#energy #efficiency #projects

#EEXI #CII #FUELEU

#2026 #modern #shipyard

#RealAction #Futureflexible

QUALITY
ON-TIME
ALWAYS

For Inspiration,
please find in this folder a selection of
Energy Saving Initiatives

www.fayard.dk

Climate change is one of the biggest sustainability challenges of our time.

At FAYARD we have a strong focus on supporting customers regarding the CII and the EEXI improvements, and in optimizing the ships in operations by incremental retrofits.

With Green House Gas emission costs on the rise, the economics of **Energy Saving Devices (ESDs)** are shifting.
ESDs offer a compelling route to lower OPEX, reduce emissions liability, and future-proof fleets.

We are thrilled to work together and to help our customers become more efficient while reducing the vessels' environmental footprint.

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FUELEU MARITIME

From 1. January 2025, Ships above 5,000GT transporting Cargo or Passengers for commercial purposes in the EU/EEA(ex Norway and Iceland) are required to meet annual Well-to-Wake Green House Gas (GHG) emission intensity requirements.

$$\text{GHG Intensity}^{*} = \frac{\text{Total GHG emissions (tCO2eq)}}{\text{Total energy from Fuels + Total Shore power + Reward}_{\substack{\text{Renewable fuel}\\ \text{Non-Biological origin}\\ \text{from 2033}}}} \times \text{Reward}_{\substack{\text{Wind}\\ 1\%,\ 3\%,\ 5\%}}$$

Note the rewarding factors:

- Use of Shore Power**
- Use of certain renewable fuels
- Use of Wind Assisted Propulsion System (WAPS)

* The GHG intensity applies to
  - 100% of energy used on voyages and Port Calls within the EU/EEA
  - 50% used on voyages to or from ports in the outermost regions of an EU/EEA member state
  - 50% used on voyages into or out of the EU/EEA.

** At FAYARD, we can provide shore power to nearly all requirements. Our Shore Connections converts power from the grid to your needs.
60%+ of the electrical grid power in Denmark is generated from Wind and Sun.
When you demand 100% renewable power in the shore connection, we can still deliver.

EU's FuelEU Maritime requirements to the reduction of the 2020 avg. GHG intensity
2% from 2025 to 2029.
6% from 2030 to 2034, and accelerate from 2035 to
80% reduction in 2050

Cost effective saving potentials:

- LNG and Bio-LNG offers lower GHG Intensity than required until 2035
- Energy-Efficiency measures
- Wind assisted propulsion (WAPS)
- Shore Power when possible
- Compliance pooling

CII - an ongoing effort!

Continuously lowering the Emissions on the road towards Zero Emissions

Carbon **I**ntensity **I**ndicator (**CII**) **2023 -> 2030** (IMO)

The **CII** requirements is in force for **all** Cargo, RoPax and Cruise vessels above 5,000 GT and trading internationally. The Carbon Intensity Indicator (CII) is a measure of how efficiently a ship can transport goods or passengers and is given in grams of CO2 emitted per cargo-carrying capacity and nautical mile, based on reported IMO DCS data.

$$\text{CII} = \frac{\text{Annual Fuel Consumption} * \text{CO2 Factor} * \text{Correction Factors}}{\text{Annual Distance Travelled} * \text{DWT or GT}}$$

The **CII** addresses the actual emissions in operation.

IMO's target for **2026** is a **11% reduction** of vessels' CO2 emission

Actions:

- Shaft Limitations
- Engine Power Limitations
- Install Energy Saving Devices
- Convert to Low Carbon Fuel
- Increase vessel capacity
- And many more…

FAYARD

Energy Saving Devices (ESD)

Innovative Solutions & Incremental Improvements

for reducing emission to air by less consumption

Find the right solution to stay compliant and efficient.

Our examples on the following pages are

- available to all
- have low OPEX
- fast to implement

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ENERGY SAVING DEVICE COMBINATIONS ARE SETTING SAILS FOR THE FUTURE

HYBRID ACTIONS ALLOWING UP TO 58% REDUCTIONS IN CO_2 EMISSION:

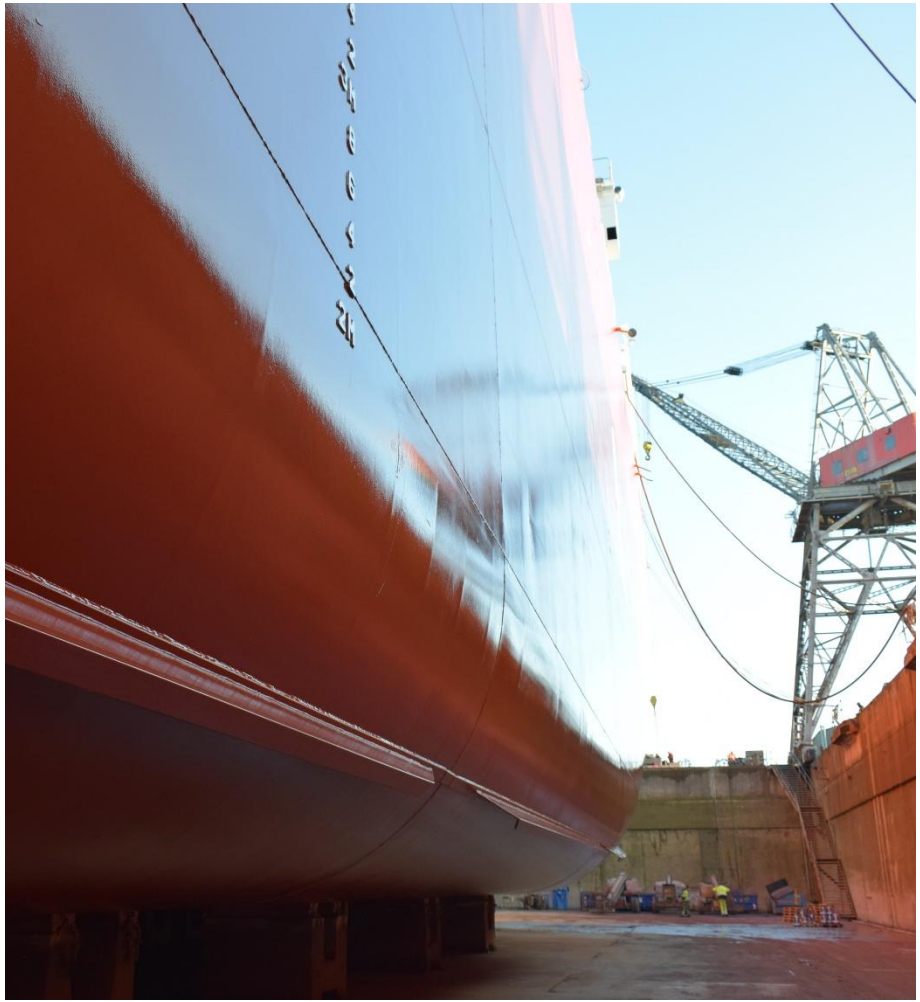
- WIND ASSISTED PROPULSION SYSTEM
- HYBRID BATTERY SOLUTION
- ON-SHORE POWER ABILITY
- BIOFUEL TESTED AND COMPLIANT
- FUEL OPTIMIZATION
- DC-LINK HYBRID SYSTEM
- DUAL FUEL ENGINE, METHANOL/MGO
- NOISE REDUCTION OPTIMIZATION
- SPEED OPTIMIZATION (JIT)

REDUCING OVERALL EMISSIONS BY COMBINED UPGRADES:

INCREASED CONTAINER CAPACITY & CHANGE OF PROPELLER

VESSEL'S OVERALL EMISSIONS REDUCED: INCREASED CONTAINER CAPACITY & EVEN MORE EFFICIENT PROPELLER

REDUCE EMISSIONS OPTIMIZING THE HULL FRICTION AND THE HYDRODYNAMICS



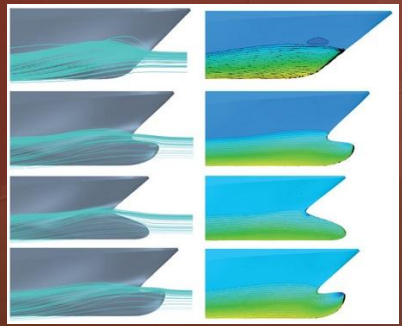
Silicone Antifouling

- Reducing resistance on the hull creates significant savings of fuel
- FAYARD meets the higher applying demands this paint system requires:
  - Special equipment needed, including heated sprayers
  - Special processes needed with high level of documentation and accuracy
- Latest projects are made with Hempadur X7 & X8

