated from discharged water in oil separators. At Swiss terminals, discharge pipes to a water body have sensors that raise the alarm if the level of hydrocarbons is exceeded, and the discharge valve to the water body automatically closes to prevent pollution.



## Progress in 2022

### Waste management

Our Cressier manufacturing hub sorted its waste into 39 different waste streams in 2022. Of this waste, 39% was recycled, 33% underwent energy recovery during waste treatment, 13% was treated in specific facilities as hazardous waste and 15% was sent to landfill.

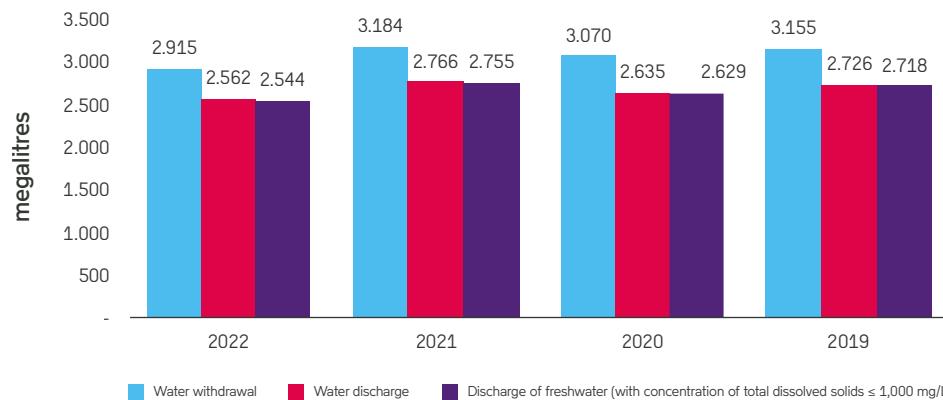
The Bayernoil manufacturing hub sent 92% of its waste for recovery. 7.8% of the hub's waste was sent for disposal, including 7.4% hazardous waste and 0.4% non-hazardous waste.

### Effluent management

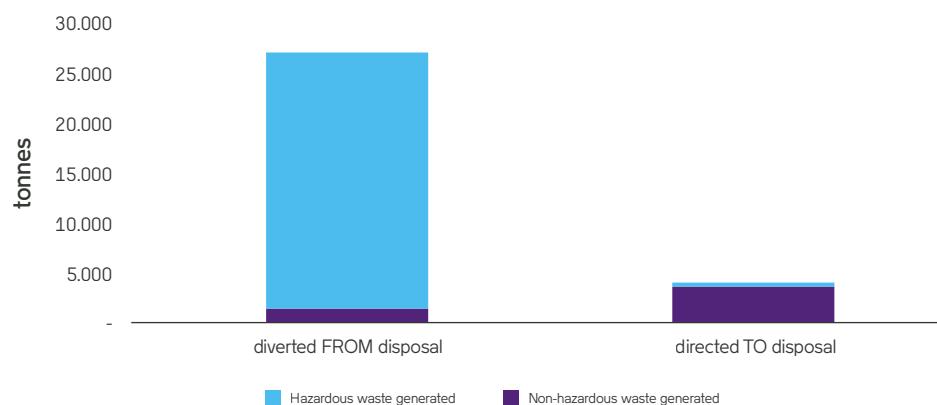
In 2022, the Cressier and Bayernoil manufacturing hubs discharged 0.33 m<sup>3</sup> and 0.41 m<sup>3</sup> of effluents respectively per tonne of produced fuel on average.

All VARO sites operated well within the limits of the chemical, biological and physical parameters for effluent discharge in the local environmental regulations during the year.

## Water use



## Waste in 2022, diverted from disposal



## Our work in 2023 and beyond

### Waste management

We will continue to minimise waste and identify partners that can find secondary uses of our waste products.

### PFAS management

The historic use of PFAS in firefighting foams is a growing concern in society due to increased knowledge about its adverse environmental and health impacts, particularly with regards to soil and water contamination. We are investigating whether our sites have been historically exposed to PFAS substances and what measures can be taken to mitigate impact.

This includes the presence of PFAS in groundwater that dates back to their use decades ago. We work closely with the authorities, local communities and NGOs to define and implement the most effective way to resolve such issues.

**CASE STUDY**

# VARO and Lufthansa Group aim to decarbonise the aviation industry

Through a Memorandum of Understanding, the companies will explore the production and supply of Sustainable Aviation Fuel (SAF) as early as 2026.

VARO aims to produce more than 250,000 tonnes of biofuel a year by 2026, and has a long-term target of more than 500,000 tonnes a year. A new agreement with Lufthansa to explore the production of SAF addresses a key element in the ONE VARO Transformation strategy and supports aviation industry decarbonisation ambitions.

“Providing solutions to decarbonise the aviation industry is a central element of our customer-focused strategy,” explains Theo Pannekeet, EVP New Energies and Innovation at VARO. “The agreement with

Lufthansa Group for the production and supply of Sustainable Aviation Fuel marks an important step in meeting the customer and societal need for aviation fuels that are both renewable and sustainable.”

## Drawing on non-edible biogenic feedstock

It is important that the raw materials used to produce biofuels do not compete with the production of food or animal feed. Under the agreement, both companies will jointly investigate the use of non-edible biogenic feedstock to produce green hydrogen that can potentially be used for SAF production.



## Leading the way on low-carbon aviation

“We believe in SAF being a powerful tool to make aviation more climate friendly,” says Katja Kleffmann, Head of Fuel Management Supply Lufthansa Group. “We are engaged in the development of SAF markets and making SAF logically available at airports. We are looking forward to our continued cooperation with VARO, which supports our sustainability strategy.”

“Our ONE VARO Transformation strategy is centred on meeting the need of our customers to decarbonise as they progress in the sustainable energy transition while maintaining supply reliability,” says Dev Sanyal, CEO of VARO. “This agreement builds on our long-standing partnership with the Lufthansa Group, one of the world’s largest airline groups, and I am excited to be working with them to accelerate the development and use of Sustainable Aviation Fuels.”

# Social

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# Social

We promote employee health and safety, ensure we are well prepared for various crises related to our operations, work to create an equal, inclusive and diverse organisation, support the satisfaction and development of our employees, promote good governance and maintain good relations with local stakeholders.



# Health and safety

Safety is our top priority to protect the health and lives of our employees and contractors. It also helps avoid environmental damage and preserves the integrity and manufacturing capacity of our assets. Our approach is reflected in our safety culture and strict procedures for managing work-related hazards and employee health on our sites. We also encourage critical thinking and robust risk management.

## Our targets

- Company-wide Total Recordable Incident Rate (TRIR) target is  $\leq 0.20$  per 200,000 work hours by 2035.
- $<0.01$  (Tier 1) and  $<0.1$  (Tier 2) process safety events per 200,000 work hours by 2035.

## Our progress in 2022

- TRIR of 0.9 per 200,000 work hours.
- Zero fatalities.

## Our approach

Working at VARO's sites requires adherence to well-defined and strictly enforced rules and procedures related to safety. Our manufacturing hubs follow international, national and industry-specific regulations to manage biological, chemical, ergonomic and physical hazards. All our manufacturing hubs and terminals have VARO-specific and ISO 45001-certified Health, Security, Safety and Environment (HSSE) management systems. For a full list of certifications held by our facilities, see the Certifications section on [page 64](#).

We use Hazard and Operability Analysis (HAZOP) and Safety Integrity Level (SIL) assessments to manage and eliminate or reduce safety-related risks.

Extensive internal and external audits verify adherence to our standards and

the effectiveness of our management system. The audits also provide a basis for continuous improvement on HSSE topics.

We are now implementing a VARO-wide programme is now being implemented to transform existing HSSE management systems into a risk-based Operational Excellence Management System (OEMS). We use a VARO-wide risk matrix to determine and classify risks. It also helps us to develop and prioritise risk-based actions and processes to mitigate these risks to acceptable levels.

We focus on high-risk activities, such as: working under high temperatures, in confined spaces, excavation activities, safety system bypass, working at height and lifting activities. Detailed instructions for such activities regulate how to conduct work to mitigate risk.





Emergency plans are in place to cover hazards related our operations. These include fire, explosions, toxic releases, and on-site injury and rescue scenarios. Our emergency plans are reviewed annually and are regularly tested through internal exercises and with the external emergency services. We learn from these exercises to further improve our approach.

### **Health and safety reporting and performance monitoring to manage risk**

Our incident categorisation and reporting is based on categories defined by the US Occupational Safety and Health Administration. We promote open and honest reporting where personnel are encouraged to report incidents, such as near misses, high potential incidents and minor spills. This provides us with an accurate status and guides our continuous improvement in HSSE.

VARO monitors monthly key performance indicator (KPI) data for all operations. Following a review in 2022, we have introduced new leading and lagging KPIs to give a better risk overview.

We analyse company-wide safety performance monthly. Our Operational Risk Committee (ORC), which is presided over by the CEO, reviews a high-level summary. The ORC reviews overall performance development as well as any incidents, with a focus on serious injuries, spills and high-potential incidents.

### **Incident investigation and follow up**

VARO continuously monitors and reports incidents and performs risk assessments to identify and classify risk in various scenarios. Events that have caused or can potentially cause significant harm to humans, the environment and assets are classified as 'high-potential incidents' or 'near misses'.

All incidents and 'near misses' are investigated and their root causes are identified to help adjust or create procedures and take action to prevent their recurrence in the future. Following a root cause analysis, we prioritise corrective and preventative actions to eliminate or minimise the causes of an incident. All investigations are recorded in our incident tracking system and follow-up actions are reviewed on a monthly basis. Learnings from incidents are shared with the workforce.

### **Employee engagement on safety**

Our precautionary measures to mitigate risks include providing the necessary personal protective equipment and training to enable employees and contractors to work safely. We proactively communicate, consult and involve all relevant employees and contractors in health and safety topics. We engage with them through various channels and forums including tool-box meetings, daily production and maintenance meetings, our intranet and risk assessments.

We provide relevant safety training to each employee and adapt it to operational changes. We have a 'Health and Safety Manual for Contractors' and provide formal site-specific induction programmes on health and safety hazards for contractors and visitors.

### **Employee health and well-being**

VARO has various initiatives that promote employee health and well-being including mental health. During pre-placement at work, we assess potential impacts on employee health based on an occupational health matrix. This is based on a health-risk profile, illness statistics and specific hazards identified for each site. Our production sites are equipped with medical facilities and medical professionals as necessary.

At some locations, VARO offers on-site employee gym facilities, as well as yoga and CrossFit lunchtime classes at nearby facilities.

## Safe transportation

VARO promotes safe driving through the implementation of driving standards for VARO truck drivers, direct contractors delivering VARO products and VARO employees who are frequent business drivers. Every truck driver has a personalised driver's manual and is provided with mandatory defensive driving training.

VARO leases rail tank cars for the transportation of products from various rail companies. We maintain a risk register that

includes the likelihood of rail transportation safety risks. Control measures include maintenance requirements for the entire fleet on a four-year cycle. We also ensure regular safety training for employees and partners that operate trains on our behalf.

For sea and river transport, VARO has verification processes and inspections for its barges and the external companies from which we lease vessels to promote safety. For leased barges, we engage third parties in technical inspections to evaluate the risk level of nearly 300 onboard aspects and

desk inspections. In 2022, we interrupted the operation of one vessel following the identification of inadequate safety practices.

## Progress in 2022

The number of TIER 1 events increased while the number of TIER 2 events remained similar to 2021. This resulted in an overall increase in the Process Safety Events (PSE) rate due to the increase in TIER 1 events. TIER 1 events are mostly classified as the lowest severity.

Nevertheless, we take the development seriously and launched a VARO-wide safety standstill with discussion and feedback at all our terminals, refineries and offices that underlined our primary message of safety being our number one priority.

Severe injuries are rare at VARO, compared with the industry in general. Our total injury rates in 2022 were however higher than our target levels, which reflect high industry standards. In 2022, the TRIR for VARO was 0.9 per 200,000 work hours on

	Targets	2022	2021	2020
<b>Process Safety Event</b>	Tier 1 PSE <sup>1</sup>	5	1	2
	Tier 2 PSE <sup>2</sup>	4	4	8
<b>Spills of oil and refined products</b>	Total number of recorded spills >100 litres	18	15	10
	Total number of recorded spills <100 litres	107	99	104
<b>Work-related injuries<sup>3</sup></b>	Fatalities	0	0	0
	Lost time injury rate	0.43	0.52	0.12
	High-consequence work-related injury rate	0	0	0
	Total recordable injury rate	0.9	0.8	0.4



<sup>1</sup> A Tier 1 Process Safety Event (T-1 PSE) is a loss of primary containment (LOPC) with the greatest consequence as defined by API RP 754.

<sup>2</sup> A Tier 2 PSE is an LOPC with lesser consequence.

<sup>3</sup> Employees and contractors.

average. Our target for 2025 is to achieve a TRIR of <0.5.

### A systematic approach for continuous improvement

Our multi-year and company-wide plan aims to systematically improve our HSSE performance, with stronger barriers against potential serious injuries and incidents. This follows our modern, standardised approach to HSSE and risk management based on our OEMS. Our approach will drive a safety culture of continuous improvement and ultimately ensure that we follow the same procedures throughout our organisation – no matter where we operate.

The OEMS is also important to support the integration of new businesses following our ONE VARO Transformation strategy and the further expansion into the renewable energy industry. An example is the newly acquired Biogas business in Coevorden, which is integrated into the same systematic HSSE structure and culture as our other manufacturing hubs. Read more on [page 38](#).

### Employee health and well-being

In 2022, we held ‘health promotion weeks’ that included several presentations on health topics such as sleep, nutrition, ergonomics and first aid. As part of our focus on employee mental health and well-being, we provided free access to an online tool supporting meditation, relaxation, mindfulness and better sleep habits to support employees affected by stress and anxiety.

Our employees continue to benefit from well-being measures introduced during the COVID-19 pandemic to stay connected and conduct their work remotely.

One example is our anonymous helpline, rolled out in Germany during the pandemic, to give employees the opportunity to talk with a trained psychologist, which was extended to all VARO locations in 2022.

### Our work in 2023 and beyond

We recognise that we still have work to do to improve our safety performance. In 2023, we will continue our systematic approach to mitigate risk and to prevent serious injuries and incidents. We are launching several initiatives to improve safety. We will continue our asset integrity reviews and will use the results to feed into improvement plans that we are developing to promote a high standard of asset integrity.

We are planning to roll out our process safety training for leadership functions in terminals and manufacturing hubs to raise risk awareness.

As part of improving our current asset base and integrating new businesses, we are expanding our central HSSE organisation and introducing new competences, such as:



- A new HSSE Manager to support our current activities and guide our businesses to continuous improvement.
- A Process Safety and Asset Integrity Manager to enhance our approach to our Operational Excellence Management System and process safety.
- Another role will focus on the HSSE risks in retail and our marine activities.

### New VARO-wide initiatives

Our new OEMS will set minimum safety requirements for our entire business and drive continuous improvement.

Building on our experience from the Cressier manufacturing hub, we will roll out company-wide lifesaving rules from the IOGP (International Association of Oil & Gas Producers) to further enhance barriers to prevent severe injuries and fatalities. The rules will be accompanied by a new Stop Work Authority (SWA) initiative that enables anyone to stop an activity they deem unsafe.

We also plan to introduce the Process Safety Fundamentals initiative, which will help our employees to understand and avoid high-risk events. The implementation will begin at the Cressier manufacturing hub before being rolled out at our other manufacturing hubs.

Our Just Culture initiative, which aims to improve our safety reporting culture and avoid incidents, is already used by our

manufacturing hubs. During 2023, we will roll out the initiative throughout VARO.

### Improving transport safety

In 2023, VARO will introduce an improved risk-based process to ensure barges, vessels and their personnel can safely transport our products on waterways.

We will also use digital tools to further increase the safety of our logistics operations, for example by using GPS mapping for trains and implementing automatic train wagon coupling to increase safety and save time.



### VARO's lifesaving rules



# Equity, inclusion and diversity

**Our work with equity, inclusion and diversity drives employee motivation, provides diverse perspectives and helps to attract and retain talent.**

## Our targets

- At least 50% female employees in office-based positions by 2030.
- 50% senior managers are women by 2030.
- Gender pay gap of <10%.

## Our progress in 2022

- 40% female office-based employees.
- 16% female senior managers.
- <10% difference in pay based on gender identified in analyses in Benelux and Germany in 2022.

## Our approach

VARO's heritage and success to date is based on bringing together and embracing the different backgrounds and cultures of around 20 companies, each with a history of entrepreneurship. We believe that different ways of working create value. We will continue to champion this diversity as we expand and transform our business, to meet the changing requirements related

to the transition to a sustainable energy system.

