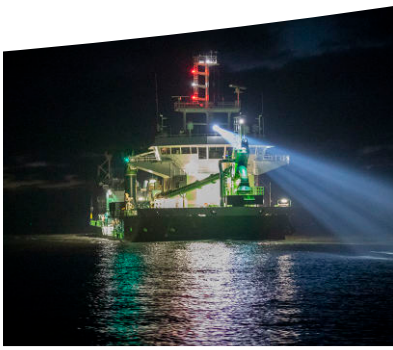
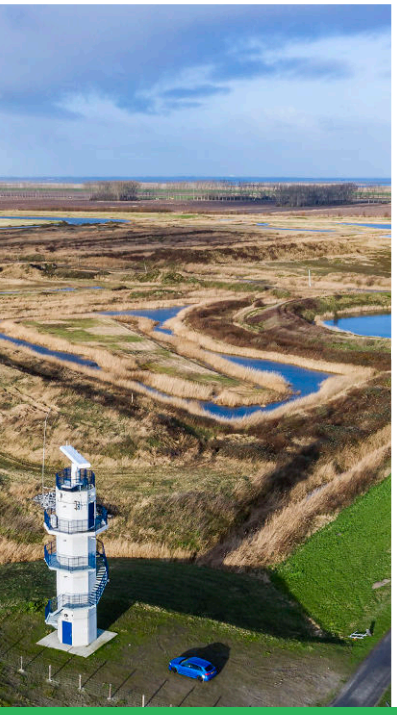
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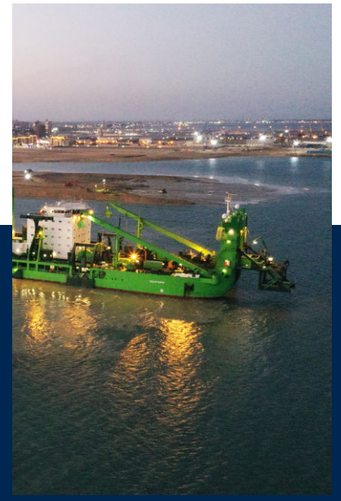





SUSTAINABILITY REPORT 2021

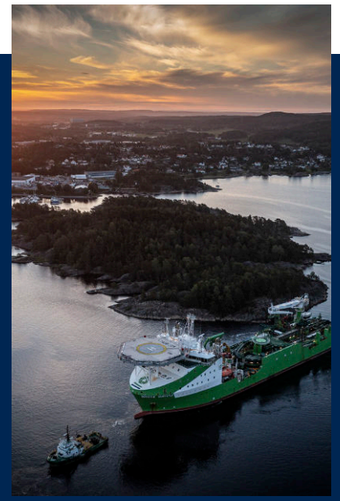
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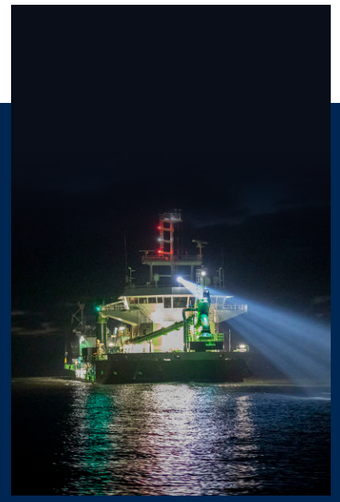
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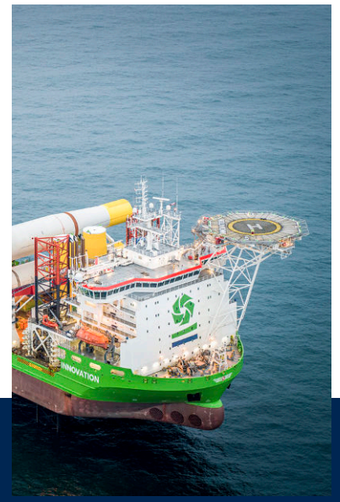
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6

WELCOME TO DEME'S SUSTAINABILITY REPORT

COMPANY PROFILE

DEME is a world leader in the highly specialised fields of dredging, solutions for the offshore energy market, infra and environmental works. We can build on more than 140 years of know-how and experience and have fostered a pioneering approach throughout our history, being a front runner in innovation and new technologies.

While our company roots are in Belgium, we have built up a strong presence in all of the world's seas and continents, operating worldwide. We can rely on around 5,000 highly skilled professionals across the globe. With a versatile fleet of over 100 vessels, backed by a broad range of auxiliary equipment, we can provide solutions for even the most complex projects.

We also believe in turning challenges into opportunities. That's why we are continuously looking for ways to deploy our knowledge and expertise in other activities, exploring new horizons and expanding our solutions portfolio.

In line with our ambitions to have a long-term, sustainable business our activities in the offshore wind industry are being extended outside of Europe, to Asia and the US and we have also entered the green hydrogen market with several initiatives underway.

OUR VISION IS TO WORK TOWARDS A SUSTAINABLE FUTURE BY OFFERING SOLUTIONS FOR GLOBAL CHALLENGES.

Our vision is to work towards a sustainable future by offering solutions for global challenges: rising sea levels, a growing population, reduction of emissions, polluted rivers, seas and soils, and a scarcity of natural resources.

Although our activities originated with our core dredging business, our portfolio has diversified substantially over the decades. Our offering includes dredging and land reclamation, solutions for the offshore energy market, infra and environmental solutions. These multidisciplinary capabilities and ability to benefit from synergies across projects, as well as our integrated corporate structure, have made us into a global solutions provider.

We continuously strive for improvements in our environmental performance and productivity rates, and this is highlighted in our ongoing investments in our fleet and equipment.

DEME's shareholder is the Brussels-based civil engineering contractor CFE, which is controlled by the Belgian investment group Ackermans & van Haaren – both publicly listed companies on Euronext Brussels.



MESSAGE FROM THE BOARD OF DIRECTORS



LUC BERTRAND
Chairman
DEME Group

LUC VANDENBULCKE
CEO
DEME Group

DEME has again made progress in 2021 towards achieving its ambitious sustainability goal of becoming climate-neutral by 2050. We fully understand the growing sense of urgency to tackle global warming and that the need for firm action is paramount, as the IPCC concludes that climate change is already happening. We also understand that the swift transition to sustainable energy is absolutely vital if we are to mitigate the impact of climate change successfully.

Sustainability is being addressed in all aspects of our business and we have embraced the UN Sustainable Development Goals, especially those where we can really make a difference.

ENCOURAGING STAKEHOLDERS TO JOIN US

To make sure we reach our targets, and make clear progress, DEME has a sustainability governance model whereby we focus on two core elements: we explore sustainable business solutions and on the other hand, we aim to excel in our operations (sustainable performance in our daily operations). As well as our own targets, we support our clients in achieving their sustainability ambitions and we encourage all of our stakeholders and suppliers to join us on this journey. We can only find solutions for this enormous challenge by working together.

AGAIN AT THE FOREFRONT OF THE OFFSHORE WIND INDUSTRY

DEME has been a pioneer in the renewables industry, we were there when the very first offshore wind farms were built. More than two decades on, we are the undisputed leader in offshore wind contracting. In 2021 DEME Offshore has installed more than 2,500 turbines and helped construct nearly 70 offshore wind farms worldwide.

We have landed some amazing offshore wind projects in the last 12 months. I was personally absolutely delighted to see Thistle Wind Partners, a consortium including DEME Concessions, be awarded a staggering 2 GW worth of option areas in Scotland's highly competitive ScotWind seabed leasing process and a significant part of this is related to floating offshore wind – the next important step in the development of the sector. It is gratifying to see that our courage to take on a leadership role has enabled us to be at the forefront of the industry again.

In the US market, there was another breakthrough as the offshore wind industry starts to gather pace. DEME Offshore will perform several scopes for Vineyard Wind 1, the first utility-scale offshore wind farm in the US and we were very proud to be awarded Dominion Energy Group's Balance of Plant contract for the construction of the Coastal Virginia Offshore Wind. This is the largest offshore wind installation contract ever awarded in the country and the biggest single cabling contract in DEME Group's history. DEME's presence in the renewables industry is also being extended worldwide into new markets such as Taiwan, Brazil, Vietnam and Japan.

REGIONAL BLUE HUB AT PORT-LA NOUVELLE

Alongside this, as part of a consortium, DEME Concessions was awarded a 40-year port concession for Port-La Nouvelle in France. This concession perfectly fits our sustainability goals because the French port is undergoing a major redevelopment, which includes establishing a strategic hub for the offshore- and floating wind industry. Aiming to become the regional 'blue economy hub', the port is set to welcome new activities such as offshore wind power, the maintenance of offshore wind farms, the production of green hydrogen and the storage of renewable energies.

GREEN HYDROGEN INITIATIVES

Importantly, DEME is not limiting its renewable energy activities to offshore wind. We are also making investments in other core technologies which we believe have an enormous potential to play a key role in the energy transition, such as renewable hydrogen. DEME has made significant progress with its flagship green hydrogen project HYPORT® Duqm in Oman during 2021. DEME Concessions and its partners are aiming to establish an industrial-scale, green hydrogen plant in the port. This ambitious project encompasses the full value chain, starting with 100% renewable energy, the production of hydrogen in electrolysers and then the conversion to green ammonia. Taking the utmost care of the valuable resources our planet provides for us is also key. For decades our environmental specialists have been cleaning polluted soils and water. In a major remediation project, DEME Environmental is cleaning up a heavily polluted, former oil refinery site in Bowling, Scotland deploying its high-tech solutions. Again, this project highlights our focus on promoting a sustainable and circular economy. More than 90% of the material will be cleaned and reused and the site will eventually be transformed into an industrial and commercial development.

We are also making investments in other core technologies which we believe have an enormous potential to play a key role in the energy transition.

DEME is addressing some of the world's megatrends such as promoting mobility and connectivity.

SUSTAINABLE DEEP-SEA MINERALS

In a ground-breaking initiative to tackle the scarcity of resources, also in line with the SDGs, Global Sea Mineral Resources (GSR), DEME's deep-sea exploratory division, took another important step in its ambition to responsibly and sustainably collect metal-rich, polymetallic nodules from the ocean floor. In 2021, our team successfully tested GSR's pre-prototype nodule collector, Patania II, at a depth of 4,500 m.

IMPROVING MOBILITY AND CONNECTIVITY AT THE FEHMARNBELT FIXED LINK

In another example of taking a longer term view about sustainability, DEME is addressing some of the world's megatrends such as promoting mobility and connectivity. We are absolutely thrilled to be part of the Fehmarnbelt Fixed Link project, which is heralded as the infrastructure project of the century. Connecting Denmark with Germany, at 18 km the Fehmarnbelt Fixed Link will be the longest immersed road and rail tunnel in the world. But more importantly, it will shorten the journey between the German and Danish coasts to just minutes.

A GREENER FLEET – NEW FUELS AND NEW TECHNOLOGY

In addition to building the infrastructure to produce cleaner, greener fuel, we are also making investments in our fleet to ensure they are as environmentally advanced as possible. This investment programme in greener vessels is enabling us to win sustainable contracts such as a recent public tender in Belgium, entitled the 'Sustainable maintenance dredging works in the maritime access channels'. To be considered the successful bidder had to have the ability to deploy technically advanced vessels and those that are able to excel in environmental technologies. We know that one of the biggest challenges we face is the decarbonisation of fuel for our ships. Our investment in R&D continues and we are sure that the combination of working with our stakeholders will help us find the solutions.

EU TAXONOMY REPORTING

In 2021, we also took a very significant step forward in terms of our sustainability reporting and for the first time reported according to the new EU Taxonomy regulation. The goal of this legislation is to play an important role in helping the EU scale up sustainable investment and to support the implementation of the European Green Deal.

SUSTAINABILITY-LINKED FINANCING

DEME took the bold decision to completely transform its long-term loans' portfolio and instead we have converted them all into sustainability-linked financing packages. By changing the existing loans into sustainability-linked loans, the lenders agree to lower the interest rate when the company achieves its targets in relation to two sustainability KPIs. The first Environmental, social, and governance (ESG) KPI relates to work safety – always the most important priority at DEME and the second includes a target to increase the percentage of low carbon fuels consumed by the company.

A SAFE AND DIVERSE COMPANY

Being a sustainable company goes hand in hand with having a safe working environment for our employees. This is paramount. DEME provides an inclusive, diverse environment, where everyone has an equal opportunity to flourish. We also understand that without our highly talented, dedicated people, we cannot accomplish our ambitions to achieve a sustainable planet. We have definitely made progress in 2021 but we know we need to do more. Our strenuous efforts will continue and DEME will do what it is does best - we will pioneer, we will innovate, we will find new solutions.

DEME'S CORE VALUES

We have established a set of standards applicable to our business units and subsidiaries worldwide. These core values demonstrate our commitment to consistently deliver excellence to our customers and value to our company. We also expect suppliers, subcontractors and partners to adhere to these standards. At DEME, we define our company culture using the acronym STRIVE.



S – SAFETY

The personal safety and health of employees and stakeholders is our greatest responsibility. Everyone has the right to work in a safe and risk-free environment at all times.

T – TECHNICAL LEADERSHIP

With an open mind and the right team spirit, we continue to improve all aspects of our work process and develop trailblazing solutions to address the needs and challenges of our customers.

R – RESPECT & INTEGRITY

Our employees are trained and motivated to meet the challenges ahead. Individuality and diversity are valued and performance is recognised. Our relationships with suppliers, subcontractors and partners reflect respect, understanding and sound business practice. We observe all applicable laws and regulations of the countries in which we are active. We respect human rights and prohibit discrimination.

I – INNOVATION

Innovation is the cornerstone of our achievements. We continuously push our boundaries by developing new, value-adding services and solutions.

V – VALUE CREATION

We make result- and sustainability-driven decisions in order to ensure long-term growth for the benefit of employees, customers and shareholders. This includes financial discipline to keep our company healthy.

E – ENVIRONMENT

We protect the environment and the communities in which we do business by limiting our impact and exploring opportunities for sustainable value creation together with our stakeholders.

COLLABORATION WITH OUR STAKEHOLDERS



As a global company operating in many different markets and locations, it is essential to maintain good working relationships with all our stakeholders. To achieve this, as well as to enhance awareness and foster multi-stakeholder collaborations, we emphasise:

01 **Growing awareness about sustainability within our value chains, including our employees, shareholders, suppliers, subcontractors, customers and partners.**

02 **Building partnerships and exchanging knowledge with research institutes, technology providers, policy makers and Non-Governmental Organisations (NGOs) for sustainable economic development.**

03 **Creating a sustainable mindset within the organisation.**

04 **Communicating transparently about the progress made towards our sustainability goals.**

05 **Strengthening the capacity of local communities to maintain and sustain the projects we complete.**

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DEME'S VISION

SETTING SUSTAINABLE GOALS AND MAKING THEM HAPPEN

SETTING SUSTAINABLE GOALS AND MAKING THEM HAPPEN

At DEME, it is our ambition to fundamentally contribute to sustainable solutions for the global environmental, societal and economic challenges facing our world today.

Every day we are involved in a wide range of large, complex projects worldwide, ranging from dredging and land reclamation to infra marine infrastructure, environmental and offshore energy works. All these projects have a potential impact – positive or negative, minor or substantial – on communities, local economies and the overall climate.

We always strive to improve the sustainability of our own operations.

An intense internal cooperation process took place across our activities, leading to a two-dimensional strategy for sustainable performance.

01

TO EXPLORE SUSTAINABLE BUSINESS SOLUTIONS

by continuously challenging ourselves to enlarge our sustainable business portfolio and to align our business decisions with the Sustainable Development Goals where DEME can create the most impact.

02

TO EXCEL IN OUR OPERATIONS

by maintaining and strengthening a sustainable performance in our daily operations.

This strategy will help us to create sustainable value for our customers, DEME and society.

01 **EXPLORE** SUSTAINABLE BUSINESS SOLUTIONS

02 **EXCEL** IN OUR OPERATIONS



MATERIALITY MATRIX

During 2021 we upgraded our Materiality Matrix, which dates from 2018. The main goal was to better include (and update) external stakeholders' views on the relevance of Environmental, Social and Corporate Governance (ESG) topics for DEME.

