



2022 EuDA Workshop on “EU ETS & Fit for 55 Initiatives”

**REPORT ON THE EUDA WORKSHOP ON  
EU EMISSIONS TRADING SYSTEM &  
OTHER ‘FIT FOR 55’ INITIATIVES FOR DREDGERS  
WEDNESDAY 16 FEBRUARY 2022**

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**Executive Summary**

- **‘Fit for 55’** is a major policy and legislative package designed to deliver the **Green Deal’s** objective of reducing GHG emissions by at least 55% by 2030.
- The package combines 8 strengthened existing pieces of legislation with 5 new initiatives, setting **Carbon Prices, Climate Targets, Rules/Standards and Incentives**.
- The **pathway to climate neutrality** demands huge efforts from all industry sectors and may potentially provide huge opportunities. Climate neutrality will require additional **offsetting** (contribution from carbon sinks and carbon capture technologies).
- The current **EU Emissions Trading System** is a **‘Cap-and-trade’** system covering around 40% of the EU’s total greenhouse gas emissions in Europe (incl. some EFTA countries).
- The **basket of measures** applying to maritime aim at:
  - maritime transport’s contribution to EU climate and Paris Agreement efforts;
  - incentivising the sector’s decarbonisation (energy efficiency, low carbon fuels);
  - addressing market and economic barriers, technological barriers, ...;
  - coordinating at global level, ensuring fair competition & proper functioning of the EU maritime transport market.
- The extension of ETS to **shipping** will apply the same key principles and constraints applicable to the other ETS sectors (including emissions monitoring, purchasing and surrendering of ETS emission allowances per emitted GHG ton). In addition, there will be equal treatment on routes and flag neutrality for shipping.
- The extension of ETS to shipping will include ships covered under MRV, meaning that **dredging vessels are excluded from ETS scope** for the moment.
- **FuelEU Maritime** aims at:
  - providing regulatory predictability;
  - supporting global measures at IMO;
  - complementing ETS, ETD, RED and AFID (maritime basket of measures);
- **Clients can act like greening catalysts** (e.g. Ørsted), raising the environmental requirements and standards much higher than minimum legal requirements and creating a ‘demand pull’ on the private side. **Public procurement** requirements should also align to support the Green Deal objectives to **create a ‘demand pull’ on the public side**.

## INTRODUCTION

The purpose of the EuDA workshop was to understand the impact of the most relevant ‘Fit for 55’ measures on the dredging industry. The workshop focused on the Extension of the Emissions Trading System (ETS) to maritime transport and FuelEU, and discussed their potential strategic implications for the dredging activities within the context of the ‘Fit for 55’ legislative package and the broader framework of the European Green Deal.

The workshop aimed to

- develop a common understanding of ETS and Fit for 55 for dredging;
- and identify practical ways forward with EU & national administrations.

In order to set the stage, the European Commission was invited to present the “*Legislative Background and recent developments (Fit for 55)*”. DG CLIMA and DG MOVE respectively presented:

1. *European MRV, European ETS and dredging* (Mr [Tim Noël](#), DG CLIMA);
2. *FuelEU within Fit for 55 initiatives* (Mr [Ricardo Batista](#), DG MOVE).

Then the “*Greening Strategy of Dredging Clients*” was presented by Ørsted:

3. *What drives offshore dredging clients’ greening strategy ?*  
Mrs [Virginia Dundas](#), Ørsted ;

Finally, the EuDA members brainstormed and discussed together the main attention points for a common understanding of ETS and Fit for 55 for dredging.