We believe that VARO's diverse environment is an important cornerstone for the company to attract and retain the best talent.

Giving everyone equal opportunities to reach their maximum potential is at the heart of our approach to equity, inclusion

and diversity (EI&D). We aim to support every person with what they need to succeed – whether opportunity, networks, resources or support – based on where they are starting from.

We are committed to providing equal opportunities in the hiring, promotion and compensating employees. Employees should not be discriminated against based on their race, colour, religion, sex, gender, gender identity or expression, sexual orientation, national origin, genetics, disability or age. We have zero tolerance

for harassment – including verbal, physical and other forms of harassment.

Our EI&D Policy, adopted in May 2022, covers all business relationships and expects all our employees to exhibit conduct that reflects inclusion while at work, whether colleagues, customers, suppliers, authorities, stakeholders or any member of the public. Our EI&D Steering Committee manages the effectiveness of our EI&D policies and actions, and alignment with our transformation strategy.





## Progress in 2022

We continued to focus on gender diversity, and we have launched a new hiring plan as part of our ONE VARO Transformation strategy. Out of the 23 positions filled in 2022, we recruited 12 women at a senior management level. We demanded that our headhunting company include women on applicant shortlists and did not begin interviews until this objective was fulfilled.

The proportion of female office-based employees at VARO was 40% by the end of 2022. Women accounted for 16% of our senior managers (defined at VARO as Category 6 and above).

Following the completion of a gender pay gap analysis in Switzerland in 2021, we conducted similar analyses in Benelux and Germany in 2022. The analyses confirmed that VARO has a gender pay gap of <10%. In Switzerland, the ratio of payment to men and women with the same qualifications

was 6.7% in favour of men, and at the Cressier manufacturing hub it was 11.3% in favour of women. In Benelux, the ratio was 0.6% in favour of men, and in Germany it was 4.1% in favour of women.

We have launched a Flexible Work Policy that provides our employees with the opportunity to work remotely up to two days per week – if suitable for their duties and department. We hope that the policy helps employees to find a better work-life balance.

## Our work in 2023 and beyond

We will continue to promote equal opportunities when we hire, promote and pay employees – towards our EI&D 2030 targets.

Focusing on recruitment is however not enough to promote EI&D and support our female and diverse talent to thrive. Our EI&D work will be an integral part of our employee satisfaction and development work (read more in the Employee satisfaction and development section on [page 55](#)). To support the work-life balance for our employees with young children, we have started to provide subsidised child day care near our Swiss office in 2023.

# Employee satisfaction and development

We care about the well-being of our colleagues and provide career opportunities, employee engagement, and personal and professional development. This approach also drives our business success.

## Our targets

- >75% engagement level by 2025.
- Maintain >90% voluntary employee retention rate.

## Our progress in 2022

- Conducted our first Employee Satisfaction Survey to create a baseline.
- Voluntary employee retention rate of 94%.
- Improved employee development opportunities.

## Our approach

We aim to create an environment where people feel they can speak up and be heard, which aims to boost our creativity and innovation, while empowering employees to engage. Our Employee Handbook and policies such as our Code of Conduct and our new Flexible Work Policy, which clarifies our conditions for flexible and remote working, guide our approach to employee satisfaction and development. We also promote employee

dialogue through various channels and person-to-person encounters to support our employee culture.

We encourage our employees to act in accordance with our company values – to aim high, embrace challenges, drive pace and solve together. A sense of responsibility and respect to people and planet should be at the heart of everything we do. Our values were updated in 2022 following input from a broad range of employees.

## Employee satisfaction

We aim to enable employees to find a good work-life balance. Employee satisfaction is also related to equal opportunities, equal treatment and non-discrimination as well as competitive pay (read more in the Equity, inclusion and diversity section on [page 53](#)). We conduct regular people surveys, and we then review aggregated results and compare them with high-performing companies. Action plans are then prepared for themes that require specific attention.

## Employee development

The personal and professional development of our employees is key to our succession planning and business continuity as we continuously identify individuals with potential. Development is also vital to empower our employees and

to promote their continued attractiveness on the job market. VARO encourages employees to further their capabilities, knowledge, skills and competencies by networking with other professionals and pursuing formal training.

We provide annual employee performance reviews as part of our Performance Evaluation Process. The reviews focus on assessing employee performance and promoting development and career growth by making development plans and setting personal targets.

Our ‘Lunch & learn’ sessions encourage our employees to share experiences. The sessions also offer education and development opportunities delivered by in-house subject experts, and are supported by e-learning materials.

We have focused on the following topics:

### Learning & development

- We expect VARO to have a career, succession, learning and development plan.

### Collaborate & communicate

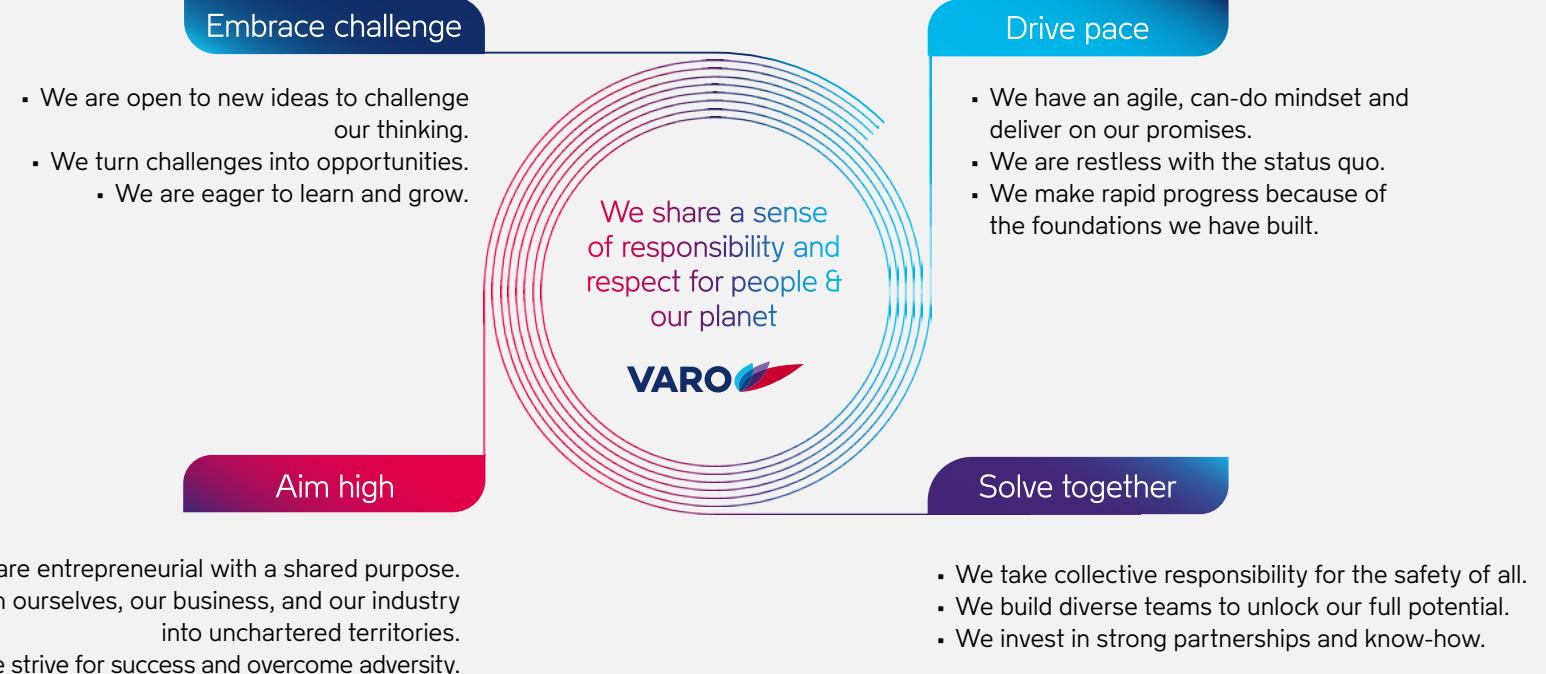
- We expect VARO to have clearly defined roles and responsibilities and to be organised in a systematic, functional and agile way.

### Feedback & recognition

- We expect VARO to have a culture of regular constructive and fair feedback on general performance, but also particular achievements.

## Our values

At VARO, we always aim high, we challenge the status quo and we solve together. This is how we act to make a difference in society and drive the pace of change in our industry.



## Progress in 2022

High employee satisfaction helped us to achieve a voluntary retention rate of 94% in 2022. Our target is to achieve and maintain a voluntary retention rate of above 90%.

### Employee satisfaction

We have created a new Employee Satisfaction Survey and have improved our processes to analyse, involve key stakeholders and take action. This resulted

in record participation rate for a VARO survey. The survey highlighted good employee awareness and appreciation of our HSSE work.

The feedback collected during the survey provided deep insights and shed light on areas requiring greater attention as we progress. To tackle these concerns, a dedicated cross-functional and cross-regional focus group has developed an action plan.





In October 2022, the VARO Board decided to make a one-off payment to help compensate employees on lower salaries for higher living costs in society. This amounted to between 2,000 and 4,000 Euros / Swiss Francs depending on job category.

VARO always seeks to pay fair wages and benchmarks salaries against industry peers. In 2022, we conducted an exercise to benchmark our compensation using the Mercer benchmark. VARO's pension fund also offers higher returns than state pension funds and compulsory health insurance covers loss of earnings, parental leave, and social and accident insurance.

### Employee development

In 2022, 85% of our employees completed a performance review. Our total training budget in 2022 was USD 1.6 million.

VARO has a long-term partnership with IMD Business School Executive Education in Lausanne. We continue to offer high-quality IMD training to our employees. Two customised VARO sessions took place in 2022, which each involved 18 first-level leaders.

## Our work in 2023 and beyond

We will continue to implement initiatives that promote employee satisfaction and development, while addressing focus areas that were highlighted by our 2022 Employee Satisfaction Survey.

To address employee expectations, we will strive to achieve the following actions and goals in 2023:

### Our objectives in 2023 and 2024

#### Learning and development

- Reinforce PEP process to promote quality development discussions.
- Structure an annual review of talent development and succession planning.
- Provide more accessible learning opportunities.

#### Collaboration and communication

- Improve two-way vertical communication throughout the organisation.
- Continuous review and improvement of communication.

#### Feedback and recognition

- Organise training on how to provide and receive feedback.
- Publish our Reward Policy.
- Encourage a culture of recognition between teams and peers.

As we continue to grow in 2023, we will open new spaces for both our main offices in Switzerland and the Netherlands. These spaces will provide our employees with modern and high-quality work environments with natural light, as well as more spaces for employee collaboration. They will also offer healthy snacks and food.

We will incentivise employees to use public transport and make e-bikes available for short journeys. Healthy lifestyles will be promoted by providing our employees with new offers for yoga classes, cross fit and gyms.

While some of these actions will be implemented at short notice, others will require more time and will therefore be managed as projects. We are confident that these actions and the broader changes we are making will have a positive impact on everyone's experience at VARO. We will continue to regularly assess and optimise this work in the coming years.

# Local community engagement

We believe our licence to operate builds on providing positive local benefit in the communities in which we operate, and we prioritise maintaining good relations with local authorities and the residents of neighbouring communities.

## Our approach

Along with our contribution to energy security and energy transition in society, our licence to operate is also based on a positive contribution to the local communities in which we work. VARO's business provides local employment and we are investing in technologies such as solar energy and district heating, which benefit local communities.

### Transparent communication

Open communication and frequent dialogue help to maintain good relationships with local communities. We inform local communities about disruptions, planned overhaul activities and turnarounds, and the impact they may have. Our HSSE Policy requires each VARO company to communicate openly with all stakeholders on relevant HSSE topics.

We use various communication channels and share information through our website, third-party websites and in local newspapers. We also maintain an emergency hotline for the community to express their concerns. Neighbouring communities can voice any concerns they might have, such as regarding development projects and natural habitats.

At our Cressier manufacturing hub, we have created a virtual sustainability map to inform the public about our initiatives in environmental protection, energy efficiency, safety and social engagement. The map covers 46 initiatives to improve sustainability on the site, which covers areas such as energy conservation, biodiversity, noise, advanced biofuels, CO<sub>2</sub> emission reduction, and the treatment of contamination. The map is accessible at <https://sustainability-varoenergy.com/en/>.

Our HSSE Policy requires VARO to communicate openly with all stakeholders on relevant HSSE topics. Local authorities are key stakeholders and we arrange site visits for local officials every year to exchange ideas and concerns about past, present and future activities.

The Bayernoil manufacturing hub organises open days at least once a year to present their activities and future plans to local stakeholders. Our Cressier manufacturing hub also organises site visits for groups with a special interest in our operations.

### Emergency preparedness

As we operate facilities and products that involve inherent risks, such as those

involving fire, cooperation on security and safety, we have active cooperation and training with local emergency services (read more about crisis management on [page 70](#)).

## Community engagement and support

We strive to provide a positive contribution though actively supporting local projects and other initiatives related to people in need through our local community engagement programmes and sponsorships.

At the Cressier manufacturing hub, we work with neighbouring communities to enhance biodiversity.



## Noise disturbance

Our operations can create disturbance such as noise, air emissions (read more about air quality on [page 39](#)) and effluent discharges (read more about our approach to effluent management on [page 43](#)).

Managing noise pollution includes both protecting employees exposed to high noise levels during the production process, and minimising noise disturbance to the communities surrounding our production facilities. Noise has historically been an issue at our Cressier manufacturing hub, which is in close proximity to communities. We have invested over CHF 4.5 million to install equipment that has helped to halve noise pollution since 2004.

According to noise impact assessments within a 4.5 km<sup>2</sup> area surrounding the Cressier manufacturing hub, the most significant sources of noise were the site's cooling fans. Consequently, we changed the blades of nearly 80 fans to reduce noise. We have also modified other kinds of equipment and built anti-noise walls to further reduce noise levels. Noise under normal operations is now at a level that is acceptable to the community.

We monitor noise from our sites and act quickly to reduce noise disturbance for local communities. During regular control checks, we monitor equipment that might affect noise levels during the day and night. We maintain regular contact with the local authorities regarding abnormal

noise disturbance. Such events happen mostly when equipment fails or during shutdown/start-up operations. If we discover abnormal noise or in the case of a complaint, the source of the noise is identified and relevant actions are taken by our production teams.

At both Bayernoil sites – Neustadt and Vohburg – noise engineers have assessed noise pollution and advised on mitigating actions, including switching to quieter equipment. We have taken action in recent years to minimise noise levels from the FCC and the steam methane reformer (SMR), which are the main sources of noise at the Neustadt site. Our outstanding focus area is the platformer unit following its throughput increase in 2022.

## Progress in 2022

On VARO's 10th anniversary, we organised a special meeting with the local authorities close to our Cressier manufacturing hub. The meeting celebrated the launch of our ONE VARO Transformation strategy at the same place VARO was founded 10 years earlier. It was attended by VARO's CEO, several members of the local and corporate management, as well as representatives of the government of the Neuchâtel region (Canton of Neuchâtel).

In 2022, VARO supported various cultural events and infrastructure initiatives around the Cressier manufacturing hub.





This included the Seul en scène Cressier music festival, the rock festival Corn'rock and a regional organisation for socio-cultural activities for young people. We also renovated public playgrounds and sports facilities, replaced the heating system in a public building and repaired roads damaged during flooding in 2021.

To further improve our communication and dialogue with society we have updated our website and all stakeholders are now better informed about VARO's activities, strategy and progress to achieve our objectives. We have also improved our social media presence, especially on LinkedIn with weekly news on our CEO's profile.

In 2022, we organised a series of events for children in Switzerland called Zukunfstag. Young children visited our Cressier manufacturing hub and office during these events to become familiar with our industry and company. We conducted visits to

various production facilities, organised quizzes, and responded to the children's questions. The idea is to inspire children's curiosity and interest in various professions within the energy sector.

#### **Minimising noise disturbance**

We received no complaints related to noise disturbance from local stakeholders around our Bayernoil sites in 2022. At the Cressier manufacturing hub, noise control measures helped to reduce noise-related complaints from 17 in 2021 to one single complaint in 2022.

As the majority of Cressier complaints in 2021 were related to the shutdown and renewal of facilities particularly to noise from a safety flare, a sound level meter was installed close to the flare in 2022 to enable us to quickly react to excessive noise disturbance. We also piloted quieter burners.

#### **Support for Ukraine**

In response to the devastating war in Ukraine, VARO contributed to refugee relief initiatives. We also created employment opportunities within our own organisation. In Hamburg, we onboarded three refugees into our workforce.

