EXECUTIVE SUMMARY

European Parliament

Research for PECH Committee – Workshop on the European Green Deal – Challenges and opportunities for EU fisheries and aquaculture – Part I: Decarbonisation and circular economy aspects for fisheries

Background

The European Green Deal (EGD) aims at transforming the EU into a resource-efficient, modern and competitive society. This can be achieved by making Europe carbon neutral by 2050. To facilitate a gradual transition, the EU must reduce its net greenhouse gas (GHG) emissions by at least 55% by 2030 from its 1990 levels. All industrial sectors and society, in general, will have to contribute to this endeavour, and the fisheries sector is no exception. This study sheds light on two fundamental aspects of EGD: the decarbonisation and the circular economy of European fisheries. It presents the policy framework, successful examples, observed challenges and some policy recommendations.

Decarbonisation of fishing fleet

The **decarbonisation of EU fisheries** will be achieved by having fleets consuming less fuel, using alternative energy sources, while fishing sustainable fish stocks. Over **20 solutions are presented** in this report as possibilities that could be applied by the fishing sector as part of its energy transition. Some of the solutions are targeting the (a) vessel's **strategy** (e.g. how the fishing vessel is operated), others, (b) the **vessel structure and** onboard **equipment**, and (c) energy efficient **fishing gear**, and the last group (d) focuses on **catchability**.

Defining the energy and activity patterns of a vessel is key to start outlining the **decarbonisation strategy** for any vessel. Nowadays, however, the selection of a solution is often made blindfolded. Installing an **energy monitoring device** and conducting **energy audits** should be, therefore, the first step in this process because they provide accurate information on how energy is consumed onboard, by which equipment, and their share during navigation and fishing phases.

The present document is the executive summary of the study on "*Workshop on the European Green Deal – Challenges and opportunities for EU fisheries and aquaculture – Part I: Decarbonisation and circular economy aspects for fisheries*". The full study, which is available in English can be downloaded at: https://bit.ly/3PJ8GL7

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Other successful implementations include the reduction of navigation **speed** for vessels presenting long navigation distances in their trips, the use of low emission or hybrid **engines**, alternative **fuels** and **antifouling coatings**, or a **bulbous bow**.

In terms of efficient **fishing gear**, the use of rolling wheel for trawl shoes or the so-called 'SumWing' have proven to be successful for beam trawlers. In contrast, for otter bottom trawls, the use of lighter netting designs, semi-pelagic trawl doors or remotely controlled doors are mostly recommended.

Despite the diversity of solutions, not all of them are suitable for every fishing vessel. **Training** is needed to facilitate this energy transition amongst fishers and other stakeholders, and mechanisms to improve the **knowledge transfer**.

Circular economy in fisheries

Circular economy in the fisheries sector has been mainly focused on solutions addressing **fishing gear smart designs**, innovative approaches to **reduce the dumping of litter** at sea, marine **litter collection**, and efficient **recycling** channels. While **circular design of fishing gear** has a lot of potential and a long way to go, it is still at an **early stage**.

In contrast, the development of **initiatives** that address the recovery, reuse, recycling and upcycling of **marine litter** and **end of life (EOL) fishing gear** has been more popular. The results are already being applied involving the **fashion industry**. Major fashion brands are starting to produce garments made from marine plastic or EOL fishing gear. This growing number of initiatives not only indicates a new market niche and a new **production model**, but also changes in society's **consumption pattern**.

However, **few circular examples applied to small-scale fisheries** have been found, apart from engaging fisheries in active or passive **fishing for litter (FFL) schemes**, which aim at retrieving marine litter from the sea on a paid or voluntary basis. **Port reception facilities** should be improved across Europe, and local or regional **management schemes** for end of life **EOL fishing gear** and **marine litter** are recommended to facilitate circular economy practices amongst the fishing sector and harmonise the approach towards a carbon neutral Europe.

