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1 Introduction

At Heerema Marine Contractors, innovation and engineering form the foundation of our company, and harnessing our innovative power is how we continue to make great steps in our sustainability journey. We make our decisions in line with our mission – to be the leading marine contractor creating sustainable value(s) for clients and stakeholders – and are guided by our Sustainability Roadmap, which is built on three pillars: Carbon Neutral, Circular Heerema, and Caring for People.

We need to take action now to act sustainably, and at Heerema we use our expertise to develop and implement solutions that align and contribute to the UN Sustainable Development Goals. The need for urgent action drives our progress and we believe the most valuable business decisions enable our company, our people, and the planet to prosper together.

Throughout 2021, we prioritized action on reducing our emissions, ensuring our team were cared for throughout another challenging pandemic year, and further enhancing our circularity by introducing installation methods that require less steel, amongst much more.

I invite you to continue reading Heerema's Sustainability Report to learn about our sustainability achievements, our ongoing projects, and how the results connect to our stakeholders and contribute to the global demand to take sustainable action now.



Pieter Heerema Chairman



Heerema Highlights of 2021

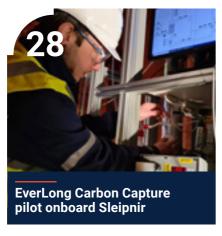






10 years of

Sustainability Reporting



Plastic Box pilot HMC

Warehouse & Sleipnir/Thialf



RVO Subsidies LNG ZERO

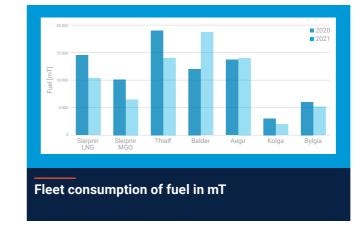
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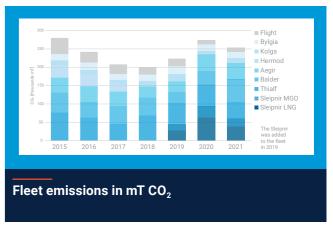












Check the website for more information about our projects www.heerema.com

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3 Our company at a glance

Making the impossible possible offshore

Our mission is to be the leading marine contractor creating sustainable value(s) for clients and stakeholders.

We deliver innovative and sustainable solutions for the transportation, installation, and removal of offshore infrastructure. We do so by managing the entire supply chain of project execution, offering solutions that include design and front-end engineering, planning, logistics, project management, and the execution of projects worldwide. Since

October 2020, we execute our jobs as a Carbon Neutral company. Because we want to, not because we have to.

Our most valuable asset is the people who work for the company. Their passion and skills are the driving force for the company's vision to make the impossible possible offshore. It is a

highly skilled workforce that works in offices worldwide and across its fleet of the world's largest crane vessels.

Within our fleet, we have the world's most sustainable semi-submersible crane vessel Sleipnir. In the table, you can learn more about our sustainability measures onboard our fleet.





Wind

Driving the global energy transition by bringing Heerema's experience to the offshore wind industry.



Decommissioning

Heerema has been removing offshore facilities safely, predictably, and sustainable for over thirty years.



Transport and Installation

Heerema transports and installs offshore structures in a safe, costeffective, and sustainable manner.









			TULALE	DALDED	AFOID	KOLGA
			IHIALF	BALDER	AEGIR	BYLGIA
Lifting capabilities			2 x 7,100 mT	6,300 mT	5,000 mT	-
	25.9 LNG	18.0 MGO	48.4 MGO	36.8 MGO	28.5 MGO	12.7 / 15.2 MGO
CO ₂ eq.* NOx SOx	3.651 0.01020 0.00002	3.24999 0.05090 0.0012	3.24999 0.05886 0.0007	3.24999 0.05375 0.0006	3.24999 0.04080 0.0016	3.24999 0.04927 0.0023
Alternative Low Emission Fuels (LNG/GTL/HVO)			HVO/GTL	In progress	In progress	In progress
Marine Gas Oil low sulphur			V	✓	√	V
UREA system to reduce NOx emissions on MGO			х	х	х	X
Optional noise mitigation during pile driving			V	V	√	-
Occupational health measurements			✓	√	√	V
Biodegradable oils non-floating spread and ROVs			V	V	✓	-
Environmentally friendly cleaning products			✓	√	✓	V
Highly effective bilge water separators			√	√	√	V
Green Dynamic Positioning (DP) mode or equivalent			V	V	√	V
State-of-the-Art Crane Power Management System			V	-	-	-
Solid State Gyros for improved Navigation			V	-	-	-
Optional sailing on one engine			-	-	-	V
LED lighting cranebooms, deck, and exterior accomo			V	V	✓	-
Ship Energy Efficiency Management Plan (SEEMP)			V	V	✓	V
Strict waste separation procedures			√	√	√	V
Deck rainwater collection / treatment			-	-	-	-
High Performing Fluorine-Free Foams for Firefighting			-	-	-	-
Dedicated waste management controller			V	V	√	V
Green Passport EU Notation			-	-	V	V
	NOX SOX	2 x 10,000 m 25.9 LNG CO ₂ eq.* 3.651 0.01020 0.00002 D LN A A A A A A A A A A A A A	CO ₂ eq.* NOX NOX SOX 0.01020 0.05090 0.0012 LNG V V V V V V Alent V Como V V V V V V V V V V V V V V V V V V	2 x 10,000 mT	2 x 10,000 mT	2 x 10,000 mT

^{*} including methane slip

q

Continuous improvements, always

What weighs 136,709 metric tons, moves at around 6 knots, and can lift 14,200 metric tons? Thialf of course!