Our communications team has engaged with freelancers from Ukraine, paying them competitive rates aligned with Western European standards, where they currently reside.

We extended monetary donations to organisations providing direct aid to people who fled Ukraine. We also donated a variety of goods to local refugee shops in Switzerland.

#### **Our work in 2023 and beyond**

Going forward, informing local communities is an important part of our new ESG strategy, and particularly the development of Engine 2 of our One VARO Transformation strategy. Keeping communities informed is part of our goal to transform into a low-carbon energy generation business. We are developing district heating systems to use waste heat from industrial processes at our Cressier manufacturing hub to heat homes in the adjacent municipalities. We are also constructing the largest ground-mounted solar farm in Switzerland on the Cressier site, which will provide renewable electricity to both the manufacturing hub and local society. We are implementing the project together with the local electricity supplier Groupe E (Read more in the Emissions section on [page 35](#)).



# Governance

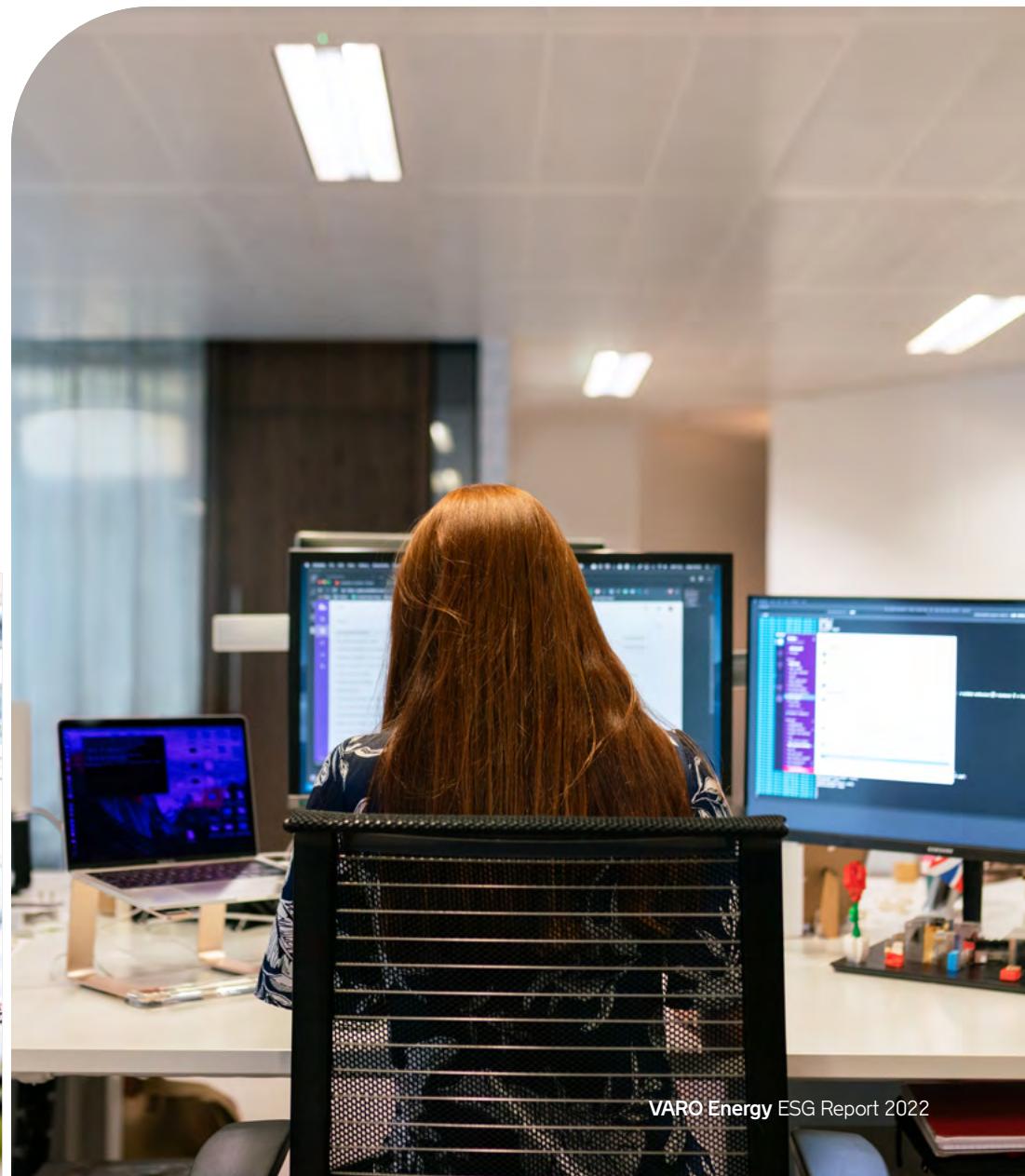
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# Managing our material ESG topics

## Our approach

At VARO, we are committed to conducting our business while causing zero harm to people and the environment, and respecting our neighbouring communities. This means respecting the environment and protecting the safety and health of those who work with us. We strive to comply with the relevant environmental legislation and have a policy to continuously improve our performance and to communicate openly with all stakeholders.

VARO has a comprehensive approach to the governance of material sustainability topics involving our Board and management team. Management of ESG is integrated and cascaded down throughout the organisation through a number of committees that oversee specific ESG-related topics (read more in the Corporate governance section on [page 65](#)). Our management and support systems are designed to enable corporate governance to function smoothly and effectively.



## Policies and standards

Our policies, including our Code of Conduct, ensure that VARO's rules, standards, values, culture and benefits are clearly outlined to protect our people and give them the basis to succeed in their role. Our policies also connect our vision, values and day-to-day operations.

VARO's key policies and standards related to ESG are:

Policy	Scope / content	Policy	Scope / content
<b>HSSE commitment and Policy</b>	Encourages business conduct that avoids harm to people, protects the environment and respects our neighbours. The Policy outlines specific requirements for employees, joint ventures, and contractors to comply with this goal.	<b>HR Policy on Terminating Contracts</b>	Establishes the procedure for terminating employee contracts. The policy establishes the rules for abiding with VARO's commitment of treat employees with respect and fairness in all situations.
<b>Code of Conduct</b>	Policy guiding employees and all individuals acting on behalf of VARO on how to act in an ethical and responsible manner and uphold VARO's values in various aspects of the business environment.	<b>Performance Evaluation Process Policy</b>	Establishes the scope, principles and process for conducting regular performance appraisals, setting personal performance objectives, and establishing a path for professional development, training, and career growth.
<b>Whistleblower Policy</b>	Defines and supports the process for submitting complaints or grievances, receiving feedback and establishes a policy of non-retaliation against individuals submitting grievances.	<b>HR Privacy Notice and Data Retention Policy</b>	Establishes rules for the collection, sharing, and retention of private data of prospective, current, or former employees or other individuals working for or on behalf of VARO.
<b>Equity, Inclusion &amp; Diversity Policy</b>	Defines the meaning of equal opportunity in hiring, promotion, and compensation, establishes the responsibility to maintain a work environment free of harassment, and obligates individuals to report any breaches.	<b>Data Privacy, Vendor Selection Section</b>	Guidance on conducting due diligence of vendors in relation to data handling processes. The policy ensures VARO's compliance with GDPR when working with vendors.
<b>VARO Flexible Working Policy</b>	Establishes the scope, conditions, and requirements for employees' ability to combine remote work and work in the business premises.	<b>Information Security Policy</b>	Provides the foundation for an effective information security management system, in alignment with legal requirements and best practices. It is a set of policies directed on operating Information & Technology in a responsible and safe way.
		<b>KYC (Know Your Customer) Policy</b>	The policy includes the risk assessment and verification of risk-related information regarding counterparties and business relationships. Its primary objective is to ensure VARO's compliance with sanctions, prevent involvement in money laundering, financing terrorism, or any other criminal activities, and mitigate the risk of exposure to corruption or bribery.

## Certified management systems

VARO is committed to conducting its business while causing zero harm to people and the environment, and respecting neighbouring communities. Our management system is based on the International Standards Organisation (ISO) 9001 for Quality Management and ISO 14001 for Environmental Management. The quality of our Integrated Management System approach to environmental and safety performance is reflected in our various certifications, as shown in the table below. Bayernoil's EU Eco-Management and Audit Scheme (EMAS) certification goes beyond the requirements of the

ISO 14001 environmental management system and can be considered equivalent.

Regular internal and external certification audits schemes ensure that our asset management processes are based on responsible business practices, oriented towards continuous performance improvement, and meet our required obligations.

### Memberships

The Bayernoil manufacturing hub is part of the Umwelt + Klimapakt Bayern1 (the Environmental and Climate Pact of Bavaria), which is a cooperation between

the Government of the Free State of Bavaria and over 4,000 local companies. The pact establishes a cooperation in which businesses undertake various obligations related to improving their climate-related performance, setting up or enhancing their environmental management systems, and improving resource efficiency. In turn, state authorities provide financial support for such initiatives, as well as expert recommendations and other types of assistance.

	Bayernoil Manufacturing hub	Cressier Manufacturing hub	VARO Tankstorage Switzerland	VARO Terminals Germany	VARO Terminals Netherlands	VARO Terminals Belgium	VARO Terminals France
ISO 9001	●	●	●	●	●	●	
ISO 14001		●	●	●		●	●
ISO 45001		●	●			●	
EMAS	●						
ISO 27001	●						



# Corporate Governance

VARO has a comprehensive approach to managing its ESG and sustainability-related material topics, which is guided by the company's governance structure.

VARO is privately owned by Carlyle and Vitol and conducts its business through Group companies acting as one single entity. The Group's holding company is VARO Energy BV, based in the Netherlands and its operational head office is based in Switzerland, through VARO Energy Marketing AG. All VARO companies follow OECD guidance for the correct pricing for intra-Group services as part of an integrated business model.

## Board structure

The Group has a two-tier board structure that consists of the Supervisory Board (SB) and the Executive Board (EB). The SB supervises and advises the EB, which performs all initiatives necessary to achieve VARO's objectives.

The SB oversees VARO's ESG strategy and performance through dedicated ESG sessions as part of the SB meetings headed by the SB Chairman. The overview includes the performance of material ESG topics as well as the management of climate-related risks and opportunities related to the overall ONE VARO strategy and the Group's business planning.

## Audit Committee

The Audit Committee (AC) consists of the members of the SB or their representatives. Its overall task is to support the SB in the performance of its oversight duties. The AC's responsibilities include monitoring the performance of the EB with respect to (non-extensive):

- Legal and Compliance policies.
- ESG reporting activities.

## Remuneration Committee

The Remuneration Committee consists of the members of the SB or their representatives. Its responsibilities include:

- Preparing nominations and approvals of EB members.
- Determining, agreeing, and developing VARO's Executive and Senior Management Remuneration Policy.

- Determining specific remuneration packages for VARO's Executive Directors, including (but not limited to) salary, benefits, performance-based incentives.
- Reviewing and agreeing significant changes to remuneration packages and periodical amendments of key employment terms across VARO.

## Structure of the Supervisory Board



**Marcel van Poecke**  
Chairman



**Russell Hardy**  
Member of the board



**Joost Dröge**  
Member of the board



**Bendik Dahle**  
Member of the board



**Jay Gleacher**  
Member of the board

## Executive Board

The EB is entrusted with the operational management of the Group and is responsible for the continuity of the Group under the supervision of the SB. The EB includes seven members and meets on a weekly basis. The EB's operational management of the Group's activities includes (but is not limited to):

- Developing VARO's strategy including the ESG strategy and targets.
- Enhancing VARO's performance.
- Identifying, analysing and managing general and financial risks through internal control systems.
- Financial reporting and non-financial reporting.

ESG topics, for example pertaining to climate risk and opportunities, is an integral part of the EB's work in setting the ONE VARO Transformation strategy to create long-term value, setting the management agenda and conducting business planning, including financial planning.

### Structure of the Executive Board



**Dev Sanyal**  
CEO



**Rick Klop**  
EVP CFO



**Julian Stoll**  
EVP COO



**Ernestina Benedetto**  
EVP Strategy and  
Transformation



**Gilles Vollin**  
EVP Integration and  
Capability



**Theo Pannekeet**  
EVP New Energies  
and Innovation



**Jeremy Baines**  
EVP Customers, Trading and  
Commercial Optimisation

## Internal governance structure

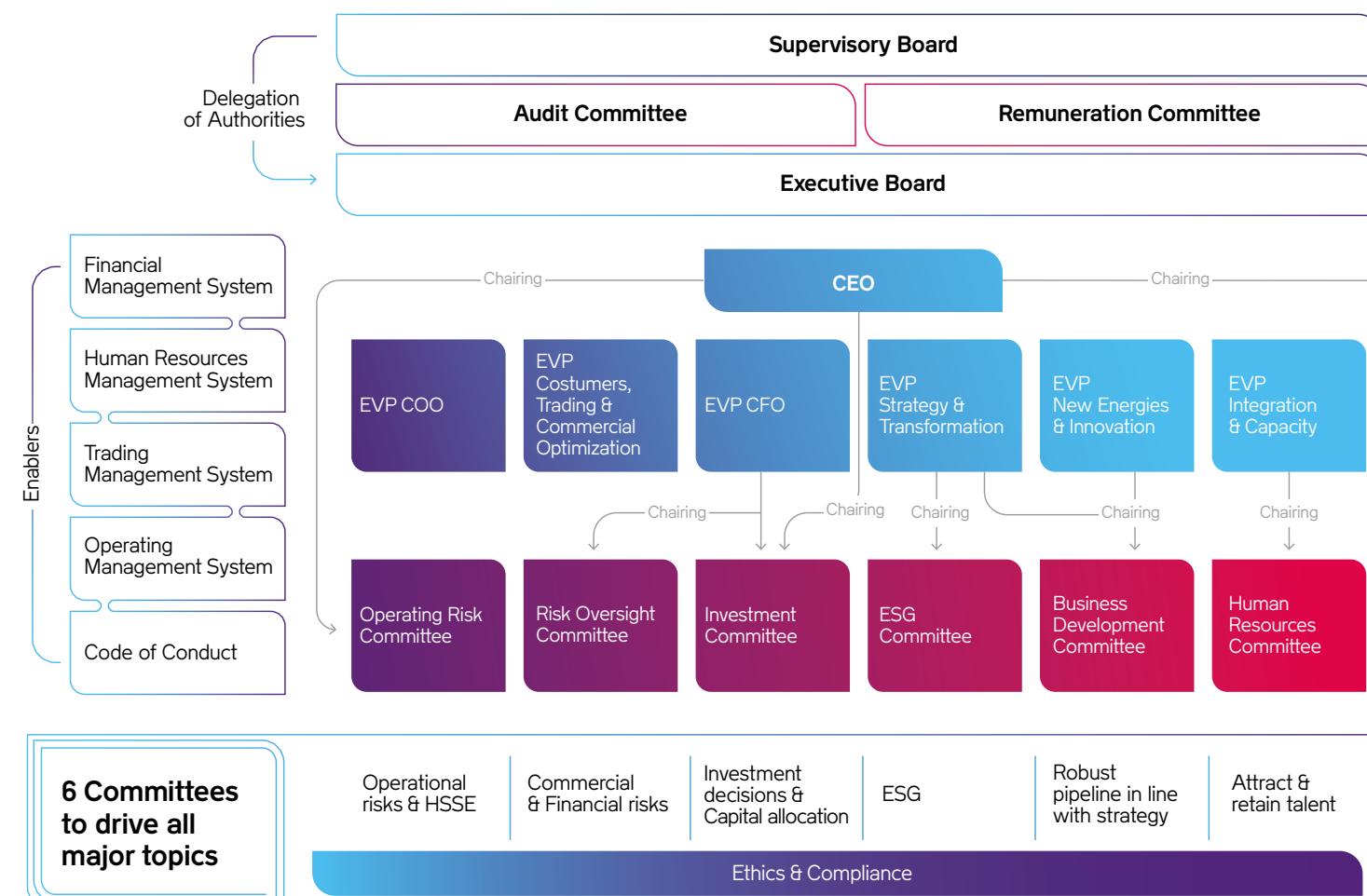
To facilitate VARO's strategy, business development and effective decision making, VARO has established a governance structure with dedicated committees supporting the EB.

VARO's dedicated **ESG Committee** oversees the implementation and effectiveness of our ESG programmes and manages risk, including our climate-related targets. The committee defines ESG priorities, objectives and strategy. It aims to further integrate sustainability into our

strategy and operations, and oversees the implementation of our ESG initiatives and performance.