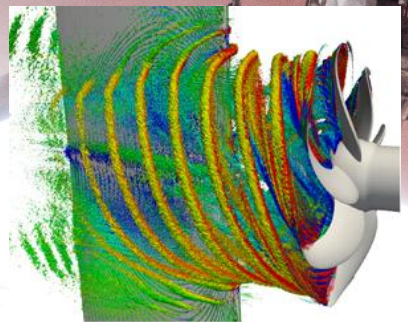
Clean Hull = Less Emission

FACILITIES AVAILABLE FOR APPLYING SILICONE-ANTIFOULING THROUGHOUT THE YEAR

REDUCE EMISSIONS BY HYDRO-DYNAMIC OPTIMIZATION



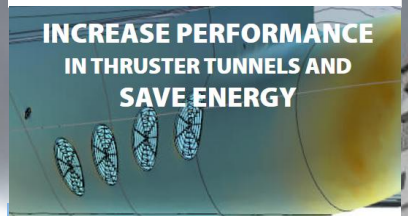
REDUCE EMISSIONS BY HYDRO-DYNAMIC OPTIMIZATION



MANY OPTIONS AVAILABLE:

- CONE/BULB
- CAP
- PRE-SWIRL STATOR
- FOILS
- NOZZLES
- TUNNEL THRUSTER GRITS
- AIR LUBRICATION
- AND MANY MORE…

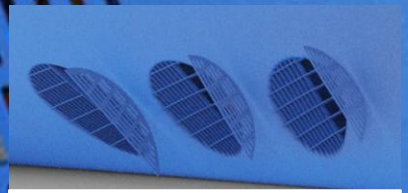
REDUCE EMISSIONS BY HYDRO-DYNAMIC OPTIMIZATION: *ELOGRIDS*



Reduces fuel consumption about 2 %, which leads to about 0.5 t of fuel saved per day equal to app. 1 .5 t less CO_2 emissions per day per ferry according to Viking Line / ELOMATIC

REDUCE EMISSIONS BY SUPPRESSING THRUSTER TUNNEL DRAG.

ONE EXAMPLE FOR YOUR INSPIRATION



DNV AND FINCANTIERI ARE DEVELOPING A HYDRO-DYNAMICALLY EFFECTIVE SOLUTION NOW AVAILABLE FOR THE MARKET.

FINCANTIERI'S PATENT-PENDING SOLUTION CONSISTS OF A SPECIALLY DESIGNED GRID AND A HINGED, SLOTTED DEFLECTOR COVERING THE FORWARD PORTION OF THE TUNNEL.

Link: Suppressing thruster tunnel drag to conserve energy (dnv.com)

REDUCING EMISSIONS BY CHANGING THE PROPELLER.

THE RIGHT, AND CLEAN, PROPELLER LOWERS THE FUEL CONSUMPTION SIGNIFICANTLY

REDUCE EMISSIONS BY CHANGE OF PROPELLERS

WIND ASSISTED PROPULSION SYSTEMS REDUCE FUEL CONSUMPTIONS

- ROTOR
- KITE
- RIGID SAIL
- SUCTION WING
- ...

A WIND SHIELD MAY REDUCE THE FUEL CONSUMPTION

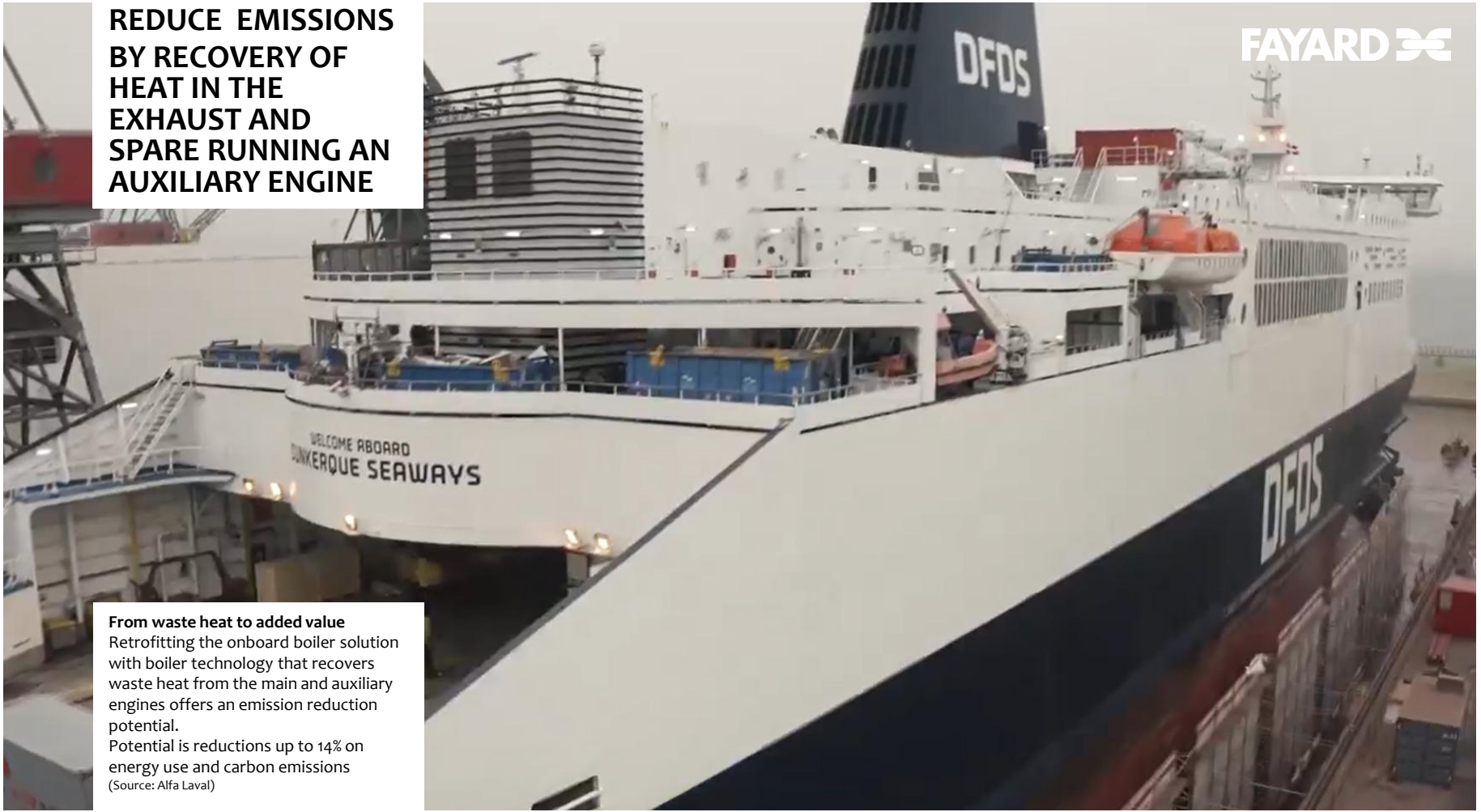
FOR INSPIRATION ONLY.
CONSTRUCTION AND INSTALLATION CARRIED OUT BY HAPAG LLOYD IN ASIA

REDUCE EMISSIONS BY AIR LUBRICATION SYSTEM

REDUCE EMISSIONS BY USE OF SHAFT GENERATOR(S) AND ENERGY STORAGE SYSTEM(ESS)

JUMBOIZATION: IMPROVING THE PROFIT-ABILITY AND CII BY INCREASING THE VESSEL'S CAPACITY

REDUCE EMISSIONS BY RECOVERY OF HEAT IN THE EXHAUST AND SPARE RUNNING AN AUXILIARY ENGINE



From waste heat to added value
Retrofitting the onboard boiler solution with boiler technology that recovers waste heat from the main and auxiliary engines offers an emission reduction potential.
Potential is reductions up to 14% on energy use and carbon emissions
(Source: Alfa Laval)

REDUCE EMISSIONS BY RECOVERY OF HEAT FROM THE EXHAUST AND/OR HT WATER, AND USE IT FOR COOLING OF THE ACCOMMODATION

By recycling the ship's thermal waste energy and utilizing it for heat-driven cooling, the ship's amount of fuel generated electricity used for cooling **can be reduced by over 90%.**

The COOL4SEA technology utilizes the ship's waste heat for cooling of Crew Quarters, Service Areas, Energy Storage System etc.
The technology is based on the unique and patented **"Active Spray Absorption"** cooling and developed specifically for use on ships.
The technology is **100% automatic** and adapts to variations in the temperatures and flows.

- Water is used as refrigerant.
- No additives.
- High operational reliability
- Practically no maintenance.

The only essential requirement is simply that the technology's key processes can be connected to three external circuits.

Control your consumption

Controlling of e.g. cooling pumps / ventilation fans' speed etc. using e.g. actual monitored temperatures, pressure, torque, volume or ...