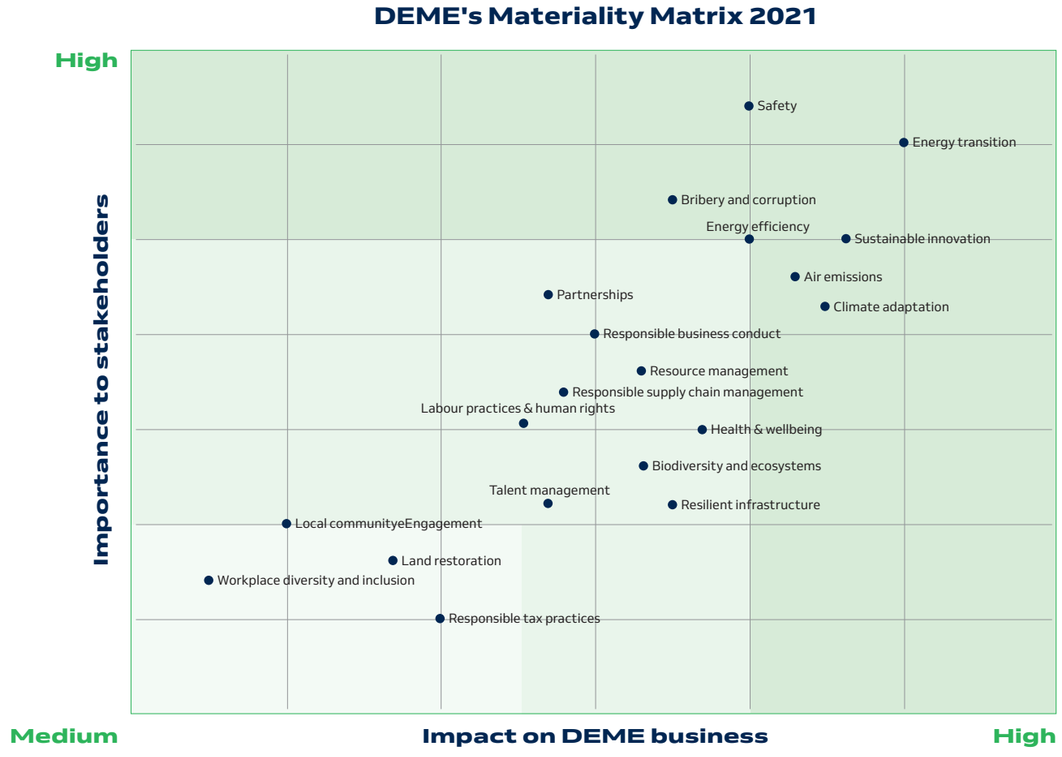
TO DO SO WE:

Reviewed the ESG and sustainability topics in DEME's existing Materiality Matrix from 2018 and benchmarked these within our sector with some of our peers and with relevant ESG topics used by risk rating agencies;

Sent out an anonymous online survey to more than 200 of our closest external stakeholders (customers, suppliers, financial institutions, research partners, NGOs and shareholders) asking them to rate, based on their expectations about DEME and its operating sector, the relevance of the ESG and sustainability topics retained in the previous step;

Compiled the results of the review and the online survey in the renewed Materiality Matrix 2021 and validated these results through our governance model.

DEME's renewed Materiality Matrix 2021 helps us to better identify and understand the relative importance of specific ESG and sustainability topics.



OUR COMMITMENT TO THE SUSTAINABLE DEVELOPMENT GOALS

It is undeniable that the world is facing multiple global challenges that could have a serious impact on society and the environment unless we take action now. With its 17 Sustainable Development Goals (SDGs), the UN has identified its priorities for creating a better world by 2030.

While these goals address different themes and aspects of sustainability, they are all interconnected. Together, they will help us to overcome global poverty, stop climate change and fight inequality so that we all live in a better world.

At DEME, we are fully committed to helping achieve the SDGs. These goals have helped us to understand the economic, environmental and social impact of our operations as we move towards a project portfolio with a strong sustainable focus.

As all of the UN goals are interconnected, DEME is committed to addressing all 17 SDGs. Nevertheless, DEME does not contribute to all of the goals equally. We have bundled the 17 SDGs into 8 Key Sustainability Themes and identified 34 (out of 169) specific targets where we can make the most significant contribution.

In 2021, we worked to further refine the implementation of our two-dimensional sustainability strategy and our 8 Key Sustainability Themes, where we have focused on the areas which are most relevant for our business and for our external stakeholders. Consequently, we set up an operational framework of well-defined sustainability programmes connecting our ambitions with clear targets, action plans and performance indicators in a coherent and structured way. These sustainability programmes are outlined on the following pages.

DEME'S 8 KEY SUSTAINABILITY THEMES AND THEIR CONNECTION WITH THE RELEVANT SDGs.

- CLIMATE AND ENERGY
- NATURAL CAPITAL
- SUSTAINABLE INNOVATION
- WASTE AND RESOURCE MANAGEMENT
- HEALTH AND WELLBEING
- DIVERSITY AND OPPORTUNITY
- ETHICAL BUSINESS
- LOCAL COMMUNITIES





In October 2021, DEME was named a United Nations 'SDG Pioneer' as the United Nations and United Nations Institute for Training and Research (UNITAR) recognised our efforts to achieve a more sustainable planet. We were officially awarded the international certificate.

This award is the result of three consecutive years of successful participation in the VOKA Charter for Sustainable Business (VOKA Charter Duurzaam Ondernemen). By carrying out a series of actions under the Charter, we have made a positive contribution to each of the 17 Sustainable Development Goals. We are very proud to have achieved this result as it highlights the tremendous efforts of our enthusiastic employees. They jumped on board right from the beginning and are helping us achieve our ambitious vision for a sustainable future.

EU TAXONOMY REPORTING

The EU taxonomy is a classification system, establishing a list of environmentally sustainable economic activities. The goal of this new European legislation is to play an important role in helping the EU scale up sustainable investment and to support the implementation of the European Green Deal.

For the financial year 2021 DEME is reporting according to the EU Taxonomy standards in compliance with the requirements set for the preparation of its shareholders' Non-Financial Statements. As both CFE and Ackermans & van Haaren fall within the scope of the Non-Financial Reporting Directive (NFRD), DEME performed an eligibility assessment to disclose the proportion of Taxonomy eligible or non-eligible activities in total turnover and in capital expenditure. In addition, and in preparation of the 2023 disclosure obligations over financial year 2022, DEME also performed a more in-depth Taxonomy alignment screening for its DEME Offshore wind projects.

The eligibility assessment has been carried out at project level, based on the consideration of the ultimate project purpose and in relation to the relevant contributing sector, Taxonomy eligible activity and NACE code(s). All projects of DEME's Activity Lines 'Offshore', 'Dredging' and 'Infra' have been assessed for eligibility for a substantial contribution to climate change mitigation and climate change adaptation. The projects of DEME's Activity Lines 'Environmental' and 'Others' were not assessed.

For the in-depth Taxonomy alignment assessment of DEME's offshore wind projects, two additional steps have been taken on top of the assessment of a substantial contribution to climate change mitigation. These projects have also been screened for all relevant Do Not Significant Harm criteria. Finally, compliance with the Minimum Social Safeguards (OECD Guidelines and UN Guiding Principles on Business and Human Rights) has been verified through the review of relevant information detailed in a.o. DEME's previous Sustainability Report, the Human Rights Policy, our Code of Ethics and Business Integrity and DEME's GRI Content Index.

The calculation of the proportion of the Taxonomy-eligible or non-eligible activities in capital expenditure is based on DEME's investment plan as of December 31, 2021.

DEME's offshore wind activities will, based on the current interpretation, be both eligible and largely aligned with the EU taxonomy. 28% of total turnover over financial year 2021 is eligible and 24% can already be considered aligned based on current definitions. In addition, 32% of total capital expenditure is eligible and can already be considered aligned.

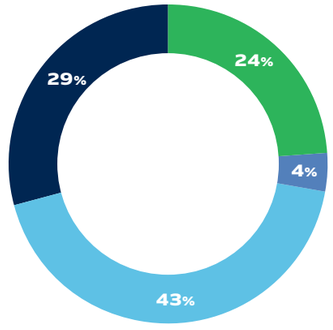
DEME is also active in other green activities such as the construction of bridges and tunnels for rail infrastructure and the construction or modernization of port infrastructure. For these activities, the Taxonomy leaves room for interpretation, therefore these activities currently are being regarded as 'likely eligible', accounting for 43% of total turnover. In addition, 61% of total capital expenditure can be regarded as 'likely eligible'.

The remaining 29% of non-eligible turnover can be divided between economic activities related to natural gas-fired power, oil & gas and a remaining part of the turnover which has not been assessed yet as it was not deemed relevant for the environmental objectives on climate change mitigation and climate change adaptation.

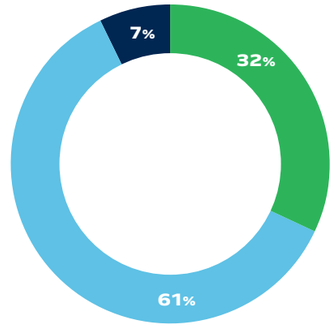
DEME's activities related to gas-fired power and the production and transport of LNG are provisionally and conservatively assigned as non-eligible, although the European Commission published the second delegated act of the EU Taxonomy Regulation on February 2nd 2022, including the extension of its green finance criteria to nuclear and natural gas-fired power. Before entering into force, this second delegated act needs to be adopted over the next four to six months after scrutiny by co-legislators.

For the purposes of reporting over the financial year 2022, the impact of the four additional Taxonomy environmental objectives yet to be published and the further alignment at project level of the entire project portfolio must be further analysed.

EU TAXONOMY KPI 'ELIGIBLE TURNOVER'



EU TAXONOMY KPI 'ELIGIBLE CAPEX'



SUSTAINABILITY-LINKED FINANCING

In 2021 DEME has been working to transform DEME's entire long-term loans portfolio into sustainability-linked financing. This major commitment underlines DEME's vision to realise a sustainable future and represents a total loan value of EUR 579 million.

In accordance with the Sustainability Linked Loan Principles issued by the Loan Market Association, the transaction was realised on 7 February 2022. By changing the existing loans into sustainability-linked loans, the lenders agree to lower the interest rate when the company achieves its targets in relation to two sustainability KPIs. Failure to achieve both targets will result in a slight increase of the interest rate.

The first Environmental, Social, and Governance (ESG) KPI relates to work safety – a long standing priority at DEME. Often performing groundbreaking projects in challenging and remote environments, this KPI requires the company to continually look to improve its safety performance. DEME has already introduced the necessary management systems and action plans to achieve its safety goals, but the company remains vigilant. Improving safety is never a closed chapter (see https://www.deme-group.com/publications).

The second ESG KPI includes a target to increase the percentage of low carbon fuels consumed by the company. Again, this is a continual focus and DEME has set ambitious targets to reduce emissions and to ultimately become climate-neutral by 2050. In the meantime, the company aims to reduce greenhouse gas emissions by 40% by 2030 relative to 2008 per unit of work (see pages 46-47).

SUSTAINABILITY PROGRAMMES

WHAT?
EXPLORE

'What business do we want to be in and how can we create sustainable growth?'

AMBITION	PROGRAMME	SDG	
Drive the energy transition by expanding our offshore energy solutions and by exploring new marine-based solutions for renewable energy production, connection and storage.	**Transport, installation and maintenance of offshore wind farms**	7, 13	CLIMATE AND ENERGY
	Production, storage & transport of green hydrogen		
	Development of energy islands		
Improve adaptation to climate-related hazards by building resilient infrastructure and providing dedicated flood protection solutions.	**Flood protection solutions**		
Protect, revive and build natural capital to address key environmental and societal challenges.	**Nature-based prevention solutions for coastal protection**	6, 14, 15	NATURAL CAPITAL
	Regreening ecosystems		
Stimulate the development of holistic solutions through multistakeholder partnerships to drive the transition towards a sustainable future.	**Jointly striving for sustainability impact by building multistakeholder partnerships**	9, 17	SUSTAINABLE INNOVATION
Accelerate the shift towards a circular economy by providing solutions for waste, soil, water and sediments.	**Soil remediation & brownfield development**	12	WASTE AND RESOURCE MANAGEMENT
	Environmental dredging & sediment treatment		
	Treatment of water		
Drive the resource transition by increasing the sustainable supply of materials.	**Secondary raw materials**		
	Plastic soup solutions		
	Responsible deep-sea minerals industry		

HOW?
EXCEL

'How can we make sure we are performing in the most sustainable way possible?'

AMBITION	PROGRAMME	SDG	
Strive for a climate-neutral organisation by 2050 and improve energy efficiency in our operations.	**Reduction of GHG emissions from the energy used for our own operations and from purchased energy**	7, 13	CLIMATE AND ENERGY
	Reduction of GHG emissions in our project supply chains		
Minimise the environmental impact of our operations and strive for a net positive impact on biodiversity and ecosystems.	**Operational solutions to manage adverse impacts on water, land and air**	6, 14, 15	NATURAL CAPITAL
	Environmental engineering solutions and nature-based solutions in our project designs		
Enhance scientific research, upgrade the technological capabilities and encourage sustainable innovation within our projects.	**Intrapreneurship to advance sustainability**	9, 17	SUSTAINABLE INNOVATION
	Partnerships with universities and research institutions		
Maximise efficient and circular use of materials throughout our projects.	**Reuse of dredged materials, soils, water and materials from demolition works in our operations**	12	WASTE AND RESOURCE MANAGEMENT
Provide a safe, secure and healthy working environment for all people involved.	**Guaranteeing physical and mental health & wellbeing**	3	HEALTH AND WELLBEING
Ensure an inclusive workplace where all workers are treated equally, with dignity and respect.	**Diversity, equal opportunities and inclusion**	4, 5, 8, 10	DIVERSITY AND OPPORTUNITY
Strengthen employee competencies.	**Personal and professional possibilities**		
Respect and protect labour rights in our operations.	**Clear guidance and minimum standards on business ethics & human rights for all parties involved in our operations**	16	ETHICAL BUSINESS
Embed an ethical business mindset within the organisation and transparently communicate about our ethical performance.			
Build collaborative relationships with local communities through consultation, engagement and participation.	**Employee engagement in community participation**	1, 2, 11	LOCAL COMMUNITIES

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DEME'S EXPLORE PROGRAMMES



CLIMATE AND ENERGY

FOSTERING CLIMATE MITIGATION AND ADAPTATION

Climate change is one of the greatest threats to our planet and society. Increasing global temperatures, driven by greenhouse gas emissions lead to rising sea levels, the warming of the ocean surface and more volatile weather phenomena causing drought, fires and flooding. At the same time, there is a growing need for access to affordable, reliable and sustainable energy. DEME provides solutions to increase society's ability to withstand the impact of climate change and to expedite the much-needed energy transition.

AMBITION
01

DRIVE THE ENERGY TRANSITION

Renewables

DEME is continuing its ambitious strategy to expedite the energy transition and to increase society's ability to withstand the impact of climate change. This is reflected throughout the company, but particularly in the offshore wind sector, where DEME worked on projects such as Triton Knoll, Hornsea Two, Saint-Nazaire and Dolwin6 amongst others in 2021. SeaMade, which consists of two wind farms (Seastar and Mermaid) and is named the jewel in the crown of the Belgian offshore wind market, was officially inaugurated on October 20. This large-scale wind farm provides renewable energy to 500,000 families and represents a CO_2 reduction of 600 kilotonnes per year.

During the past year, DEME also secured some truly remarkable contracts including the first Engineering, Procurement, Construction and Installation (EPCI) contract for a floating offshore wind farm in France and the Transportation and Installation (T&I) scope for the turbines and foundations for Vineyard Wind 1, the first large-scale offshore wind farm in the US. This was swiftly followed by a major Balance of Plant (BoP) contract for the construction of the 2.6 GW Coastal Virginia Offshore Wind project, the largest offshore wind installation contract ever awarded in the US.

Status January 2022

2,662
turbines

13,268
MW

49
projects

Since our very first wind farm project in 2000, DEME has installed 2,662 turbines of all sizes at 49 different wind farms worldwide. In total DEME helped construct nearly 70 offshore wind farms worldwide.

Green hydrogen

Alongside the achievements in offshore wind, DEME is also working on other forms of renewable energy including the production, storage and transport of green hydrogen. In Oman, DEME Concessions and Omani partner OQ Alternative Energy LLC, the state-owned oil and new energies company, have established an exclusive project partnership to develop a world-leading green hydrogen plant in Duqm.

This facility - developed in stages to GW size - has the potential to contribute significantly to the decarbonisation of the regional chemical industry, but will in the first instance supply the much needed green hydrogen and derivatives such as green ammonia to European and international customers.

Combining innovative technologies at scale, HYPORT® Duqm is recognised as one of the very few lighthouse projects worldwide which encompass the full value chain, starting with 100% renewable energy, the production of hydrogen in electrolysers and then the conversion to green ammonia. This flagship green hydrogen project has been developing rapidly in 2021. In July, HYPORT® Duqm signed a cooperation agreement with energy giant Uniper. Under the cooperation, Uniper will be joining the project team to provide engineering services and negotiate an offtake agreement of green ammonia.

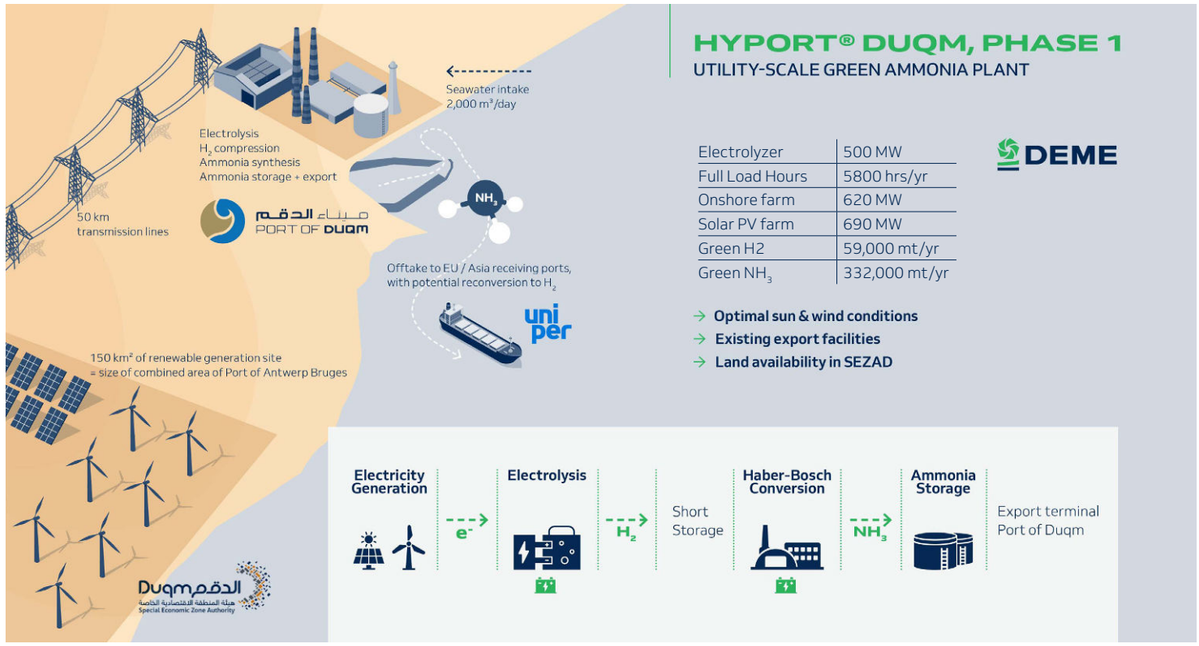
During September 2021 HYPORT® Duqm secured the land reservation for the renewable power generation site in Oman. The site of 150 km² enables ca. 1.3 GW onshore wind- and PV capacity for phase 1 and additional capacity for the expansion of HYPORT® Duqm.