## FIT FOR 55

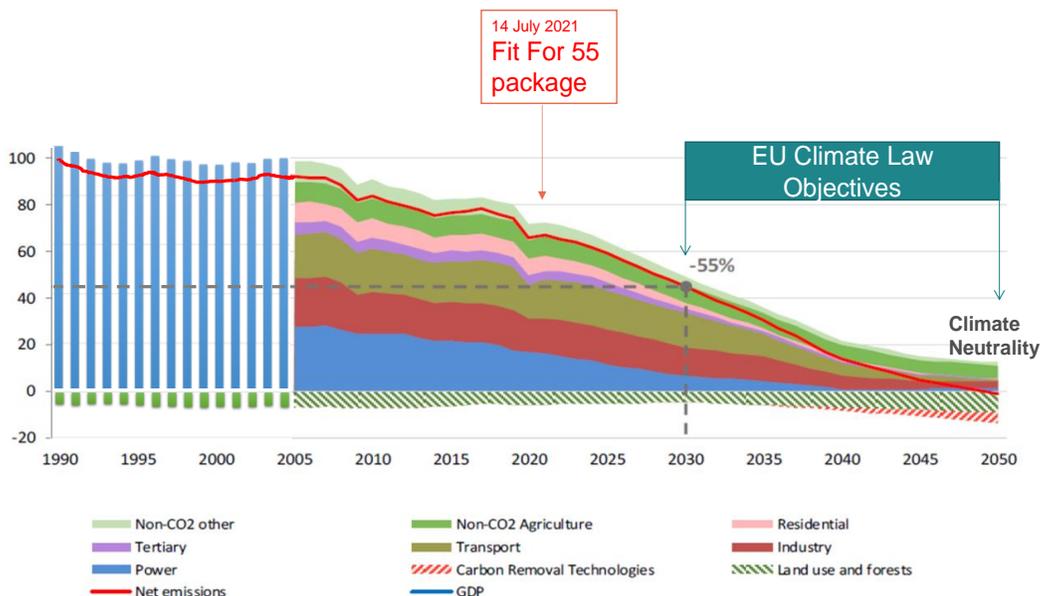
### 1. Legislative Background and recent developments

The ‘Fit for 55’ package was adopted on 14/07/2021 and is a major policy and legislative package designed to deliver the Green Deal’s objective of achieving a net reduction of greenhouse gas emissions by at least **55% by 2030**, compared to 1990 levels. But the Green Deal is not just about climate change but about sustainability and includes biodiversity improvement as well as the economic opportunities linked to the ‘greening’ of the European economy.



The pathway to climate neutrality demands huge efforts from all industry sectors that will face huge challenges but may potentially also identify huge opportunities. Climate neutrality will only be achieved in 2050 with additional contribution from carbon sinks and carbon capture technologies. However, the necessity for offsetting does not mean that some companies or sector are exempted from contributing to the reduction of emissions.

# EU pathway to climate neutrality



The package consists of a set of inter-connected policy proposals and initiatives on climate, energy (fuels), transport, buildings, land use (forestry) and taxation (trade), which all drive towards the same goal of ensuring a fair, competitive and green transition by 2030 and beyond, by applying the ‘Polluter-Pays’ principle. Where possible existing legislation is made more ambitious and where needed new proposals are put on the table.