ESG topics are also managed in other governance committees. For example: The **Operational Risk Committee**

oversees issues related to HSSE. VARO promotes the reporting of all HSSE incidents and the HSSE Director issues a monthly summary and trend analysis to the EB. The SB is updated on HSSE on a quarterly basis and on individual incidents when necessary.



## Enterprise risk management system

VARO is exposed to various financial risks – including those related to the energy transition, commodity prices, foreign currency exchange rates, financing and credit risk. During 2022, we conducted a comprehensive risk review with the support of external risk management specialists.

VARO's Enterprise Risk Management (ERM) system provides a clear framework for managing and reporting risks in our business activities and operations to the SB and its sub-committees.

Risk management includes the daily monitoring of the market, monthly Group Risk Oversight Committee (ROC) meetings, and real-time credit risk and market risk evaluation and reporting. Significant risk exposures from prices and markets are reported to and discussed by the ROC.

Our management systems and Code of Conduct, combined with our organisational structures, processes, controls, standards, compliance and ethics, together form our system of internal control (SIC), which governs how we conduct business and manage risk.

VARO's internal control system is periodically assessed by the AC. The AC will advise the Board on the adequacy of the combined assurance provided by our risk management procedures.

### ESG Risk management

ESG risk management is integrated into the ERM process, where ESG risks and opportunities are identified, assessed and integrated into the ONE VARO's Transformation strategy, business planning, ESG objectives and management, through VARO's designated Governance Committees.



## Examples of risk areas

### Climate change and energy transition risk

Developments in regulations, technology and the market related to climate change and the transition to a low-carbon society could increase or decrease demand for certain products within our portfolio. This could ultimately change our revenue and business outlook and alter investor sentiment, our financial performance and our competitiveness.

The regulatory environment to support decarbonisation is evolving. We are investing in Sustainable Energies (Engine 2 of our One VARO Transformation strategy) to strengthen our market positions, and we expect to benefit from future legislative changes. We monitor research and global market data to determine future investments, such as electric and hybrid vehicle sales, and the shift from conventional fuels to sustainable energy solutions.

Our competitiveness and profitability may also be affected by the increased severity of extreme weather events, such as storms and floods, change in precipitation patterns and greater variability in weather patterns, combined with the rising mean temperature, sea and river levels. Such events may lead to price volatility, reduced demand, unexpected

operational disruptions, asset write-offs and financial losses. In the coming two years, VARO will further integrate physical climate risk into its ERM process and conduct a Climate Scenario Analysis aligned with TCFD recommendations.

### External market risk

We are exposed to market price fluctuations for oil products, renewable fuels, carbon, other commodity inputs such as natural gas, electricity, interest rates, and to foreign currency exchange rate fluctuations and the general macroeconomic outlook.

The oil market is subject to geopolitical factors that shape global supply and demand. Besides managing the associated price risks, we seek to ensure supply continuity by operating flexible manufacturing models that are not dependent on the supply of certain grades of crude oil.

### Geopolitical risks

VARO has established a cross-functional internal team to closely monitor developments and to ensure compliance with sanctions across our business. The team continuously assesses risk implications, and manages: the continuity of crude procurement, the supply of products to our customers, the optimisation of our market positions

and inventory levels to ensure effective risk management, funding implications to maintain sufficient liquidity, and also focuses on credit and performance risk exposure.

VARO has acted proactively by substituting Russian crude oil with other products since the start of the conflict in February 2022, and fully abides by all relevant sanctions.

### Ethical misconduct and non-compliance risk

The Group's policies and Code of Conduct state that all our employees must comply with all the applicable regulations and company policies that govern their work, including those related to anti-trust and competition, anti-bribery and the environment. Our employees are obliged to report any suspected violation of regulations, policies, procedures or the Code of Conduct to VARO's General Counsel, including concerns related to accounting non-compliance, fraud or corruption. Employees who raise concerns or help to resolve reported matters are protected against retaliation.

### Information and cyber security

VARO operates critical infrastructure that is reliant on information technology and operational technology systems, including services to support business-critical manufacturing and supply chain processes.

The size, age and complexity of our infrastructure makes us potentially vulnerable to internal and external security threats, intrusions, attacks and outages. This includes state-sponsored cybercrimes that could affect our ability to perform critical tasks, safeguard privacy and commercially sensitive data, and ensure safe and reliable service availability. It could also result in injury or direct harm to people, local communities or the environment, the loss of customer trust, legal or regulatory fines, or the loss of our license to operate critical infrastructure services.

We have a comprehensive incident response plan and provide cybersecurity awareness training for our employees as well as a Crisis Management Plan that includes the procedures related to cyberattacks (read more in the Crisis management section on [page 70](#)). Our aim is to create a security-conscious culture, in which all employees take personal responsibility for cybersecurity.

# Crisis management

We prepare for various crises related to our operations that could potentially harm people and the environment or disrupt our business.

## Our approach

Besides causing potential harm to people and the environment, a crisis could potentially interrupt the supply of products to customers and harm our business through fines and reputational damage. We meet all relevant regulations and have established appropriate systems for all reasonably foreseeable emergencies. We continuously monitor other potential issues that could potentially develop into a crisis.

Emergency procedures also include fire, flooding, explosions, the exhaust of gases, terrorist attacks, extreme weather events and significant process disruption caused by human error. Emergency systems include procedures and tools for warning people onsite and offsite. We review our emergency plans on an annual basis, and we conduct regular training to simulate various possible incidents.

All our terminal operations conduct an annual crisis scenario exercise, which covers the management of a fire

emergency, oil spill, personal injury and terrorism. It is coordinated internally by the HSSE department and with the assistance of external trainers when required.

When necessary, terminals have 24/7 crisis teams, dedicated fire fighters, emergency control rooms, CCTV, and can initiate emergency responses in other locations and coordinate evacuations. We provide fire management training quarterly and annual training for all personnel on responding to terrorism attacks.

## Progress in 2022

During the year, two large-scale emergency exercises were carried out at the Cressier manufacturing hub. One event was planned with the local authorities and involved the simulation of a leakage from our crude oil pipeline. The other event was unplanned and involved the training scenario of a Liquefied Petroleum Gas (LPG) leakage during a pipe replacement. We also implemented 134 additional training sessions for our emergency teams that involved over 300

VARO employees during the year. In 2022, investigations continued into the significant incident that involved an explosion and fire that occurred at Bayernoil's Vohburg site in 2018. Corrective actions arising from internal investigations are being implemented, and a reinvestment and rebuild programme is under way.

## Our work in 2023 and beyond

Going forward, we will continue to refine and improve our crisis management procedures, and aim to have a structured and layered approach to crisis management and follow internationally recognised standards.



# Business behaviour and ethics

Our approach to business behaviour and ethics is driven by our Code of Conduct, our ethical business practices, data privacy and anti-corruption.

## Our approach

The core values that guide our business practices centre on honesty, integrity and reliability. We expect everyone acting on behalf of VARO to abide by our ethical business practices – including employees, consultants and representatives.

## Our Code of Conduct

Our code is a comprehensive set of principles related to VARO's core legal standards, our business behaviour and ethics. It is publicly available on our website. It forms part of the employment agreement entered into by every employee and is a key part of their induction, on-boarding and ongoing training. The code is available in VARO's four languages: English, Dutch, German and French. It is also an integral part of management agreements, service agreements and other partnerships. VARO's General Counsel and the EVP Integration and Capability are custodians of our Code of Conduct.

## Ethical business practices

In a highly competitive market, we believe that conducting business in an ethical way is a precondition for maintaining our reputation as a trusted partner, and for being a successful long-term business. We abide strictly by national and EU regulations, and all related international sanctions, such as the recent sanctions relating to the ban on importing Russian crude oil and products.

VARO employees who engage in commercial activities with counterparties are trained extensively in compliance with national and EU competition rules, which are reflected in the VARO Competition Rules.

## Data privacy

We have clear responsibilities for safeguarding the personal data of individuals – including our employees, customers, suppliers and business partners. The VARO Privacy Policy aligns with the requirements of applicable laws

and regulations, particularly the General Data Protection Regulation 2016/679 (GDPR). The VARO Data Retention Policy regulates the time limit for retaining the data of stakeholders stored for various purposes. We train and inform employees on safeguarding confidential information, particularly in relation to the handling of computer equipment used for work purposes. Read more about cybersecurity on [page 69](#).

Our Conflict of Interest Policy forms part of the VARO Code of Conduct, and is intended to prevent the risk of personal interests. It encourages employees to declare if there is any situation that could lead to a conflict of interest in their performance of work duties. To promote an impartial and equitable approach among all VARO employees, we have imposed a policy of transparency of all personal ties between employees and potential employees.

## Anti-corruption

VARO is committed to complying with all anti-money laundering and counter-terrorism financing regulations, which are part of our Know Your Customer (KYC) Policy. Our approach aims to identify, mitigate and manage the risks of breaching sanctions, facilitating money laundering, financing terrorism, or other criminal activity, and exposure to bribery and corruption. The VARO Credit Risk Department is responsible for conducting due diligence and vetting our counterparties.

All business relationships resulting in one or more transactions with a total value of over 15,000 EUR are subject to due diligence. There are around 18,000 counterparties that abide by our KYC Policy.

## Our Whistleblower Policy

Employees can report their concerns through our new Whistleblower channel, which facilitates employees to anonymously report any suspected violations of our policies. Employees are protected from retaliation.

## Advocacy

VARO advocates its values of sustainable business, and establishes partnerships and co-operation with like-minded partners. Our active role in these partnerships enables us to exchange best practice experience.

One example is our partnership with the World Economic Forum, where we collaborate with other leading global companies to develop solutions to some of the world's greatest challenges. Another of our important partnerships is with the Transhydrogen Alliance, which is working to develop the logistics infrastructure to facilitate the energy transition. See Appendix V on [page 107](#) for a list of entities that VARO collaborates with.

## Progress in 2022

By the end of 2022, 84.2% of employees had completed our Code of Conduct training. We plan to have trained 100% of our employees by the end of 2023.

In 2022, we introduced a Whistleblower Policy that provides employees with an alternative channel to file a complaint related to any issue covered by the Code of Conduct.

In 2022, there were no reported breaches of our KYC Policy by our business partners.

## Our work in 2023 and beyond

In 2023, we will review our due diligence process for counterparties.



# Safeguarding human rights

We seek to safeguard universal human rights by operating with respect and by following global best practices in relation to our employees, the communities affected by our operations, products and services, and our supply chain.

Besides our vision to not cause harm to people or the environment, our licence to operate is defined by local communities and the high standards of human rights where we operate (read more in the section on Local community engagement on [page 58](#), and the Health and safety section on [page 48](#)).

Our operations and strategies are aligned with universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and the UN Sustainable Development Goals. In April 2022, we joined the UN Global Compact, and will work to ensure that the ten principles are fully incorporated throughout our corporate practices and value chain.

All countries where we operate – Belgium, France, Germany, Luxembourg, the Netherlands, and Switzerland – are ranked the highest on the Human Freedom Index. This means that our relations with employees and society are well regulated by local legislation, with high standards governing human rights.

Our Code of Conduct highlights our commitment to a workplace environment where people are treated with dignity, fairness and respect, while our Equity, Inclusion and Diversity Policy establishes the principles of creating working environments based on fair treatment and equality.

## Our grievance mechanism

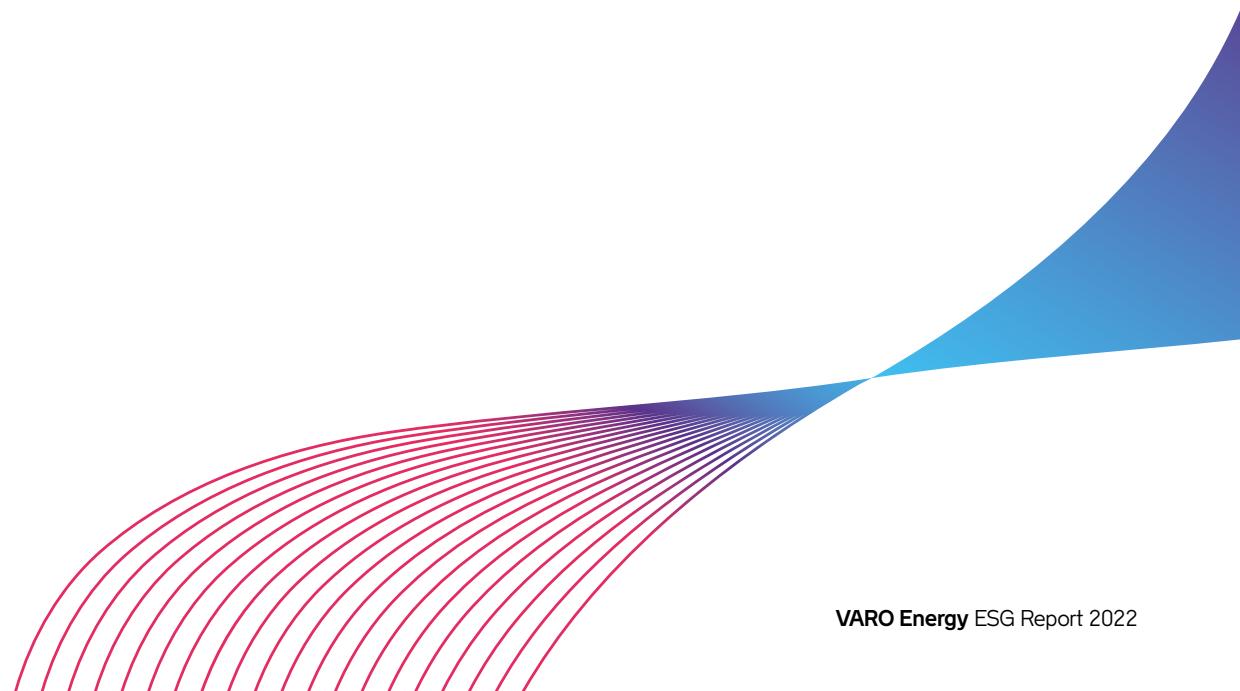
Our employees have a duty to report in good faith any suspected violations of our policies. We place strong emphasis on the shared obligation to uphold high standards of business and personal ethics when fulfilling duties and responsibilities.

We provide a channel for reporting breaches, which acts as our grievance or whistleblowing mechanism. Reporting is via email or in-person communication to the Human Resources Department and/or to the General Counsel. Our Whistleblower Policy provides an additional channel for grievances, as indicated in the section Business behaviour and ethics on [page 71](#). In 2022, we registered three grievances, all of which were resolved.



## Part III

# Appendices summarising key KPIs



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# Appendix I: Our ESG report

This report has been prepared in accordance with the Universal GRI Standards 2021, and with other sustainability reporting standards and commonly used guidance as deemed necessary to communicate VARO Energy's Environmental, Social and Governance (ESG) strategy and performance.

The report describes VARO Energy's general governance of sustainability, programmes and particular initiatives (historical, current and planned for the future), as well as quantitative data reflecting ESG performance.

For the evaluation of material topics, VARO conducted the evaluation and positioned

the relative weighting for the topics consistently with the GRI Standards 2016.

VARO Energy B.V. is the reporting company and main holding company for the Group. The operational headquarters are in Baar, Switzerland. Throughout the report, VARO Energy and VARO are used interchangeably.

## Financial year reporting

Disclosures are reported using VARO's fiscal year, which corresponds to a standard calendar year - 1 January to 31 December. The most recent completed financial year is reported in the following year's reporting.

### The report is structured in three parts:

**Part I:** Introducing VARO and our sustainability approach.

**Part II:** Managing our material sustainability topics.

**Part III:** Appendices summarising key KPIs and providing other information in accordance with the principles and requirements of GRI.



## Definition on selected disclosures

### GHG inventory and scope of reporting

VARO measures and reports GHG emissions in line with the Green House Gas Protocol Corporate Standard (scope 1 & 2) and the Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. While we strive to report CO<sub>2</sub>e, this information is not always readily available. The GHGs that are most material to VARO's operations and value chain are CO<sub>2</sub> and CH<sub>4</sub>.

Entities included in GHG accounting are: VARO Benelux, VARO France, VARO Germany, VARO Switzerland, VARO manufacturing hubs (Cressier and Bayernoil). We also report on several scope 3 categories along the VARO value chain.