Separately, DEME is also looking into opportunities in Europe where there are high levels of offshore wind production in the North Sea and Baltic, and seeing where this renewable energy could be combined with the production of green molecules.

Energy islands

DEME has been pioneering the concept of energy islands off the coast, which involves an artificial, multifunctional island at sea combining offshore renewable energy production, storage, transmission and conversion to other energy sources. In November 2021, DEME signed a partnership agreement with Copenhagen Infrastructure Partners (CIP), a leading global fund manager specialising in renewable energy investments, to bid for the development of the Energy Island in the Danish North Sea, together with three other leading contractors.

Set to become the world's first Energy Island, it will be located approximately 80-100 km off the Danish coast and will be able to connect 10 GW of offshore wind to Denmark and neighbouring countries, as well as having possibilities for large-scale energy storage and Power-to-X technologies. The Danish Energy Agency is currently talking to potential bidders for the Energy Island tender.



AMBITION
02

PROVIDE DEDICATED FLOOD PROTECTION SOLUTIONS

Rising sea levels threaten low-lying areas around the world, with increased coastal flooding risks during more severe and more frequent storms. To tackle this problem and in line with our sustainability ambitions, we are therefore focusing on building resilient infrastructure that is better adapted to climate-related hazards such as flood protection solutions. Crucially, we aim to provide an innovative and integrated approach, which includes sustainable coastal and river embankment management.

From grey to green, a variety of coastal protection possibilities exist. Well-known hard engineered grey solutions to protect coastal zones against storms and floods have been the worldwide standard for many years. However, this infrastructure sometimes disrupts natural coastal processes and in a number of cases more sustainable alternatives also meet the required protection levels.

Ecosystem-based or nature-based approaches to coastal defence might even be more appropriate. These solutions not only provide protection against storms and sea level rise, but also add ecological value, improve coastal resilience and increase biodiversity. Hybrid solutions can also combine hard engineered solutions with a more sustainable design type.

Our nature-based solutions are further outlined in the following pages which highlight DEME's 'Natural Capital' EXPLORE theme.



Throughout its history DEME has been providing dedicated flood protection solutions.

NATURAL CAPITAL

BUILDING AND REVIVING NATURAL CAPITAL

Breathable air, a tolerable temperature, drinkable water and many other crucial services for humanity are delivered and maintained by complex ecosystems built upon a diverse range of species. Several international institutions point out the value of natural ecosystems and biodiversity as the foundations for economic growth, human health and prosperity and the specific role they play as a carbon storage and climate stabiliser. Oceans and seas are identified as one of the main ecosystems, with both the highest sensitivity and potential impact, to tackle climate change.



In 2021 the 'mussel shaker' has been installed as an innovative, new bivalve reef infrastructure, which is designed to facilitate and optimise mussel reef development at the foreshore of the Belgian North Sea coast.

AMBITION
01

PROTECT, REVIVE AND BUILD NATURAL CAPITAL

Our aim is to protect, revive and build natural capital. Our focus here is not only to prevent and reduce marine pollution but to go beyond this, and provide innovative solutions contributing to sustainability by reviving and building marine, coastal, inland waterways and terrestrial ecosystems. As a marine solutions provider which has been operating in the water for more than a century, DEME is committed to exploring how nature-inspired and nature-based solutions can be converted into viable business opportunities and how our project portfolio could be further developed in this direction.

The Coastbusters and Bankbusters projects are great examples of such initiatives, aiming to take an innovative approach with regards to traditional, unsustainable coastal and river embankment management methods and instead develop solutions inspired by nature.

Coastbusters

Coastbusters are essentially reef builders, helping to limit erosion and boost coastal management by the construction of natural biogenic reefs from biobuilder species such as plants, bivalves and worms. These solutions are 'self-healing' which makes them efficient, affordable and resilient, whilst contributing to biodiversity and a healthy, well-balanced ecosystem.

These types of solutions hold many technical, ecological and social advantages such as restoring biodiversity and building resilience against rising sea levels, desertification, droughts, extreme flooding events, biogeochemical flows, wildfires or saline groundwater intrusions. During further exploration of the Coastbusters concept and the viability of various business models, DEME has also identified financial and monetised added value, as well as alternative social and ecological benefits, which have the potential to be valorised such as oyster reef habitats, fish nurseries, carbon sequestration, seagrass bed stability, recreational spots, empowerment of local communities and employment opportunities.

Meanwhile, since its inception in 2017, the Coastbusters approach has gained widespread scientific and international acclaim - reflecting an increased awareness of nature-based solutions as a valuable alternative marine engineering tool.

Bankbusters

Pursuing the Coastbusters philosophy, the new Bankbusters project focuses on the beneficial reuse of soft dredging material in smart engineered riverbank configurations in order to facilitate the restoration of tidal marsh and mudflat habitats. Within this R&D project we aim to further increase our knowledge of the complex estuarine ecosystem processes and integrate our operational excellence related to the handling and treating of fine dredged materials into innovative, engineered riverbank units. Bringing together ecological, technical and morphological expertise in this nature-based solution in both laboratory and field pilot tests, has clearly demonstrated that this provides more sustainable protection for erosive, tidal river embankments.

Additionally, Coastbusters 2.0 is the follow-up of the original Coastbusters project, the latter being successfully concluded in April 2020. Coastbusters 2.0 aims to further develop the bivalve biogenic reef for coastal management and the use of biodegradable and sustainable bio(materials).

Both R&D projects are supported by the Agency for Innovation and Entrepreneurship (VLAIO) within the framework of the Flemish Spearhead Blue Cluster.

DEME is also a member of the Society for Ecological Restoration (SER). SER is positioned at the critical interface between restoration science and practice, and supports the field of ecological restoration by promoting a global policy agenda, providing networking opportunities, as well as sharing research and best practices.

WASTE AND RESOURCE MANAGEMENT

PLAYING OUR ROLE IN THE MOVE TOWARDS A CIRCULAR ECONOMY

Over the next 30 years the global population is set to expand by a staggering two billion people. This will put a huge strain on our natural resources such as soils, land and water (process and drinking) but also on mineral resources, such as the critical metals needed in order to make the transition to clean energy.

Working towards Sustainable Development Goal 12, responsible consumption and production, requires the establishment of a circular economy to manage soil, sediments, water and land sustainably, as well as the careful management and (re)use of mineral resources.



AMBITION
01

CREATE CLEAN AND HEALTHY ENVIRONMENTS

DEME provides integrated circular solutions for soil remediation, brownfield development, environmental dredging and sediment treatment, as well as for the treatment and delivery of water.

Brownfield sites are disused industrial areas where economic activities are severely impeded or rendered impossible due to historic contamination of the soil and groundwater. Here we take on a very proactive role in sourcing and developing potential remediation projects, alongside our development partners. DEME identifies polluted industrial sites and approaches the owners regarding the possibility of redeveloping them into new business parks, residential and recreational areas.

DEME is also equipped to tackle the very specific nature of contaminated sediments. Deploying decades of experience, our advanced, environmental dredging techniques enable us to perform precision dredging, meaning that any disturbance of the aquatic environment is kept to an absolute minimum. If the sediment is contaminated specialised technologies and processes ensure the maximum reuse of treated polluted soil, sediment and sludges.

We have a broad portfolio of specialised in-house soil, sediment and water treatment and remediation techniques including, but not limited to, bioremediation, physico-chemical cleaning, thermal processing, sludge dewatering through lagoon, filter presses or screen belt presses, stabilisation and immobilisation. Some of these technologies, such as Soft Soil Improvement®, have been specifically developed for in-situ treatment, while others are used in our dedicated sediment processing centres.

DEME operates around 30 mobile and fixed water treatment plants. In this way a lot of polluted (ground)water is cleaned and can be recuperated.

REUSE OF SOILS & SEDIMENTS (SECONDARY RAW MATERIALS)

WE PROVIDE INTEGRATED CIRCULAR SOLUTIONS

- **1.55 million tonnes** of polluted soils and sediments were managed and treated at our own centers in 2021
- **535 ha of former brownfield** sites are ready for reuse
- **13 recycling centres**

AMBITION
02

INCREASE THE SUSTAINABLE SUPPLY OF MATERIALS

We aim to reuse soils and sediments as much as possible in our projects, whether this is for (building) materials for construction or other purposes such as land reclamation. Soil, sediment and sludge remediation has been a core specialty of DEME for many, many years and we have a leading position in this sector. More than 25 years ago, we established the most advanced soil treatment centre in Europe in Antwerp. We now have a network of 13 soil treatment and sediment recycling centres at strategic locations in Belgium, the Netherlands and northern France. In addition, we have also designed and built a number of mobile soil washing and recycling systems that can be deployed at any project site worldwide.

MARINE LITTER HUNTER

In the course of our global activities we are sadly confronted with plastic waste in rivers and oceans almost on a daily basis. To help find solutions for the sustainable management of plastic waste, we initially chose to focus on collecting these plastics in rivers so we can prevent them from landing up in our seas and oceans where it is more difficult to tackle the problem. In 2021 we successfully completed a technological demonstration of DEME's 'Marine Litter Hunter' on the River Scheldt. Utilising cutting-edge technology this plastic collector combined Artificial Intelligence for object recognition, Autonomous Sailing (unmanned), Virtual Reality and Solar-charged batteries for propulsion. It consisted of a fixed installation that passively collects floating and suspended waste from the water and a mobile system that actively collects bigger pieces of waste. The Marine Litter Hunter also includes a smart detection system and a workboat that can navigate autonomously. During the year, we have thoroughly tested our collector and proven the concept, and ultimately we were able to remove more than 60 tonnes of plastic waste from our rivers.



In May 2021, our team of world-class engineers successfully tested GSR's pre-prototype nodule collector, Patania II, at a depth of 4,500 m.

GLOBAL SEA MINERAL RESOURCES (GSR)

All credible forecasts predict a huge and sustained growth in demand for primary metals before we can reach our shared goal of a circular economy. In its May 2021 report, The Role of Critical Minerals in Clean Energy Transitions, the International Energy Agency (IEA) calculates that to reach the goals of the Paris Agreement, lithium supply will need to increase 42-fold, cobalt 21-fold and nickel 19-fold. The production and processing of many critical minerals is geographically concentrated. Currently over 70% of global cobalt supplies come from the Democratic Republic of Congo and more than 60% is processed in China (source: IEA). This could lead to issues with supply chain security in the event of disruption or trade restrictions. Security of supply requires diversity of supply.

Moreover, known terrestrial resources are located in increasingly remote, biologically diverse and vulnerable areas. To reach ores on land often a top layer of earth, known as overburden, must be removed. This requires the use of explosives and drilling and can create mountains of waste. Some of the waste – known as tailings – is toxic and is disposed of on land or at sea, either directly or via rivers.

Accessing deep-sea mineral deposits means no deforestation, no overburden to be removed, no communities to be displaced and no need for local power stations or transport links to support the mine site. The high-grade, multi-metal nature of seafloor polymetallic nodules presents an opportunity to obtain minerals with a significantly lower carbon footprint and less waste than many terrestrial options.

GSR, the deep-sea exploratory division of the DEME Group, believes that the responsible collection and management of polymetallic nodules could become an important source of high-grade, low carbon critical minerals. In 2021, GSR vowed to not produce ocean-mined minerals before the environmental risks are comprehensively understood. Additionally, GSR will only apply for a harvesting contract if the science shows that, from an environmental and social perspective, deep seabed minerals have advantages over the alternative – which is to rely solely on new and current mines on land.

In May 2021, our team of world-class engineers successfully tested GSR's pre-prototype nodule collector, Patania II, at a depth of 4,500 m. This ultra-deep-water trial was independently monitored by a consortium of EU scientists. We are proud to be a leader in this space.

SUSTAINABLE INNOVATION

JOINTLY STRIVING FOR SUSTAINABILITY

The Sustainable Development Goals explicitly acknowledge the interconnectedness of the prosperity of business, the prosperity of society and the prosperity of the environment. They represent a fundamental shift in approach and emphasise that all societal sectors have to play a role, which requires an unprecedented level of cooperation and collaboration among business, government, NGOs, foundations, civil society and others if they are to be successfully achieved.

We all hold key parts of the solution, and we all stand to benefit by collectively driving forward sustainable development. Multistakeholder partnerships therefore can be seen as a way for organisations from different societal sectors to work together. They can share the risks and combine their unique resources and competencies in ways that can generate and maximise value through more innovative, more sustainable, more efficient or more systemic approaches.

AMBITION
01

HOLISTIC SOLUTIONS THROUGH MULTISTAKEHOLDER PARTNERSHIPS

DEME strongly believes in joining forces to enlarge the overall sustainability impact. Our approach is to participate in multistakeholder partnerships and inter- and intra-industry collaborations to drive the transition towards holistic sustainable solutions.

We are taking a leading role in the Blauwe Cluster (Blue Cluster). This is an industry alliance that uses the 'blue economy' as an engine for sustainable growth. In 2021 we participated in a number of different research projects, feasibility studies and pilot cases such as Bankbusters, BlueMarine[3]. Com, Coastbusters II, Databeach, MPVAqua (floating PV) and Shared Situational Awareness for Vessels (SSAVE). In these projects we are working together with a broad range of partners including sector and cross-sector business partners, SMEs, governmental organisations, educational institutions, research institutes, universities, finance and insurance companies. MPVAqua, a highly innovative project which aims to develop a new cost-competitive technology for offshore floating PV plants, won the Blue Innovation 2021 Swell Award. In this project DEME works alongside several partners.

In January 2021 the Hydrogen Import Coalition - a collaboration between DEME, ENGIE, Exmar, Fluxys, Port of Antwerp, Port of Zeebrugge and WaterstofNet - published a study on the import of renewable energy and concluded that it is both technically and economically feasible. The results demonstrate the essential role of importing renewable energy in order to be able to meet the challenge of the transition to a carbon-neutral society by 2050.

In May 2021, DEME together with other industrial pioneers such as Bekaert, Colruyt Group, John Cockerill and the Flemish research centres imec and VITO (both partners in EnergyVille), announced they were joining forces to invest in the production of green hydrogen. Named Hyve, the consortium aims to provide sustainable, cost-efficient production of hydrogen at gigawatt level. Hyve will put the Flemish region in the driver's seat in the hydrogen economy and the transition towards a carbon neutral industry in Europe.

With regards to energy islands, DEME is involved in several research initiatives such as the Joint Industry Projects HybridEnerSeaHub and North Sea Energy Cooperation. HybridEnerSeaHub is investigating the use of floating modules, in combination with reclaimed land, to make islands more adaptive in every stage of their lifetime. The North Sea Energy Cooperation brings together organisations, companies and knowledge institutions that have a connection with the North Sea in order to ensure a good cooperation and to put the North Sea on the map as a pioneering region for the European energy transition.

DEME also puts a strong emphasis on further international cooperation via commitments to the European Clean Hydrogen Alliance, the MENA Hydrogen Alliance, the UN Global Compact Platform for Sustainable Ocean Business, the World Economic Forum's Global Plastic Action Partnership, the European Raw Materials Alliance, the European Battery Alliance and the World Economic Forum's Global Battery Alliance.

DEME's efforts also include supporting different governmental and NGO initiatives. For more information on partnerships with universities and research institutions we refer to our dedicated sustainability programme on this topic.



In 2021, DEME and its partners won the Blue Innovation Swell Award for the MPVAqua project for the development of a new cost-competitive technology for offshore floating PV plants.

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DEME'S EXCEL PROGRAMMES

CLIMATE AND ENERGY

01 REDUCTION OF GHG EMISSIONS FROM THE ENERGY USED FOR OUR OWN OPERATIONS AND FROM PURCHASED ENERGY

SCOPE

WHY?

Climate change is one of the greatest threats to our planet and society. Increasing global temperatures driven by greenhouse gas (GHG) emissions lead to rising sea levels, the warming of the ocean surface and more volatile weather phenomena causing drought, fires and flooding. By its very nature, marine contracting tends to be energy intensive. And undoubtedly, the biggest part of our own energy consumption is fuelling our vessels, auxiliary and floating equipment, and dry earthmoving equipment.

WHAT?

In line with our ambition to achieve climate-neutral operations by 2050, we are taking our responsibility to be at the forefront of the industry when it comes to integrating climate proof technology and energy excellence into our operations. For our vessels and equipment, we continue to optimise their fuel consumption by deploying them efficiently, and we are gradually transforming the fleet, which will ultimately see us move towards climate-neutral vessels and equipment. We strive for integrated energy solutions for our offices and project sites worldwide and continuously work to further increase the awareness of our employees. This programme is limited to the reduction of greenhouse gas emissions Scope 1 & Scope 2.

TARGETS

To reduce greenhouse gas emissions by 40% by 2030 relative to 2008 per unit of work.
In line with DEME's roadmap to reach this 40% and taking five significant energy users into account, defined within our ISO 50001 Energy Management Systems, the following additional targets were defined in 2021:

- Vessels: 17% of low carbon fuels consumed (energy based) in comparison to total consumed fuels (energy based) by 2026;
- Machinery and Equipment: climate neutral operations in the Benelux by 2030;
- Buildings: Climate neutral Headquarters by 2025;
- Car fleet: reduction to 65 grams CO_2/km for lease cars by 2025 in the Benelux.