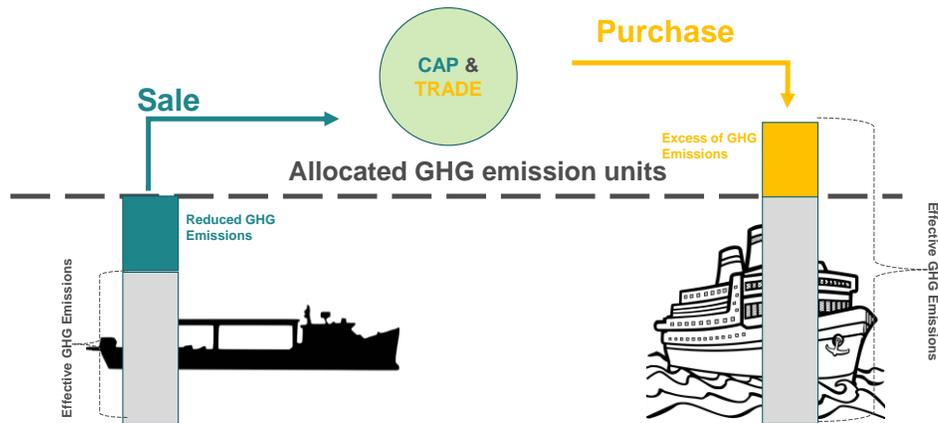
## Delivering on the 2030 commitment



Overall, the package strengthens **8 existing pieces of legislation** and presents **5 new initiatives**, aiming at setting Carbon Prices, Climate Targets, Rules/Standards and Incentives across a broad range of complementary policy areas and economic sectors.

## 2. EU Emissions Trading System

The EU ETS is ‘Cap-and-trade’ system operating in all EU countries plus Iceland, Liechtenstein, and Norway and covering around 40% of the EU’s total greenhouse gas emissions.



It works based on a cap being set for emissions under the scheme and the total amount being allocated across corporates covered. Participants can then trade these allowances, buying or selling credits to match their total allowance to their emissions.

ETS sets a quantity limit (cap) on emissions for installations and activities under the ETS. This overall cap is reduced each year.

A fixed number of ETS allowances (corresponding to the cap total amount for the covered sector) is issued and ETS participants monitor emissions and surrender allowances to cover all their annual emissions.

The main benefits include:

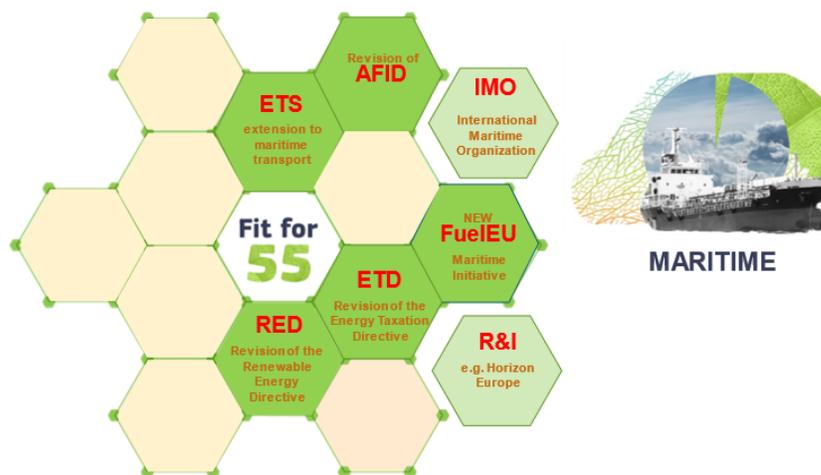
- capping and reducing GHG emissions;
- price signal;
- flexibility and cost-effectiveness;
- generate revenues to tackle climate change.

### 3. Waterborne Basket of Measures in ‘Fit for 55’

With regard to waterborne emissions, from maritime transport and inland navigation activities, the basket of measures in ‘Fit for 55’ has the following objectives:

- ☞ ensure that maritime transport **contributes** to the increased EU climate effort and to the Paris Agreement commitments;
- ☞ put in place the right **incentives** to drive the decarbonisation of the sector, which requires: improving energy efficiency (i.e. using less fuel) and greater use of renewable and low carbon fuels (i.e. using cleaner fuels);
- ☞ address various **barriers** through a basket of measures (market and economic barriers, technological barriers, lack of a strong enabling regulatory framework);
- ☞ **coordination at global level** & ensuring fair competition and the proper functioning of the EU maritime transport market.

#### Initiatives that concern waterborne transport (“basket of measures”)



This maritime legislative basket contains the following measures:

**AFID** - The Alternative Fuels Infrastructure Directive aims at stimulating the distribution of renewable and low carbon fuels (e.g. on-shore power supply for 90% of calls for container and passenger ships > 5000 GT).

**RED** - The Renewable Energy Directive targets the supply (production) of renewable fuels. RED counts energy used in international shipping towards the target and foresees a multiplier for renewable fuels of non-biological origin and advanced biofuels and biogas supplied to maritime.