At our home base in the Port of Rotterdam, we connected two of our vessels to a Shore Power connection powered by wind turbines.

By implementing Shore
Power our vessels will be
powered by renewable
electricity when moored.
No emissions, no engine
noise, no climate impact!

Hedzer Keulen

Project Lead Shore Power

At present, the Company's Shore Power connection will deliver the targeted 5% prevention of emissions at the source to fulfill the target for 2021-2022.

Thialf bunkered GoodFuels'
HVO biofuel for the first
time last year! Read more
about it on page 30.

30 M

In 2022, Heerema will be installing 27 wind turbines for Parkwind's Arcadis Ost I wind farm in the Baltic Sea using our novel Rotor Nacelle Assembly (RNA) installation method. We will execute this project with Thialf, the world's second-largest semi-submersible crane vessel (only Sleipnir is bigger).

DJUSTMENTS

Between our home base in the Port of Rotterdam and the Arcadis Ost project location sits Denmark's Storebaelt Bridge. It connects the Danish islands of Zealand and Funen and has a clearance of 65 meters, while from Thialf's floaters to the top of the vessel's A-frames is a huge 105 meters!

Thialf's A-frames already have hingable corners that can accommodate the NOV custom-designed semi-permanent adjustment system. Using this system, Heerema can lower the Thialf's cranes by folding its A-frames, creating a sufficient air gap when combined with ballasting between the vessel and the Storebaelt Bridge.

Tom Piscaer

Sr. Technical Superintendent Thialf

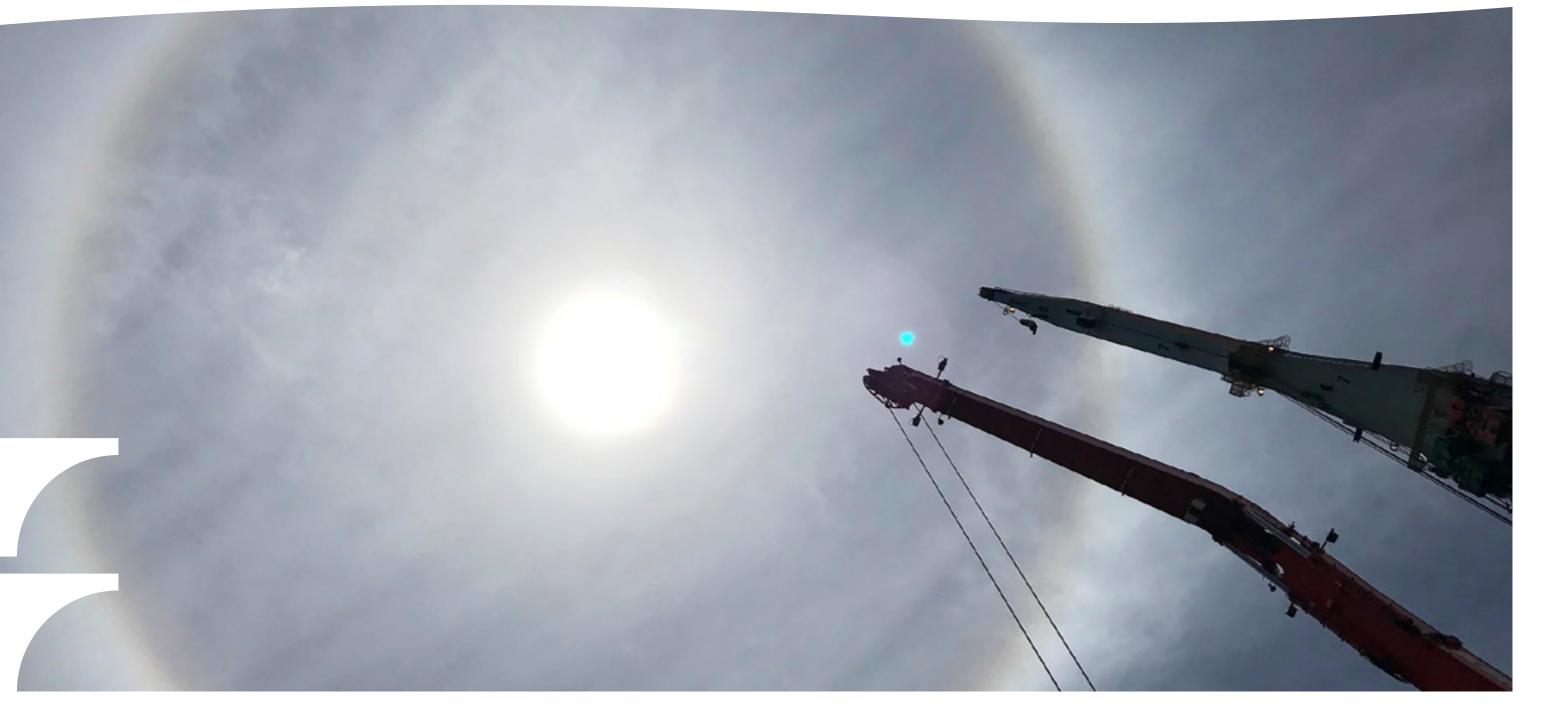


The output of the installation is 11kV on 60 Hz, the input of the installation is 25 kV on 50 Hz.