MANAGEMENT

POLICIES

- Energy & Greenhouse Gas Emissions Policy

INTERNATIONAL STANDARDS & FRAMEWORKS

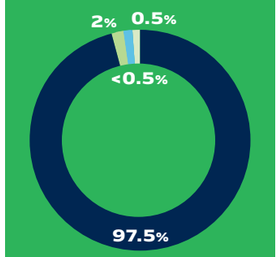
- GHG Protocol
- CO_2 Performance Ladder (Belgium & the Netherlands)
- ISO 14064 (reporting)
- ISO 50001 (Energy Management System – new!)

MANAGEMENT SYSTEMS

The Energy Management System is integrated into DEME Group's Management System.
We evaluate the effectiveness of our approach with the following validation and/or verification mechanisms:

- Compliance with CO_2 Performance Ladder - Level 5 (Belgium & the Netherlands) based on ISO 14064 and GHG Protocol
- External verification of emissions inventory (for Belgium and the Netherlands) every 3 years
- Internal annual Energy Management Review
- Compliance with IMO regulations by classification societies and flag states

WORLDWIDE
GREENHOUSE GAS EMISSIONS
SCOPE 1 + 2



WORLDWIDE
GREENHOUSE GAS EMISSIONS
SCOPE 1 - KTONNE CO_2 EQ*
832

SCOPE 2 - KTONNE CO_2 EQ*
0.8

CO_2 EMISSIONS
BELGIUM & NETHERLANDS
SCOPE 1 - KTONNE CO_2*
133

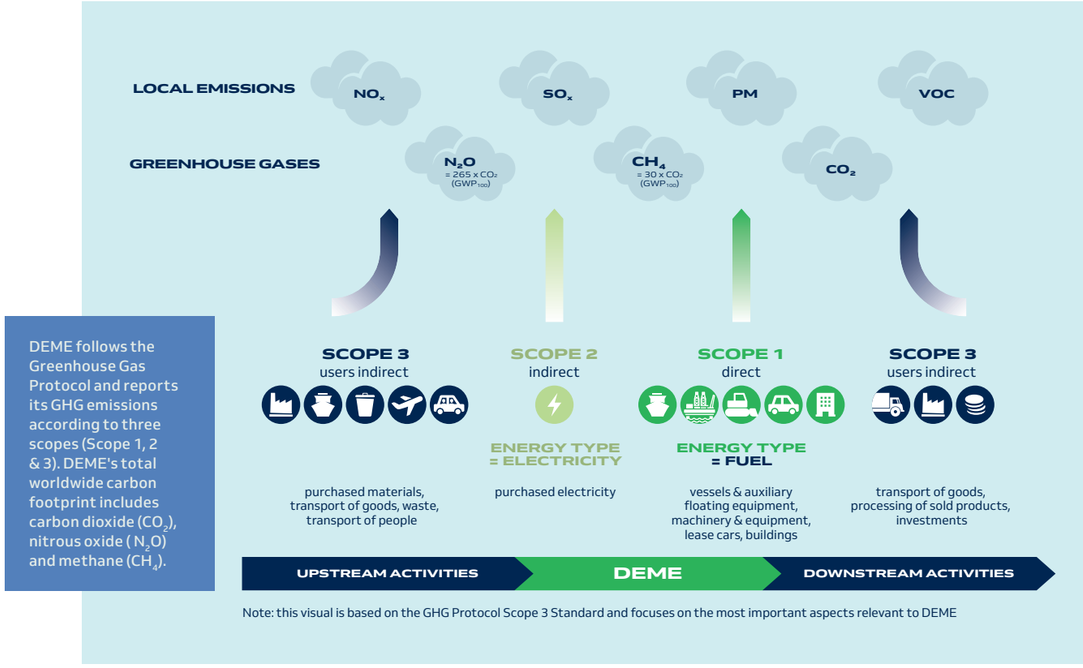
SCOPE 2 - KTONNE CO_2*
0.7

* see reporting practices

PROGRESS

PROGRESS 2021

- The total Scope 1 and 2 greenhouse gas emissions of the group amounted to 833 kTonne CO_2-Eq. in 2021 compared to 660 kTonne CO_2-eq. in 2020. This change in total worldwide greenhouse gas emissions can mainly be attributed to the high overall occupation of vessels in 2021. The utilisation rate for our hopper and cutter fleets was approximately 15% higher than the year before.
- In 2021 the world's most powerful mega cutter 'Spartacus' entered service. This vessel is able to run on LNG as well as having several energy saving features. Also 'Groenewind', a vessel specifically designed for the maintenance of offshore wind farms and saving up to 50% fuel, joined the fleet.
- We were delighted to achieve the ISO 50001 certification for the first time and this was for the whole DEME Group. ISO 50001 is an international standard that specifies a process for controlling and continually improving a company's energy performance. This energy management system enables us to align the energy performance of our significant energy users with the other accredited standards such as ISO 9001, ISO 14001 and ISO 45001. It allows us to integrate our energy management with our related greenhouse gas emission management, and to integrate these with our overall efforts to improve quality and environmental management.
- Within the framework of the ISO 50001 Energy Management System, 5 main significant energy users (SEUs) have been identified: vessels, machinery and equipment, buildings, transport of people and purchase of goods and services. For each SEU, a new, specific target has been set.
- DEME holds a Level 5 certificate from the CO_2 Performance Ladder (version 3.1). We were one of the first companies in the industry to be awarded the highest level. For our overall progress regarding the CO_2 Performance Ladder we would kindly refer to our dedicated webpage www.deme-group.com/CO_2-prestatieladder and in particular, DEME's progress report 'Energy Performance booklet, Scope 1 & 2'.



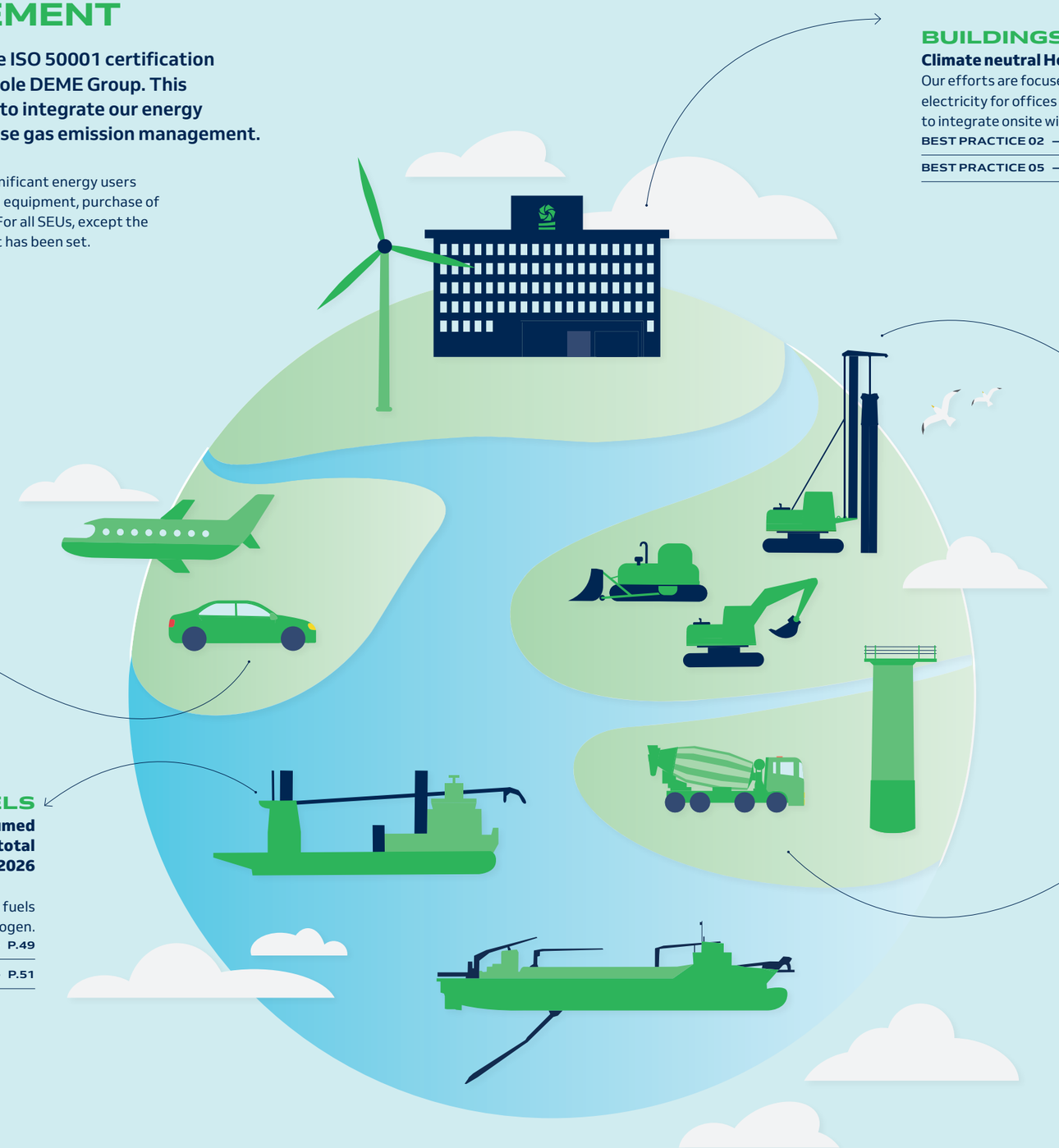
DEME follows the Greenhouse Gas Protocol and reports its GHG emissions according to three scopes (Scope 1, 2 & 3). DEME's total worldwide carbon footprint includes carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4).

Note: this visual is based on the GHG Protocol Scope 3 Standard and focuses on the most important aspects relevant to DEME

ENERGY MANAGEMENT

In 2021 we were delighted to achieve the ISO 50001 certification for the first time and this was for the whole DEME Group. This energy management system enables us to integrate our energy management with our related greenhouse gas emission management.

Within the framework of the ISO 50001, five main significant energy users (SEUs) have been identified: buildings, machinery and equipment, purchase of goods and services, vessels and transport of people. For all SEUs, except the purchase of goods and services, a new, specific target has been set.



BUILDINGS

Climate neutral Headquarters by 2025

Our efforts are focused on the procurement of green electricity for offices and other sites in the Benelux and to integrate onsite wind and solar energy at our HQ.

BEST PRACTICE 02 — P.50

BEST PRACTICE 05 — P.53

MACHINERY AND EQUIPMENT

Climate neutral operations in the Benelux by 2030

We aim to develop and use emission free machinery and equipment via electrification and the use of hydrogen in the Benelux. On project sites worldwide we aim to increase and optimise our energy registration.

BEST PRACTICE 04 — P.52

TRANSPORT OF PEOPLE

Reduction to 65 grams CO_2/km for lease cars by 2025 in the Benelux

We are increasing the pace at which our car fleet is being electrified and aim to reduce our business air travel for distances below 500km.

BEST PRACTICE 02 — P.50

VESSELS

17% of low carbon fuels consumed (energy based) in comparison to total consumed fuels (energy based) by 2026

We also explore the vast potential of future fuels such as ammonia, methanol and hydrogen.

BEST PRACTICE 01 — P.49

BEST PRACTICE 03 — P.51

PURCHASE OF GOODS & SERVICES

Reduction of GHG emissions in our project supply chains

We aim to encourage our main suppliers to improve their energy consumption and to consider alternatives with a smaller carbon footprint by exchanging energy and emission performance data.

EXCEL SUSTAINABILITY PROGRAMME 02 — P.54

BEST PRACTICE 01

Towards the most efficient and flexible fleet in the sector

We are currently implementing a multi-year fleet investment programme in order to further increase energy efficiency, to directly and significantly reduce air emissions, and to be able to make the switch to the use of future hydrogen-based fuels in the long run. On top of that, we are already actively engaging ourselves in the production of these future fuels, which will play a vital role in reducing emissions to almost zero.

INCREASING EFFICIENCY: BOTH TECHNICALLY AND OPERATIONALLY

We are working to increase energy efficiency across the fleet, and thus at the same time to reduce emissions by implementing different kinds of efficiency measures such as waste heat recovery systems, which convert heat from the exhaust gases to electrical energy. At the same time, we continuously seek further operational efficiency by the implementation of a pragmatic approach to process improvements and bottom-up innovation.

REDUCING AIR EMISSIONS ON THE GO

We incorporate state-of-the-art, dual fuel technology in our new vessels so they are able to run on both liquefied natural gas (LNG) in gas mode and conventional fossil fuels in diesel mode. From an emissions perspective, the concept is that they can readily access the use of a cleaner fuel with the option to fall back on conventional fossil fuels if alternatives are not available. In 2021, approximately 30% of the installed power of our fleet is technically prepared to use LNG as a fuel.



We continue to increase energy efficiency - both technically and operationally - across the fleet and to create flexibility by using LNG and biofuels.

This includes 'Spartacus', 'Minerva', 'Meuse River', 'Scheldt River', 'Living Stone', 'Bonny River', 'Orion' and 'Green Jade'. Running on LNG almost entirely eliminates SOx and PM emissions, strongly reduces the amount of NOx emissions and reduces CO_2 emissions in gas mode by up to 25%. Currently, we see the use of LNG as the best solution to achieve both an immediate and significant cut in emissions affecting local air quality, as well as a simultaneous cut in the CO_2 emissions which lead to climate change.

CREATING FLEXIBILITY IN FUEL USE

Alongside the use of LNG, our vessels can also run on biofuels or a mixture of a fossil fuel with a biofuel, both resulting in a positive impact on our CO_2 and GHG emission reduction. Biodiesel and biomethane (BioLNG) are biofuels which can be used as a 'drop-in' fuel. Biodiesel can therefore be used on every vessel. BioLNG can be used on board of our vessels currently running on LNG without any technical modifications for storage, handling and combustion, in contrast to fossil LNG.

BUILDING FUTURE-PROOF VESSELS

Incorporating dual fuel technology, and thus making our vessels technically ready for the use of LNG also has another advantage. Building up knowledge and experience with LNG sets a pathway for the easier implementation of alternative, low flashpoint future fuels. Our investment in dual fuel technology - with the LNG option - can be seen as preparations for the future and a cornerstone of our transition to climate neutrality in the longer term.

EXPLORING THE VAST POTENTIAL OF FUTURE E-FUELS

Today there are several candidates for future fuels for combustion engines, with ammonia, methanol and hydrogen considered the most promising. When these fuels are produced using renewable energy (such as onshore or offshore wind energy and PV power) via the process of electrolysis and conversion, they are known as e-fuels. DEME is a keen enthusiast about the potential of these future e-fuels and has adopted an ambitious strategy here, particularly focusing on the benefits of hydrogen and methanol. We intend to be a front runner in this sector and therefore we are actively taking part in several initiatives and indeed, we are already making substantial investments.



Building up knowledge and experience with LNG sets a pathway for the easier implementation of alternative, low flashpoint future fuels.

BEST PRACTICE 02

Green offices and creating climate neutral headquarters by 2025

We are currently working to increase energy efficiency and to promote the use of sustainable energy in our offices, which is also incorporated in our ISO 50001 Energy Management System. Our efforts are focused on the procurement of green electricity in the short term and to improve our energy efficiency and to generate our own wind and solar power for our headquarters. Our aim is to have a climate neutral headquarters by 2025. The procurement and production of this green electricity will play a vital role in reducing emissions for our offices to almost zero.

PROCUREMENT OF GREEN ELECTRICITY AND PRODUCTION OF WIND AND SOLAR POWER

The first step in our strategy towards zero-emission offices is the procurement of green electricity for our offices and sites in Belgium. By procuring green electricity our indirect GHG emissions (Scope 2) due to energy use in our offices is reduced to almost zero. Our efforts do not end there, however. For our headquarters in Belgium we took another step towards achieving our goals by teaming up with the 'Wind aan de Stroom' initiative. On June 15 and in celebration of 'Global Wind Day', two large-scale 3.5 MW wind turbines were inaugurated in the presence of the Flemish Prime Minister Jan Jambon, the Flemish Minister of Mobility and Public Works Lydia Peeters and Alderman of the Port, Annick De Ridder.

COMBINING ENERGY REDUCTION WITH A HEALTHY, CREATIVE WORKING ENVIRONMENT

The DEME headquarters will be transformed to the DEME Campus in the coming years. We are fully committed to creating a nice and creative environment where we can meet and collaborate with colleagues, customers, suppliers and external partners, to innovate, prepare, execute and manage projects in multifunctional teams, to attend training courses and seminars, to enjoy breakfast and lunch and to relax. We are working towards a modern and attractive DEME Campus, sustainable and energy-neutral.

The DEME Lab and new offices will be fitted with heat pumps and fully electrified heating systems as a part of our multiannual plan to gradually shift from fossil heating to the use of green electricity. During construction and renovation we will also focus on the design and insulation of course, in order to reduce the heating and cooling demand. The construction works for the DEME Lab started in November 2021, with an expansion of our parking facilities with extended smart charging capacity for hybrid and electric cars. The pace at which our car fleet is being electrified is increasing and we are aiming to further reduce emissions of our overall car fleet to 65 grams CO_2/km for lease cars by 2025 in the Benelux and to achieve 100% of new emissions-free cars in Belgium as from 2026.



On June 15, two large-scale 3.5 MW wind turbines were inaugurated at DEME's headquarters in Belgium.

BEST PRACTICE 03

Use of biofuel

We are continuing our strenuous efforts to reduce emissions and have embarked on a multi-year fleet investment programme to further increase our energy efficiency, which will ultimately play a key role in DEME becoming a climate-neutral organisation by 2050.