**ETD** - Energy Taxation Directive foresees zero minimum rates for sustainable fuels (biofuels and biogas, low-carbon-fuels, renewable fuels of non-biological origin and advanced sustainable electricity) for 10-year transitional period.

**ESR** - Effort Sharing Regulation national targets continue to include domestic maritime.

**FuelEU** - FuelEU Maritime Regulation specifically addresses the technology issue related to fuels.

**ETS** - The EU Emission Trade System is a cap & trade system, for GHG emissions reduction and energy savings, to be extended to waterborne transport.

#### 4. Extension of ETS to Maritime

With specific regard to ETS, the same key principles and constraints that apply to the other ETS sectors will apply to maritime: shipping companies will have to

- ☞ **monitor** their emissions,
- ☞ **purchase** and
- ☞ **surrender ETS emission allowances** for each tonne of reported greenhouse gas (GHG) emissions.

Additional allowances will be derived from 2018-2019 data and adjusted every year with the same **linear reduction factor (4,2%)** that applies to the other sectors.

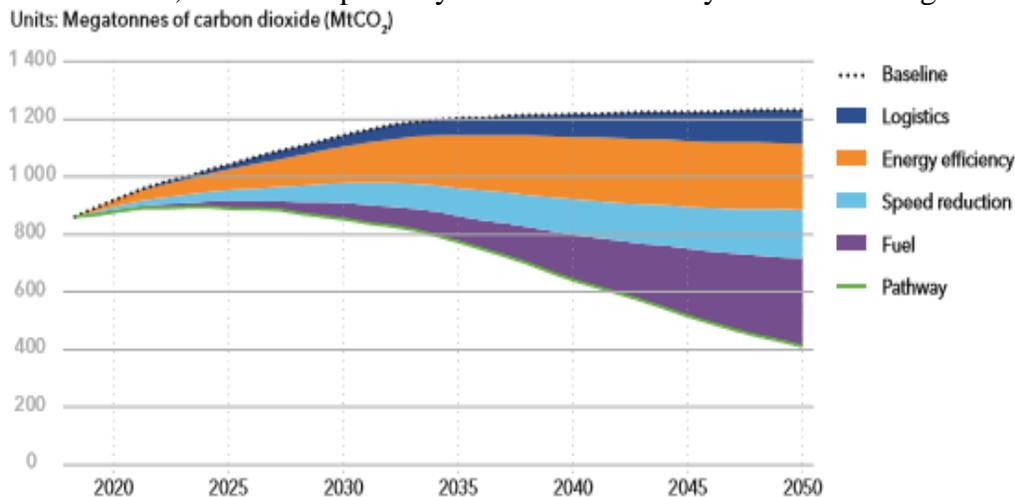
In addition for shipping, there will be **equal treatment on routes** and **flag neutrality**.

The ETS extension to maritime will be gradual, starting in 2023 with a 3-year phase-in period, during which the allowance surrendering will be as follows:

- 20 % of verified emissions reported for 2023
- 45 % of verified emissions reported for 2024
- 70 % of verified emissions reported for 2025
- 100 % of verified emissions reported for 2026 and after

The ETS extension to maritime will use the same CO<sub>2</sub> price across sectors, a yearly 'cap' on the total emissions covered by the system with a gradual reduction of cap over time and will attribute shipping companies to national administering authority to ensure compliance.

For maritime, the overall pathway to carbon neutrality is the following:



DNV-GL (2019) | Maritime Forecast to 2050

ETS for shipping builds on the existing **EU Monitoring, Reporting and Verification (MRV)** system, in terms of:

- responsible entities;
- covered ships (above 5,000 GT);  
*NB: the ships covered under the MRV Regulation exclude dredgers (and other working and sailing vessels);*  
**therefore, the ETS extension to shipping currently excludes dredging vessels** (as well as **working vessels** such as offshore supply vessels).
- covered GHGs.