Actual demand operation versus on/off approach

- Less fuel consumption causes less GHG.
- Less wear and tear.
- Less noise onboard.

FAYARD has installed several solutions for this purpose, all having a short return on investment for the Owner, and at FAYARD, we use flow control ourselves in our Dry Docks for filling and emptying.

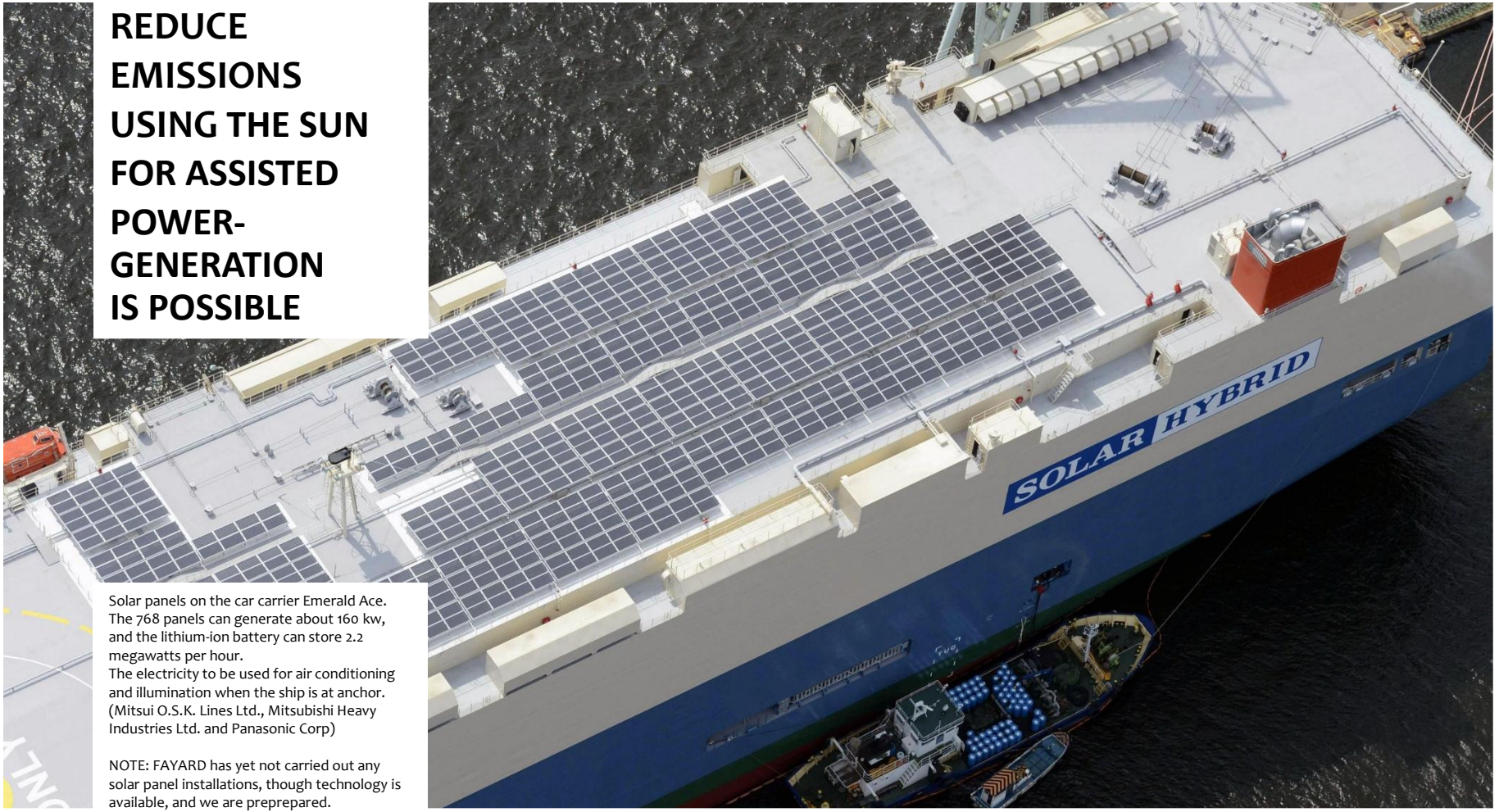
Saving potential is related to specific vessel and its major operational area.

Roughly the average saving potential is app. 300t CO_2 per vessel per year.

LED Lights

- Replacing the lights onboard with low energy consumers as e.g., LED lamps not reduces the power consumption reflecting lower GHG emissions
- LED lamps also reflect lower heat generation and by such reduces the HVAC requirement.
- Relevant for especially Cruise, Ferries, PCTC vehichles carriers, RoRo vessels etc.

REDUCE EMISSIONS USING THE SUN FOR ASSISTED POWER-GENERATION IS POSSIBLE



Solar panels on the car carrier Emerald Ace. The 768 panels can generate about 160 kw, and the lithium-ion battery can store 2.2 megawatts per hour.
The electricity to be used for air conditioning and illumination when the ship is at anchor. (Mitsui O.S.K. Lines Ltd., Mitsubishi Heavy Industries Ltd. and Panasonic Corp)

NOTE: FAYARD has yet not carried out any solar panel installations, though technology is available, and we are preprepared.

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Emission to Air reductions
NEXT is NOx-Limitation

#NOx
#SCR Catalysator
#DPF Particle filters

Selected Case Stories

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Selective Catalytic Reduction (SCR)

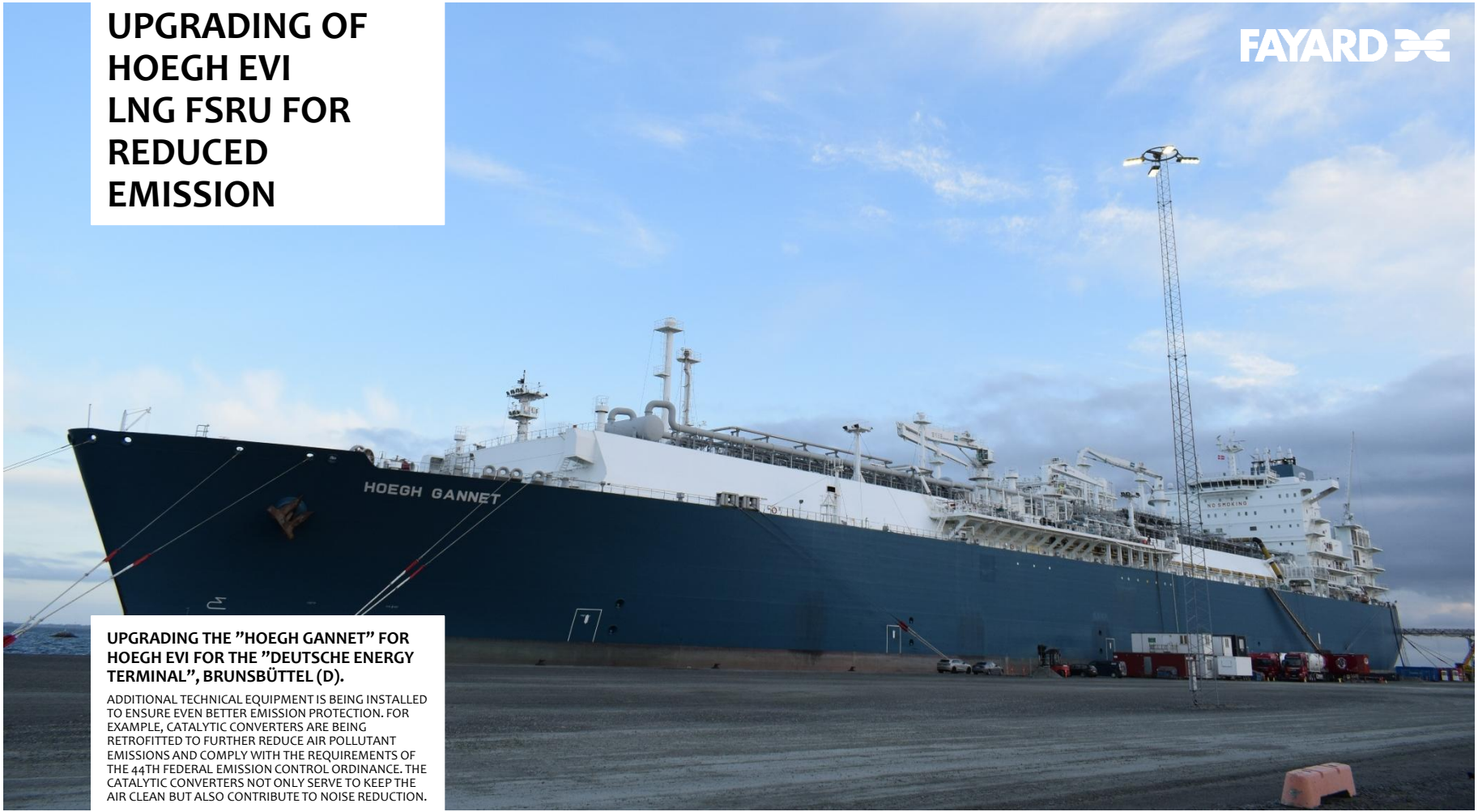
Emissions of nitrogen oxides (**NOx**) from diesel engines affect air quality. For ships trading in the North Sea and the Baltic Sea ECA areas the tier III requirements apply for marine diesel engines with an output of 130 kW or higher for ships constructed on or after the 1 January 2021 as well as for new engines installed in all ships on or after the 1. January 2021. The requirements further apply to major conversions e.g. if the output of the engine is changed outside the limits in the **NOx** approval or if the fuel injection system is changed. Replacement of an engine with an identical engine are exempted from the new requirements.