Ballast Water Management Convention aims to prevent the spread of harmful aquatic organisms from one region to another. SSCV Thialf executed a significant modification to her ballast system by installing 4x 3000m3/hr treatment systems. Treatment is based on direct electro chlorination principle

(Electro-Cleen System by Techcross).

Our commitment to Sustainability



4.1 **Sustainability Beliefs**

We act sustainably because we want to

For many years now, Heerema has believed that a responsible company has an obligation to act in a sustainable manner.

Heerema is committed to creating value(s) that encompass the three pillars of sustainability, namely: Social, Environmental, and Economic values. This means that people, planet, and prosperity are all drivers within the company and as a result sustainability is embedded into all daily work practices. To move values into action, Heerema uses a Sustainability Roadmap that guides all employees and sets out concrete ambitions and goals. The Roadmap is based on the United Nations' Sustainable Development Goals and the sustainable ambitions of the International Maritime Organization.

OUR ACHIEVEMENTS

The sustainable achievements show some of our recent sustainability successes.

OUR PROJECTS

The projects in the Sustainability
Roadmap bundle our current initiatives.
They can be seen as the foundation
on which we translate our values into
action. Reduce Footprint and Emissions,
Sustainable Supply Chain Management,
and Good Health and Well Being, all
together achieve an optimal balance
of the triple bottom line. Ultimately our
initiatives move our sustainability
agenda forward by creating sustainable
values, awareness and involvement.

OUR AMBITIONS

The ambitions set targets on social, environmental, and economic sustainability-related aspects. Not only do we set ambitions in terms of emissions reduction, resource consumption or sustainable employability, it also contains the strategy on how to get there.



We use our Sustainability
Roadmap for the long-term
strategy and sustainable
development planning.
It reflects our sustainability
journey and is therefore
being updated according
lessons learned along
the way.



4.2 10 years of Sustainability Reporting

Our journey towards creating sustainable value(s)

For many years, Heerema has believed that a responsible company has an obligation to act in a sustainable manner. Our Sustainability Reporting journey officially started in 2011, when the first Sustainability report was written.

For the coming years we are looking at the implementation of several decarbonization technologies according to our Carbon Neutral Roadmap. This year, preparations for the implementations are in full development.

Cees Dijkhuizen | Sustainability Project Manager

Naturally, much has happened since then. In 2013, the decision was made to outfit the Sleipnir with dual-fuel engines running on LNG (one of the first in the world of its size), and in 2015 Heerema moved to a new office that is one of the most sustainable offices in the world according to the World Green Building Council.
In 2017, with combined efforts from Heerema employees, including upper management, a "Sustainability Roadmap" was introduced. In 2019, a contract was signed with Eneco and

the Port of Rotterdam to establish a Shore Power connection allowing our vessels to operate fully on green electricity, preventing emissions. In 2020, we decided to take action now and became Carbon Neutral by compensating our emissions.

10 years of sustainable development with clients and stakeholders





















Caring for People













5.1 Introduction Roadmap

Caring for people | Taking our Social Responsibility

Organization











Heerema Culture









Health & Well-Being

The physical and mental health of our colleagues

Within Heerema we focus on the physical health and mental well-being of our colleagues. Since the COVID pandemic outbreak in 2020, taking care of each other has become even more important. See the next page for detailed insights on what we accomplished in 2021 to safeguard the wellbeing of our global workforce.

Organization

The way we execute our daily jobs

When working globally, different aspects are part of our daily job. Each has its own opportunities, improvement possibilities, and partnerships. Examples in 2021 are the introduction of our Working from Home Policy and the revamp of our CLIMB initiative to foster continuous improvement.

Heerema Culture

The character of our organization

Collaborating as one Heerema while we share our passion. We all take our job seriously, with plenty of room for fun. An example of one of our Heerema Culture initiatives is the continuation of the Founder's Mentality sessions for our global workforce.



5.2 Health & Well-Being at Heerema

FIT WITH SDGs

To move values into action, we use our Sustainability Roadmaps. These are based on the United Nations' Sustainable Development Goals (SDGs).

These initiatives contribute to a number of Sustainable Development Goals, among others:

3 SDG 3 (Good Health and Well-Being), at Heerema we aim to ensure healthy lives and promote well-being for all, at all ages.

Especially during the tough global health circumstances we face, Heerema promotes the importance of universal health coverage.

FIT WITH STRATEGY

As part of the Caring for People Roadmap, Physical Health and Mental Well-Being are initiatives within the pillar Health & Well-Being.

Listening and supporting

Employee Assistance Program (EAP) including:

- Company social worker, confidential counsellors, company doctor, registered nurse on board
- Cross-discipline work group (HR, HSE, Unions, Offshore) on Sustainable employability for our offshore workers
- Healthy food provision
- Promoting fitness & sports
- Physical therapist

At Heerema we strive towards creating an environment where employees can feel happy, healthy, and motivated. Especially in COVID-19 dominated times maintaining both physical and mental health remains key.