The **revenues** collected from auctioning shall be used to **tackle climate change**, and to increase **funding of innovation**.

The **ETS-funded Innovation Fund** is one of the world’s largest funding programmes for the demonstration of innovative low-carbon technologies is already active for ships and ports.

The **EU ETS approach for shipping** is the following:

ETS geographical scope:

- ☞ **50%** of the emissions from **voyages starting or ending at EU ports**;  
*e.g. the ETS on a ship leaving China for Turkey and then EU will only apply to 50% of the last leg of the voyage (Turkey-EU).*
- ☞ including emissions when **ships are at berth in EU ports**; and
- ☞ all emissions from voyages **within the EU**;  
*NB the ETS applies per Member State, emissions outside the EU are not covered.*

While applying the **IMO principles of equal treatment on routes and flag neutrality**, this geographical scope is also consistent with the **UN FPCC principle of Common But Differentiated Responsibilities** as well as with the **Paris Agreement**. (recital 17).

Enforcement:

The penalties foreseen by EU ETS include: €100/tonne of carbon emitted (inflation linked), as applicable to other sectors of the economy, making up any shortfall and publication.

Additionally, ships could be **denied entry** to EU ports where a company fail to comply for **two or more consecutive years**.

Review:

Monitor the implementation of the rules applicable to the maritime sector, and take account of relevant developments at the level of the International Maritime Organization at latest before 2nd global stocktake (Sep 2028)

## 5. FuelEU Maritime Regulation

### Main Challenges

Today, the **maritime fuel mix** is composed of over **99% of fossil fuels**. To reach the climate targets in 2050, the maritime sector should transition towards close to 90% use of renewable and low-carbon fuels.

There is not a single technological option for the large variety of ship types and trades. Therefore, many operators are trapped in a “**wait-and-see attitude**”.

There is a need for considering the total cost of ownership (lifecycle approach-LCA) and for coordination between supply, distribution and demand. To break the chicken-and-egg issue, ‘Fit for 55’ is addressing all relevant aspects from **fuel production** (Renewable Energy Directive), **fuel distribution** (Alternative Fuel Infrastructure Directive) and **fuel demand** (FuelEU).

Moreover, **obligations must be imposed on demand** not only to promote investments in supply and distribution, but also to **avoid carbon leakage**. Consistency with green financing (**Green Taxonomy**) is also of the essence.

Finally, **long lead times** for fuel supply chains and fleet renewal: need for immediate, yet gradual action.

### Main Goals

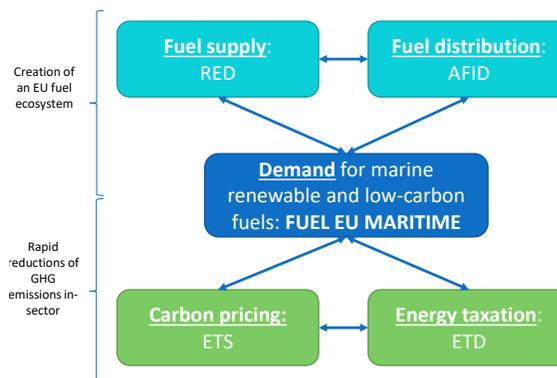
The FuelEU Maritime Regulation aims to

- ☞ provide **regulatory predictability**;
- ☞ support **global measures** at IMO, where discussions are ongoing;
 

The EU submission to IMO on a low GHG fuel standard reflects the FuelEU proposal. The EU proposal on guidelines on well-to-wake GHG emission is also coherent with the FuelEU Maritime approach;
- ☞ complement ETS, ETD, RED and AFID by specifically **addressing the technology issue** related to fuels, which may not be sufficiently incentivised by the ETS price signals in the short-medium term;



### FuelEU Maritime as part of Fit for 55



## Proposed Approach

FuelEU Maritime will focus on fuel demand, promoting the uptake of renewable and low-carbon fuels by maritime transport. It is complementary to the Energy Efficiency Technology-neutral approach: maritime operators will need to use an increasing proportion of zero and low carbon sustainable fuels, without obligation to use a specific technology.