On a diesel vehicle, **NOx** can be reduced significantly by means of an SCR catalyst, where **NOx** reacts with ammonia to form nitrogen and water. Normally, a **NOx** reduction level of 85-95% can be reached.

Competent and Efficient SCR Retrofits at FAYARD:

- **12 SCR Retrofits at FAYARD**
- **Treating total MW of engine emissions: 60 MW**
- **Range of SCR systems retrofitted: 4.5MW - 30MW**
- **Most SCRs in one vessel: 4 pcs**
- **Fastest SCR retrofit: 4 days**
- **Average of all 12 SCR retrofits: 10 days**

UPGRADING OF HOEGH EVI LNG FSRU FOR REDUCED EMISSION



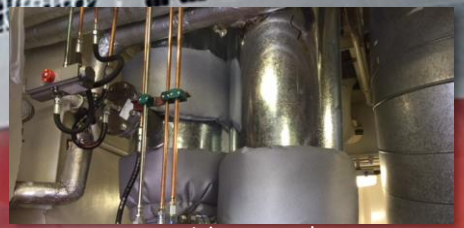
UPGRADING THE "HOEGH GANNET" FOR HOEGH EVI FOR THE "DEUTSCHE ENERGY TERMINAL", BRUNSBÜTTEL (D).

ADDITIONAL TECHNICAL EQUIPMENT IS BEING INSTALLED TO ENSURE EVEN BETTER EMISSION PROTECTION. FOR EXAMPLE, CATALYTIC CONVERTERS ARE BEING RETROFITTED TO FURTHER REDUCE AIR POLLUTANT EMISSIONS AND COMPLY WITH THE REQUIREMENTS OF THE 44TH FEDERAL EMISSION CONTROL ORDINANCE. THE CATALYTIC CONVERTERS NOT ONLY SERVE TO KEEP THE AIR CLEAN BUT ALSO CONTRIBUTE TO NOISE REDUCTION.

LOWERING GHG NOX-EMISSIONS BY

SELECTIVE
CATALYTIC
REDUCTION
SYSTEM

Urea tank with dosing unit and control system



Injector spools

SCR Unit no. 3 of 3

LOWERING GHG NOX-EMISSIONS BY

SELECTIVE
CATALYTIC
REDUCTION
SYSTEM

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HYBRID
Energy Storage Systems

for reducing emission to air

Selected Case Stories

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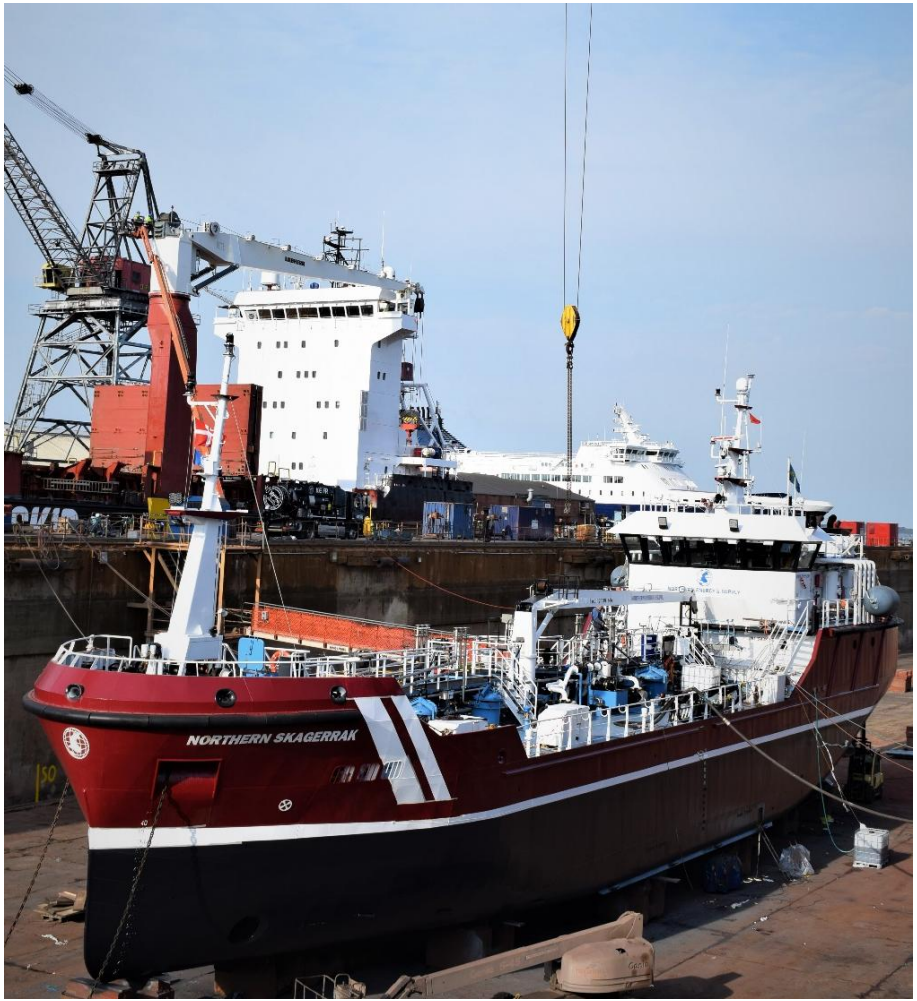
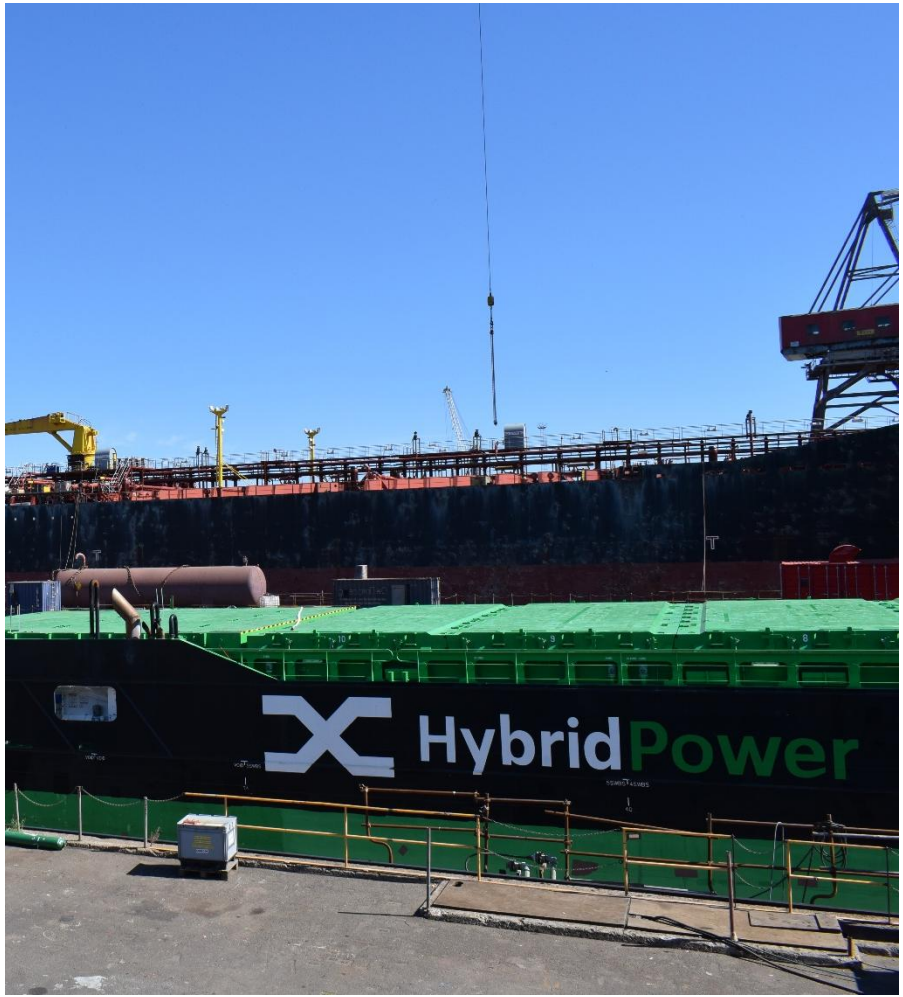