Policy recommendations

The current implementation of decarbonisation solutions is on average very low in fisheries worldwide, also in EU fisheries. To guarantee an **effective energy transition** and to start **decarbonising the European fisheries sector**, the following policy recommendations can be given:

- Defining a **fisheries roadmap** towards **decarbonisation**.
- Revising **EU's definition of the term fishing capacity**, because adding more GTs or kW does not necessarily increase a vessel's ability to fish, but is a *sine qua non* condition for applying some of the energy efficiency solutions.
- Embracing a simpler and **more flexible processes for funding** application for investment or installation of energy efficient solutions
- Promoting the **implementation of a mixture of energy efficient solutions** due to there is no 'one-fit-all' solution applicable to all fishing vessels and fishing modalities.
- Promoting the installation of **energy monitoring devices** in all fishing fleet segments.
- Making the **EU Data Collection Framework** include detailed data on energy consumption of fisheries to be reported by energy monitoring devices.

- Encouraging the inclusion of fishing vessels of different sizes in the **energy efficiency policy framework of the IMO** (MARPOL 73/78).
- Establishing an **EU cooperation platform** for more **energy efficiency in fisheries**, exchange of success stories, promote dialogue and cooperation, and facilitate the transference of information and sustainability awareness.
- Promoting the development of **seafood labels** or **eco-certifications** incorporating the carbon footprint or Fuel Use Intensity (**FUI) score of the fishery**[1] on food products.

Circular economy initiatives in the fisheries sector have been mainly focused on recycling of EOL fishing gear and marine litter into garments or accessories. However, this is short-sighted as circular economy implies a wider consideration, which can promote job creation and additional income. Policy recommendations to **implement the circular economy in fisheries** are:

- Defining a sectoral **roadmap** to develop the **circular economy in fisheries' value chain**.
- Outlining an agreed **definition for circular fishing gear** including targets for recycled content within the gear and associated legislation to enhance the design but also the implementation of circular gears onboard the fishing fleet.
- Establishing a standardised approach to **mark and label the polymers and materials composing the fishing gear** to facilitate its final recycling.
- Defining a **standardised collection, sorting, conditioning and recycling scheme** for EOL fishing gear and marine litter at EU level. This implies: making **port reception facilities** for EOL fishing gears and marine litter **ubiquitous in all European ports** regardless their size; including this type of waste in established **waste treatment streams**; and adding the collection, conditioning, sorting and recycling of marine litter and EOL fishing gear as part of the **service contracts** of port waste managers, so that fishers would not have to pay an additional fee for the management of such waste.
- Establishing **financial support programmes** that promote the expansion of **fishing for litter** (FFL) schemes across the EU.
- Setting **national minimum collection rates** for marine litter and end of life (EOL) fishing gear.
- Developping a **reporting system**, which is appropriate for local fishers, to document the extent and location of abandoned, lost or otherwise discarded fishing gear (ALDFG), marine litter collected by fishing for litter (FFL) activities and end of life (EOL) fishing gear discarded in port.
- Establishing an **extended producer responsibility (EPR) scheme for fishing gear** with financial schemes and support, and with defined responsibilities.
- Establishing mechanisms to **improve the logistics** associated with the full value chain for the recycling of marine litter and end of life (EOL) fishing gear across Europe.
- Improving the **collaboration, cooperation, and dialogue amongst stakeholders** and between and within regions to establish responsibilities regarding the management for these waste types.

[1] Fuel Use Intensity (FUI) score of a fishery = fuel use per kg of landed fish

- Promoting and financing **research and innovation** on circular economy in fisheries, e.g. circular design of gears, alternative management systems, conditioning and recycling technology, smart logistics, etc., by **supporting pilot projects**, and **synergies** between stakeholders (e.g. the fishing sector, businesses).
- Incentivising the **development of local circular solutions and projects** embracing the cooperation and partnerships between actors of the fishing industry's value chain, FLAGs, local waste managers, recycling companies and other entrepreneurs.
- Promoting the **market for recycled fishing gear** and marine litter by, for example, fostering the green procurement of marine plastic-derived products.
- Promoting the **traceability of products** made of marine plastic or other fishery-related wastes by, for example, establishing a label to define plastic of marine origin (link to digital product passport).
- Increasing the **awareness raising and training skills activities** for reducing the marine litter contribution from fisheries and increase the participation in circular solution practices.

Further information

This executive summary is available in the following languages: English, French, German, Italian and Spanish. The study, which is available in English, and the summaries can be downloaded at: https://bit.ly/3PJ8GL7

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