Staying Fit & Healthy

- · Heerema (Virtual) Fitness
- FIT20
- · Leiden Marathon
- Heerema club on Strava, joint running & cycling tours







Getting through quarantine

Purpose

- Project related briefings and required trainings provided
- General project preparations & tasks
- Welcome home reception at the airport for returning crews

Togetherness

 Webinar / Teams informal connect sessions

- Fun quarantine crew WhatsApp groups
- Sharing stories via Intranet and Online HMC community

Staying Fit & Active

- Exercise options provided [equipment in room and via online programs]
- Care for food provision [looking at dietary requirements, special themed meals & celebrations]
- Reading materials / daily newspapers

printed of crew resident countries

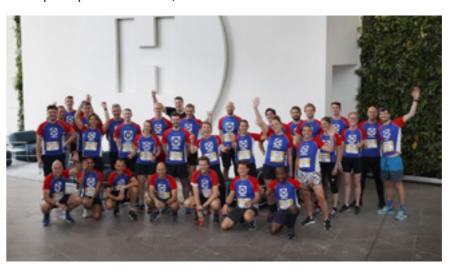
 Broadband internet, Phone cards, iPads provided for those without devices

Support

- Pre-travel information and PPE / hygiene package provided
- Employer Assistance Program [EAP]
- Mental & Physical Health guidance

Leiden Marathon

As sponsor of the 10 kilometer distance of the Leiden Marathon, yearly a large amount of our Heerema Colleagues join the business team races. In 2021 eight teams participated on the 5km, the Heerema 10km and the 21 km races.



Bionda van Roosendaal General Manager HSE

Dare to Care is a commitment, both personal and organizational, that will eventually lead to a situation without incidents and injuries. It is a safety mindset intolerant of any level, frequency, or severity of incident or injury.

Our impact on the environment



6.1 **Carbon Neutral**

PREVENT I REDUCE I COMPENSATE The Heerema Sustainability Roadmap includes the Carbon Neutral program, whereby from 2020 the company became the first offshore contractor to become carbon neutral by offsetting 100% of its approximately 250.000 metric tons of emissions. The program contains yearly targets that either prevent or reduce emissions at the source.

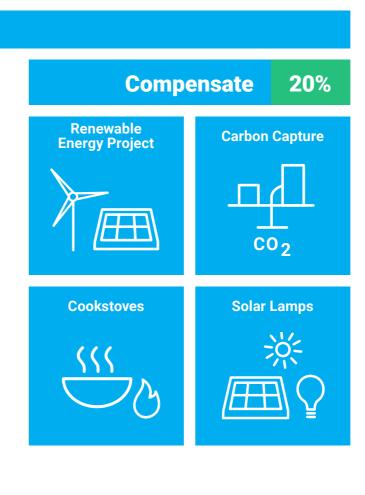
6.1.1 **CARBON CAPTURE & STORAGE ONBOARD**

6.1.2 **ALTERNATIVE FUELS**

In 2020, Heerema began investing in carbon offsetting projects that align with its mission to create sustainable value(s). These are certified carbon reduction projects with the accredited Climate Neutral Group. Additionally, emissions will be either prevented by eliminating the combustion of fuel or reduced by changing or reducing the amount of fuel required or increasing combustion

efficiency. The goal is to be Carbon Neutral using 'zeroemission technology' wherever feasible. In our first year of being Carbon neutral, we have compensated 100% of our emissions. Moving into year two, we set the ambitious goal to prevent 5% of our emissions at the source. We are proud that we hit this target with our Shore Power connection in the Port of Rotterdam.

Carbon Neutral | Net Zero GHG Emissions 25% 55% **Prevent** Reduce **Shore Power** SCR/Scrubbers Hydrogen Software & System Optimization **Alternative Fuels**













6.1.1

Carbon Capture & Storage onboard

Capturing CO₂ from our exhausts

Carbon Capture and Storage (CCS) is the process of capturing 'waste' carbon dioxide from large emitters. The overall objective of our CCS project is to implement a safe and economic Carbon Capture and Storage system onboard the Sleipnir in order to eliminate carbon emissions while running on both LNG and MGO. Preliminary results show that up to 80-90% of all carbon emissions can be captured on board Sleipnir while working offshore. The exact numbers and optimal economic performance of the plant have yet to be determined.

Therefore, we are taking part in several international carbon capture research projects. DERISCO2 and COAST are examples of previous projects. Currently, we are involved in the project known as EverLong. This project aims to develop the technology and strategy required to reduce exhaust emissions to contribute towards a sustainable shipping industry. At the end of 2021, the first pilot onboard Sleipnir took place. During this pilot, CO2 emissions where captured from the Sleipnir while being in the Port of Rotterdam. Throughout 2022 we will prepare for another carbon capture pilot on an even bigger scale for the year 2023/2024. With this pilot we are aiming to validate capturing 250 kg of CO2 per day.



Additionally, along with TNO, the University of Twente, Technische Universiteit Delft, and various other industry leaders, we are taking part in a leading Dutch maritime consortium. In 2021, this project has received a subsidy for an advanced 'LNG-ZERO' concept.

We are really proud to be a part of both the EverLong and LNG-ZERO consortia and are looking forward to further contributing to emission reduction in the maritime industry.



code and check out EverLoNG The importance and challenge in any sustainability initiative is to have and maintain a clear and mutual agreement of what a sustainable solution requires. Our focus is to avoid situations where a remedy would be worse than the disease. Our objective is to implement a Carbon Capture and Storage system onboard the Sleipnir reducing net carbon emissions while running on LNG or MGO without restricting operational performance and capabilities.

Mike Sattler Equipment Manager Sleipnir

FIT WITH SDGs

To move values into action, we use our Sustainability Roadmaps. These are based on the United Nations' Sustainable Development Goals (SDGs).