As well as this, we strive to minimise our environmental impact wherever we work and are well aware of the importance of lowering emissions for residents living in densely populated areas, such as in busy harbour towns and cities. That's why in 2021, in line with our strategy of exploring the potential of carbon neutral marine fuels, our hopper dredgers 'Pallieter' and 'Scheldt River' have been bunkered several times with biofuel in order to perform the maintenance dredging in Zeebrugge and the River Scheldt in a sustainable way. For the Hornsea Two project (installation of wind turbines) we also chose biofuel for one of the transport vessels, the 'Jumbo Fairmaster'. The vessel transported 142 MPs and 135 TPs (out of 165) from Rostock, DE and Aalborg, DK to Eemshaven, NL. The MDF1-100 fuel used was provided by GOODFUELS. The HLV consumed 3,268 tonnes of biofuel (out of a total of 4,835 tonnes).

GREEN INITIATIVE



BEST PRACTICE 04

Development of 40-tonne hydraulic excavators able to use liquid hydrogen

The demand for sustainable construction is increasing. Clients of projects in the vicinity of nature and urban areas particularly are setting increasingly strict requirements for emissions.

However, due to the lack of zero-emission construction equipment, many projects are delayed. The electrification of construction equipment and the use of hydrogen give the construction sector more and more opportunities to move towards zero emissions, but as yet there is not a good solution for remote locations using energy-intensive construction equipment, and these locations are usually exactly where DEME is working.

One of the projects in which DEME Environmental is involved in as an innovation partner, and which must be carried out without emissions as far as possible, is the Sterke Lekdijk, a dyke improvement programme commissioned by the water authority Hoogheemraadschap De Stichtse Rijnlanden (HDSR). During this project, the Sterke Lekdijk between Amerongen and Schoonhoven will be reinforced in order to protect a large part of the central and western Netherlands against flooding in the future. This concerns a 55 km-long route. The innovation partners, including DEME Environmental, have the task of solving this issue together with the help of HDSR.

The energy demand of the smaller mobile machines can easily be met with battery electricity or hydrogen gas, but this is more difficult with heavy mobile machines (>30 tonnes), due to the high energy demand per hour. Liquid hydrogen offers a solution in this case because it has 2.8 times greater energy content per litre compared to gaseous hydrogen at 350 bar.

Therefore, the innovation partners have taken the initiative to develop (convert) two emission-free, heavy mobile machines that are able to run on liquid hydrogen to contribute to the zero-emission construction site.

A tank facility for liquid hydrogen and two, 40-tonne hydraulic excavators running on liquid hydrogen are currently being built. Attention is paid to safety, permits, deployment requirements and scaling up for the future. The machines will be tested on the project and the knowledge and experience gained will be widely shared by the zero emissions infrastructure network, 'Stichting Emissieloos Netwerk Infra' (also an initiative of DEME Environmental among others) within the construction industry.

GREEN INITIATIVE



In order to reduce the CO_2 footprint of the project 'Redevelopment & nature realisation Terranova and Callemansputte', DEME Environmental decided to purchase an excavator that injects up to 30% hydrogen during combustion. For 10,000 operating hours this results in a saving of approximately 55,000 litres of fuel oil and 145 tonnes of CO_2, as well as a reduction in NO_x emissions.



GREEN INITIATIVE

Solar panels on the roof of DEME Infra Dordrecht producing approximately 183,600 kWh per year, which is around 38% of the site's total electricity consumption.

BEST PRACTICE 05

Energy monitoring, production of solar energy and new charging points

At DEME Infra in Dordrecht, 204 kWp of solar (PV) panels have been installed on the roof. These PV panels jointly produce approximately 183,600 kWh per year, which is around 38% of the total electricity consumption of the DEME Infra facility, which in turn means 38% of electricity consumption with zero emissions.

In 2022 the HVAC system will also be improved, which will reduce energy consumption, through increased efficiency, and improve the comfort of employees working in the offices. This is expected to save around 240,000 kWh per year, or 49% of the total consumption.

Finally, four additional charging points have been installed. And it is worth noting that on a nice summer day, all five connected cars are fully charged with solar power from DEME's own solar panels.

CLIMATE AND ENERGY

02 REDUCTION OF GHG EMISSIONS IN OUR PROJECT SUPPLY CHAINS

SCOPE

WHY?

Climate change is one of the greatest threats to our planet and society. Increasing global temperatures driven by greenhouse gas (GHG) emissions lead to rising sea levels, the warming of the ocean surface and more volatile weather phenomena causing drought, fires and flooding. By its very nature, marine contracting tends to be energy intensive and one of the main energy consumers in the project supply chain is the purchase of goods and services. For example, this can include concrete, steel and fuel for hired equipment.

WHAT?

We aim to reduce GHG emissions across our entire project value chain. This includes exchanging energy and emissions performance data. This programme is limited to greenhouse gas emissions (Scope 3) from our activities in Belgium and the Netherlands.

TARGETS

- To gain further insights into our most significant emissions categories from Scope 3.
- To set dedicated targets and/or actions based on an analysis of our Scope 3 emissions and related Life Cycle Assessments.

WORLDWIDE GREENHOUSE GAS EMISSIONS
SCOPE 3 - KTONNE CO_2 EQ*
11

CO_2 EMISSIONS
BELGIUM & NETHERLANDS
SCOPE 3 - KTONNE CO_2*
10

* see reporting practices

MANAGEMENT

POLICIES

- Energy & Greenhouse Gas Emissions Policy

INTERNATIONAL STANDARDS & FRAMEWORKS

- GHG Protocol
- CO_2 Performance Ladder (Belgium & the Netherlands)
- ISO 14064 (reporting)
- ISO 50001 (Energy Management System – new!)

MANAGEMENT SYSTEMS

The Energy Management System is integrated into DEME Group's Management System. We evaluate the effectiveness of our approach with the following validation and/or verification mechanisms:

- Compliance with CO_2 Performance Ladder - Level 5 (Belgium & the Netherlands) based on ISO 14064 and GHG Protocol
- External verification of emissions inventory (for Belgium and the Netherlands) every 3 years
- Internal annual Energy Management Review

PROGRESS

PROGRESS 2021

- In 2021 we were delighted to achieve the ISO 50001 certification for the first time and this was for the whole DEME Group. ISO 50001 is an international standard that specifies a process for controlling and continually improving a company's energy performance. This energy management system enables us to align the energy performance of our significant energy users with the other accredited standards such as ISO 9001, ISO 14001 and ISO 45001. It allows us to integrate our energy management with our related greenhouse gas emission management, and to integrate these with our overall efforts to improve quality and environmental management.
- DEME holds a Level 5 certificate from the CO_2 Performance Ladder (version 3.1). We were the one of the first companies in the industry to be awarded the highest level. For our overall progress regarding the CO_2 Performance Ladder we would kindly refer to our dedicated webpage www.deme-group.com/CO_2-prestatieladder and in particular, DEME's progress report 'Energy Performance booklet, Scope 3 target progress'.
- In 2021 we also expanded our internal knowledge and awareness of the GHG emissions in our supply chains. An analysis showed that most GHG emissions in our supply chain are related to steel, concrete, cables, transport and business travel.
- We performed an online survey with the suppliers most relevant to Scope 3 (in terms of spend and contribution) to get more insight into their maturity on energy and GHG emissions management. We also carried out an analysis of existing frameworks and evaluation tools for sustainable procurement.



We aim to encourage our main suppliers to improve their energy consumption and to consider alternatives with a smaller carbon footprint.

NATURAL CAPITAL

03 OPERATIONAL SOLUTIONS TO MANAGE ADVERSE IMPACTS ON WATER, LAND AND AIR

SCOPE

WHY?

Our oceans, seas, rivers and coastlines are vital for a healthy planet and economy. It is undeniable that marine contracting (e.g. dredging, harbour extensions, offshore wind turbine installation, underwater cable laying) alters the environment. For this reason it is important to find sustainable solutions that safeguard and improve marine and terrestrial ecosystems by de-polluting, restoring and enhancing our rivers, coastal areas, ports and land.

WHAT?

We aim to actively manage the environmental impact of our operations by protecting biodiversity and avoiding the disturbance of species and habitats during our operations as much as possible.

TARGETS

- To avoid environmental incidents.
- To systematically implement environmental assessments in all project preparations.
- To implement at least 1 Green Initiative each year for every project with a duration longer than three months (see below under Progress).

MANAGEMENT

POLICIES

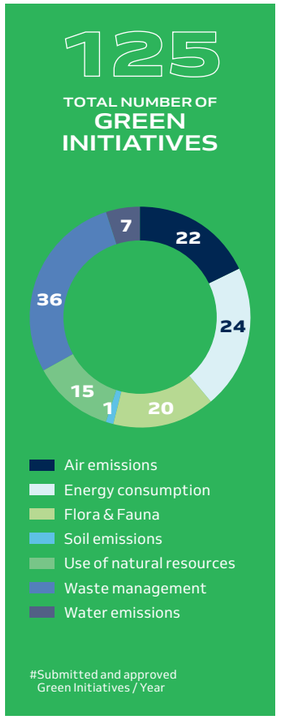
- Quality, Health, Safety and Environment Policy

INTERNATIONAL STANDARDS & FRAMEWORKS

- ISO 14001 (Environmental Management)
- International Safety Management (ISM) Code for the safe management and operation of ships and for pollution prevention.
- IMO Ballast Water Management Convention
- IMO MARPOL Convention Annex VI

MANAGEMENT SYSTEMS

- The Environmental Management System is integrated into DEME Group's Management System.
- Starting from a basic template, we develop project specific Environmental Management & Engineering Plans for all relevant projects.
- The target concerning Green Initiatives is linked to the QHSE-S Bonus.
- We evaluate our approach with the following validation and/or verification mechanisms in place: periodic external audits of DEME Group's Management System according to ISO 14001 and ISM and an internal annual QHSE-S Management Review including environmental topics.



PROGRESS

PROGRESS 2021

- Another successful campaign took place in 2021, resulting in 125 Green Initiatives. These initiatives are employees' actions to make changes or modifications to a process, equipment or setup to minimise the environmental impact of the project. They go beyond compliance and have the objective to increase environmental awareness and to encourage projects to review processes and decrease their environmental impact.
- We fully integrated a dedicated Environmental Risk Assessment Matrix in our QHSE-S Management System. This matrix is part of a more systematic methodology to map all possible risks related to specific equipment, impacts and receptors, which has been made available to all employees and was incorporated in the DEME corporate QHSE-S training courses.
- During the year there was a further development and successful application of our online and real-time field monitoring system, using in-house designed environmental buoy setups for water quality surveys.
- After intensive training, some 30 DEME Offshore bridge staff obtained the JNCC certification for offshore Marine Mammal Observations for underwater noise mitigation and monitoring during rock placement.

BEST PRACTICE 01

Operational environmental engineering in the Ob Bay Sea Channel project

Feasible environmental engineering on site and creating environmental awareness were top priorities at the Sea Channel project, which is located in the sensitive ecosystem of the Arctic's Ob Bay, as we performed a second dredging campaign there in 2021.

Going well beyond the standard Russian compliance framework regarding waste and fuel management and water quality standards, DEME's environmental team introduced a comprehensive range of operational measures in a dedicated Contractor Environmental Management Plan.

These were all audited by an independent environmental consultant, known as the 'Environmental Captain'. His detailed assessment clearly shows that all works were executed according to the international guidelines regarding environmental protection, climate change and human health.
Our team's dedicated focus on the environment creates growing awareness about the ecological values of the ecosystem we are working in.

We deployed our own spar buoys, which were designed in-house. These six environmental buoys are mounted with water quality sensors and can record turbidity levels, water temperature, salinity, dissolved oxygen levels and Chlorophyll A (Chl-A) in real time and online. All the collected field data is readily available on the spot - both on the vessels on site and at HQ – so we can directly respond if there are any potential water quality (turbidity) issues arising.

All the collected field records showed that our dredging and disposal activities had no influence on the natural turbidity pattern: only limited disturbances both in time and place were observed. As in previous campaigns, all the measured variations in turbidity levels fell within the natural dynamics of Ob Bay. Additionally, initial drone observations confirmed the limited spatial turbidity dispersion during both dredging and ploughing works.

Last but not least, dredging in the Ob Bay took place during the ice-free period and coincides with the fish migration and spawning season. As dredging operations can have an impact on fish migration and spawning, we made sure we compensated for this potential impact by rearing a large quantity of fish fry (juvenile fish) at local fish farms and releasing them into the water basins of the region.



All the collected field records showed that our dredging and disposal activities had no influence on the natural turbidity pattern.

BEST PRACTICE 02

‘Soft-start’ mitigation measure to protect marine mammals

Often operating in sensitive waters, DEME systematically uses the ‘soft-start’ or the ‘ramp-up’ mitigation measure, whereby the seismic source starts at a very low power and this is gradually and systematically increased until full power is achieved (usually over a period of 10 to 25 minutes). This method is used when commencing a seismic survey or after a long break in noise production and it needs to be done ‘manually’ by firing the seismic source by hand.

The main objective is to deter marine mammals to reduce their noise exposure and prevent physical and physiological damage. However, some mammals may be attracted to the sounds and thus exposed to potentially harmful levels of noise, so the soft-start is therefore combined with marine mammal observations and monitoring.

In order to minimise the risk of acoustic disturbance from geophysical surveys, we have implemented this measure into our work routine, even though it isn't mandatory in most countries.



BEST PRACTICE 03

Prevention of nitrogen deposition

Since the start of the Markermeer project in the Netherlands, the engines of our barge suction dredger ‘Texel’ have been fitted with a specific Selective Catalytic Reduction (SCR) system with the aim of limiting nitrogen emissions to a minimum and to prevent nitrogen deposition in the nearby Natura 2000 area.

BEST PRACTICE 04

Preventing pollution during drilling of grout anchors

GREEN INITIATIVE

Usually flushing water used for drilling ground anchors, as well as excessive grout, is disposed of in open water (when drilling on or from the water). Typically, the applied water is freshwater of high quality, while the outflowing drilled soil is potentially polluted.

However, a big improvement can be made by preventing the water/soil/grout mix reaching the open water in the first place. This is done by mounting a gutter next to the drilling head, which leads to a collection box, from where the mix is pumped to a container ashore. The particles can then sink and clean water can be pumped back. DEME Infra has introduced this on several megaprojects such as the New Lock Terneuzen and Blankenburg Connection in the Netherlands.



While drilling the grout anchors for the Blankenburg Connection project in the Netherlands, we worked on preventing water pollution.

NATURAL CAPITAL

04 ENVIRONMENTAL ENGINEERING SOLUTIONS AND NATURE-BASED SOLUTIONS IN OUR PROJECT DESIGNS

25
INITIATIVES ON NATURE-BASED SOLUTIONS

SCOPE

WHY?

Our oceans, seas, rivers and coastlines are vital for a healthy planet and economy. It is undeniable that marine contracting (e.g. dredging, harbour extensions, offshore wind turbine installation, underwater cable laying) alters the environment. For this reason it is important to find sustainable solutions that safeguard and improve marine and terrestrial ecosystems by de-polluting, restoring and enhancing our rivers, coastal areas, ports and land.

WHAT?

We aim to minimise the environmental impact of our operations and strive for a net positive result on biodiversity and ecosystems. In order to do so however, we have to have an in-depth knowledge of the ecosystems in which we operate, including their environmental features and receptors. It is important to map the level of sensitivity these receptors have and the values that they bring.

TARGETS

- To identify, understand and value the ecosystems we operate in, including the sensitivity of receptors and environmental features.
- To valorise the environmental engineering solutions and nature-based solutions as competitive alternatives in our project designs.

MANAGEMENT

POLICIES

- Quality, Health, Safety and Environment Policy

INTERNATIONAL STANDARDS & FRAMEWORKS

- IUCN Global standards for nature-based solutions (NbS)
- United Nations' Nature-Based Solutions for Climate Manifesto
- EU Biodiversity Strategy 2030
- EU Adaptation Strategy on climate change

MANAGEMENT SYSTEMS

- DEME Group's Management System (design & engineering aspect)

PROGRESS

PROGRESS 2021

- In 2021 we were actively engaged in multiple initiatives concerning environmental engineering and nature-based solutions in our tender approach and project designs.
- We have taken the first steps in our business development strategy and provide nature-inspired and nature-based solutions for sustainable coastal and river embankment management as a clear alternative in our project portfolio.

BEST PRACTICE 01

Nature islands in Poland to facilitate bird migration and nesting by the reuse of dredged material



Application of a resource-based design and the reuse of dredged material in the modernisation of the Świnoujście – Szczecin fairway project in Poland.

Deepening the access channel of the Świnoujście - Szczecin fairway delivers a surplus of dredged materials, therefore the smart reuse of these sediments - by turning them into nature islands - avoids costly and unsustainable disposal at the site.

Nature Island 'W22' includes a traditionally reclaimed land zone within a circular outer bund (1.5 km diameter) created from traditional rock revetment. In line with the available dredged sediments, the island is split up into a dedicated bird (more sandy) area for both nesting and migrating birds, a muddy wetland zone, including an inner lake, and a dedicated stretch where greenery is being established. This planting of trees, reeds and bushes - installed as a direct compensation for tree cutting along the nearby riverbanks - is limited to one side of one island. As this Nature Island will be kept as it is after the formal handover - being inaccessible to the public - a natural development is assured.

A second, 'W28' Island - with a donut-shaped outer bund - is already established. The reclaimed outer bund is just in place and this will be filled with dredged materials from future maintenance dredging works in the fairway.

BEST PRACTICE 02

Blue Gate Antwerp, remediation of 'Grote Leigracht' with additional measures to enhance future nature development

In 2020 and 2021 DEME Environmental has been working to remediate the 'Grote Leigracht' as part of the huge Blue Gate Antwerp project.