Parallel Hybrid Transmission

- The Northern Offshore Service's Bunkering Tanker is dependent on always having enough power for vessel operation in all terms
- Also, the vessels are required to be compliant to various port restrictions for emission as well as a Owner driven dedication to lowering the overall fleet footprint.
- At FAYARD we have installed Northern Offshore Services' newest hybrid solution:
  Parallel Hybrid Transmission (PHT). The PHT-solution consists amongst others of:
  - Esco Power PHT module installed between the diesel engine and the gearbox
  - Esco Power Hybrid Electrical Solution Package (HESP). HESP consisting of **efficient electric motors and generators**, electronic control and command system, control levers, screens, and software to benefit from various operation;
    propulsion modes: diesel – electric – automatic and additional modes as: generator–back up–cross feed.
  - ZEM Battery system
  - ZEM Charging system
  - Step up/down transformer

Hybrid Energy systems

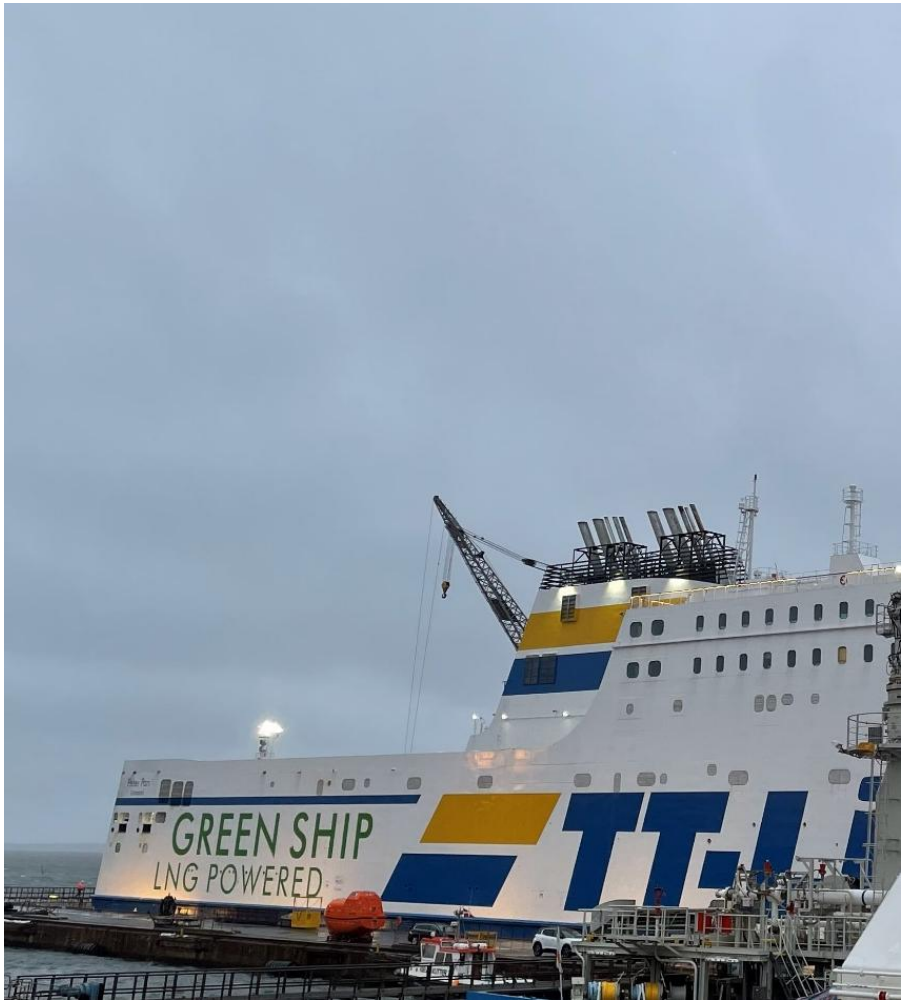
- The Northern Offshore Service Vessels are dependent on always having enough power for vessel operation in all terms
- Also, the vessels are required to be compliant to various port restrictions for emission
- At FAYARD we have assisted Northern Offshore Services for upgrading the vessels to HYBRID operation, Diesel and/or Electrical propulsion made possible.
- 4 x Volvo Penta D13-700 DST (Tier 3) engines
- 4 x Volvo Penta IPS900 Q2 props
- ESS made ready for to allow charging by shore power for emission free sailing



Hybrid Power Systems Example for inspiration

The Green Coaster Shipping's new vessel series for short sea general cargo is a cutting-edge vessel that emits up to 50% less CO_2 compared to the previous generation of ships, thanks to innovative features such as **shore power connectivity**, **significant battery installation**, and improved cargo intake. These advancements not only help reduce greenhouse gas emissions but also ensure quieter and cleaner operations while docked.

At FAYARD we have assisted the technical management , GoTa Ship Management with normal vessel maintenance activities only but find the vessel Hybrid Power System solution worth sharing for inspiration



Dual Fuel LNG/MGO System Example for inspiration

The ferry operator TT-Line's Green Ships have 5 stars score in the Clean Shipping Index. The LNG propulsion reduces emission: 98% less Sox, 82% less Nox, 93% less particles, 22% less co2 when running on LNG vs. MGO

- Low friction hull paint

- Fin Stabilizers with Eco Mode

- HVAC plant with Cold Recovery from coolness of LNG, Alaska Coolers for use of the coldness from the sea water, Heat Recovery System for absorbing energy from the out going warm air to warm up the ingoing air.

- Cabins have "Eco Mode" to minimize cabin consumption when the passenger is not in the cabin.

- Lights all over are LED reducing power demand by 80% and reduces heat generation as well.

- E-Car charging stations for passenger's e-cars

Plug-in Hybrid

Color Line's "Color Hybrid" – World Largest plug-in Hybrid Ship in operation from 2019

The ship has full battery operation in and out of the fjord to Sandefjord inner harbor. The ship therefore does not emit emissions to air from harmful environmental gases and
the noise is significantly reduced. At 100 m distance to the ship, the noise corresponds to a normal conversation between two people.

Passengers	2000
Crew	100
Cars	500
Batteries (ESS)	5MW equal to app 60min maneuvering at 0-12 knots
Power generation	4 diesel electrical engines & Waste Heat Recovery System
Drives	2 CP propellers (16.8MW Mcr)

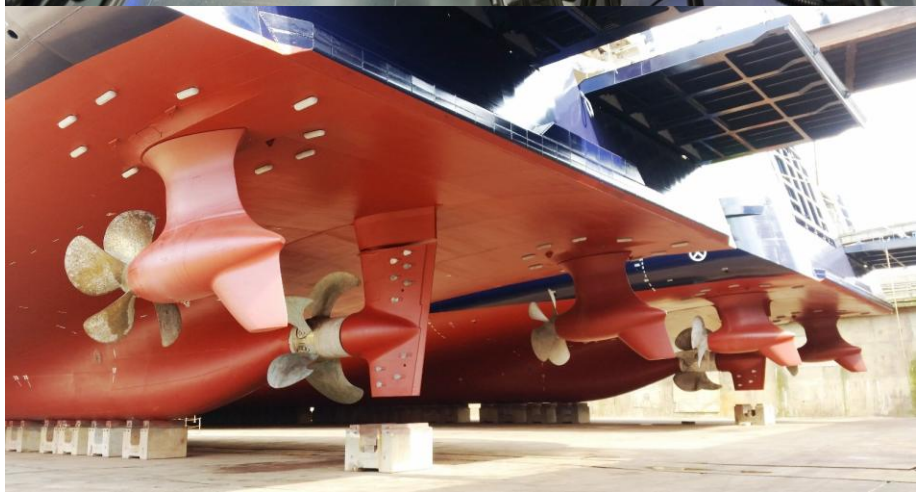
Onshore power plants for Shore Connections

The company has been a driving force in the establishment of onshore power plants in Norwegian ports. Oslo in October 2011. Kristiansand in 2014, Larvik in 2016, Sandefjord in 2017 and Kiel 2019

Total annual CO_2 emissions are reduced by about 8 000 tons CO_2. In addition, the local environment is saved for large point emissions of NOx, SOx and particulate matter, as well as a significant reduction in noise when the ships are docked.