This sustainability initiative contributes to a number of Sustainable Development Goals, among others:

- 9 SDG 9 (Industry, Innovation and Infrastructure), this project has the potential to accelerate the development of scientific research into innovations that contribute to our carbon neutral ambition.
- Consumption and Production), by initiating the CCS pilot we try to capture and store the emissions that can harm the environment in a sustainable manner, in order to limit pollution caused by our vessels.
- 13 SDG 13 (Climate Action), this project directly affects the amount of emissions released into the atmosphere and limits our impacts on the climate.

 14 SDG 14 (Life below Water), capturing and storing carbon means that the greenhouse gasses will not be released into the sea or atmosphere. CCS will contribute to a significant reduction of the emissions that cause ocean warming, acidification, and deoxygenation of our ocean that harm marine ecosystems.

FIT WITH STRATEGY

As part of the Carbon Neutral Roadmap, Carbon Capture and Storage is one of the initiatives within the pillar Compensate to achieve our Carbon Neutral ambition.

29







TANK-TO-EXHAUST



6.1.2 **Alternative Fuels**

HVO Bunker for Thialf

To calculate our footprint, we use emission factors that cover the scope of well-to-exhaust.











WELL-TO-EXHAUST

FIT WITH SDGs

To move values into action, we use our Sustainability Roadmaps. These are based on the United Nations' Sustainable Development Goals (SDGs).

This sustainability initiative contributes to a number of Sustainable Development Goals, among others:

- **SDG 7** (Affordable and Clean Energy), with this initiative Heerema contributes to a future where the use of alternative fuels will be seen as default in our industry aiming to facilitate access to clean energy technologies.
- 9 SDG 9 (Industry, Innovation and Infrastructure), creating value for the industry by experimenting with alternative fuels and therefore contributing to technological development.
- 13 SDG 13 (Climate Action), by using alternative fuels, Heerema prevents carbon emissions released into the atmosphere and lowers its carbon footprint. 17 SDG 17 (Partnerships), by enhancing partnerships that mobilize and share knowledge, expertise, technology and resources, to support the achievement of the sustainable development goals.

FIT WITH STRATEGY

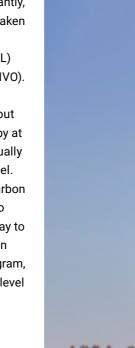
As part of the Carbon Neutral Roadmap, Alternative Fuels is one of the initiatives within the pillar Reduce to achieve our Carbon Neutral ambition.

To reduce local emissions significantly, in February 2020, a first pilot has taken place on board Thialf to test the performance of Gas-to-Liquid (GTL) and Hydrotreated Vegetable Oil (HVO). These alternative fuels showed a decrease in NOx emissions by about 15% and Particulate Matter (PM) by at least 50%. SOx emissions are virtually eliminated using these types of fuel. HVO has the potential to reduce carbon footprint (well-to-exhaust) by up to 80%. Biofuels are thus a proven way to prevent carbon emissions. After an extensive research and testing program, we have taken the pilots to a next level in the year 2021:

Thialf bunkered GoodFuels' HVO biofuel for the first time!

By doing so, Thialf became the largest vessel to bunker Hydrotreated Vegetable Oil (HVO). For the test one engine was selected as test engine. This engine just had its major service completed and therefore could be used as reference engine. During the test, auxiliary systems like transfer pumps and filters ran like before, without any malfunctions observed

After consuming all HVO, several inspections were conducted on the test engine. Additionally, a sample was drawn and analysed from the engine lubricating oil. No irregularities were observed during these inspections.





Other biofuels are being looked into while the use of biofuels in Heerema fleet should gradually increase up from 0% in 2020 to almost 40% in 2025 in order to prevent 95.000 [mT] of CO2.



We are honored to help Heerema create a more sustainable offshore industry, making a direct impact on their Greenhouse Gas emissions with our truly sustainable biofuels.

Judy Pattiasina Commercial Manager



Although conclusions regarding the use of HVO for a prolonged period of time with regards to possible reduction of equipment maintenance intervals cannot be drawn from this test, it is fair to say that the test itself proved to be a success. **Engine and subsystems** were functioning as expected, without any issues observed.

Marco Hofmeijer Chief Engineer Thialf



1.996,18
SAVED TONS BUNKER OF CO2eq

6.2 Circular Heerema

PREVENT I REUSE I RETAIN The third ambition in the Sustainability Roadmap is to be circular by eliminating waste and unnecessary use of resources by focusing on preventing, reusing, and retaining these assets.

6.2.1 **RESPONSIBLE PROJECT EXECUTION**

6.2.2 **NO SUPPLY CHAIN PLASTIC**

These pillars are derived from the MacArthur Foundation's 9R's framework, facilitating an overview of circular strategies. This ambition is guided by a Circular Roadmap, which outlines ambitions that include eliminating single-use plastics, sustainable supply chain management, and an internal steel marketplace. Prevention measures are classified as

those that focus on smarter product use and manufacturing. For example, sailing with a jacket in the cranes to prevent the production of additional grillage. Also, the implementation of 3D printing onboard to reduce shipping of small printable parts is part of this pillar. Reuse measures are classified as those that focus on extending the lifespan

of products and parts, which is exemplified by the steel marketplace. Finally, Retain measures are classified as useful applications of materials at their end of life such as responsible waste stream management.