Type	Explanation	Application in VARO reporting (if different from above)	In scope limited assurance	Emission factors for GHGs:
Scope 1	Direct emissions	Utilities data from operations and direct CO <sub>2</sub> reporting from manufacturing hubs included in ETS (Emission Trading Scheme).	Yes	VARO's GHG calculations are based on a number of sources of emission factors:
Scope 2	Indirect emissions from e.g. electricity usage	Market-based reporting using supplier-specific factors or the national residual mix, location-based using national grid average.	Yes	<ul style="list-style-type: none"> <li>Scope 1: Emissions from our manufacturing hubs are calculated internally as part of the European Emission Trading Scheme.</li> </ul>
Scope 3, cat. 1	Purchased goods	Processed crude oil and renewable feedstock using crude-type specific emission factors. Purchased ready-made products are calculated using generic emission factors.	No	<ul style="list-style-type: none"> <li>Scope 2: Supplier-based emission factors taking account of the product-specific allocation of electricity production. Emission factors from the GHG protocol are used for the residual grid and residual mix.</li> </ul>
Scope 3, cat. 2	Capital goods	Including assets in VARO's balance sheet e.g. barges and rail transport carriers.	No	<ul style="list-style-type: none"> <li>Scope 3 category 11 emissions for the combustion of sold products are based on DEFRA 'Combustion – Fuels'.</li> </ul>
Scope 3, cat. 3	Fuel and energy	Production-related emissions for all fuels and energy sources used by VARO.	No	<ul style="list-style-type: none"> <li>Scope 3, category 1 emissions for purchased ready-made products are based on 'DEFRA WTT – fuels'.</li> </ul>
Scope 3, cat. 4	Upstream transport	Transport of crude oil, feedstock and ready-made products.	No	
Scope 3, cat. 5	Waste	Third-party disposal and treatment of waste generated in VARO's operations.	No	
Scope 3, cat. 6	Business travel	Work-related travel by VARO employees.	No	
Scope 3, cat. 7	Employee commuting	VARO Benelux.	No	
Scope 3, cat. 9	Downstream transport	Transport of products.	No	
Scope 3, cat. 11	Use of sold products	Total volumes from both VARO's own manufactured products and traded products if sold to direct users, distributors or other parties. Fuels are assumed to be combusted. Bitumen products are assumed to belong to a partly circular material chain.	Yes	
Scope 3, cat. 12	End of life treatment	Applied to bitumen.	No	

## Consolidation approach to GHG emissions

VARO applies a financial control approach and seeks to align the extent of its GHG reporting with that of its financial statements. VARO owns 51.4% of the Bayernoil joint venture manufacturing hub. Previously this proportion has corresponded to the control of activities and GHG emissions. During 2022, VARO took over control over additional manufacturing rates at Bayernoil and updated the consolidation approach to also encompass the additional volumes and associated emissions. This change also led to a restatement of 2021 data. In 2021, the actual allocation of scope 1 and 2 emissions was 52.38% – compared to 56.64% in 2022.

We have also updated the reporting process and emission factor sources for Scope 2 calculations retroactively and introduced dual reporting with market-based reporting.

Restated figures are:

KPI	ESG Report 2021	ESG Report 2022
2021 GHG emissions of Bayernoil Scope 1	624,818 tonnes CO <sub>2</sub>	639,406 tonnes CO <sub>2</sub>
2021 GHG emissions of Bayernoil Scope 2, location based	116,510 tonnes CO <sub>2</sub> *	83,582 tonnes CO <sub>2</sub>

\* more accurate data has been used in this estimate.

## Units

VARO reports GHG emissions in metric tonnes of carbon dioxide equivalents (mtCO<sub>2</sub>e)

## Disclosures on carbon intensity

Product Carbon Intensity (CI) is calculated using the following formula:

$$CI = \frac{gCO_2e}{MJ} = \frac{\text{Total GHG}^* - \text{Retired marketed CO}_2\text{ removals}^{**}}{\text{Conventional fuels marketed} + \text{Sustainable energies marketed}}$$

\*Total GHG include scopes 1, 2, and 3, as defined by the GHG Protocol.

Scope 3 includes categories 1, 2, 3, 4, 5, 6, 7, 9, 11 and 12, as defined by the GHG Protocol.

\*\* Sold to customers and retired at the same time. Only includes high-carbon removals.

Manufacturing process Carbon Intensity (CI<sub>M</sub>) is calculated using the following formula:

$$CI_M = \frac{kgCO_2e}{boe} = \frac{\text{Scope 1 \& 2 GHG}}{\text{Crude oil throughput}}$$

## Disclosure on electricity generated from renewable sources

Reported electricity generated from renewable sources includes electricity provided to our Swiss operations via power supply contracts backed by Guarantees of Origin from the power supply company.

## Reporting on Health & Safety

### Disclosure on TRIR

Total Recordable Work-related Injury Rate (TRIR) is disclosed at a rate of 200,000 working hours. It is based on a weighted average of the injury rate for different operating facilities, and is based on the following formula:

$$\text{TRIR} = \frac{\text{TRI}}{\text{Working hours}} \times 200,000$$

Where:

- TRI is the weighted average of the Total Recordable Injuries, which include fatalities, Lost Time Injury (LTI), Restricted Work Injury (RWI) and Medical Treatment Case (MTC).
- Working hours is estimated as the number of hours of work performed by employees and contractors.
- 200,000 hours reflect 100 full-time equivalent employees on a yearly basis, based on the assumption they work 2,000 hours (250 days) per year, as required by the compilation requirements of the GRI Disclosure 403-9 Work-related injuries. 2.1.

### Disclosure on Women in Senior Management

Senior management is defined by VARO's human resources system as VARO employees entering category 6 and above. Category 6 includes senior leaders with larger departments, some of them covering VARO operations in several countries, leaders of the leaders of other teams, and Senior Project managers.

The percentage of female employees in this category is defined by share of females in senior management.

The calculations are based on the headcount of VARO employees.

### Disclosure on Voluntary Employee Retention Rate

Voluntary Employee Retention Rate includes employees that have terminated their contract with VARO on a voluntary basis (voluntary attrition). It does not include retired VARO employees. It is calculated based on the following formula:

$$\text{Voluntary retention rate} = \frac{\text{Voluntary resignations}}{\text{Average number of VARO employees in 2022}}$$

Where number of employees is based on headcount.



# Appendix II: ESG Data

## Environment

### Greenhouse gas emissions (GHGs)

	Unit	2022	2021 **	2020
Direct (scope 1) GHG emissions	metric tonnes CO <sub>2</sub> equivalent	1,217,116	982,093	990,614
of which from Cressier	metric tonnes CO <sub>2</sub> equivalent	381,068	304,283	355,695
of which from Bayernoil*	metric tonnes CO <sub>2</sub> equivalent	788,815,	639,406	590,945***
Energy indirect (scope 2) GHG emissions, market-based*	metric tonnes CO <sub>2</sub> equivalent	189,752	173,142	151,323
of which from Cressier, market-based	metric tonnes CO <sub>2</sub> equivalent	0	5,791	12,392
of which from Bayernoil, market-based*	metric tonnes CO <sub>2</sub> equivalent	171,673	149,796	119,054
Energy indirect (scope 2) GHG emissions, location-based	metric tonnes CO <sub>2</sub> equivalent	111,728	97,114	-
of which from Cressier, location-based	metric tonnes CO <sub>2</sub> equivalent	2,560	2,172	-
of which from Bayernoil, location-based*	metric tonnes CO <sub>2</sub> equivalent	95,789	83,582	-
Other indirect (scope 3) GHG emissions	metric tonnes CO <sub>2</sub> equivalent	78,451,178	71,440,682	66,497,422
of which categories 3.1	metric tonnes CO <sub>2</sub> equivalent	12,595,153	11,943,728	11,088,885
of which category 3.3	metric tonnes CO <sub>2</sub> equivalent	230,652	198,541	199,538
of which category 3.4	metric tonnes CO <sub>2</sub> equivalent	277,232	211,346	294,235
of which categories 3.11	metric tonnes CO <sub>2</sub> equivalent	65,099,004	58,844,562	54,668,705

\* Entities included in GHG accounting are: VARO Benelux, VARO France, VARO Germany, VARO Switzerland, VARO Manufacturing Hubs (Cressier and Bayernoil). The GHG included in the calculations are CO<sub>2</sub> and CH<sub>4</sub>, which are relevant for VARO's operations and value chain. GHG emissions from Bayernoil manufacturing hub, included in the result, are accounted for following the financial control approach, but taking into account the actual utilisation of plant capacity. In 2022, actual utilisation was 56.64%, compared to 52.38% in 2021 and 51.4% in 2020, which was equivalent to VARO's actual equity share.

Restatement: Based on the change in methodology, Bayernoil emissions for 2021 were changed.

\*\* Restatements based on the use of the new methodology.

\*\*\* residual.

## Carbon intensities

			2022	2021	2020
Carbon intensity of manufacturing	kg CO <sub>2</sub> /boe		21	23	-
Carbon intensity of sold products	gCO <sub>2</sub> /MJ		83.7	84.5	87.4

## Air emissions

	Unit	2022	2021	2020
NOx	tonnes	686	610	651
SOx	tonnes	900	873	1,186
VOC (Volatile Organic Compounds)	tonnes	417	318	372
PM (Particulate Matter)	tonnes	8	6	9
CO	tonnes	19	33	28

## Energy consumption

	Unit	2022	2021 **	2020
Energy intensity of refining	GJ/toe	2.61	2.67	2.61
Total energy consumption within the organisation	TJ	23,917	21,326	21,028
Total fuel consumption within the organisation from non-renewable sources*	TJ	20,758	17,245	17,299
Electricity consumption	TJ	1,974	2,220	2,031
of which electricity generated from renewable sources**	TJ	398	297	317
Heating consumption	TJ	17,515	15,071	15,033
Cooling consumption	TJ	155	134	137
Steam consumption	TJ	3,706	3,508	3,468
Electricity sold	TJ	16	15	14
Heating sold	TJ	3	3	1

\* restatement: correction of values for 2019-2021 due to re-calculation.

\*\* restatement: correction of values for 2021 due to the change in methodology (use of actual utilisation capacity for Bayernoil instead of equity share).

\*\*\* restatement: correction of values for renewable energy due to the change of definition. See Appendix I, About the ESG Report.

## Water consumption

	Unit	2022	2021	2020
Total water consumption from all areas*	megalitres	353	418	435
Water consumed in water-stress areas	megalitres	0	0	0
Total water withdrawal from all areas*	megalitres	2,915	3,184	3,070
Total withdrawal of surface water*	megalitres	566	656	525
Total water discharge to all areas**	megalitres	2,562	2,766	2,635
Total discharge of freshwater	megalitres	2,544	2,755	2,629

\* Restatement for 2021, 2020 and 2019 due to changes in the recording methodology at the Bayernoil.

\*\* Restatement for 2021, 2020 and 2019 due to re-calculation.

## Waste management

	Unit	2022	2021	2020
Total weight of waste generated	metric tonnes	31,457	21,233	14,072
of which hazardous	metric tonnes	5,038	3,288	2,984
of which non-hazardous	metric tonnes	26,316	16,500	10,550
of which scale and sludge	metric tonnes	833	1,669	941
Total weight of waste diverted from disposal	metric tonnes	27,272	14,613	9,680
of which hazardous	metric tonnes	1,402	613	515
of which non-hazardous	metric tonnes	25,869	14,000	9,165
Total weight of waste sent for disposal	metric tonnes	4,563	4,852	3,056
Total weight of hazardous waste sent for disposal	metric tonnes	2,419	2,203	1,727
Total weight of non-hazardous waste sent for disposal	metric tonnes	2,143	2,341	1,192

# Safety

## Work related injuries, employees and contractors

	Unit	2022	2021	2020
Fatalities	Number	0	0	0
Rate of fatalities	Per 200,000 hours worked	0	0	0
Number of hours worked, total employees and contractors*	Hours	5,114,620	5,815,500	6,482,000
Number of hours worked, employees*	Hours	3,242,870	-	-
Number of hours worked, contractors*	Hours	1,871,750	-	-
Lost Time Injuries, total employees and contractors**	Number	11	15	4
Lost Time Injury Rate, total employees and contractors	Per 200,000 hours worked	0.43	0.52	0.09
Lost work days	Days	248.5	-	-
High consequence work-related injury, total employees and contractors	Number	0	0	0
High consequence work-related injury, contractors***	Number	0	3	0
High consequence work-related injury, contractors	Number	0	3	0
High consequence work-related injury Rate, total for employees and contractors	Per 200,000 hours worked	0	0.1	0
Total Recordable Work-related Injuries, total employees and contractors	Number	22	24	13
Total Recordable Work-related Injuries, employees	Number	16	-	-
Total Recordable Work-related Injuries, contractors	Number	6	-	-
Total Recordable Work-related Injury Rate, total employees and contractors****	Per 200,000 hours worked	0.9	0.8	0.4

\* Estimated.

\*\* Main types of injuries: more than half of injuries are related to the damage of limb muscle involving twisting or breaking, and damage to a finger as a result of handling equipment or moving around the premises. This is followed by damage caused by moving objects, chemicals, damage to body muscle or ligament, and a fall from height or from equipment. (8% each, respectively).

\*\*\* Restatement: for 2021, correction.

\*\*\*\* Total Recordable Injury (TRI): includes fatalities, Lost Time Injury (LTI), Restricted Work Injury (RWI), Medical Treatment Case (MTC). This is calculated based on a weighted average of injury rate for different operating facilities.

## Process safety

			2022	2021	2020
Tier 1 process safety events		Number	5	1	2
Tier 1 process safety events rate	Per 200,000 hours worked		0.196	0.034	0.062
Tier 2 process safety events			4	4	8
Tier 2 process safety events rate	Per 200,000 hours worked		0.156	0.138	0.247

## Spills of oil and refined products

	Unit	2022	2021	2020
Total number of recorded significant spills (above 100 litres)*	Number	18	15	10
Total volume of recorded significant spills	Litres	53,210	17,684	7,698
Total number of spills with low severity (below 100 litres)	Number	107	99	104

## Our People

### Headcount of employees, by region, gender, employment and contract type

Status as of 31 Dec 2022

	Netherlands	Belgium	France	Germany	Switzerland	Male	Female	Total
Total employees	306	41	30	451	501	980	349	1,329
Employees with permanent contract	270	41	30	412	498	931	320	1,251
Employees with temporary contract*	36	0	0	39	3	49	29	78
Employees with non-guaranteed hours	3	0	0	0	2	3	2	5
Full-time employees	252	38	30	356	455	883	284	1,131
Part-time employees	54	3	0	95	46	101	97	198

\* temporary contract as defined by the national law

### Headcount of employees, by region, gender, employment and contract type

Status as of 31 Dec 2021

	Netherlands	Belgium	France	Germany	Switzerland	Male	Female	Total
Total employees	303	40	32	368	482	938	287	1,225
Employees with permanent contract	269	40	31	349	482	938	287	1,171
Employees with temporary contract*	34	0	1	19	0	37	17	54
Employees with non-guaranteed hours	4	0	0	0	2	3	3	6
Full-time employees	246	36	32	337	434	895	190	1,085
Part-time employees	57	4	0	29	48	41	97	138

\* temporary contract as defined by national law.

## Headcount of employees, by region, gender, employment and contract type

Status as of 31 Dec 2020

	Netherlands	Belgium	France	Germany	Switzerland	Male	Female	Total
Total employees	295	40	31	371	473	935	275	1,210
Employees with permanent contract	267	40	31	354	472	902	262	1,164
Employees with temporary contract*	28	0	0	17	1	33	13	46
Employees with non-guaranteed hours	3	0	0	0	2	2	3	5
Full-time employees	242	38	31	344	430	905	180	1,085
Part-time employees	53	2	0	16	43	30	84	114

\* temporary contract as defined by national law.

## Headcount of workers who are not employees\*

	Netherlands	Belgium	France	Germany	Switzerland	Total
Year 2022	33	0	1	8	95	137
Year 2021	29	1	2	11	75	203

\* Does not include contractors engaged in turnaround at the refineries. A worker who is not an employee is usually referred to as a person filling a vacancy for a permanent position, or a temporary replacement in the event of pregnancy, illness or temporary project work.