FuelEU will impose maximum limits on the GHG intensity of the energy used on board (yearly average).

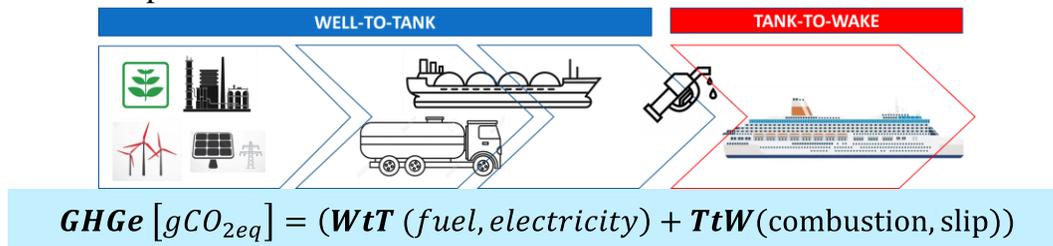
FuelEU Maritime will establish limits on the yearly average GHG intensity of the energy used on-board (CO<sub>2</sub>eq/MJ)

2025	2030	2035	2040	2045	2050
-2%	-6%	-13%	-26%	-59%	-75%

In line with ETS, the scope of FuelEU Maritime covers ships above 5,000 GT, intra-EU traffic + 50% international, EU ports.

In addition, FuelEU Maritime will require Zero-Emission at berth (promoting OPS and alternative zero-emission technologies). Zero-Emission at berth will be compulsory for container, Ro-Pax and passenger vessels as of 2030 (with some exemptions up to 2035).

CO<sub>2</sub>, methane and nitrous oxide will be included in a full well-to-wake calculation, that allows fair comparison of fuels:



There is a **flexibility mechanism** by banking or borrowing compliance surpluses: surpluses and (small) deficits can be carried over to the next year.

A voluntary and open pooling mechanism should reward/incentivise overachievers and encourage the rapid deployment of the most advanced options.

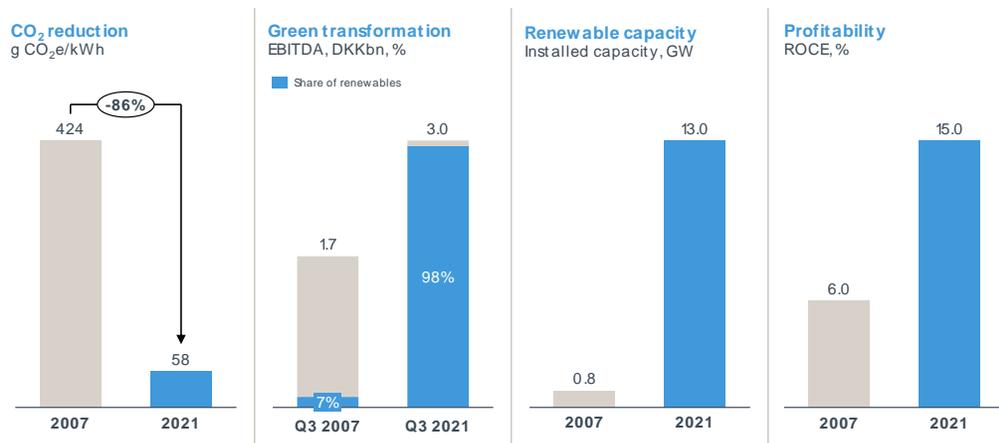
In case of compliance, companies are issued a valid **certificate of compliance**. Enforcement is done by checking this certificate of compliance. In case of non-compliance, there will be a proportionate dissuasive financial penalties. In case of disagreement with the verifiers, companies may request a review.