During remediation, the polluted sludge bed was completely removed and the bank was excavated where it was necessary. The replenished bed was supplemented with a clean clay layer to prevent new pollution from adjacent polluted soils.

In cooperation and at the request of the local NGO Natuurpunt, we have taken several additional measures to take the future nature management plan of the site into account. For example, we have not replenished the excavated banks in order for a swamp to subsequently develop on the low-lying wetland zones.



During the remediation of the 'Grote Leigracht' several additional measures have been taken to take the future nature management plan of the site into account.

SUSTAINABLE INNOVATION

05 INTRAPRENEURSHIP TO ADVANCE SUSTAINABILITY

SCOPE

WHY?

One of the main global challenges is to enable the concurrent use of oceans and seas for traditional maritime activities such as shipping, fisheries, oil & gas, tourism and for new, large-scale activities including offshore renewable energy, aquaculture, leisure and nature conservation. Multistakeholder partnerships are required to create holistic, sustainable solutions. The ambition to achieve a sustainable world also means that intrapreneurship (whereby employees can behave like entrepreneurs, even though they work within an organisation) should be encouraged within the company.

WHAT?

We strive to encourage sustainable innovation within our projects, and we believe it has a substantial, explicit and direct impact on one or more of our key sustainability themes and on the underlying Sustainable Development Goals.

TARGETS

- To ensure uptake of sustainability as an integral part of every challenge in each innovation campaign.
- To make sure sustainability is always part of the evaluation criteria of every idea or initiative in our innovation campaigns.

MANAGEMENT

INTERNATIONAL STANDARDS & FRAMEWORKS

- ISO 56002 as a guideline for innovation management

MANAGEMENT SYSTEMS

- For each corporate innovation campaign we follow a stage-gate approval process. Final approval and a review of the ideas and process is carried out by the Innovation Board.
- In order to make sure that all initiatives progress through this stage-gate process with due regard to sustainability, a Sustainability Readiness Level (SRL) system has been created.
- In 2020 we performed an evaluation of the innovation campaigns. The results of this evaluation were used to refocus efforts in 2021, with an emphasis on accelerating approved ideas rather than gathering new ones.

PROGRESS

PROGRESS 2021

- Following a very successful 'Diver campaign' in 2020, whereby the DEME community contributed more than 600 innovative new ideas (of which 119 were about sustainability), we focused on developing the most promising ones by entering them into our Acceleration Programme in 2021. One of the ideas being accelerated was the development of working with zero-emission equipment. Another one focused on procurement, and ensuring our subcontractors and suppliers are also working on improving their sustainability efforts, for example by reducing their CO_2 emissions.
- In 2021, we performed five AVISO innovation campaigns, one of them concentrating on the removal of sea-dumped ammunition, and therefore having a strong sustainability focus. AVISO stands for Alternatives, Value (creation, engineering), Innovation, Smarts & Optimisation and focuses on attaining excellence in business.
- Sustainability considerations continue to be taken into account, thanks to the integration of our SRL system into our stage-gate evaluation criteria.
- We held several 'DEME Talks' (inspired by TED Talks) on both technical and non-technical topics. In 2021, we had a record number of participants from all over the world. Some 250 people logged in to hear the speakers for the 'Sitting is the next smoking' and the 'Green hydrogen production' talk.

14
APPROVED
INNOVATION INITIATIVES

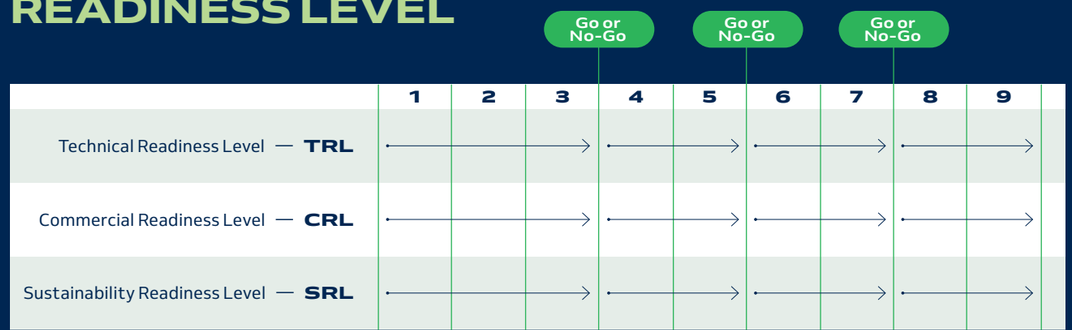
INCORPORATING SUSTAINABILITY IN OUR INNOVATION PROCESS - SUSTAINABILITY READINESS LEVEL (SRL)

Sustainability has been an essential part of our innovation initiatives for the last decades, but in 2021 we have developed a system to ensure that sustainability is embedded into our innovation process: the Sustainability Readiness Level (SRL).

The SRL is an addition to the well-known Technical Readiness Level (TRL) and Commercial Readiness Level (CRL) considered during the development of novel products and services. As for the TRL and CRL, the SRL is defined on a scale from 1 to 9 with 9 being the most mature. The 9 different steps need to be taken into account in order for the innovation to be developed into a sustainable product or service.

Aligning the products and services with our corporate strategy and adding the highest sustainable value possible at acceptable costs, is seen as essential in our sustainable innovation approach.

SUSTAINABILITY READINESS LEVEL



SUSTAINABLE INNOVATION

06 PARTNERSHIPS WITH UNIVERSITIES AND RESEARCH INSTITUTIONS

SCOPE

WHY?

One of the main global challenges is to enable the concurrent use of oceans and seas for traditional maritime activities such as shipping, fisheries, oil & gas, tourism and for new, large-scale activities such as offshore renewable energy, aquaculture, leisure and nature conservation. Multistakeholder partnerships are vital to create holistic, sustainable solutions. This also requires in-depth knowledge, expertise and R&D on very specific topics, and dedicated cooperation with universities and research institutes in order to secure access to the very latest knowledge and innovative thinking about the subject.

WHAT?

We want to enhance scientific research, upgrade our technological capabilities and encourage sustainable innovation within our projects.

TARGETS

- To set up long-term partnerships with selected universities.
- To set up project-specific collaborations with universities and research institutes.

MANAGEMENT

MANAGEMENT SYSTEMS

- To align and exchange knowledge throughout the organisation we have established a dedicated Working Group that brings all of our Activity Lines together.
- We have developed databases outlining collaborations between DEME and universities/research institutes, and about students and their thesis topics.

PROGRESS

PROGRESS 2021

- Highlighting the many benefits for both parties, the existing long-term partnership with ESITC Caen (France) has been extended for another three years. In addition to the usual collaboration initiatives such as guest lectures and internship support, DEME was also invited to sponsor the 2023 Graduation. DEME was extremely honoured as this is the first time a non-French company has been granted this privilege.
- Offshore geotechnics is one of the attention points within DEME. In order to secure access to the very latest knowledge and innovative thinking about this subject, DEME supports the major 'Dredging & Offshore Engineering' of Ghent University by offering master's theses and guest lectures.
- Global Sea Mineral Resources (GSR) and Ghent University have been working on the environmental baseline studies of the North Pacific Ocean since 2014. In 2021, GSR and the Joint Project Initiative for the Oceans (JPIO) partnered and conducted the world's first independently monitored harvesting test.

10
PARTNERSHIPS WITH UNIVERSITIES AND RESEARCH INSTITUTIONS

14
NUMBER OF MASTER'S THESES AND PhDs

BEST PRACTICE 01

DEME supports the first Sustainability Conference of the BEST European student organisation

A key part of DEME's sustainability programme is our close partnerships with universities and research institutions, and to reach out to the Science, Technology, Engineering and Mathematics (STEM) student community we supported the BEST European student organisation when it held a Sustainability Conference in 2021, focusing on the UN Sustainable Development Goals.

DEME was keen to participate and show the students how the Group is taking the lead in sustainability, particularly amongst the marine contractors, and to highlight that we are an attractive employer, especially for students keen to pursue a career that will provide a diverse range of opportunities, many of which are working towards achieving a more sustainable planet.

CODING CHALLENGE

Working closely with the STEM students, DEME developed a Coding Challenge to show how we are contributing to the SDGs, and specifically, SDG 7 'Clean & Affordable Energy', by creating both economic value and also value for society and the environment.

For their first Sustainability Conference the students focused on companies which have, or are changing their business model, in line with sustainability goals. They were interested to learn more about how companies are implementing their sustainable vision.

And students were certainly keen to attend. Some 280 students participated, including 150 BEST students and 50 high school students. As well as DEME, leading companies such as BASF and Nokia were present.

Of the 18 companies attending, DEME's Coding Challenge was the largest and most popular session, with 100 students taking part. The students worked together in teams of four, with groups of students from a variety of European universities competing, and the tasks were all based on SDG 7 and DEME's core activities such as installing wind turbines, green hydrogen and soil recycling centres, amongst others.



Working closely with the STEM students, DEME developed a Coding Challenge to show how we are contributing to the SDGs, and specifically, SDG 7 'Clean & Affordable Energy'.

WASTE AND RESOURCE MANAGEMENT

07 REUSE OF DREDGED MATERIALS, SOILS, WATER AND MATERIALS FROM DEMOLITION WORKS IN OUR OPERATIONS

SCOPE

WHY?

By 2050, waste generation is expected to increase to 3,400 million tonnes a year. Additionally, waste is not always disposed of in a controlled way, ending up in the oceans and coastal environment. Plastics are estimated to account for as much as 95% of marine litter. Therefore, prudent waste & resource management is essential for a sustainable future. And in order to achieve this goal, we need to establish a circular economy to successfully manage soil, sediment, water and land to ensure an efficient use of these vital natural resources.

WHAT?

Put simply, we are striving for minimum waste. We aim to maximise the efficient and circular use of materials throughout our projects. We need to find an alternative way of thinking and consider our waste as an important resource instead. Currently, we are mainly focused on minerals (sand, gravel, concrete), metals (steel) and waste. One way we can reduce and manage our waste is by using the waste hierarchy of Lansink: rather than incinerating or dumping waste in landfills we must consider waste prevention, reuse and recycling.

TARGETS

- To map significant reuse of material streams (soil, sediments, water and materials from demolition works) in our projects via the Green Initiatives.
(Green Initiatives are employees' actions to make changes or modifications to a process, equipment or setup to minimise the environmental impact of the project.)

MANAGEMENT

POLICIES

- Quality, Health, Safety and Environment Policy

INTERNATIONAL STANDARDS & FRAMEWORKS

- ISO 14001

MANAGEMENT SYSTEMS

DEME Group's Management System
We evaluate our approach with the following external validation and/or verification mechanisms in place:
- ISO 14001 external audits
- Reporting to local authorities
- Compliance with MARPOL regulations (e.g. Garbage Record Book)
- Annual Management review

PROGRESS

PROGRESS 2021

- In 2021 we received 36 Green Initiatives on Waste and 15 on the Use of Natural Resources.
- We set up Green Initiative communications, where we select some of the most impactful and valuable ideas, and share the lessons learned with all DEME employees. Six Green Initiative communications were sent out in 2021.
- Additionally, initiatives on a smaller scale matter, as they contribute to an enhanced awareness. For example, our Facilities Department has launched an initiative focusing on the reuse of office supplies. At DEME's head offices they collected, sorted and stored office supplies and when personnel want to order new supplies, they are referred to the 'Facilities shop' first so they can reuse this material.

15
GREEN INITIATIVES ON USE OF NATURAL RESOURCES

36
GREEN INITIATIVES ON WASTE MANAGEMENT

BEST PRACTICE 01

Buenaventura - beach cleanups and collection & recycling of waste and turning it into valuable raw material for the construction of houses

While performing maintenance dredging along the Buenaventura access channel in Colombia, the DEME team decided to establish a project to help keep the beaches and coastline clean. Sadly, there are very few efforts to avoid the contamination of the beautiful local beaches and coastal ecosystems, and this is putting tremendous pressure on the natural resources in the region.

GREEN INITIATIVE

Therefore in 2021, mechanisms were established to finance campaigns to clean beaches and neighbourhoods which suffer from an accumulation of waste from nearby rivers.

DEME's team contacted an enthusiastic local group of people keen to keep their beaches clean and they were provided with the necessary materials and equipment for collecting the waste. At the end of the day, an impressive 2.5 tonnes of waste was collected, of which 15% could be recycled.

Additionally, the collection of the waste from our TSHD 'Lange Wapper' was carried out in partnership with the Buenaventura Recycling Movement. The objective of this project was to recycle those waste streams that could be turned into raw materials and use them for the construction of simple houses for impoverished families.

The waste was segregated and a large quantity of this could then be converted into hard plastic pieces which were subsequently used for the construction of beams and walls. This campaign is known as 'maderotón' and during each waste discharge, 60% of the plastics, cardboard and cans were used to make materials for the new homes.



Beach cleanups and collection and recycling of waste during the 'Buenaventura access channel' project.

BEST PRACTICE 02

Reusable lunch boxes and selective waste collection on board of 'Groenewind'



Green Initiative saves the equivalent of 80 m³ of garbage!

DEME's new Service Operation Vessel, 'Groenewind', is serving several offshore wind farms.
But to reduce waste as much as possible, all of the wind farm technicians have been supplied with reusable lunch boxes. Over the course of the contract, it is estimated that this will save a staggering 100,000 pieces of rubbish, representing 3 tonnes in weight, or the equivalent of 80 m³ of garbage!

Besides this, extensive selective waste collection is carried out on board (metal, plastic, glass, domestic, carton) and different treatments (shredding, compacting of waste flows) to maximise segregated waste collection onshore. This system has been developed in close cooperation with the waste collector.

BEST PRACTICE 03

Grout ball catchers on Saint-Nazaire project

The Saint-Nazaire offshore wind farm consists of multiple, subsoil grouted monopiles.
After operations have been completed the grouting plant needs to be cleaned, which includes flushing out all of the lines.

In order to make sure the lines are free from grout, sponge balls are pumped through the lines to clear the inside of the hoses. But to keep the release of waste into the ocean to a minimum, a solution needed to be found to retrieve the sponge balls. Therefore, the project team designed special catcher frames. The sponge balls are shot into the catcher and stored, in order to remove them once the 'MODIGA' (Monopile Offshore Drilling Interface Grouting Assistance tool) is back on deck.

Without this smart solution these sponge balls would end up in the ocean. As a result, 1,074 sponge balls have been collected and safely disposed of.



Keeping the oceans clean with novel sponge ball catcher.

BEST PRACTICE 04

Sustainable sediment management in the Rhine-Meuse estuary

In order to retain the dredged sand and silt in the natural ecosystem of the Rhine-Meuse estuary for as long as possible, a number of major players in this field have got together in the Rhine Estuary Sediment Living Lab initiative. A more efficient use of dredged sand/silt is both good for the environment and for the safety of the delta. The aim of the Living Lab is to develop a strategy for sustainable sediment management.

Living Lab Rijnmond is a broad, public-private partnership including the Rijkswaterstaat, Waterschappen, the Port of Rotterdam Authority, WNF, Staatsbosbeheer, ARK Nature Development and the knowledge institutes Wageningen University & Research and Deltares. DEME's de Vries & van de Wiel (DVW) & Dredging International (DI) is the private partner in this unique partnership.

Large amounts of sediment are dredged every year in the estuary to maintain the depth of the waterways and ports and a large part of this reusable sediment is deposited at sea or in depots. The Living Lab initiative is exploring scalable design concepts which look at retaining this sediment and using as much as possible for nature, flood risk management, shipping and recreation. By testing and monitoring these concepts in various pilot locations in combination with already planned maintenance and development projects, the strategy can be tested, adjusted and enriched. Three Living Lab locations are currently being prepared.



BEST PRACTICE 05

Reuse of wood and use of bamboo at GOVA project



Reuse and recycling of the wood in the 'GOVA' project leads to a reduction of CO_2 of approximately 13 kilotonnes.

The GOVA 7c project includes five locations in the south of the Netherlands where the mooring, berthing and navigational aids have to be replaced. Part of the wood will be reused in the new construction as fendering (80m³) and the remainder will be reused, remanufactured, recycled or recovered. This results in the use of 95% of the wood, or in other words a forest or 13 football fields! Ultimately, this initiative will lead to a 946 tonne reduction in CO_2. The recycled wood represents a further reduction of approximately 12 kilotonnes.

To further reduce the project's carbon footprint, DEME has also suggested using bamboo for the rubbing purlins rather than the more traditionally used plastic (UHMWPE) or tropical hardwood (Azobé) ones. Bamboo has a significantly lower GHG footprint and yet comparable qualitative properties. In the coming years, the performance of this new material will be closely monitored in a pilot project. The use of bamboo results in a reduction of 83 kg CO_2 per tonne of replaced Azobé.

HEALTH AND WELLBEING

08 GUARANTEEING PHYSICAL AND MENTAL HEALTH & WELLBEING

SCOPE

WHY?

Everyone has the right to work in a safe, secure and healthy working environment. Due to the nature of our work, many projects take place in challenging and sometimes dangerous environments. Workplace health, safety and wellbeing - for our own people as well as subcontractors, suppliers, partners and other stakeholders - is an ongoing priority.

WHAT?

We aim to provide a safe, secure and healthy working environment for everyone. Safety has always been DEME's number one priority and over the years we have introduced the necessary management systems, action plans and dashboards. Naturally this is a continual process and our efforts to improve safety are relentless.

For more information we would kindly refer to our dedicated QHSE-S Performance Report 2021 for a detailed overview of our progress.

This specific sustainability programme aims to further highlight our focus on the physical and mental health & wellbeing of all the people we work with.

TARGETS

- To ensure the uptake of health & wellbeing topics in all people management training courses.
- To incorporate health & wellbeing in onboarding programmes for new employees.