Circular Heerema | Zero Waste

Prevent No Single-Use Plastics





No Supply Chain Plastics



Topology Optimized Structures



Reuse





Circular **Decommissioning**



Refurbished **IT Resources**



Education & Awareness



Retain





Plastic Recycling Facility



Responsible Project Execution



Life Cycle Engineering











6.2.1

Responsible Project Execution

Lifting over Launching

FIT WITH SDGs

To move values into action, we use our Sustainability Roadmaps.
These are based on the United Nations' Sustainable Development Goals (SDGs).

This sustainability initiative contributes to a number of Sustainable Development Goals, among others:

- 8 SDG 8 (Decent Work and Economic Growth), promoting sustained growth by using more efficient techniques during this project, ensures productive employment and decent work for all.
- 9 SDG 9 (Industry, Innovation and Infrastructure), this project suggests a new way of launching jackets, through technological development we are now able to lift jackets more easily, be less dependent on weather circumstances, predict performances and use less steel.
- 12 SDG 12 (Responsible Consumption and Production), through lifting the jackets instead of launching we reduce the amount of resources needed to fulfil the operation.

FIT WITH STRATEGY

As part of the Circular Heerema Roadmap, Responsible Project Execution is one of the initiatives within the pillar Retain to achieve our Circular ambition.

Lifting over launching

The typical steel-framed jackets required for offshore structures need to withstand environmental forces and the weight of heavy topsides. In some cases they can be huge, and in the past, these structures required a 'launch installation' due to their weight. These operations involved launching the steel jacket equipped with floatation devices from a launch barge into a floating horizontal position, where it could then be uprighted and installation finalized.

What are the advantages?

Less material is needed, which contributes to our Circular Heerema ambition. Jackets will be much lighter as we will remove the need for the required buoyancy tanks to ensure launching operations are a success. In addition, by lifting the jacket, the operation becomes more straightforward with the ability to use both cranes to lift the jacket directly from a barge. This action means there is greater predictability, less weather sensitivity for the project and less steel used.

Heerema's Capabilities

We want to help clients lift jackets instead of launching wherever possible, and to do that, we get involved early to assist in FEED studies and use our Simulation Center (page 2) to assess all project aspects. In terms of lifting capacity, we have Sleipnir, the world's largest semi-submersible crane vessel, with two cranes that have 10,000 metric tons lifting capacity each.

Heerema has various barges suitable for launching and continues to support these installation methods. However, with the introduction of Sleipnir, we can lift these gigantic jackets instead of launching them!

Arjan Buijsse I Sustainability Project Manager









6.2.2

No Supply Chain Plastic

Sustainable packaging pilots offshore

Prevent plastic use

Together with our colleagues on- and offshore, we investigate and implement solutions to prevent the use of plastics. This also applies to plastics in our supply-chain. Together with our suppliers we are looking into alternatives to prevent plastic packaging where possible.

Plastic reduction in Vlissingen

In Vlissingen, our colleagues make sure all packages and other important load gets onboard our vessels in time. This logistic challenge includes managing several packages of different suppliers. To make these packages ready for the container shipment, it is important to bundle them. The conventional way to do so, is by collecting them on one wooden pallet and wrap them in plastic.

For this way of packaging, we use biobased wrapping film where and when possible without losing our flexibility and efficiency (since January 2021). The stretch film is for 50% made of residues from cane sugar production, meaning that it is partly biodegradable – an improvement compared to the classic plastic wrapping film.

Taking the next step

Our learning mindset brought us to a next step: in 2021 we conducted a pilot with our vessels Thialf and Sleipnir by using re-usable plastic boxes as an alternative for these pallets. During the pilot we evaluated the usability of the boxes together with our colleagues onboard. We can conclude the plastic

FIT WITH SDGs

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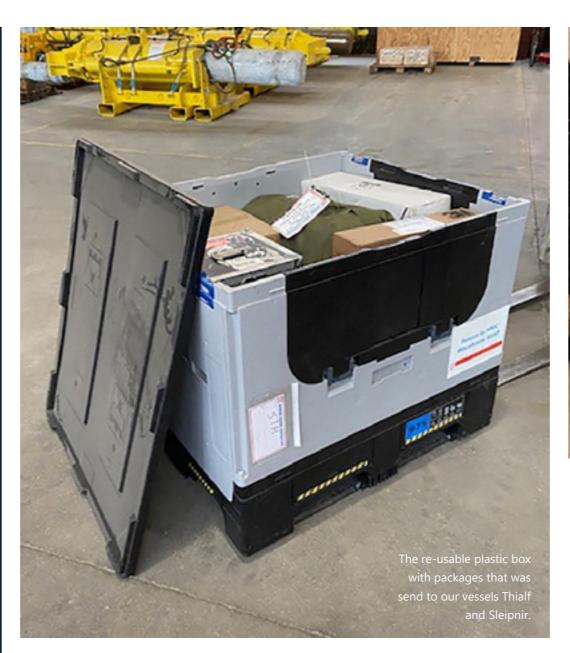
- II SDG 11 (Sustainable Cities and Communities), engaging The Heerema community to attribute to sustainable initiatives concerning recycling and re-use of plastics.
- SDG 12 (Responsible
 Consumption and Production),
 working together with our
 suppliers to ensure less plastic
 is used in packaging and that
 plastic is used in more
 responsible and efficient way to
 increase the circularity.

 TSDG 17 (Partnerships for the
 Goals), improving our supply chain
 by using less plastic asks for
 partnering up with our suppliers
 and finding new solutions together.