Finally, **Monitoring and Reporting** is based on MRV approach, with some additional data (e.g. calculation of Compliance Balance). During the year, companies will monitor the amount and type of energy in regulated journeys / port calls (using bunker delivery notes and OPS bills). Data is scrutinised by verifiers and reported to the Commission through an IT tool.

## 6. Greening Strategy of Dredging Clients

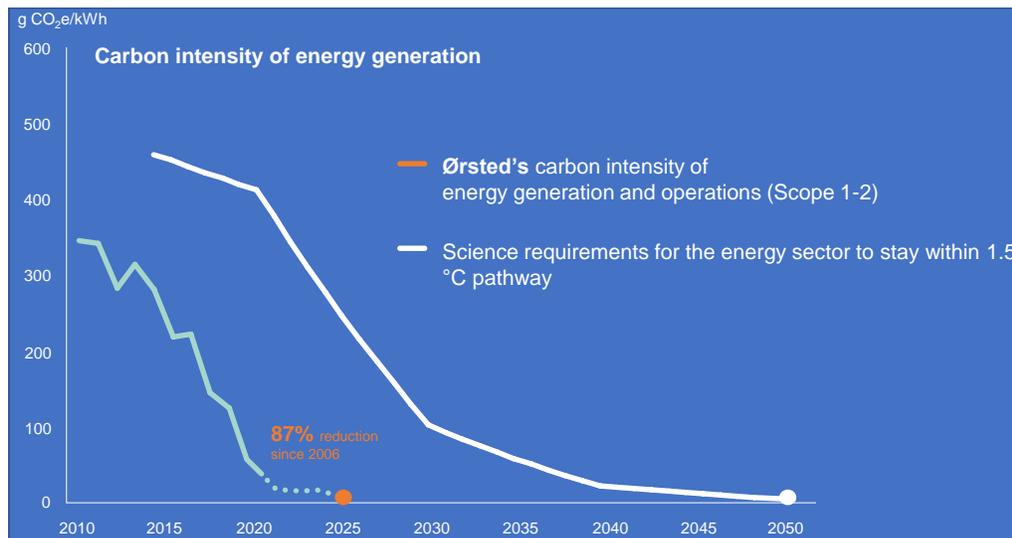
### What drives offshore dredging clients’ greening strategy ?

In over 15 years, Ørsted managed to successfully transform its business model into a sustainable one. The turnaround was slow but steady and difficult decision had to be made.



Source: Ørsted

Ørsted ambitions to become a global green energy major while ensuring a sustainable global green energy transformation.



Source: Ørsted

Ørsted’s decarbonisation path is based on science but is also well ahead of the timing and efforts that science has required to stay within the 1.5°C pathway. The company wants to be a catalyst for decarbonisation and after decarbonising its own business activities, its next industry challenges include

- 👉 decarbonising its full supply chain (including dredging) by 2040;
- 👉 improving biodiversity protection;
- 👉 creating shared value with local communities.