## New hires, by region, gender and age

Status as of 31 Dec 2022

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	176	45	4	5	51	71
Below 30 years old, headcount	42	18	1	0	10	13
Between 30 and 50 years old, headcount	102	23	2	4	31	42
Above 50 years old, headcount	32	4	1	1	10	16
Below 30 years old, rate	24%	40%	25%	0%	20%	18%
Between 30 and 50 years old, rate	58%	51%	50%	40%	60%	59%
Above 50 years old, rate	18%	9%	25%	20%	20%	23%
Male, headcount	127	-	-	-	-	-
Male, rate	72%	-	-	-	-	-
Female, headcount	49	-	-	-	-	-
Female, rate	28%	-	-	-	-	-

## New hires, by region, gender and age

Status as of 31 Dec 2021

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	123	36	3	3	38	43
Below 30 years old, headcount	47	17	2	0	9	19
Between 30 and 50 years old, headcount	53	12	1	2	22	16
Above 50 years old, headcount	23	7	0	1	7	8
Below 30 years old, rate	38%	47%	67%	0%	24%	44%
Between 30 and 50 years old, rate	43%	33%	33%	67%	58%	37%
Above 50 years old, rate	19%	19%	0%	33%	18%	19%
Male, headcount	84	-	-	-	-	-
Male, rate	68%	-	-	-	-	-
Female, headcount	39	-	-	-	-	-
Female, rate	32%	-	-	-	-	-

## New hires, by region, gender and age

Status as of 31 Dec 2020

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	147	32	3	3	64	45
Below 30 years old, headcount	36	9	0	0	12	15
Between 30 and 50 years old, headcount	84	18	2	2	35	27
Above 50 years old, headcount	27	5	1	1	17	3
Below 30 years old, rate	24%	28%	0%	0%	19%	33%
Between 30 and 50 years old, rate	57%	56%	67%	67%	55%	60%
Above 50 years old, rate	18%	16%	33%	33%	27%	7%
Male, headcount	113	-	-	-	-	-
Male, rate	77%	-	-	-	-	-
Female, headcount	34	-	-	-	-	-
Female, rate	23%	-	-	-	-	-

## Employee turnover - employees with terminated contracts

Status as of 31 Dec 2022

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	154	33	4	6	54	57
Below 30 years old, headcount	29	5	0	0	0	9
Between 30 and 50 years old, headcount	63	23	1	2	30	21
Above 50 years old, headcount	58	5	3	4	19	27
Below 30 years old, rate	19%	15%	0%	0%	0%	16%
Between 30 and 50 years old, rate	41%	70%	25%	33%	56%	37%
Above 50 years old, rate	38%	15%	75%	67%	35%	47%
Male, headcount	119	-	-	-	-	-
Male, rate	77%	-	-	-	-	-
Female, headcount	35	-	-	-	-	-
Female, rate	23%	-	-	-	-	-

## Employee turnover - employees with terminated contracts

Status as of 31 Dec 2021

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	134	34	3	3	56	38
Below 30 years old, headcount	29	8	0	0	15	6
Between 30 and 50 years old, headcount	56	15	1	1	24	15
Above 50 years old, headcount	32	11	2	2	17	17
Below 30 years old, rate	22%	24%	0%	0%	27%	16%
Between 30 and 50 years old, rate	42%	44%	33%	33%	43%	39%
Above 50 years old, rate	24%	32%	67%	67%	30%	45%
Male, headcount	92	-	-	-	-	-
Male, rate	69%	-	-	-	-	-
Female, headcount	42	-	-	-	-	-
Female, rate	31%	-	-	-	-	-

## Employee turnover - employees with terminated contracts

Status as of 31 Dec 2020

	Total	Netherlands	Belgium	France	Germany	Switzerland
Total	135	37	1	3	54	40
Below 30 years old, headcount	25	10	0	0	6	9
Between 30 and 50 years old, headcount	63	17	0	2	25	19
Above 50 years old, headcount	24	10	1	1	23	12
Below 30 years old, rate	19%	27%	0%	0%	11%	23%
Between 30 and 50 years old, rate	47%	46%	0%	67%	46%	48%
Above 50 years old, rate	18%	27%	100%	33%	43%	30%
Male, headcount	95	-	-	-	-	-
Male, rate	70%	-	-	-	-	-
Female, headcount	40	-	-	-	-	-
Female, rate	30%	-	-	-	-	-

## Parental leave

	2022	2021	2020
Employees that took parental leave	43	41	32
of which male	17	18	12
of which female	26	23	20
Total number of employees that returned to work after parental leave	43	40	32
of which male	17	18	12
of which female	26	22	20
Employees that returned to work after parental leave ended that were still employed 12 months after their return to work	39	40	32
of which male	16	18	12
of which female	23	22	20
Retention rates of employees that returned to work after parental leave	91%	100%	100%
of which male	41%	100%	100%
of which female	59%	100%	100%

## Diversity of governance bodies, by age and gender

### Supervisory Board

	2022	2021	2020
Total	5	4	6
Below 30 years old, rate	0%	0%	0%
Between 30 and 50 years old, rate	40%	25%	17%
Above 50 years old, rate	60%	75%	83%
Male, rate	100%	100%	83%
Female, rate	0%	0%	17%

### Executive Board

	2022	2021	2020
Total	7	7	7
Below 30 years old, rate	0%	0%	0%
Between 30 and 50 years old, rate	57%	29%	29%
Above 50 years old, rate	43%	71%	71%
Male, rate	86%	100%	100%
Female, rate	14%	0%	0%

## Diversity of employee categories, by age and gender

Year 2022

	Senior Management	Middle Management	Senior Expert	Project Manager
Below 30 years old, rate	0%	2%	11%	14%
Between 30 and 50 years old, rate	54%	67%	55%	48%
Above 50 years old, rate	45%	31%	34%	38%
Male, rate	85%	71%	66%	84%
Female, rate	16%	29%	34%	16%

Year 2021

	Senior Management	Middle Management	Senior Expert	Project Manager
Below 30 years old, rate	1%	0%	11%	14%
Between 30 and 50 years old, rate	54%	67%	56%	48%
Above 50 years old, rate	45%	33%	33%	39%
Male, rate	86%	71%	68%	82%
Female, rate	14%	29%	32%	18%

Year 2020

	Senior Management	Middle Management	Senior Expert	Project Manager
Below 30 years old, rate	1%	2%	12%	12%
Between 30 and 50 years old, rate	50%	71%	58%	49%
Above 50 years old, rate	44%	28%	30%	38%
Male, rate	90%	72%	68%	82%
Female, rate	10%	28%	32%	18%

# Appendix III: GRI Index

<b>Statement of use</b>	VARO Energy has reported in accordance with the GRI Standards for the period 1 Jan 2022 - 31 Dec 2022
<b>GRI 1 used</b>	GRI 1: Foundation 2021
<b>Applicable GRI Sector Standard(s)</b>	GRI 11: Oil and Gas Sector 2021



GRI standard/ other source	Disclosure	<b>GRI 11: oil and gas sector 2021</b>	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
<b>General disclosures</b>							
GRI 2: General Disclosures 2021	2-1 Organisational details		<a href="#">Appendix I: Our ESG report.</a> VARO Energy operates in Switzerland, Germany, the Netherlands, Belgium and Luxembourg.				
	2-2 Entities included in the organisation's sustainability reporting		The Group's holding company is VARO Energy BV, based in the Netherlands. The Group operational headquarters company is VARO Energy Marketing AG (VMAG), in Switzerland. VMAG is where the Group's main financial risks are managed, inventory is held, working capital is financed and associated rewards are recognised. All other companies perform well-defined services for the Group following OECD guidance for the correct transfer pricing of intra-Group services.				
	2-3 Reporting period, frequency and contact point		1 Jan 2022 - 31 Dec 2022 (equivalent to period of data reporting in Annual financial report) Annual Contact point: Mr Jens Bruno <a href="mailto:jens.bruno@varoenergy.com">jens.bruno@varoenergy.com</a>				
	2-4 Restatements of information		Restatements are related to data and are marked by word 'restatement'				
	2-5 External assurance		<a href="#">Assurance statement</a>				
	2-6 Activities, value chain and other business relationships		VARO's Business Model				
	2-7 Employees		<a href="#">Appendix II. ESG Data. Our People</a> VARO is not working in a sector with many seasonal employees. However, temporary contractors are employed during turnarounds at manufacturing hubs.				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	2-8 Workers who are not employees		Appendix II . ESG Data. Employees. Safety training for contractors as described in Spills and spills prevention. Our approach. Type of workers who are not employees are indicated in ESG Data. Employees.				
	2-9 Governance structure and composition		<u>Corporate governance</u>  Constitution and operations of the Company's governance bodies is based on the provisions of Dutch law in effect on the date of this document, the articles of association of the Company (the Articles of Association) and the shareholders agreement.  The Company has a two-tier board structure consisting of the Management Board and the Supervisory Board.  Executive Board has seven members. Data on composition is in Appendix III. ESG Data. Employees.  The Remuneration Committee prepares nominations and approvals of the Executive Board members and supervising policies for Senior Management selection criteria and appointments by the Executive Board.				
	2-10 Nomination and selection of the highest governance body		The Company recognises that differences in skills, experience, education, background, nationality, age, race, gender, sexual orientation, religious beliefs, physical ability and other characteristics of people are important. VARO therefore places high emphasis on the development of diversity in the senior management roles within the Group.	Partially omitted	Information unavailable/incomplete	Part b.iii	
	2-11 Chair of the highest governance body		The Company has a two-tier board structure consisting of the Management Board and the Supervisory Board. The Chairman of the Supervisory Board is different from the senior executive officer - the CEO.				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	2-12 Role of the highest governance body in overseeing the management of impacts		<p><a href="#">Corporate governance</a>  <a href="#">Internal governance structure</a></p> <p>VARO has a two-tier board structure - the Management Board and the Supervisory Board. The Management Board is the executive body (bestuur) and is responsible for the day-to-day management of the Company. For day-to-day operational management, the Management Board has installed an Executive Board. The Supervisory Board (raad van commissarissen) supervises and advises the Management Board.</p> <p>The Management Board is entrusted with the management of the Company's Group and responsible for the continuity of the Company's Group under the supervision of the Supervisory Board. The Management Board's responsibilities include, among other things:</p> <ul style="list-style-type: none"> <li>- Setting the Company's management agenda,</li> <li>- Developing a vision on how to create long-term value,</li> <li>- Developing a strategy,</li> <li>- Enhancing the performance of the Company,</li> <li>- Identifying, analysing and managing the risks associated with the Company's strategy and activities and</li> <li>- Establishing and implementing internal procedures, that ensure that all relevant information is known to the Management Board and the Supervisory Board in a timely manner.</li> </ul>				
	2-13 Delegation of responsibility for managing impacts		<p><a href="#">Internal governance structure</a></p> <p>VARO's dedicated ESG Committee oversees the implementation and effectiveness of the company's ESG programmes and manages risk, including its climate-related targets.</p>				
	2-14 Role of the highest governance body in sustainability reporting		Executive Board reviews and approves the ESG Report.				
	2-15 Conflicts of interest		<p><a href="#">Business behaviour and ethics</a></p>				
	2-16 Communication of critical concerns		<p><a href="#">Internal governance structure</a>  <a href="#">Safeguarding human rights</a>  <a href="#">Business behaviour and ethics</a></p>	Partially omitted	Information unavailable/ incomplete	Part b.	
	2-17 Collective knowledge of the highest governance body		<p><a href="#">Corporate governance</a></p> <p>The EB's operational management of the Group's activities includes developing VARO's strategy as well as the ESG strategy and targets. The EB is at the core of VARO's transformational strategy and its members are specifically appointed to oversee the ONE VARO Transformation strategy.</p>				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
2-18 Evaluation of the performance of the highest governance body  2-19 Remuneration policies  2-20 Process to determine remuneration  2-21 Annual total compensation ratio  2-22 Statement on sustainable development strategy  2-23 Policy commitments  2-24 Embedding policy commitments  2-25 Processes to remediate negative impacts  2-26 Mechanisms for seeking advice and raising concerns  2-27 Compliance with laws and regulations  2-28 Membership associations  2-29 Approach to stakeholder engagement			General meeting of shareholders is the highest governing body, evaluating the performance of the EB.	Partially omitted	Information unavailable/incomplete	Part c.	
	2-19 Remuneration policies		Not available	Omitted	Confidentiality constraints		
	2-20 Process to determine remuneration		Not available	Omitted	Confidentiality constraints		
	2-21 Annual total compensation ratio		Not available	Omitted	Confidentiality constraints		
	2-22 Statement on sustainable development strategy		<a href="#">Our ONE VARO Transformation strategy</a>				
	2-23 Policy commitments		<a href="#">Policies and standards</a> Group companies perform well-defined services for the Group following OECD guidance for correct transfer pricing of intra-group services. UN Global Compact, signatory.				
	2-24 Embedding policy commitments		<a href="#">Business behaviour and ethics</a> <a href="#">Safeguarding human rights</a>				
	2-25 Processes to remediate negative impacts		<a href="#">Our stakeholders and stakeholder engagement</a> <a href="#">Safeguarding human rights</a> <a href="#">Local community engagement</a> <a href="#">Noise disturbance</a> <a href="#">Data privacy</a>	Partially omitted	Information unavailable/incomplete	Parts d. and e.	
	2-26 Mechanisms for seeking advice and raising concerns		<a href="#">Business behaviour and ethics</a> <a href="#">Our Whistleblower Policy</a>				
	2-27 Compliance with laws and regulations		No significant fines were incurred				
	2-28 Membership associations		<a href="#">Appendix V. Associations</a>				
	2-29 Approach to stakeholder engagement		<a href="#">Our stakeholders and stakeholder engagement</a>				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	2-30 Collective bargaining agreements		<p>VARO Energy operates in the countries with the freedom of joining collective bargaining agreements. It is free choice of employees to join such agreements.</p> <p>In the Netherlands, the Varo Works Council, which represents employees of Varo Energy Netherlands BV, has appointed an external confidential advisor to whom employees can turn in case of a breach of the Code of Conduct. Additionally, the Works Council provides the Country Manager with requested advice and approval, as well as unsolicited advice where required.</p>				

## Material topics

GRI 3: Material Topics 2021	3-1 Process to determine material topics		<a href="#">Our materiality assessment process</a>				
	3-2 List of material topics		<a href="#">Material sustainability topics</a>				

## Anti-corruption

16

GRI 3: Material Topics 2021	3-3 Management of material topics	11.20.1: Anti-corruption	<a href="#">Business behaviour and ethics</a>				
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	11.20.2	<a href="#">Business behaviour and ethics</a>				
	205-2 Communication and training about anti-corruption policies and procedures	11.20.3	<a href="#">Business behaviour and ethics</a>				
	205-3 Confirmed incidents of corruption and actions taken	11.20.4	There were no incidents of corruption.				

## Anti-competitive behaviour

16

GRI 3: Material Topics 2021	3-3 Management of material topics	11.19.1 Anti-competitive behaviour	<a href="#">Business behaviour and ethics</a>				
GRI 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	11.19.2	There were no legal actions, pending or completed, during 2022, related to anti-competitive behaviour, anti-trust, and monopoly practices.				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
<b>Advocacy (specific topic of VARO)</b>							7, 11, 12, 13, 16
		11.2.4 Additional sector disclosures	<a href="#">Internal governance structure</a> <a href="#">Advocacy</a> <a href="#">Appendix V. Associations</a>				
<b>Energy</b>							7, 9, 13
GRI 3: Material Topics 2021	3-3 Management of material topics	11.1.1 GHG Emissions	<a href="#">VARO in a transitioning energy market</a> <a href="#">Our ONE VARO Transformation strategy</a> <a href="#">CO<sub>2</sub> Emissions</a>				
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	11.1.2	<a href="#">Appendix II. ESG Data (Energy consumption)</a>	Partially omitted	Information unavailable/incomplete	Parts f. and g.	
GRI 302: Energy 2016	302-2 Energy consumption outside of the organisation	11.1.3	<a href="#">Appendix II. ESG Data (Energy consumption)</a>				
	302-3 Energy intensity	11.1.4	<a href="#">Appendix II. ESG Data (Energy consumption)</a>	Partially omitted	Information unavailable/incomplete	Parts c. and d.	
	302-4 Reduction of energy consumption		<a href="#">Emissions reduction at the Cressier manufacturing hub</a> <a href="#">Emissions reduction at the Bayernoil manufacturing hub</a>				
	302-5 Reductions in energy requirements of products and services		Not available	Omission	Information unavailable/incomplete		
<b>Water and effluents</b>							6, 12, 14, 15
GRI 3: Material Topics 2021	3-3 Management of material topics	11.6.1 Water and effluents	<a href="#">Waste and effluents</a>				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	11.6.2	<a href="#">Waste and effluents</a>	Partially omitted	Information unavailable/incomplete	Parts b., c. and d	
	303-2 Management of water discharge-related impacts	11.6.3	<a href="#">Waste and effluents</a>				
	303-3 Water withdrawal	11.6.4	<a href="#">Appendix II. ESG Data (Water consumption)</a>	Partially omitted	Information unavailable/incomplete	Parts c. and d.	
	303-4 Water discharge	11.6.5	<a href="#">Appendix II. ESG Data (Water consumption)</a>	Partially omitted	Information unavailable/incomplete	Parts c., d., e.	