FIT WITH STRATEGY

As part of the Circular Heerema Roadmap, No Supply Chain Plastic is one of the initiatives within the pillar Prevent to achieve our Circular ambition.

boxes can be an alternative for pallets or loose packages but we think it is more suitable for single consumable related products like rice, grit which can be put in one box al together. To



combine small packages into the box will be time consuming and will result in more boxes and eventually containers. Suppliers can however play an important role by the further development of the boxes particularly in case of consumables. Besides this you can

also ask suppliers to limit their plastics with respect of container-based consumables or material. Coming year, we expect to validate several alternatives for supply-chain plastic, among which the plastic boxes.

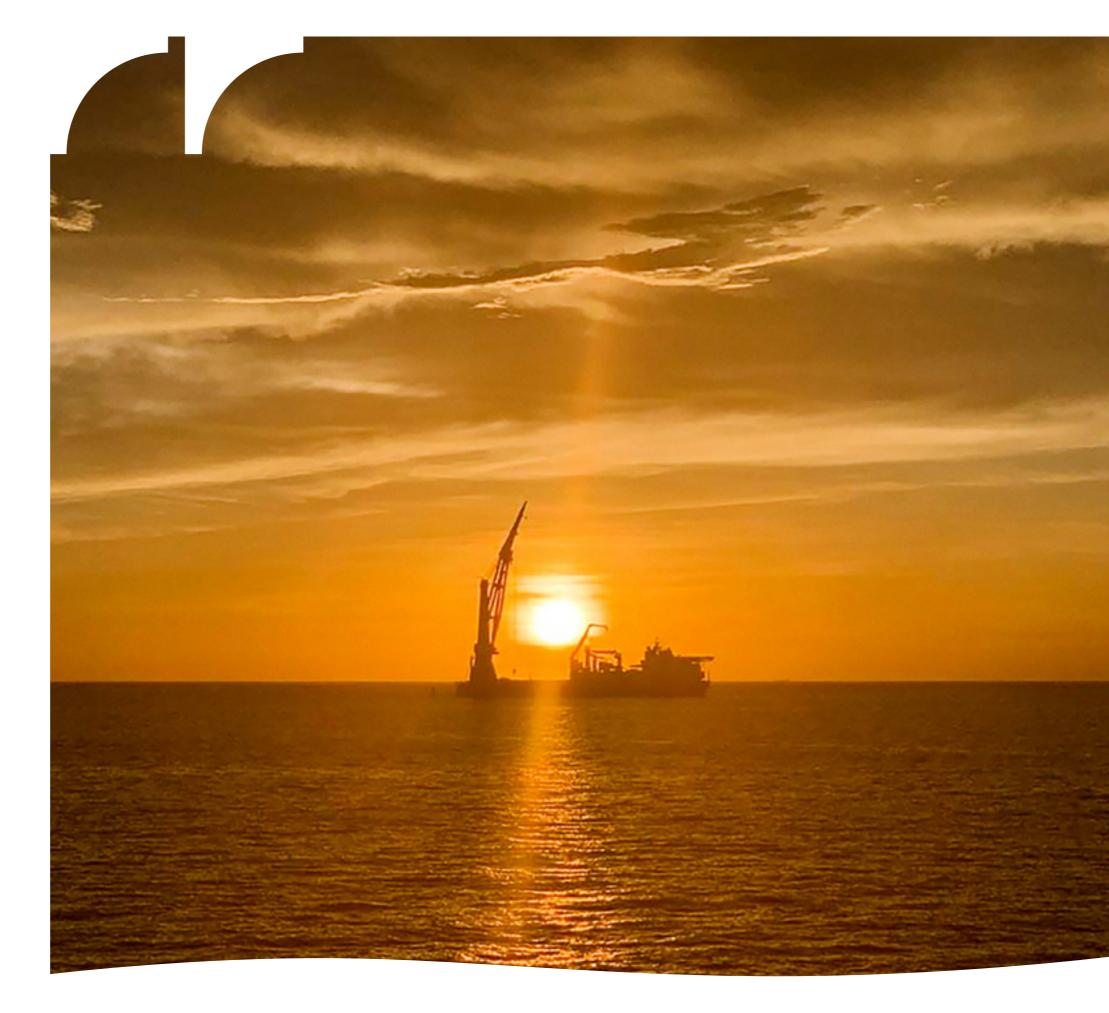


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Marjo van Gijs

Sr. Shipping & Receiving Coordinator

Ourimpact

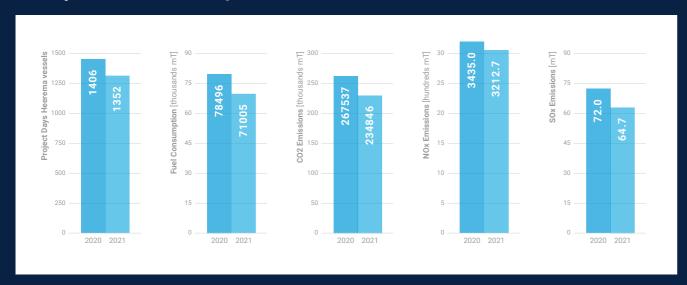


7.1 Reduce Footprint & Emissions

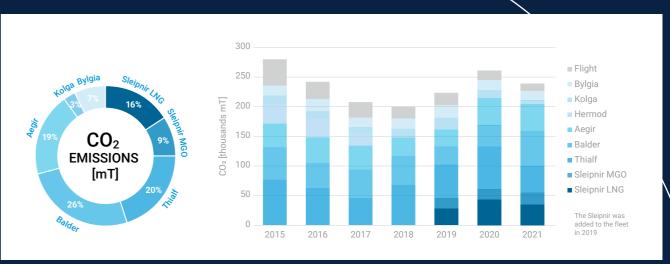
Transit & Work per Vessel