Hybrid Energy systems

- Vessels are dependent on always having enough power for vessel operation in all terms
- When one single solution is not the right approach, the securing of the propulsion can be achieved combining more state-of-the-art solutions into one Hybrid Energy system
- At FAYARD we have teamed up with Owners in a wide range of system combinations to achieve the most suitable Hybrid Energy systems for specific vessels:
    - Emission hybrids
    - Fuel system hybrids
    - Power generation hybrids
    - Energy Storage Systems
    - And more to come



Electrical – Electrical Propulsion

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HYBRID Options

- Diesel - Emission controlled by closed loop Scrubbers
- Diesel – Electrical - Emission controlled by closed loop Scrubbers
- Electrical – Electrical - Zero Emission from the propulsion

Scandlines is the first ferry operator in the world introducing a large scale hybrid system, which can store excess energy in batteries on board.

Scandlines' visions of sustainable ferry services go even further. The ambition of the green strategy is ultimately **zero emission**; that is, a propulsion system for the ferries without any emissions.

A key goal is to optimize the fuel consumption of the two new ships for Rostock-Gedser – and to comply with applicable environmental requirements.

This is done by Scandlines' award-winning hybrid propulsion system and by exhaust gas cleaning solutions (closed loop scrubbers), which reduce the Sulphur emissions by at least 90 percent and thereby comply with the 2020 standards for Sulphur limits.

Battery power a condition for vessel contracts

DOF CARRIED OUT THE HYBRID CONVERSION OF SKANDI MONGSTAD AT FAYARD

DOF's Skandi Mongstad went to FAYARD for conversion early 2018.

The conversion for battery hybrid operation is now required under contracts awarded by Equinor: All vessels to be equipped with hybrid battery operation, and the possibility of shore power connection. This will allow the vessel to reduce fuel consumption while working in dynamic positioning mode.

Equinor says, that with an ambition of being a leader in carbon-efficient oil and gas production, it is focusing on reducing emissions from its logistics activities. The contract requirement will allow to focus on optimizing our operations to continuously improve operation, safety and energy efficiency.

Hybrid propulsion that combines electric drives, diesel generators and batteries can make offshore vessels more fuel efficient, reducing fuel consumption, CO_2 emissions and enhancing the level of redundancy onboard.

Batteries also smooth the load by compensating for peaks and troughs, as well as enhancing safety and reliability by providing back-up in the event of blackouts.

The ability of battery-based Energy Storage Systems to provide peak shaving, power smoothing and power for dynamic positioning operations, features are especially applicable to OSVs.

SHORE TO SHIP POWER

Alternative Marine Power (AMP):

FAYARD's SHORE CONNECTIONs

Reducing emissions to air when in Port, at lay-up and when at FAYARD.
In 2022 59.3% of the electrical power in Denmark was generated from the Wind and the Sun.

AMP made possible by FAYARD's solution

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ALWAYS

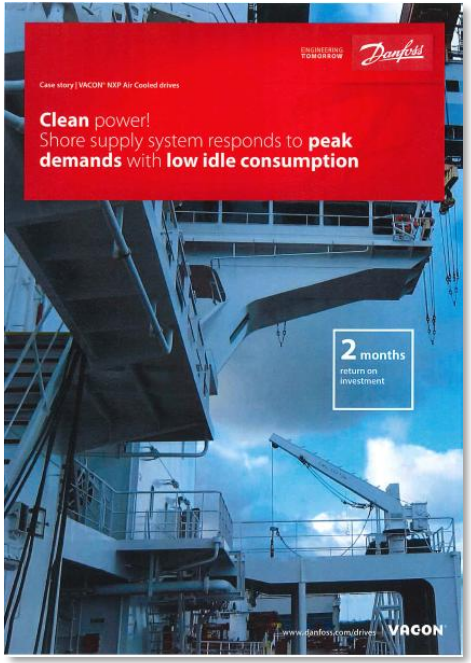
ALTERNATIVE MARINE POWER (AMP):

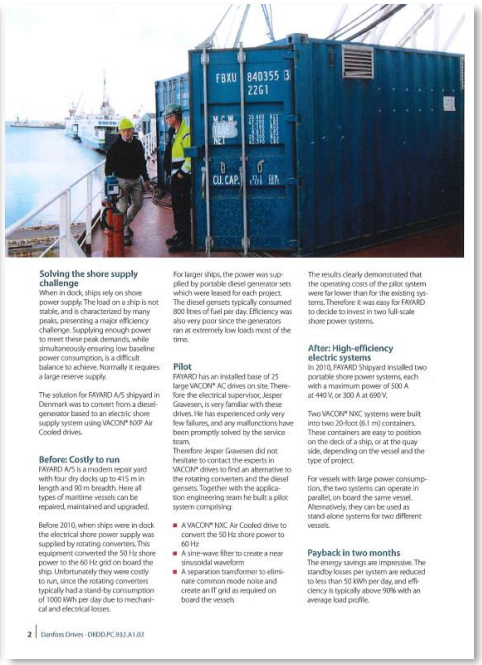
LOWER THE VESSEL'S EMISSION USING SHORE TO SHIP POWER WHEN IN PORT.

Innovative SHORE TO SHIP POWER – AMP

Most vessels have shore connecting equipment allowing power supply from ashore when in port or yard.
For the onshore supply of power to the vessel, FAYARD and Danfoss have developed the **"Clean Power"** shore supply system.
At FAYARD we naturally use the solution having 10 systems in use
2022: 59.3% of Provided electricity was generated in Denmark from the Wind and the Sun.

We sell, rent, lease the solution to Ports and Owners in need for the right Shore to Ship interface between the domestic onshore power grit and the vessel.





Innovative
SHORE to SHIP POWER

- **Green Energy solution at FAYARD**
  FAYARD has 10 mobile shore connecting power supply systems 300A/690V, 500A/440V & 1500A/440V with Vacon AC drives to provide electricity from the national grid to the app 130 vessels and platforms, yearly in dock or alongside at FAYARD.
- The Shore to Ship solution can supply the required voltage and the required frequency.

The green solution has many advantages:

- Proven Technology – has been in operation since 2009.
- Low exhaust emissions, great flexibility.
- Power, voltage and frequency,
- Lower costs of operation, noise and GHG-emissions.

- The Green Energy Shore Connections are incorporated in FAYARD's ISO14001:2015 certification.

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THE ESTABLIHING OF FUTURE FOSSILFREE POWER REQUIRES SIGNIFICANT MARITME INVOLMENT

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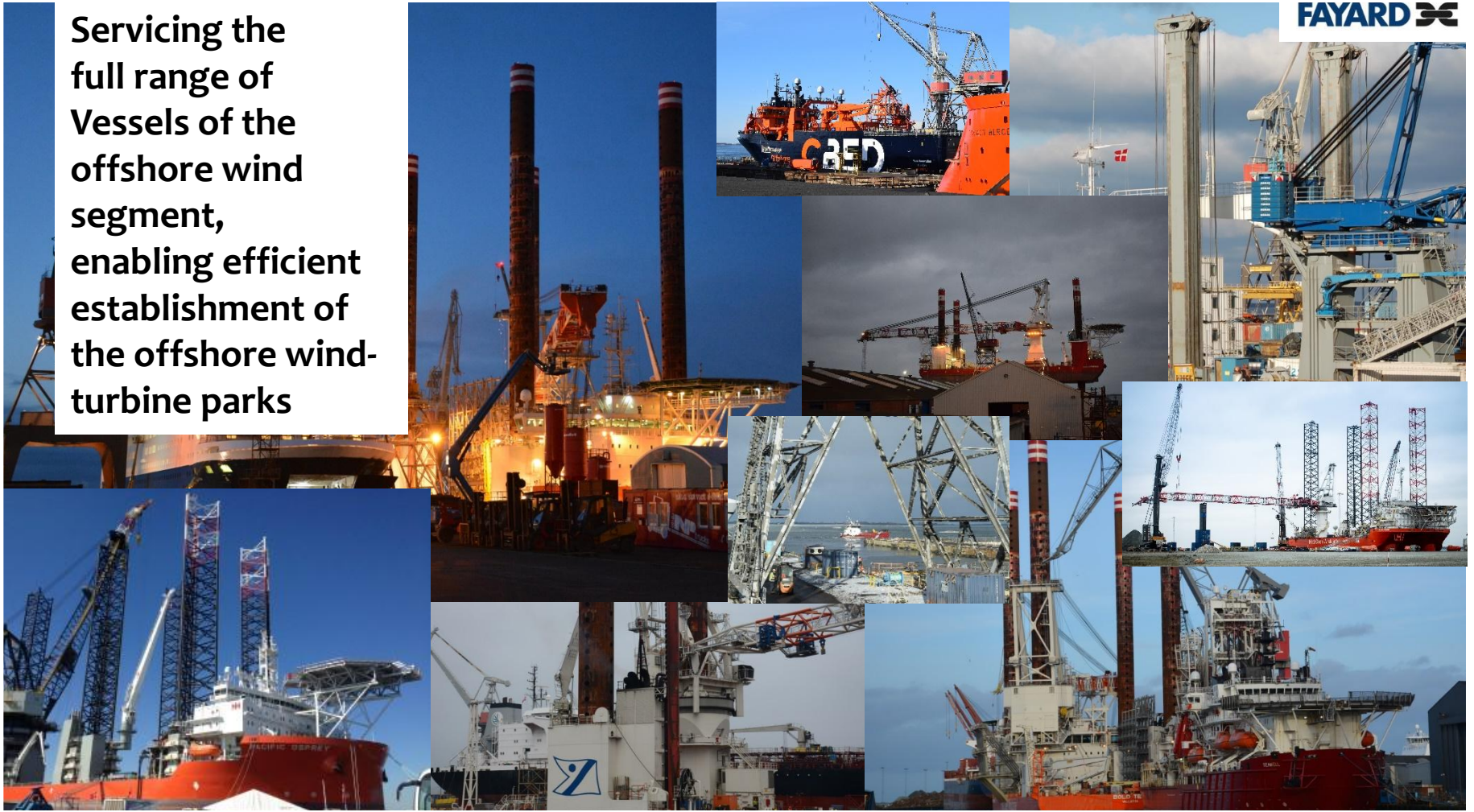
Servicing the full range of Vessels of the offshore wind segment, enabling efficient establishment of the offshore wind-turbine parks