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	303-5 Water consumption	11.6.6	<a href="#">Appendix II. ESG Data (Water consumption)</a>	Partially omitted	Information unavailable/incomplete	Parts c. and d.	
<b>Biodiversity</b>							6, 14, 15
GRI 3: Material Topics 2021	3-3 Management of material topics	11.4.1 Biodiversity	<a href="#">Biodiversity and land use</a>				
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	11.4.2	<a href="#">Biodiversity and land use</a>				
	304-2 Significant impacts of activities, products and services on biodiversity	11.4.3	<a href="#">Biodiversity and land use</a>				
	304-3 Habitats protected or restored	11.4.4	<a href="#">Biodiversity and land use</a>	Partially omitted	Information unavailable/incomplete	Parts c. and d.	
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	11.4.5	<a href="#">Biodiversity and land use</a>  The relevant species present in the area where the Bayernoil sites operate, named 'Danube area between Ingolstadt and Weltenburg' are beaver, yellow-bellied toad (mountain toad), lady's redfin (Lady's fish), abdominal slug, grayling, barbel, white-finned gudgeon and Danube cod. Near the site of Cressier manufacturing hub, beaver is on the IUCN Red List.	Omitted	Information unavailable/incomplete		
<b>Sustainability of feedstock production</b>							2, 15

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
SASB:  RR-BI-430a.1. Discussion of strategy to manage risks associated with environmental impacts of feedstock production (and risks of supply interruption/deficiency)  RR-BI-430a.2. Percentage of biofuel production third-party certified to an environmental sustainability standard (ISCC and other)			<a href="#">Our five strategic growth pillars/Biofuels</a> <a href="#">Responsible sourcing of feedstock</a> <a href="#">CASE STUDY: Strategic partnership to drive growth in advanced biofuels</a>				
<b>Emissions (GHG)</b>							7, 13
GRI 3: Material Topics 2021	3-3 Management of material topics	11.1.1 GHG Emissions 11.2.1 Climate adaptation, resilience, and transition	<a href="#">VARO in a transitioning energy market</a> <a href="#">Our ONE VARO Transformation strategy</a> <a href="#">Reducing our emissions - how we will get there</a> <a href="#">Sustainability highlights 2022</a> <a href="#">CASE STUDY: Strategic partnership to drive growth in advanced biofuels</a> <a href="#">CASE STUDY: Developing the largest biogas facility in Northern Europe</a> <a href="#">CASE STUDY: VARO and Lufthansa</a> Group sign Sustainable Aviation Fuel agreement Developing our offering of more sustainable products <a href="#">CO<sub>2</sub> Emissions</a> <a href="#">Carbon emissions in our value chain</a>				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	11.1.5	<a href="#">Appendix II. ESG Data (GHG emissions)</a>	Partially omitted	Information unavailable/incomplete	Parts c., e. and g.	
	305-2 Energy indirect (Scope 2) GHG emissions	11.1.6	<a href="#">Appendix II. ESG Data (GHG emissions)</a>	Partially omitted	Information unavailable/incomplete	Parts e., f. and g.	
	305-3 Other indirect (Scope 3) GHG emissions	11.1.7	<a href="#">Appendix II. ESG Data (GHG emissions)</a>	Partially omitted	Information unavailable/incomplete	Parts c., f. and g.	
	305-4 GHG emissions intensity	11.1.8	<a href="#">Appendix II. ESG Data (Carbon intensities)</a>				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	305-5 Reduction of GHG emissions	11.2.3	<a href="#">VARO in a transitioning energy market</a> Developing our offering of more sustainable products <a href="#">CO<sub>2</sub> Emissions</a>	Partially omitted	Information unavailable/ incomplete	Part e.	
	305-6 Emissions of ozone-depleting substances (ODS)		Not applicable	Omission	Not applicable		
<b>Emissions (non-GHG)</b>							3, 11, 15
	3-3 Management of material topics	11.3.1 Air emissions	<a href="#">Other emissions to air</a>				
	305-7 Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), and other significant air emissions	11.3.2	<a href="#">Other emissions to air</a>	Partially omitted	Not applicable	Parts b. and c.	
	416-1 Assessment of the health and safety impacts of product and service categories	11.3.3	Environmental impacts from the use of our products (fuels for motor vehicles, aircraft, oil-fired heating systems and large commercial and industrial consumers) include exhaust of CO, CO <sub>2</sub> , NO <sub>x</sub> , SO <sub>2</sub> , dust and soot. This exhaust, if accumulated in the air in certain amounts, may have a negative impact on human health. To decrease these negative impacts, we reduce the sulphur content of our products and optimise combustion properties through the use of additives, such as Elixir for Celsium Premium for Heating Oil, and Elixir for Endura for Diesel performance. The main quality regulation for VARO products, as required for companies producing and supplying products in European Economic Area (EEA) countries, is REACH: Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). VARO's internal process for compiling, handling and communicating product information through Material Safety Data Sheets (MSDS) is directed at ensuring compliance with REACH and CLP regulations. VARO has around 80 MSDS available for 16 different countries, in 14 different languages.				
<b>Waste</b>							3, 6, 12, 14, 15
GRI 3: Material Topics 2021	3-3 Management of material topics	11.5.1 Waste	<a href="#">Waste and effluents</a>				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	11.5.2	<a href="#">Waste and effluents</a>				
	306-2 Management of significant waste-related impacts	11.5.3	<a href="#">Waste and effluents</a>	Partially omitted	Information unavailable/ incomplete	Part c.	

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
	306-3 Waste generated	11.5.4	<a href="#">Appendix II. ESG Data. (Waste management)</a>				
	306-4 Waste diverted from disposal	11.5.5.	<a href="#">Appendix II. ESG Data. (Waste management)</a>	Partially omitted	Information unavailable/incomplete	Part e.	
	306-5 Waste directed to disposal	11.5.6	<a href="#">Appendix II. ESG Data. (Waste management)</a>	Partially omitted	Information unavailable/incomplete	Part e.	
<b>Oil spills and spill prevention</b>							11, 14, 15
SASB: EM-MD-160a.1.		11.8.1 Asset integrity and critical incident management	<a href="#">Spills and spills prevention</a> <a href="#">Crisis management</a>				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.8.2	<a href="#">Spills and spills prevention. Our approach</a>				
GRI 306: Effluents and waste 2016	306-3 Significant spills	11.8.2	<a href="#">Appendix II. ESG Data. Spills of oil and refined products</a>				
<b>Employment</b>							1, 4, 5, 8, 10, 16
GRI 3: Material Topics 2021	3-3 Management of material topics	11.10.1 Employment practices	<a href="#">Employee satisfaction and development</a>				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	11.10.2	<a href="#">Appendix II. ESG Data. (New hires, by region, gender and age)</a> <a href="#">Appendix II ESG Data. (Employee turnover)</a>				
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	11.10.3	There is no difference in benefits between employees with fulltime, parttime or temporary contract. Non-full time employees are not entitled to a bonus.				
	401-3 Parental leave	11.10.4	<a href="#">Appendix II. ESG Data. (Parental leave)</a>	Partially omitted	Information unavailable/incomplete	Part a.	
<b>Occupational health and safety</b>							3, 8
GRI 3: Material Topics 2021	3-3 Management of material topics	11.9.1 Occupational health and safety	<a href="#">Health and safety</a>				

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	11.9.2	<a href="#">Health and Safety. Our approach</a>				
	403-2 Hazard identification, risk assessment, and incident investigation	11.9.3	<a href="#">Incident investigation and follow up</a> <a href="#">Crisis management</a>				
	403-3 Occupational health services	11.9.4	<a href="#">Employee health</a>				
	403-4 Worker participation, consultation, and communication on occupational health and safety	11.9.5	<a href="#">Employee engagement on safety</a>				
	403-5 Worker training on occupational health and safety	11.9.6	<a href="#">Health and Safety. Our approach</a> <a href="#">Health and Safety. Employee engagement on safety</a> <a href="#">Health and Safety. Our work in 2023 and beyond</a>				
	403-6 Promotion of worker health	11.9.7	<a href="#">Employee health</a>				
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	11.9.8	<a href="#">Health and Safety. Our approach</a> <a href="#">Health and Safety. Our work in 2023 and beyond</a> <a href="#">Spills and spills prevention. Our approach</a>				
	403-8 Workers covered by an occupational health and safety management system	11.9.9	All employees and workers who are not employees but whose work and/or workplace is controlled by the organisation, are covered by an occupational health and safety management system.  Certified management systems				
	403-9 Work-related injuries	11.9.10	<a href="#">Appendix II. ESG Data. (Work related injuries, employees and contractors)</a>				
	403-10 Work-related ill health	11.9.11		Omission	Information unavailable/incomplete		

GRI standard/ other source	Disclosure	GRI 11: oil and gas sector 2021	Location	Omission			Corresponding SDGs
				Requirement(s) omitted	Reason	Explanation	
<b>Diversity and equal opportunity</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics	11.11.1 Non-discrimination and equal opportunity	<a href="#">Equity, inclusion and diversity</a>				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	11.11.4	<a href="#">Appendix II. ESG Data. (Diversity of governance bodies, by age and gender)</a> <a href="#">Appendix II. ESG Data. (Diversity of employee categories, by age and gender)</a>				
	405-2 Ratio of basic salary and remuneration of women to men	11.11.5	<a href="#">Equity, inclusion and diversity</a>				
<b>Non-discrimination</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics		<a href="#">Equity, inclusion and diversity</a> <a href="#">Business behaviour and ethics</a>				
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken		There were no incidents of discrimination in 2022				
<b>Local communities</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics	11.15.1 Local communities	<a href="#">Local community engagement</a> <a href="#">Crisis management</a>				
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programmes	11.15.2	<a href="#">Local community engagement</a>				
	413-2 Operations with significant actual and potential negative impacts on local communities	11.15.3	<a href="#">Noise disturbance</a> <a href="#">Crisis management</a>				

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## Topics in the applicable GRI Sector Standards determined as not material

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**GRI 11: Oil and Gas Sector 2021**

Topic	Explanation
11.12 Forced labour and modern slavery	Topic of low risk for VARO operations.
11.14 Economic impacts	Management of the topic is part of the Annual Report. The ESG Report is focused on disclosing non-financial impacts.
11.16 Land and resource rights	This topic is not relevant for VARO's value chain. Indirect potential impact from the sourcing of bio-feedstock is incorporated into the topic of Sustainability of feedstock supply.
11.17 Rights of indigenous peoples	This topic is not relevant for VARO's value chain. Indirect potential impact from the sourcing of bio-feedstock is incorporated into the topic of Sustainability of feedstock supply.
11.18 Conflict and security	Topic is not relevant for the VARO value chain.
11.21 Payments to governments	Payments to governments are related to taxation and other payment obligation. Management of the topic is incorporated into the topics of Business behaviour and ethics and Anti-corruption.
11.22 Public policy	Management of the topic is incorporated into the topic Business behaviour and ethics.

# Appendix IV: TCFD Index

TCFD Recommendation	TCFD Disclosure	VARO Report Page Reference
<b>Governance</b>	a) The board's oversight of climate-related risks and opportunities.	p. 65 (Governance – Corporate Governance) p. 67 (Governance – Internal Governance Structure)
The management of climate-related risks and opportunities.	b) The management's role in assessing and managing climate-related risks and opportunities.	p. 66 (Governance – Executive Board) p. 67 (Governance – Internal Governance Structure)
<b>Strategy</b>	a) The climate-related risks and opportunities the organisation has identified over the short, medium and long term.	p. 20 (VARO's business in society – Reducing our emissions) p. 33-36 (Environment – CO <sub>2</sub> emissions) p. 69 (Governance – Examples of risk areas)
Actual and potential impact of climate-related risks and opportunities on the operations, strategy and financial planning.	b) The impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	p. 65-67 (Governance – Corporate governance) p. 33-36 (Environment – CO <sub>2</sub> emissions)
	c) The resilience of the organisation's strategy taking into consideration different climate-related scenarios.	VARO plans to supplement its work with a scenario analysis in line with the TCFD recommendations.
<b>Risk management</b>	a) The organisation's processes for identifying and assessing climate-related risks.	p. 68-69 (Governance – Enterprise risk management system)
Actual and potential impact from climate-related risks and opportunities on the operations, strategy and financial planning.	b) The organisation's processes for managing climate-related risks.	p. 33-36 (Environment – CO <sub>2</sub> emissions) p. 69 (Governance – Examples of risk areas) Carbon Pricing will be implemented during 2023
	c) How the process for identifying, assessing and managing climate-related risks is integrated into the organisation's overall risk management.	p. 67 (Governance – Internal governance structure)
<b>Metrics and targets</b>	a) The metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	p. 33-36 (Environment – CO <sub>2</sub> emissions) p. 80 (Appendix – Environment)
Results from metrics and targets to assess and manage significant climate-related risks and opportunities.	b) Disclosure of scope 1, scope 2 and scope 3 GHG emissions, and the related risks.	p. 33-36 (Environment – CO <sub>2</sub> emissions) p. 80 (Appendix – Environment)
	c) The targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	p. 20 (VARO's business in society – Reducing our emissions)

# Appendix V: Associations

VARO Energy advocates its values of sustainable business, establishes partnerships and co-operations with like-minded parties with overlapping interests, and exchanges experience on best practices in the business, through its active role and participation in these associations and other membership organisations.

Association	Country	Status of VARO	Purpose of association
<b>Avenergy Suisse</b>	Switzerland	Board Member	Avenergy Switzerland represents the interests of importers of liquid fuels. The members of Avenergy Switzerland guarantee the security of supply of the country's most important energy carriers: liquid fuels for mobility and heating purposes.
<b>CARBURA</b>	Switzerland	Board Member	Private association for importers of liquid fuels and combustibles that fulfil compulsory stockpiling of fuels. The association is supervised by the Federal Office for National Economic Supply (FONES).
<b>CONCAWE</b>	Switzerland	Member	Concawe was established in 1963 by a small group of leading oil companies to carry out research on environmental issues relevant to the oil industry. The scope of Concawe's activities has gradually expanded in line with the development of societal concerns over environmental, health and safety issues. These now cover areas such as fuel quality and emissions, air quality, water quality, soil contamination, waste, occupational health and safety, petroleum product stewardship and cross-country pipeline performance.
<b>ANCL (Association des Negociants en combustibles de Lausanne et environment)</b>	Switzerland	Member	Association of Fuel Dealers of Lausanne with the objective to promote the use of liquid fuels.
<b>ZCA (Zug Commodity Association)</b>	Switzerland	Member	The purpose of the association is to represent and protect the interests and rights of the Zug (and the surrounding area) community of companies active in the commodities supply chain. This includes but is not limited to exploration, production, processing, trading and marketing. Furthermore, ZCA organises events and training related to commodities trading.
<b>Swiss Shippers Council (SSC)</b>	Switzerland	Member	Represents the interests of industry, trade, and major distributors to state and private transport institutions, logistics companies and freight carriers in Switzerland and abroad.
<b>Fuels Europe Association</b>	Switzerland; EU	Member	Fuels Europe is a division of the European Petroleum Refiners Association, an AISBL operating in Belgium. It was formed in 1989 to represent the interests of companies conducting refinery operations in the EU. Fuels Europe aims to promote economically and environmentally sustainable refining, supply, and use of petroleum products in the EU by providing input and expert advice to EU institutions, member state governments and the wider community. This contributes to a constructive and proactive way to develop and implement EU policies and regulations.
<b>Biofuels Schweiz</b>	Switzerland	Advisory Board Member	Represents the interests of the biofuels industry and its members in dealings with authorities, politicians and market participants. It takes part in consultation processes on behalf of its members and the industry and provides services for the members in the areas of public relations, politics, communication, information exchange and advice.
<b>KliK</b>	Switzerland	Member	KliK stands for the Foundation for Climate Protection and Carbon Offsetting. The organisation helps companies fulfil their obligations to offset CO <sub>2</sub> emissions from fossil-based motor fuels consumed in Switzerland, according to the Swiss CO <sub>2</sub> Law. KliK also funds projects that aim to reduce greenhouse gas emissions in Switzerland and abroad.