	Consumption (mT)		CO ₂ emissions (mT)		NOx Emissions (mT)		SOx Emissions (mT)	
	2020	2021	2020	2021	2020	2021	2020	2021
Sleipnir LNG	14,515	10,175	62,413	37,147	148.1	103.8	0.3	0.2
Sleipnir MGO	10,122	6,577	32,451	21,376	515.2	334.8	12.5	8.1
Thialf	18,944	14,086	60,733	45,779	1,115.0	829.1	14.1	10.5
Balder	11,979	18,888	38,403	61,387	643.8	1,015.3	7.0	11.1
Aegir	13,836	14,009	44,358	45,528	564.5	571.6	22.6	22.8
Kolga	3,216	2,136	10,312	6,942	158.5	105.2	7.5	5.0
Bylgia	5,885	5,134	18,866	16,687	289.9	253.0	8.0	7.0
Total	78,496	71,005	267,537	234,846	3,435.0	3,212.7	72.0	64.7

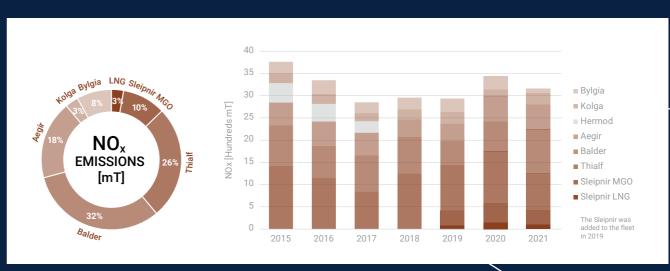
Yearly Reduction Footprint



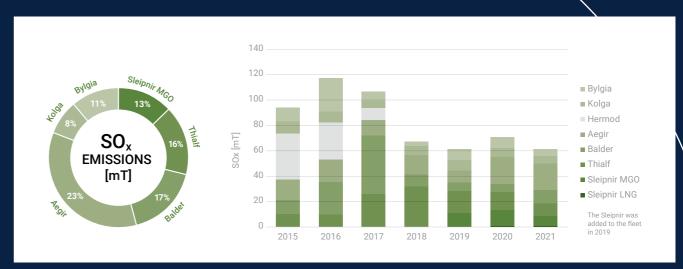
CO₂ emissions per Vessel



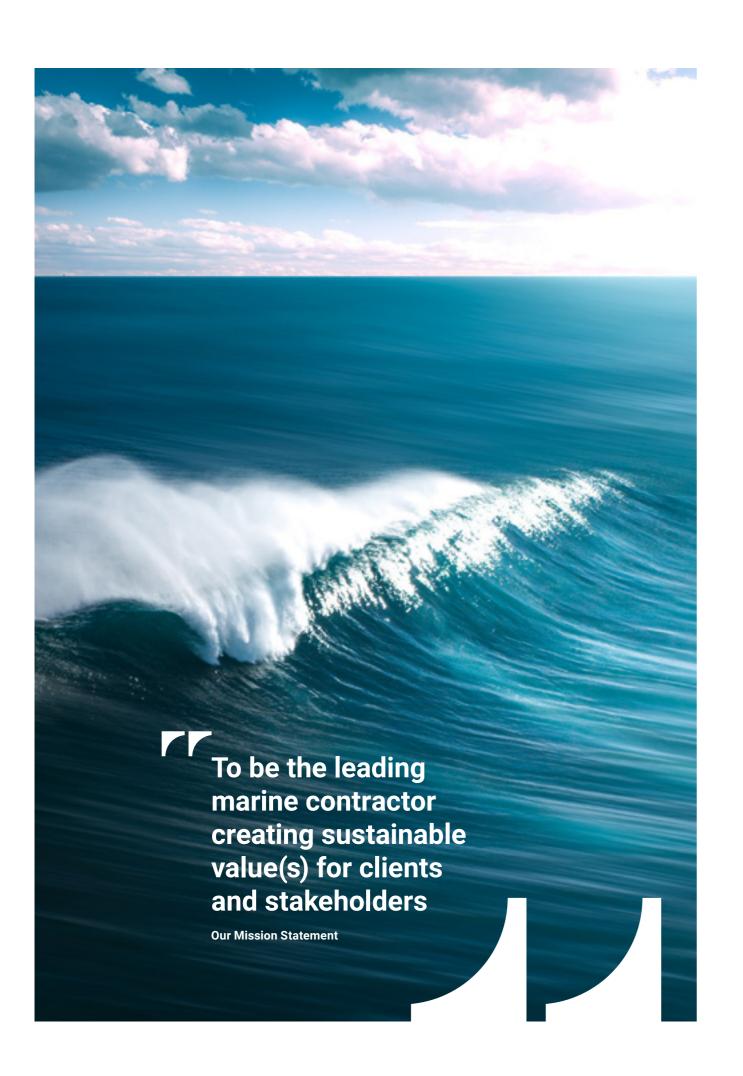
NOx emissions fleet



SOx emissions fleet



40 **Heerema Sustainability Report** 2021 Key Performance Indicators 41







This Heerema Marine Contractors Sustainability Report covers our relevant projects and performance on the three Sustainability Ambitions over the year 2021

Sustainability Report 2021



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