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FUTURE FUELS

for reducing emission to air

Selected Case Stories

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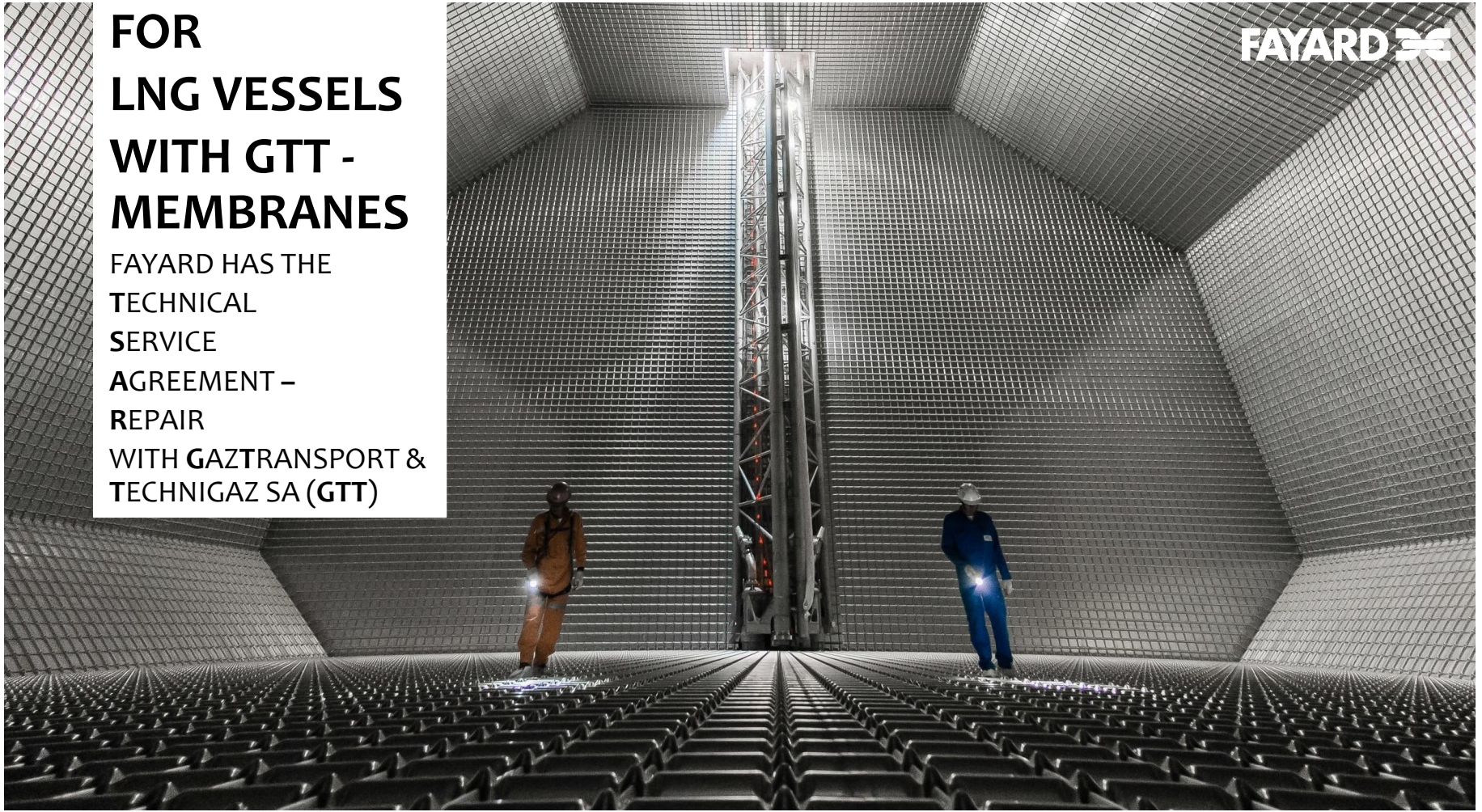
LOWER EMISSION PROJECTS

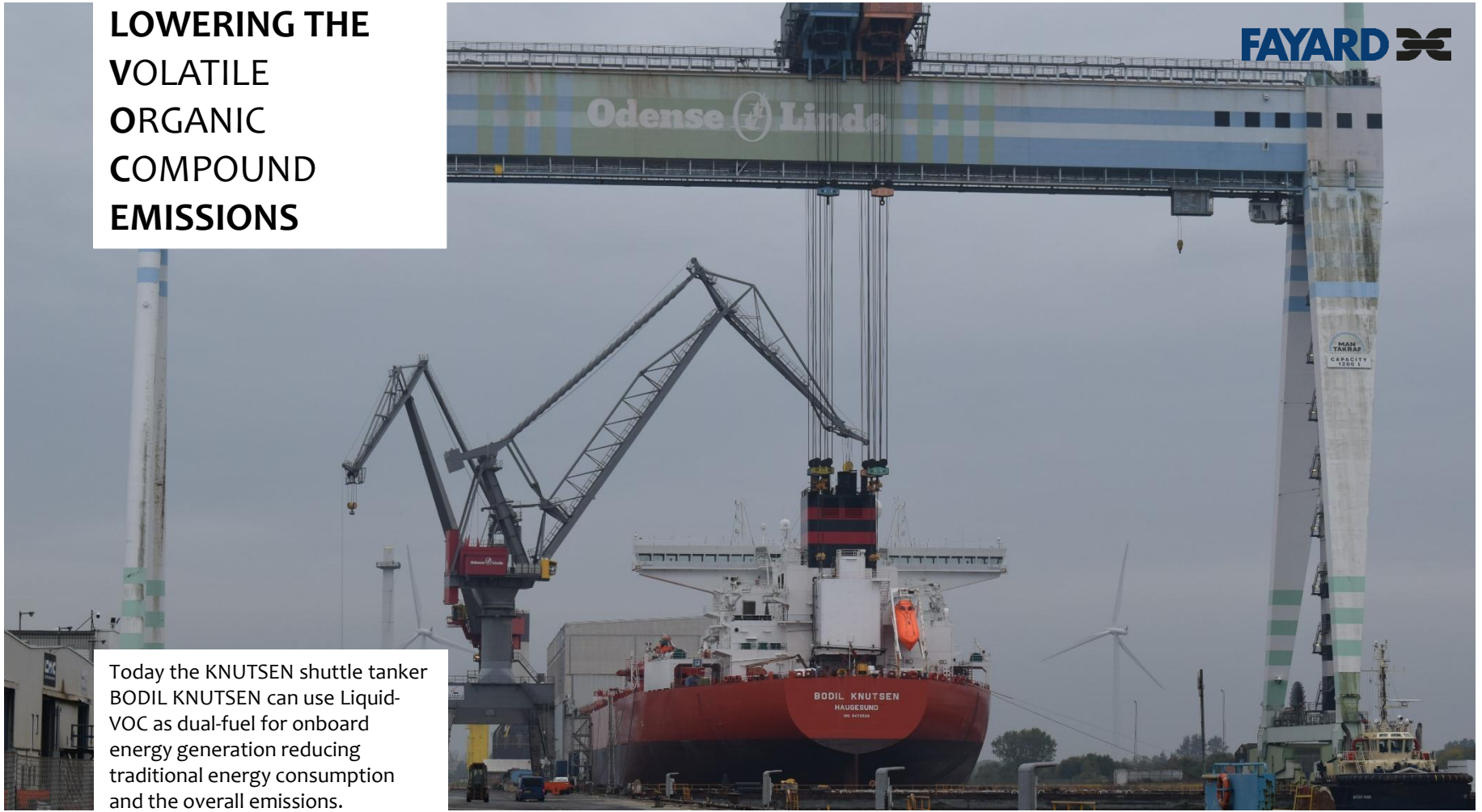
UPGRADING TO DUAL FUEL PROPULSION

FOR LNG VESSELS WITH GTT - MEMBRANES

FAYARD HAS THE
TECHNICAL
SERVICE
AGREEMENT –
REPAIR
WITH **G**AZ**T**RANSPORT &
TECHNIGAZ SA (**GTT**)



LOWERING THE VOLATILE **O**RGANIC **C**OMPOUND **EMISSIONS**



Today the KNUTSEN shuttle tanker BODIL KNUTSEN can use Liquid-VOC as dual-fuel for onboard energy generation reducing traditional energy consumption and the overall emissions.