Association	Country	Status of VARO	Purpose of association
en2X	Germany	Seat on the Board	The result of a merger between the associations of MWV and IWO. en2X promotes low-carbon energy sources that support the targets of the Paris Agreement, and defines the role of fossil fuel producers in the transition towards climate neutrality.
AFM+E	Germany	Seat on the Board	The Foreign Trade Association for Mineral Oil and Energy e. V. (AFM+E) represents the interests of independent, medium-sized energy trading companies and importers in politics. It seeks to promote the political framework to enable the ramp up of low-carbon liquid fuels.
eFuels Today	Germany	Sponsor	Alliance of companies and partners that advocate for a more open technology policy, where e-fuels can also play a role.
MEW/UPEI (working group "Energy for the Future")	Germany/ Belgium	Joint position with UPEI	Umbrella organisation for associations that engage in the import and wholesale, retail, bunkering and tank storage of fuels. Joint position with UPEI, MEW, FETSA (where possible) to set up proposals for amendments on FIT documents (by WSW).
UTV, Unabhängiger Tanklagerverband	Germany	Member of the Board, President	German independent tank storage association, representing 80% of the German tank capacity. UTV is active in aligning the overall regulatory framework and the essential adaptation of all terminals. Furthermore, the association aligns the German activities in the European framework.
BFT, German Federal Association of Independent Petrol Stations	Germany	Regular Member	Association that represents the interests of white label petrol stations and SME wholesalers in Germany. Its mission is to promote a free-market economy in the mineral oil trade and to advise and represent the members in general economic and legal subjects.
UNITI Bundesverband mittelständischer Mineralölunternehmen e. V.	Germany	Regular Member	The UNITI federal association of medium-sized mineral oil companies e. V. represents around 90% of medium-sized mineral oil companies in Germany and pools expertise in fuels, the heating market and lubricants.
EBV	Germany	Seat in the Advisory Board	Government agency for stockpiling strategic reserves.
SBMV (Sächsischer Brennstoff- und Mineralelhandelsverband e.V.)	Germany	Supporting Member	Independent Saxon fuel and mineral trade association, representing mineral oil traders' interests.
H <sub>2</sub> ercules	Germany	Member	The goal of the H <sub>2</sub> ercules activities is to contribute to the establishment of a European hydrogen market and, consequently, promote the decarbonisation and diversification of Germany's energy supply. This will be achieved by developing a hydrogen transport pipeline network, commonly referred to as the 'Hydrogen Backbone' that will connect the northern and southern regions of the country.
NOVE	Netherlands	Member of the Board	Industry association of small to mid-sized traders and distributors of road and shipping fuels.
VEMOBIN	Netherlands	Member, and Chair of the new pillar Energy in Transportation.	Association of the Dutch Petroleum Industry, active in the representation of Dutch refining and distribution companies, promoting collaboration, safety and sustainable practices within the petroleum industry.
PHB	Netherlands	Participant	Platform to accelerate and scale the utilisation of bio-based fuels for road, water and air transportation.
CPDP (Comité Professionnel Du Pétrole)	Netherlands	Member	An association declared under the law of 1 July 1901, brings together Approved Warehouse keepers whose main activity is the distribution of petroleum products on the French market.

Association	Country	Status of VARO	Purpose of association
<b>Groupement Petrolier Luxembourgeois</b>	Luxembourg	Member	Represents the interests of companies mostly in the downstream sector, which includes activities such as the refining, storage, distribution and marketing of petroleum products. Activities include information exchange, support in compliance with the legislation, market monitoring, etc.
<b>BRAFCO</b>	Belgium	Board Member, as well as Member of several working groups / commissions	Federation of fuel distributors in Belgium, including independent excise warehouses.
<b>Energia</b>	Belgium	Member, as well as Member of several working groups / commissions	ENERGIA is the sector organisation in Belgium of companies providing energy solutions for mobility and heating. Its members are active in the refining, distribution and storage of energy solutions for mobility, heating and industry as well as in the production of feedstock for the petrochemical sector.
<b>Operateur de Normalisation Petroliere (ONP)</b>	Belgium	Member	The ONP is the overarching Belgian commission managing the standardisation of petroleum products. The commission develops the national annexes to the national standards for liquid products, as well as for bitumen, LPG and bunker fuels.
<b>EBA ( European Biogas Association)</b>	Belgium	Member	Founded in February 2009, the association is committed to the deployment of sustainable biogas and biomethane production and use throughout the continent. EBA has a well-established network of nearly 250 national associations and other organisations covering the entire biogas and bio-methane value chain across Europe and beyond.
<b>Informazout</b>	Belgium	Member	The association aims to educate consumers, installers and professionals about oil heating technologies, energy efficiency, and environmental considerations.
<b>Fonds Social Chauffage</b>	Belgium	Board Member	The fund helps vulnerable segments of the Belgian population to access heating oil, in accordance with the regulatory scheme. Nearly a third of the amount is financed by the industry, and the rest by the government. It is estimated that around 100,000 Belgian households using heating oil are potential beneficiaries. In 2021, approximately 77,000 households applied for the financial aid, amounting to a total of around EUR 17 million. The Fund is looking into the need to adapt the legal framework to reflect the needs of the population in this area.
<b>ATEE</b>	France	Member	An organisation dedicated to representing issues related to Energy Savings Certificates (C2E).
<b>USI</b>	France	Member	Federation of all tank storage operators in France for regional, national and international organisations.
<b>FF3C</b>	France	Member	Federation of nearly 2,000 independent companies that distribute off-grid energy in the form of domestic fuel, bulk fuel, LPG, wood-energy, etc.
<b>FFPI</b>	France	Member	Federation of independent oil companies.
<b>WBA, World Biogas Association</b>	UK	Member	The World Biogas Association is the global trade association for the biogas, landfill gas and anaerobic digestion (AD) sectors, dedicated to facilitating the adoption of biogas globally. It seeks to represent all organisations working in the biogas industry at the international level across the world.
<b>UPEI</b>	EU	Board Member/President	UPEI represents nearly 2,000 European independent importers and wholesale/retail distributors of energy for the transport and heating sectors.
<b>World Economic Forum</b>	International	Partner	WEF leads global companies developing solutions to the world's greatest challenges.

# Abbreviations and glossary

## Abbreviations

<b>AC</b>	Audit Committee	<b>KPI</b>	Key performance indicator
<b>CDRs</b>	Carbon Dioxide Removals	<b>KYC</b>	Know Your Customer
<b>CTO</b>	Crude Tall Oil	<b>LNG</b>	Liquefied Natural Gas
<b>EB</b>	Executive Board	<b>LPG</b>	Liquid Petroleum Gas
<b>ERM</b>	Enterprise Risk Management	<b>M&amp;A</b>	Mergers and Acquisitions
<b>ESG</b>	Environmental, Social and Governance	<b>PEP</b>	Performance Evaluation Process
<b>ETBE</b>	Bio-ETBE, or Ethyl Tertiary Butyl Ether	<b>PPE</b>	Personal Protective Equipment
<b>FAME</b>	Fatty Acid Methyl Ester	<b>RED</b>	Renewable Energy Directive
<b>FCC</b>	Fluid Catalytic Cracking	<b>SAF</b>	Sustainable Aviation Fuel
<b>FQD</b>	Fuel Quality Directive	<b>SB</b>	Supervisory Board
<b>GHG</b>	Greenhouse gas	<b>SIL</b>	Safety Integrity Level
<b>HAZOP</b>	Hazard and Operability Study	<b>SMR</b>	Steam Methane Reforming
<b>H&amp;S</b>	Health and Safety	<b>UERs</b>	Upstream Emission Reduction certificates
<b>HSSE</b>	Health, Safety, Security and Environment	<b>VOCs</b>	Volatile Organic Compounds
<b>HVO</b>	Hydrotreated Vegetable Oil		

## Glossary

**Bitumen** – crude oil components that are obtained from heavy, viscous asphalt-based crude oils. Bitumen is mainly used in road construction, hydraulic engineering, and in the building construction industry.

**CO<sub>2</sub>** – Carbon dioxide is a gas that is produced during the complete combustion of carbonaceous fuels, and is one of the gases causing the greenhouse gas effect.

**E5, E7, B7** are labels used for petrol and diesel blended with biofuels. ‘E’ stands for ethanol and the 5 means the fuel has up to 5% renewable ethanol. ‘B’ represents biodiesel and the 7 refers to the fuel containing up to 7% renewable biodiesel.

**EMAS** – ‘Eco-Management and Audit Scheme’ (system for environmental management according to Regulation [EC] No. 761/2001 of the European Parliament and of the Council). This is an environmental management system for evaluating and improving the environmental performance of a company, and informing the public with the aim of continuing this improvement.

**FAME** – Fatty acid methyl ester, or compounds of fatty acids and ethanol. Mixtures of these are also known as

‘biodiesel’.

**Feedstock** – any biomass destined for conversion to energy or biofuel. For example, corn is a feedstock for ethanol production, and soybean oil is a feedstock for biodiesel.

**Green hydrogen** – hydrogen produced using renewable energy sources.

**Grey hydrogen** – hydrogen produced using natural gas.

**HAZOP** – Hazard and Operability Study, a systematic way to identify possible hazards in a work process. In this approach, the process is broken down into steps and every variation in the work parameters is considered to access the permutations of what could go wrong.

**Hydrogen** – A colourless and odourless gas that accumulates during the production process in the refinery and is reused in further refining processes.

**Liquefied petroleum gas (LPG)** – Autogas or propellant gas, often a mixture of propane and butane. It is usually used as a lighter gas, refrigerant in air-conditioning systems, for heating and cooking purposes, and as a liquid fuel in cars that has been

converted accordingly.

**Near-Miss** – An incident that could have caused (but did not actually result in) illness or injury to people, damage to assets, environment, or company reputation, or consequential business loss.

**NOx (Nitrogen oxides)** – Gases that are produced during combustion processes at high temperatures, among other things.

**OSHA** – This abbreviation stands for ‘Occupational Health and Safety Administration’. International companies often base their occupational safety standards on OSHA’s standard specifications.

**Process Safety Incident** – An incident shall be reported as a Process Safety Incident if it involves chemicals or chemical processes as well as one or more of the following: sudden release of material above a threshold defined by the US Centre for Chemical Process Safety, a fire or explosion resulting in direct cost >USD

25,000 to VARO (Tier 2 >2,000), or a lost time injury or fatality.

**SO<sub>2</sub> (Sulphur dioxide)** – a colourless, pungent gas produced when sulphur is burned.

**Spill** – a spill is an unplanned or uncontrolled release of hydrocarbons or chemical substances to the ground or water. According to the HSSE Management System, any spillage of liquid hydrocarbons or other hazardous materials on ground or water, or any other spillage of such materials shall be recorded as an incident and appropriately investigated.

**Sulphur** – is produced during the desulphurisation of JET A-1, diesel, heating and petrol oil, and the subsequent Claus process. This sulphur is widely used in the chemical industry, e.g. for the production of sulphuric acid, dyes, insecticides and artificial fertilisers.

**Third parties** – persons or organisations not employed or contracted to a company or contractor.

**Throughput in manufacturing hub** – refers to the monthly volume of crude oil fed to the crude unit at the processing hub.

**Turnaround/shutdown** – a scheduled event in which production from process units is stopped for an extended period (e.g. 1-2 months) for maintenance, inspection, revamp and/or renewal of the equipment.

**Vacuum distillation** – in crude oil distillation, crude oil is distilled under

atmospheric pressure. All components of the crude oil (gas, petrol, petroleum, and gasoil) are recovered as long as their boiling point is below a working temperature of around 350°C. If the crude oil was to be heated more, its molecules would start cracking. Other distillates are recovered at only slightly higher temperatures, but at significantly lower pressure (vacuum). The lightest fraction is vacuum gasoil, and the heaviest fraction is processed into bitumen or heavy heating oil.



## Limited assurance report of the independent auditor on VARO Energy B.V.'s selected information in the ESG report 2022

To: the management board of VARO Energy B.V.

### Our conclusion

We have performed a limited assurance engagement on selected indicators and selected disclosures relating to the materiality analysis (hereafter: the selected information) in the ESG report 2022 of VARO Energy B.V. at Rotterdam.

Based on our procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the selected information is not prepared, in all material respects, in accordance with the reporting criteria as included in the Reporting criteria section of our report.

The selected indicators consist of:

- Percentage of electricity generated from renewable sources at the Cressier manufacturing hub and the terminals in Switzerland for 2022 on [page 33](#) of the ESG report
- Scope 1 CO<sub>2</sub> emissions for 2022 on [page 34](#) of the ESG report
- Scope 2 CO<sub>2</sub> emissions (both market based as location based) for 2022 on [page 34](#) of the ESG report
- Scope 3.11 CO<sub>2</sub> emissions (Use of sold products) for 2022 on [page 34](#) of the ESG report
- Total recordable injury rate (TRIR) for 2022 on [page 48](#) of the ESG report
- Percentage of female senior managers for 2022 on [page 53](#) of the ESG report
- Voluntary employee retention rate for 2022 on [page 55](#) of the ESG report

### Basis for our conclusion

We have performed our limited assurance engagement on the selected information in accordance with Dutch law, including Dutch Standard 3000A Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten) (Assurance engagements other than audits or reviews of historical financial information (attestation engagements)). Our responsibilities under this standard are further described in the "Our responsibilities for the assurance engagement on the selected information" section of our report.

We are independent of VARO Energy B.V. in accordance with the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten" (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagement. Furthermore, we have complied with the "Verordening gedrags- en beroepsregels accountants" (VGBA, Dutch code of ethics).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### Reporting criteria

The reporting criteria used for the preparation of the selected information are the reporting criteria developed by VARO Energy B.V. and are disclosed in appendix I Our ESG report on [pages 76](#) up to and including [79](#) of the ESG report.

The absence of an established practice on which to draw, to evaluate and measure the selected information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. Consequently, the selected information needs to be read and understood together with the reporting criteria used.

### Unassured corresponding information

No assurance engagement has been performed on the selected information for the period prior to 2022. Consequently, the corresponding selected information and thereto related disclosures for the period before 2022 is not assured.

### Limitations to the scope of our assurance engagement

Our assurance engagement is restricted to the selected information. We have not performed assurance procedures on any other information as included in the ESG report in light of this engagement.

The selected information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherent to prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the selected information.

The references to external sources or websites are not part of our assurance engagement on the selected information. We therefore do not provide assurance on this information.

Our conclusion is not modified in respect of these matters.

### **Responsibilities of the management board and the supervisory board for the selected information**

The management board is responsible for the preparation of the selected information in accordance with the reporting criteria as included in the Reporting criteria section of our report. The management board is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting. In this context, the management board is responsible for the identification of the intended users and the criteria being applicable for their purposes. The choices made by the management board regarding the scope of the selected information and the reporting policy are summarized in appendix I Our ESG report on [page 76](#) of the ESG report.

Furthermore, the management board is responsible for such internal control as it determines is necessary to enable the preparation of the selected information that are free from material misstatement, whether due to error or fraud.

The supervisory board is responsible for overseeing the reporting process of the selected information of VARO Energy B.V.

### **Our responsibilities for the assurance engagement on the selected information**

Our responsibility is to plan and perform our limited assurance engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion. Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a limited assurance engagement is therefore substantially less than the assurance obtained in a reasonable assurance engagement.

We apply the Nadere voorschriften kwaliteitssystemen (NVKS, Regulations for quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

The procedures of our limited assurance engagement included among others:

- Performing an analysis of the external environment and obtaining an understanding of the sector, insight into relevant sustainability themes and issues, relevant laws and regulations and the characteristics of the company as far as relevant to the selected information.
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures on the selected information. This includes the evaluation of the reasonableness of estimates made by the management board.
- Obtaining through inquiries a general understanding of internal control, reporting processes and information systems relevant to the preparation of the selected information, without obtaining evidence about implementation or testing the operating effectiveness of controls.
- Identifying areas of the selected information with a higher risk of misleading or unbalanced information or material misstatements, whether due to error or fraud. Designing and performing further assurance procedures aimed at determining the plausibility of the selected information responsive to this risk analysis. These further assurance procedures consisted amongst others of:
  - Interviewing management and relevant staff at corporate and business level responsible for the strategy, policy and results relating to the selected information
  - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the selected information
  - Obtaining assurance information that the selected information reconciles with underlying records of the company
  - Reviewing, on a limited test basis, relevant internal and external documentation
  - Performing an analytical review of the data and trends in the information submitted for consolidation at corporate level
  - Reading the information in the ESG report which is not included in the scope of our assurance engagement to identify material inconsistencies, if any, with the selected information.

Den Haag, 13 July 2023

Ernst & Young Accountants LLP

signed by A.A. Kuijpers



## Colophon

**Photography**  
VARO, Shutterstock,  
Unsplash

**Design and lay-out**  
NOSUCH Creative Agency

**Get in touch**

[varoenergy.com](http://varoenergy.com)

You can reach us by email at  
[info@varoenergy.com](mailto:info@varoenergy.com)



**VARO** 

The Varo logo, which includes the brand name in a bold, dark blue sans-serif font followed by a graphic element consisting of three overlapping, colorful shapes in shades of blue, purple, and pink.