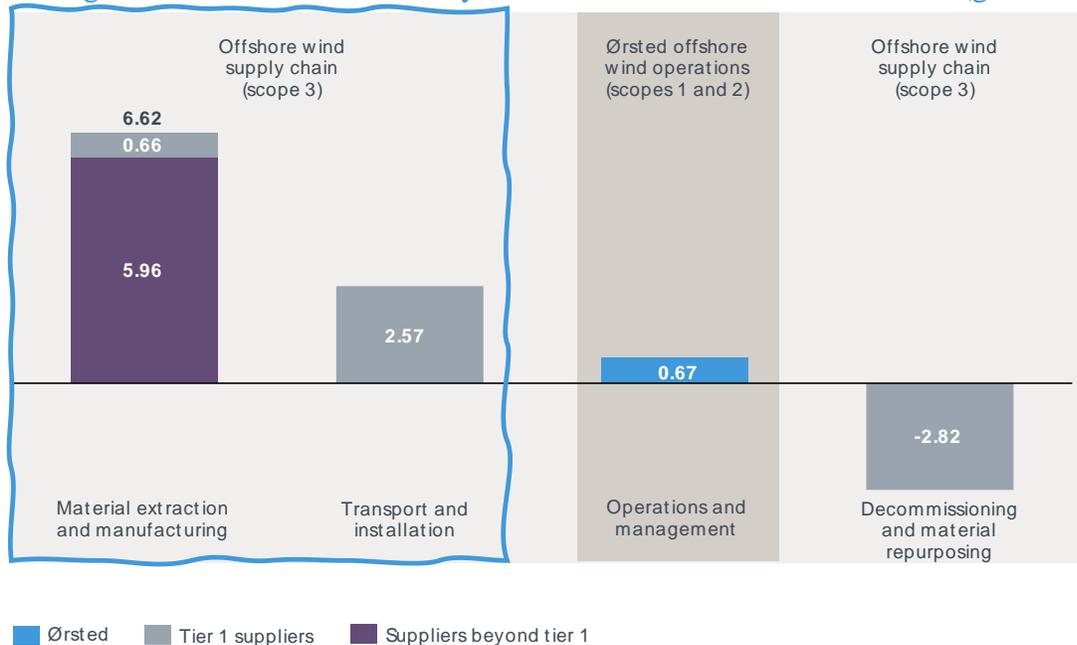
## Decarbonising the Supply Chains of Offshore Wind Farms

Ørsted analysed its own emissions across the lifecycle of their offshore wind farm.

This analysis revealed that emissions:

- ✓ arise from the materials;
- ✓ occur mainly beyond tier 1;
- ✓ steel and fuels account for majority of emissions.

### Average emissions across the lifecycle of an Ørsted offshore wind farm (g CO<sub>2</sub>e/kWh)



Source: Ørsted

In order to decarbonise the supply chains of offshore wind farms, Ørsted launched in January 2020 its **Supply Chain Decarbonisation Programme**, focusing on:

- ☞ the **most CO<sub>2</sub>-intensive parts** of the supply chain; and
- ☞ **strategic suppliers**, relevant for our future pipeline of projects (~60% of total proc spend).

The programme creates a ‘**demand pull**’ that requires from the suppliers to:

- ✓ **disclose their own emissions** and set science-based **carbon-reduction targets**;
- ✓ use **100% renewable electricity** in the manufacturing of wind turbines, foundations, cables, substations, and components;
- ✓ optimise their vessel fleet and develop **roadmap to power vessels with renewable energy**.

These requirements are much more stringent than what the European Commission is implementing, demonstrating the pioneering character of the company.

**EuDA**

Having celebrated its 25<sup>th</sup> Anniversary in 2018, the European Dredging Association (“**EuDA**”) was founded in 1993 as a non-profit industry organisation for European dredging companies and related organisations to interface with the various European Union’s (“**EU**”) Institutions and also some International Organizations (such as IMO, HELCOM or ILO). EuDA members employ approximately 25,000 European employees directly “on land and on board of the vessels” and more than 48,300 people indirectly (through the suppliers and services companies). The combined fleet of EuDA’s members counts approximately 750 seaworthy EU-flagged vessels.

Dredging activities are not well known by the wider public, but as a matter of fact, the European dredging companies, members of EuDA, are world market leaders with about 80% share of the worldwide open dredging market and a turnover of 8.2bn Euro in 2020. Although 70% of operations take place outside Europe, 90% of the returns flow back to Europe.

The Association assists its members with all kinds of requests related to dredging issues, presently strongly focusing on Social, Environmental, Technical and Trade issues. These issues are coordinated by the Secretariat and executed by its specialised working groups composed of experts from the member companies.

EuDA has registered as Interest Representative Nr 2492574893-58 under the EU transparency register. The Association will pursue its goals by endorsing policies to create fair and equitable conditions for competition; commits to respecting applicable national, European and international rules and regulations; commits to operating its fleet safely, effectively and responsibly (for more info [click here](#)).