Making Global Goals Local Actions

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Improvements Implemented

- We are fully committed to conducting our activities in an environ-mentally responsible manner. In our attempt to run a yard that is as environmentally friendly as possible we have amongst others
- Dry Docks are environmentally Closed Loop systems
- Hull Cleaning by Water Jetting as standard
- Shore Power availability reduces vessel emissions
- Tank Washing Water Receive System (Slop)
- Vessels in Inerted condition allowed
- Lower VOC Emission to air than allowed quota
- Waste Management System in operation
- All Chemicals are stores in Secured areas
- Recycling of scrap materials availability
- LED-bulbs where applicable
- EU-approved Ship-recycling facilities

MANAGEMENT SYSTEM

Certified to the ISO 9001, 14001 & 45001 standards by Bureau Veritas

SDG ACCELERATOR

FAYARD’s special focus on adapting to your requirements means that we are able to take on any roles that you would like us to.

We co-operate very efficiently with makers and owners in Energy Efficiency projects in order to make a clear split of the work in the project in advance, including the following scopes:

- **E**ngineering
- **P**rocurement
- **C**onstruction
- **I**nstallation
- **C**ommissioning

In doing so, we make sure that you will see your vessel handled effectively and that the project progress is fast, and your assets spends the least possible time in yard.

Naturally, quality, safety, and compliance are warranted by our various systems and work ethics.

FAYARD – Trusted to Perform

FAYARD

QUALITY ON-TIME ALWAYS

CERTIFIED MANAGEMENT SYSTEM

Bureau Veritas Certification

Fayard A/S

Kystvejen 100, 5330 Munkebo, Denmark

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

Docking and repair of ships and floating units.

Original cycle start date: 08-03-2012
Expiry date of previous cycle: NA
Certification / Recertification Audit date: 06-02-2024
Certification / Recertification cycle start date: 08-03-2024
Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on: 07-03-2027

Certificate No.: DK017692 Version: 1 Issue date: 13-02-2024

UKAS MANAGEMENT SYSTEMS 0008

Signed on behalf of BVCH SAS UK Branch

Certification Body Address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom

Local Office: Bureau Veritas Certification Denmark A/S, Oldenborggade 25-31, 7000 Fredericia

Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call: (+45) 77 311 000.

UKAS Certificate Template Single Site Rev 4.1 28 Aug 2023

1/1

9001:2015

Bureau Veritas Certification

Fayard A/S

Kystvejen 100, 5330 Munkebo, Denmark

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 14001:2015

Scope of certification

Docking and repair of ships and floating units.

Original cycle start date: 01-05-2017
Expiry date of previous cycle: NA
Certification / Recertification Audit date: NA
Certification / Recertification cycle start date: 01-05-2023
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 30-04-2026

Certificate No.: DK016696 Rev: 1 Issue date: 19-04-2023

UKAS MANAGEMENT SYSTEMS 0008

Certification Body Address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom

Local Office: Bureau Veritas Certification Denmark A/S, Oldenborggade 25-31, 7000 Fredericia

Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call: (+45) 77 311 000.

1/1

14001:2015

Bureau Veritas Certification

Fayard A/S

P-no. 1001710770, Kystvejen 100, 5330 Munkebo, Denmark

Bureau Veritas Certification Denmark A/S certifies that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standards detailed below.

Standard

ISO 45001:2018

Executive Order No. 1409 / 2020

Scope of certification

Docking and repair of ships and floating units.

Original Cycle Start Date: 13-06-2023
Expiry date of previous cycle: NA
Certification/Recertification Audit date: NA
Certification/Recertification cycle start date: 13-06-2023
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 12-06-2026

Certificate No.: DK016932 Version: 1 Issue Date: 13-06-2023

DANAK SYSTEM Reg.nr. 6502

Certification Office: Bureau Veritas Certification Denmark A/S Oldenborggade 25-31, 7000 Fredericia, Denmark

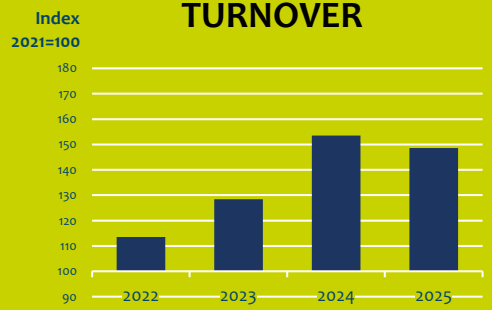
Further clarifications regarding the scope of this certificate and the applicability of the Management System requirements may be obtained by consulting the organization. To check this certificate validity, please call: (+45) 77 311 000.

1/1

45001:2018

THE NUMBERS

TURNOVER

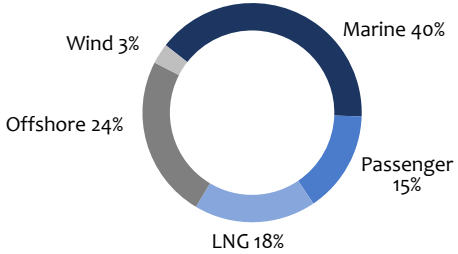


VESSELS PER YEAR (avg.)

122

2025 DOCK UTILIZATION

VESSEL SEGMENTS



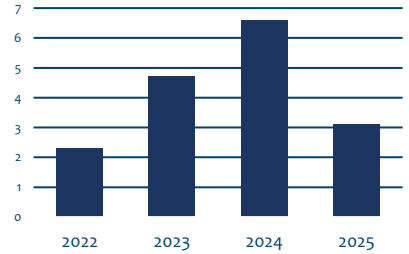
DELIVERED ON-TIME

100%

PART OF TURNOVER FROM RETURNING CUSTOMERS

94%

OSHA TRIR (the 200,000 hrs benchmark)



AVERAGE WORKING HOURS PER YEAR

DOCK AVAILABILITY

Meets requested service slot

96%

Quality - On time - Always

Thomas Andersen
CEO
ta@fayard.dk
+45 2073 6000

Morten M. Pedersen
Vice-CEO
mmp@fayard.dk
+45 2161 5530

Kristian E. Andersen
COO
ka@fayard.dk
+45 2161 5536

Jesper Gravesen
QHSE Manager
jg@fayard.dk
+45 2161 5535

Ivan S. Larsen
CCO
Sales & Marketing
isl@fayard.dk
+45 2161 5522

Lisa Brenneisen
Area Sales Manager
Central Europe
lb@fayard.dk
+49 151 6884 3524

Carsten Due
Senior Manager
Retrofit projects
cd@fayard.dk
+45 2161 5520

Jon Lohmann
CTO
jl@fayard.dk
+45 2161 5521

Kent Gorm Nielsen
Project Manager
kgn@fayard.dk
+45 2161 5571

Henrik Stammer
Project Manager
hs@fayard.dk
+45 2161 5523

Kenneth Clausen
Project Manager
kc@fayard.dk
+45 2161 5534

Peter Krogh Nielsen
Sales & Calculation
pkn@fayard.dk
+45 2161 5538

Michael Sommer
Sales & Calculation
ms@fayard.dk
+45 2161 5578

Kenneth Thomsen
Sales & Calculation
kt@fayard.dk
+45 2565 9145

Thomas G. Hansen
Project Manager
tgh@fayard.dk
+45 2565 9148

Casper K. Sørensen
Project Manager
cks@fayard.dk
+45 2161 5526

Benjamin Sørensen
Project Manager
blsj@fayard.dk
+45 2760 1153

Bo Grønkjær-Petersen
Project Manager
bgp@fayard.dk
+45 2565 9163