MANAGEMENT

POLICIES

- Quality, Health, Safety and Environment Policy
- Code of Ethics and Business Integrity

INTERNATIONAL STANDARDS & FRAMEWORKS

- ISO 45001 - Occupational Health & Safety Management System
- International Safety Management (ISM) Code

MANAGEMENT SYSTEMS

DEME Group's Management System
We ensure a structural, social dialogue in the organisation taking the following aspects into account: welfare issues such as occupational safety, health, ergonomics, psychosocial aspects at work (e.g. stress) and the environment. This dialogue leads to an action list which is addressed by our management.

PROGRESS

PROGRESS 2021

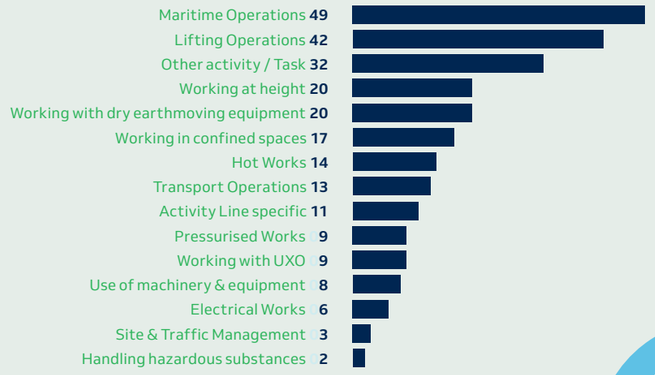
2021 continued to be a challenging year due to the COVID-19 pandemic. We launched and further developed several initiatives in order to safeguard our employees' health and overall wellbeing:

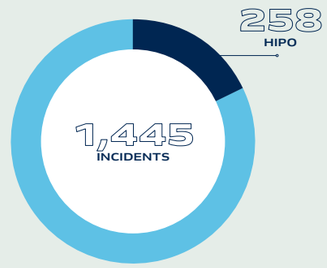
- We fine-tuned the onboarding process in the context of these COVID-19 times, making people feel welcome and supporting them through their first months at DEME Group. This included multiple check-in moments with their manager and a dedicated welcome coach, amongst other things.
- Individual coaching trajectories were provided, where an external coach acts as a sounding board and/or advisor.
- Virtual 'DEME Talks' (inspired by TED Talks) regularly took place and here we offered handy tips about working together from a distance.
- Our highly successful Re-Connect campaign had impressive participation figures in the various walking, running and cycling challenges. In the end, 48,701 km were clocked up in the Buddy Running Challenge, more than 43 million steps were counted in the Step Challenge and 49,029 km were cycled in the Team Cycling Challenge!
- The Energy@DEME events were started up again and this included more than 100 DEME employees taking part in the Antwerp 10 Miles and the launch of the DEME World Championships Cycling Challenge. This was also the crowning glory of the hard work done by our 2021 DEME Heroes, who took up the challenge to make a lifestyle switch with the ultimate goal of improving their physical condition, as well as helping to motivate their colleagues to participate in Energy@DEME events.
- We also began preparations for a companywide engagement survey which was launched in Q1 2022, including a specific chapter on wellbeing.

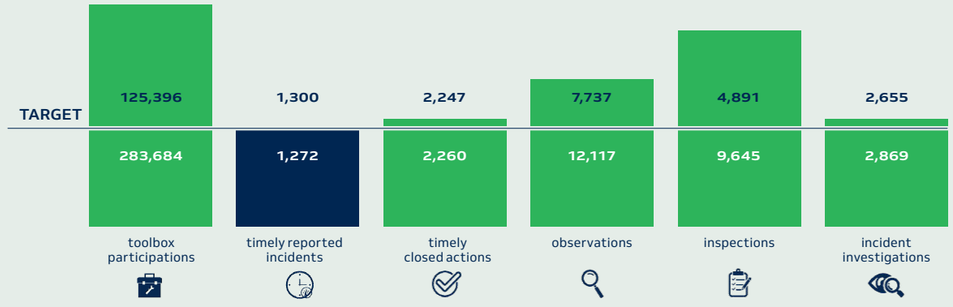
DEME's QHSE-S worldwide performance dashboard

(1 Jan 2021 - 31 Dec 2021)

HIPO

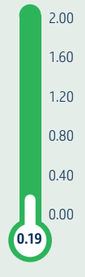






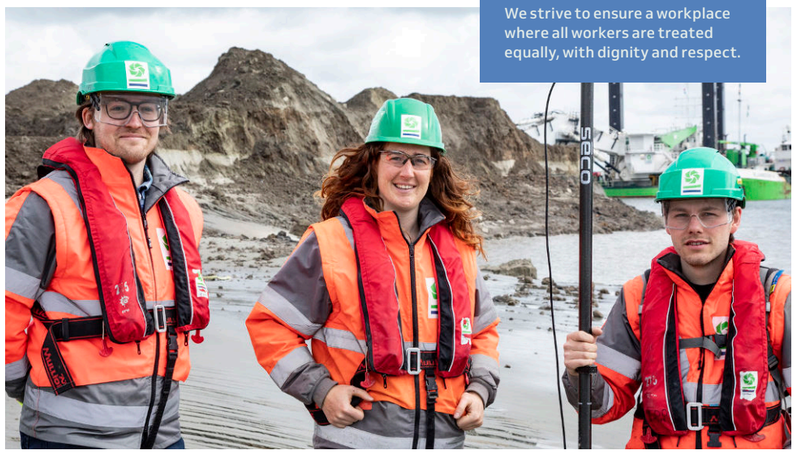
SAFETY THERMOMETER

DEME reference target **0.20**





The Energy@ DEME programme includes sports events, wellbeing tips and resources and online sessions.



We strive to ensure a workplace where all workers are treated equally, with dignity and respect.



One of our dedicated sustainability programmes aims to further highlight our focus on the physical and mental health & wellbeing of all the people we work with.



In 2021 we modernised our HR management system to ensure all our employees have equal opportunities when it comes to internal mobility.

DIVERSITY AND OPPORTUNITY

09 DIVERSITY, EQUAL OPPORTUNITIES & INCLUSION

SCOPE

WHY?

While our roots are in Belgium, DEME operates on every continent and has built a strong presence globally. Therefore, the workplace is becoming increasingly diverse in terms of nationality, culture, gender, experience and personality. We need to manage our talent resources to make the most of having all these diverse and multicultural perspectives within our company.

WHAT?

We strive to ensure a workplace where all workers are treated equally - with dignity and respect. We promote an inclusive working environment where everyone has the same opportunities for promotion, career progression and training, regardless of their gender, age, religion, sexual orientation, nationality, culture, political conviction, mental or physical ability. We aim to promote diversity across all positions, levels and Activity Lines. We want to make sure that everyone has equal opportunities at all levels of decision-making and that they can achieve their managerial ambitions.

TARGETS

- To raise awareness about diversity in (leadership) learning programmes.
- To leverage our 'One DEME, One Team' spirit by building on the rich diversity of our operational teams and inclusive employee relationships.
- To ensure all our employees have equal opportunities when it comes to internal mobility and to actively support and guide them in this process.

MANAGEMENT

POLICIES

- Code of Ethics and Business Integrity
- Human Rights Policy (incl. policies on equal opportunities, hiring practices and discrimination, harassment and disciplinary measures, freedom of association and the right to collective bargaining).

MANAGEMENT SYSTEMS

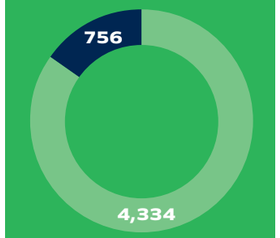
We ensure a structural social dialogue in the organisation. This dialogue leads to an action list which is addressed by our management.

PROGRESS

PROGRESS 2021

- In 2021 we modernised our HR management system. One of the advantages is that this renewed system provides all DEME employees with a clear overview of all the (external) DEME vacancies, and it has also been made easier to apply. This is one way to ensure all our employees have equal opportunities when it comes to internal mobility.
- We carried out an online recruitment campaign with a focus on international profiles (Greece, Poland, Spain, Portugal, Germany and France).
- An International Starters Guide was offered during the onboarding process to assist employees joining DEME HQ from abroad as much as possible.
- Dutch classes were provided in Zwijndrecht/Breda to ensure the further integration of non-Dutch speaking employees. In 2021 we welcomed 65 participants, versus 54 in 2020.
- DEME maintained its participation in the project 'areyouwaterproof.be – Olivia' which aims to attract more women into the maritime world. DEME and other maritime employers have joined forces with educational institutions to raise more awareness about working in a high-tech, maritime environment and to trigger young women and men's interest in the appropriate education and training programmes.
- With Technopolis, Belgium's leading science and technology experience centre, we celebrated the official opening of the 'Sea Force' exhibition in June, whereby visitors of all ages are introduced to the exciting potential of the seas and harbours of tomorrow. Youngsters can even build their own wind farm and get to know everything about generating, storing and using offshore wind energy. DEME is a proud sponsor and co-creator of this unique, immersive experience.

BREAKDOWN FEMALE/MALE



80
DIFFERENT NATIONALITIES
AMONG CREW AND STAFF

73
HOURS OF
LEADERSHIP TRAINING ON DIVERSITY

NEW HIRES

♀ **18%**

♂ **82%**

* see reporting practices

DIVERSITY AND OPPORTUNITY

10 PERSONAL AND PROFESSIONAL OPPORTUNITIES

SCOPE

WHY?

Given our planned growth, a significant number of job openings need to be filled based on competences, skill and development potential. We need to mitigate employee turnover as much as possible to reduce a potential loss of expertise across the company.

WHAT?

In line with our ambitions to create a sustainable business for the long-term, we aim to strengthen our employee competences by facilitating talent development and promoting sustainable entrepreneurship.

TARGETS

- To enhance employee satisfaction via skills management, providing training opportunities (My Learning) and career development plans for all employees.

MANAGEMENT

POLICIES

- Code of Ethics and Business Integrity

INTERNATIONAL STANDARDS & FRAMEWORKS

- ISO 9001 (Quality Management Systems)

MANAGEMENT SYSTEMS

- DEME Group's Management System
- Quality assurance system for training courses and skill management

PROGRESS

PROGRESS 2021

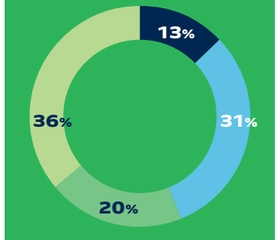
- In 2021, DEME was again awarded the Top Employer certification in Belgium. This award recognises that DEME provides exceptional employee conditions, nurtures and develops talent throughout all levels of the organisation and has demonstrated its leadership status in the HR environment, always striving to optimise its employment practices and to develop its employees to their full potential.
- We optimised 'Time To', our large-scale, competency-based performance & development tool, for our staff and our crew. Now our employees decide on the timing and reviewer, and deep dive sessions were organised to explain the performance & development management cycle at DEME. Development actions were added to help shape the learning offering at DEME and there was also a further rollout of 'Time To' for the crew. Additionally, preparations were made to ensure a successful rollout for our workmen.
- To support the personal and professional development of all employees, DEME provides an internal digital training portal 'My Learning', offering more than 600 different training courses. Via the employee's personal page, each employee can find and adjust their tailor-made learning path.
- Continued investment in Leadership Labs as a way of enhancing self-awareness, self-insights and to fast track personal development. In 2020 we organised 24 Leadership Labs, in 2021 we raised this number to 37.

71%
OF THE PERMANENT STAFF PARTICIPATED IN THE
'TIME TO' STAFF PROGRAMME

73%
OF THE PERMANENT CREW PARTICIPATED IN THE
'TIME TO' CREW PROGRAMME

40
HOURS OF
FORMAL TRAINING FOR PERMANENT EMPLOYEES

SENIORITY PERMANENT EMPLOYEES



ETHICAL BUSINESS

11 CLEAR GUIDANCE AND MINIMUM STANDARDS ON BUSINESS ETHICS AND HUMAN RIGHTS FOR ALL PARTIES INVOLVED IN OUR OPERATIONS

99%
OF DEME STAFF RECEIVED
COMPLIANCE TRAINING

SCOPE

WHY?

In our daily operations we work closely with both public officials and third parties such as (joint venture) partners, subcontractors and recruitment agencies. Additionally, we often operate in countries with a higher risk profile for non-ethical practices (e.g. low ranking in the Corruption Perceptions Index by Transparency International). Due to these factors we have to be highly vigilant and make sure that our ethical standards are adhered to at all times.

WHAT?

In line with our ambitions to create a sustainable business for the long-term, we aim to conduct our business with integrity and actively and proactively prevent corruption or bribery in any form. We respect and protect labour rights in our operations. And crucially, an ethical mindset is embedded within our organisation and we place a great deal of importance on communicating transparently about our ethical performance.

TARGETS

- To ensure that every employee has followed frequent training courses about ethical awareness.
- To ensure decent working conditions for everyone and to encourage social dialogue.
- To only work with stakeholders with the same ethical standards as our company.

MANAGEMENT

POLICIES

- Code of Ethics and Business Integrity
- Code of Ethics and Business Integrity for Business partners (new in 2021)
- Compliance Policy & practices
- Human Rights Policy
- Raising and Reporting Integrity Issues Policy & procedures

INTERNATIONAL STANDARDS & FRAMEWORKS

- United Nations Universal Declaration of Human Rights
- OECD Guidelines for Multinational Enterprises

MANAGEMENT SYSTEMS

- We perform due diligence procedures to ensure a robust sanction and anti-corruption screening of third parties.
- To evaluate the effectiveness of our approach we have the following validation and/or verification mechanisms in place: internal audits, management review based on dashboards, ad hoc audits by some of our customers and an external audit by a statutory auditor.

PROGRESS

PROGRESS 2021

- In 2020 we performed a risk analysis and have set up a tool design and a process design to provide all the necessary information to perform a more efficient and more rigorous screening of third parties. In 2021, we organised workshops with the different internal stakeholders (procurement, finance, …) and have started a project for the compliance tool selection.
- We integrated a compliance course in our Basics4Starters training for newcomers.
- Our personnel (staff) achieved a 99% success rate of our mandatory e-learning course on business ethics.
- For our crew a different approach is required with questions adapted to life at sea. We also developed specific classroom toolboxes and a new digital system for the crew members in quarantine due to COVID-19. However, the impact of the pandemic meant that some elements of the programme were not possible because they require the physical presence of trainers on board.
- In April 2021 we published a Code of Ethics & Business Integrity for Business Partners, including minimal ethical standards, human rights and their supply chains.

LOCAL COMMUNITIES

12 EMPLOYEE ENGAGEMENT IN COMMUNITY PARTICIPATION

SCOPE

WHY?

DEME operates in all of the world's seas and continents. Building collaborative and sustainable partnerships in different locations is essential to the success of our operations. We endeavour to give back to local communities and are involved in many social projects worldwide, which are aligned with both our core values and the UN Sustainable Development Goals.

WHAT?

In line with our ambitions to create a sustainable business for the long-term, we aim to build collaborative relationships through consultation, engagement and participation. Many of these initiatives are driven by our employees, who often spend years working abroad, and are keen to support charitable organisations to help local communities.

TARGETS

- To support a wide variety of social projects across the globe.
- To raise employee engagement about the benefits of community participation.

MANAGEMENT

MANAGEMENT SYSTEMS

All decisions on community projects are based on DEME's core values and sustainability goals. We support projects that have a positive impact and improve the quality of life in the communities where we operate. Projects must have a definable and measurable social outcome. Requests for charitable sponsorships will only be considered from non-profit organisations.

PROGRESS

PROGRESS 2020

- Our long-term partnership with Mercy Ships continues.
  DEME is contributing to the second hospital ship 'Global Mercy', which enters service in 2022.



DEME is contributing to the second hospital ship 'Global Mercy', which enters service in 2022.

BEST PRACTICE 01

Saint-Louis, Senegal



We endeavour to give back to local communities and are involved in many social projects worldwide.

DEME's dredging team, together with EIFFAGE, joined forces with Nebeday, a Senegalese association for the management of natural resources and environmental protection, to actively support a local initiative in Saint-Louis focusing on environmental sustainability.

Additionally, Nebeday supports local people (especially women and children) to assist them in the sustainable management of their natural resources. The association has developed a five-point action plan, which includes the sustainable development of natural resources by women, the training of the eco-citizens of tomorrow, the reforestation of Senegal, the promotion of energy alternatives and support for the sustainable management of protected areas.

In Saint-Louis, DEME's project team will work with Nebeday to help develop awareness among future generations to initiate concrete actions related to sustainable reforestation and plastic waste reduction. For example, a specialised environmental education programme will be rolled out in local schools, with dedicated interactive teaching tools (eco-comics, audiovisual media, posters and notebooks etc.). Children will also be asked to plant a tree. They will learn to protect and maintain their trees and around 300 are set to be planted during the project.

BEST PRACTICE 02

Europipe II project in Denmark

GREEN INITIATIVE

A local earthmoving company was contracted to support work on the landfall site for the Europipe II project in Denmark and to provide personnel and equipment for the dune reinstatement. This also ensured that DEME could benefit from the company's expert, practical knowledge of the local circumstances.

The engagement of a local subcontractor (instead of a subcontractor from Belgium or the Netherlands) also reduced the overall mobilisation costs and CO_2 footprint. It furthermore increased local content and assisted in dealing with local stakeholders, which in turn, helped to boost buy-in for the project and the (temporary) disturbance it caused. This was especially important given that we were working on a public beach in an area with many holiday homes.

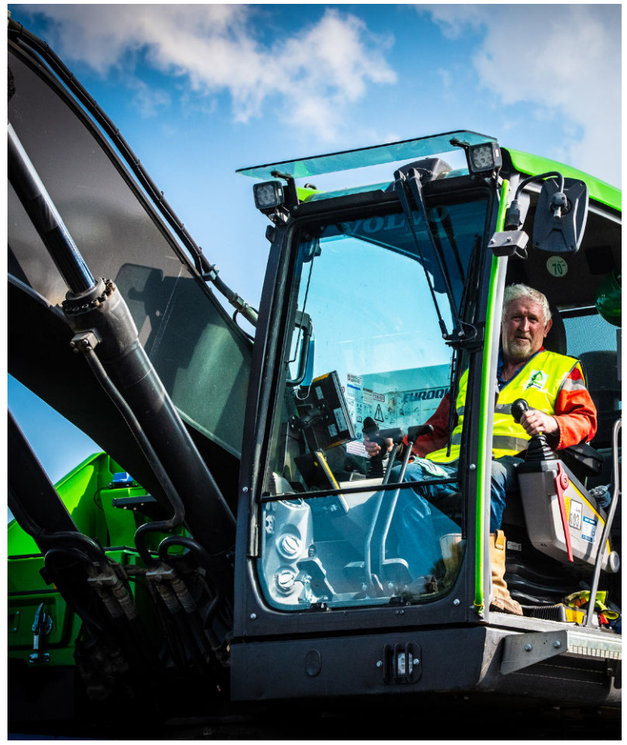


Building collaborative and sustainable partnerships in different locations is essential to the success of our operations.

BEST PRACTICE 03

Public private partnership – BASF Feluy

On the former BASF site in Feluy, Belgium, a consortium including DEME Environmental is creating a new, innovative business park. DEME and its partner Wanty had the capability and expertise to study the financial and technical feasibility of the remediation and redevelopment of the site from a sustainable, innovative perspective. They contacted IDEA, the intermunicipal association responsible for economic development in this region, and proposed a collaboration project. The project was recognised by the Walloon government as a pilot project for organising a public-private partnership, in which IDEA would hold a minority stake as a public partner.



BEST PRACTICE 04

Blankenburg Connection – using 30,000 hours of local labour



In order to engage the local community in the construction of the A24 Blankenburg Connection project in Rotterdam, the BAAK consortium agreed to use 30,000 manhours of local labour.

80

GOVERNANCE AND REPORTING PRACTICES

GOOD GOVERNANCE EVERY STEP OF THE WAY

OUR SUSTAINABILITY GOVERNANCE MODEL FOCUSES ON TWO CORE ELEMENTS

01

EXPLORE SUSTAINABLE BUSINESS SOLUTIONS (CONTINUOUSLY CHALLENGE OURSELVES TO DEVELOP MORE SUSTAINABLE SOLUTIONS)

02

TO EXCEL IN OUR OPERATIONS (SUSTAINABLE PERFORMANCE IN OUR DAILY OPERATIONS)

There are four main layers within our governance structure: the Executive Committee, Sustainability Board, Sustainability Team and Process Owners of the different Activity Lines and supporting services.

EXECUTIVE COMMITTEE

Every year, the Executive Committee reviews and approves our sustainability programmes, along with the related objectives and targets. The progress is discussed at board meetings.

SUSTAINABILITY BOARD

The Sustainability Board provides guidance on both strategic and operational sustainability topics to ensure that any decisions are aligned with our values, sustainability strategy and objectives. In 2021, the Sustainability Board met every two months to evaluate the sustainability performance of our project portfolio and the progress made towards our objectives from both a strategic and operational perspective.

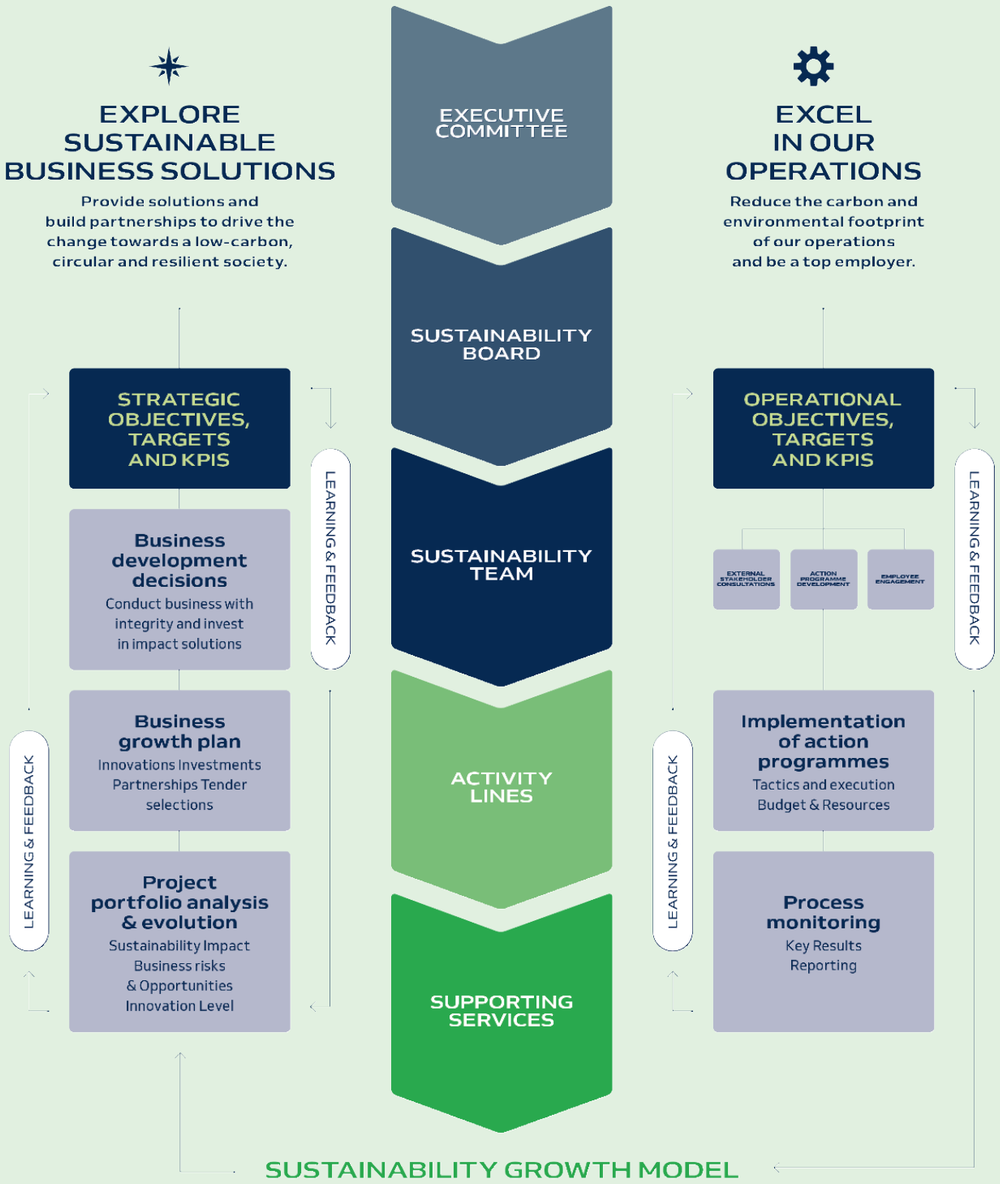
SUSTAINABILITY TEAM

The Sustainability Team is responsible for embedding sustainability into our business operations. Together, the Team:

- translates the sustainability strategy into clear objectives, targets and KPIs;
- drives and facilitates the development of the sustainability programmes;
- creates awareness across the organisation;
- engages with external stakeholders;
- organises the monitoring of key results;
- reports on performance and progress.

PROCESS OWNERS

In 2020 several Sustainability Ambassadors within the Activity Lines and Programme Leads within the supporting services have been appointed to support the further implementation of the operational sustainability objectives, targets and measures across the organisation.



SUSTAINABILITY GROWTH MODEL



MEMBERS OF THE SUSTAINABILITY BOARD



LUC VANDENBULCKE
CHIEF EXECUTIVE OFFICER



PHILIP HERMANS
MANAGING DIRECTOR ACTIVITY LINE DREDGING



ELS VERBRAECKEN
CHIEF FINANCIAL OFFICER



ERIC TANCRÉ
MANAGING DIRECTOR ACTIVITY LINE DREDGING & ACTIVITY LINE INFRA



HUGO BOUVY
MANAGING DIRECTOR ACTIVITY LINE OFFSHORE



BART VERBOOMEN
MANAGING DIRECTOR TECHNICAL DEPARTMENT



HANS CASIER
CHIEF HUMAN RESOURCES OFFICER



KOEN VANDERBEKE
STRATEGIC OPERATIONS DIRECTOR



DIRK POPPE
MANAGING DIRECTOR ACTIVITY LINE ENVIRONMENTAL



JISKA VERHULST
SUSTAINABILITY DIRECTOR

REPORTING PRACTICES

SCOPE OF INFORMATION

The information in the 2021 Sustainability Report covers DEME and its subsidiaries. For a complete overview of our subsidiaries, we refer to our Financial Report 2021. Unless stated otherwise, references to DEME should be read as references to the entire DEME Group.

REPORTING PERIOD

The 2021 Sustainability Report was published on 1 June 2022 and covers the period from January 1 to December 31, 2021. Since 2018 a Sustainability Report has been published on an annual basis.

REPORT CONTENT

This report has been prepared using the GRI principles.

The report covers eight sustainability themes on which DEME has an economic, environmental or social impact:

- Climate and energy
- Natural capital
- Sustainable innovation
- Waste and resource management
- Health and wellbeing
- Diversity and opportunity
- Ethical business
- Local communities

There are no significant changes in the sustainability themes compared to our last report. However, in 2021, we renewed DEME's Materiality Matrix, took important steps to further implement our sustainability programmes, increased the amount of quantitative targets and worked to obtain more insight into the completeness and accuracy of our non-financial data. We have the ambition to have our non-financial information externally verified in the future.

For questions related to the content of the report, please contact sustainability@deme-group.com.



SCOPING AND CALCULATION METHODOLOGIES OF THE SUSTAINABILITY FIGURES PROVIDED

GHG emissions
DEME follows the Greenhouse Gas Protocol and reports its GHG emissions according to three scopes:

- **Scope 1** includes all direct GHG emissions. These occur from sources that are owned or controlled by DEME (e.g. combustion of fuel and natural gas).

- **Scope 2** accounts for indirect GHG emissions from the generation of electricity purchased by DEME. Scope 2 emissions physically occur at the facility where electricity is generated.

- **Scope 3** is a reporting category for all other indirect emissions. These emissions are a consequence of DEME's activities but occur through sources that are not owned or controlled by DEME. Here we only report the emissions which result from business air miles.

DEME includes carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4) emissions in its carbon footprint. In the selection of emission conversion factors (linking fuel consumption to CO_2eq emissions), sector-specific emission factors from the IMO are used for vessels. For all other equipment, the worldwide (direct CO_2) emission factors of Defra (the UK government's Department for Environment, Food and Rural Affairs) are used.

CO_2 Performance Ladder
For the Netherlands and Belgium we are certified in accordance with the CO_2 Performance Ladder standards (versions 3.1 lvl.5 and report Scope 1, 2 and 3) (www.CO_2emissiefactoren.nl and www.CO_2emissiefactoren.be).
Here DEME only reports indirect CO_2 emissions (Scope 3) which result from business air miles (the Netherlands & Belgium) and which result from third-party vessels and third-party machinery and equipment (see www.deme-group. com/CO_2-prestatieladder and in particular, DEME's progress report 'Energy Performance' booklet).

A periodical verification is in place, see www.deme-group.com

Headcount related metrics
Here we report the total number of permanent employees on DEME's payroll on December 31st, 2021. Headcount diverges from average FTEs accounted for in other non-financial KPIs. Temporary employees and subcontractors are not included. The list of statutory companies which are considered is limited to consolidated companies in accordance with IFRS accounting rules (joint ventures and affiliates are excluded).

Lost Time Incidents
The frequency rate is the number of worldwide accidents involving work incapacity multiplied by 200,000 and divided by the number of hours worked by employees.

SUMMARY TABLE OF ALL INDICATORS & DATA

CLIMATE AND ENERGY	UNIT	2021	2020
SP 1 – Reduction of GHG emissions from the energy used for our own operations and from purchased energy			
Greenhouse Gas emissions (total, worldwide)			
Scope 1 GHG emissions	1000 tCO_2-eq.	832	659
Scope 2 GHG emissions	1000 tCO_2-eq.	0.8	1
CO_2 emissions BE & NL (according to CO_2 Performance Ladder scheme)			
Scope 1 CO_2 emissions	1000 tCO_2	133	191
Scope 2 CO_2 emissions	1000 tCO_2	0.7	2
Greenhouse Gas emissions - Scope 1 & 2 (total, worldwide, per asset type)			
Total worldwide GHG emissions	1000 tCO_2-eq	833	660
Vessels & auxiliary floating equipment	%	97.5	97
Machinery & equipment	%	2	1
Long-term lease cars	%	0.5	1
Buildings	%	<0.5	1
SP 2 – Reduction of GHG emissions in our project supply chains			
Greenhouse gas emissions (total, worldwide)			
Scope 3 emissions (according to business air miles)	1000tCO_2-eq	11	10
CO_2 emissions BE & NL (according CO_2 Performance Ladder scheme)			
Scope 3 - CO_2 emissions BE & NL (limited to business air miles and third-party vessels and M&E)	1000 tCO_2	10	22
NATURAL CAPITAL	**UNIT**	**2021**	**2020**
SP 3 – Operational solutions to manage adverse environmental impacts on water, land and air			
Green Initiatives realised (total)	**Number**	**125**	**128**
Green Initiatives per theme			
Minimising air emissions	Number	22	26
Preventing emissions in water	Number	7	0
Avoiding and reusing waste	Number	36	12
Preventing soil emissions	Number	1	13
Protecting flora and fauna	Number	20	13
Raising energy efficiency	Number	24	29
Smart use of natural resources	Number	15	35
SP 4 – Environmental engineering solutions and nature-based solutions in our project designs			
Initiatives on nature-based solutions	Number	25	9
SUSTAINABLE INNOVATION	**UNIT**	**2021**	**2020**
SP 5 – Intrapreneurship on sustainability			
Approved innovation initiatives (total)	Number	14	18
SP 6 – Partnerships with universities and research institutions			
Collaborations with universities and research institutes	Number	10	14
Master theses & PhDs	Number	14	22
WASTE AND RESOURCE MANAGEMENT	**UNIT**	**2021**	**2020**
SP 7 – Reuse of dredged materials, soils, water and materials from demolition works in our operations			
Green Initiatives on smart use of natural resources (total)	Number	15	35
Green Initiatives on avoiding and reusing waste (total)	Number	36	12
HEALTH AND WELLBEING	**UNIT**	**2021**	**2020**
SP 8 – Guaranteeing physical and mental health & wellbeing			
QHSE worldwide Performance Dashboard			
Lost time incidents	Freq. rate	0.19	0.19
Toolbox participation	Number	283,684	345,312
Timely reported incidents	Number	1,272	1,181
Timely closed actions	Number	2,260	1,394
Observations	Number	12,117	17,133
Inspections	Number	9,645	11,593
Incident investigations	Number	2,869	379

DIVERSITY AND OPPORTUNITY	UNIT	2021	2020
SP 9 - Diversity, equal opportunities and inclusion			
Total Headcount permanent employees	Headcount	5,090	4,976
Total Headcount staff	%	56	54
Total Headcount crew and workmen	%	44	46
Headcount by age group permanent employees			
under 30 years	%	16	17
30-49 years	%	59	58
50 years or more	%	25	25
Gender breakdown permanent employees			
Headcount male permanent employees	Headcount	4,334	4,226
Male – staff	%	49	47
Male – crew and workmen	%	51	53
Headcount female permanent employees	Headcount	756	750
Female – staff	%	95	93
Female – crew and workmen	%	5	7
Nationalities permanent employees (total)	Number	80	80
Crew and workmen - number of nationalities	Number	49	52
Staff - number of nationalities	Number	75	72
Full-time and part-time permanent employees by gender			
Total full-time permanent employees	Headcount	4944	4797
Female full-time	%	13	13
Male full-time	%	87	87
Total part-time permanent employees	Headcount	146	179
Female part-time	%	63	67
Male part-time	%	37	33
Leadership training on diversity (total)	Hours	73	136
Hires - total new permanent employees		670	
New female hires	%	18	23
New male hires	%	82	77
SP 10 - Personal and professional development possibilities			
Performance and career development permanent employees			
Participation rate 'Time to' Staff programme	%	71	86
Participation rate 'Time to' Crew programme	%	73	80
Length of service (Seniority) permanent employees			
< 1 year	%	13	5
1-5 years	%	31	38
6-10 years	%	20	20
> 10 years	%	36	37
Training hours permanent employees			
Total training hours	Hours	208,766	98,055
Average training hours/employee	Hours	40	20
Training hours for male	Hours	192,504	87,551
Training hours for female	Hours	16,261	10,504
Training hours for crew and workmen	Hours	135,334	38,073
Training hours for staff	Hours	73,431	59,982
ETHICAL BUSINESS	**UNIT**	**2021**	**2020**
SP 11 – Clear guidance and minimum standards on business ethics & human rights for all parties involved in our operations			
Staff that received DEME Compliance Awareness training	%	99	97

FORWARD-LOOKING STATEMENTS

This Sustainability Report may contain forward-looking statements. Such statements refer to future expectations and other forward-looking perceptions that are based on the management's current views, estimates and assumptions concerning future events. Such forward-looking statements, by their nature, are subject to known and unknown risks, uncertainties and other factors, which may cause the actual results to be materially different from those contemplated, projected, forecasted, estimated or budgeted whether expressed or implied, by these forward-looking statements contained in this Sustainability Report.

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Please note some pictures in the Sustainability Report were taken prior to COVID-19 restrictions and social distancing guidelines.

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