# Contribution to the Call for Evidence
# Energy transition of the EU Fishing Sector

## Context

Fishing is an energy-intensive activity that produces vast amounts of greenhouse gas (GHG) emissions. It has been estimated that fishing vessels released approximately 207 million tonnes of $CO_2$ into the atmosphere in 2016,[1] and yet the marine fishing industry is excluded from global assessments of GHG emissions.[2] In addition to releasing hugely significant amounts of GHG emissions into the atmosphere, fishing activities also aggravate the climate crisis by:

- Contributing to overfishing;[3]
- Degrading marine ecosystems which are known to be carbon sinks, for example through the use of bottom-trawling techniques;[4]
- Directly removing around 80 million tonnes of fish annually, which contribute to 16% of ocean carbon flux;[5]
- Perpetuating unsustainable global supply chains and undermining food security, specifically through the capture of small fish as food for farmed fish, or by catching and transporting fish across the world for processing and then again for sale.

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[1] Greer, K., Zeller, D., Woroniak, J., Coulter, A., Winchester, M., Palomares, M.D. and Pauly, D., 2019. Global trends in carbon dioxide (CO2) emissions from fuel combustion in marine fisheries from 1950 to 2016. *Marine Policy*, *107*, p.103382.

[2] Parker, R.W.R., Blanchard, J.L., Gardner, C. *et al.* Fuel use and greenhouse gas emissions of world fisheries. *Nature Clim Change* **8,** 333–337 (2018). https://doi.org/10.1038/s41558-018-0117-x

[3] Sumaila U.R. and Tai, T. (2020), End overfishing and increase the resilience of the ocean to climate change. Front. Mar. Sci., 15 July 2020, Sec. Marine Fisheries, Aquaculture and Living Resources. https://doi.org/10.3389/fmars.2020.00523

[4] Epstein, G. et al. (2021) The impact of mobile demersal fishing on carbon storage in seabed sediments. Global Change Biology, Vol 28, Issue 9. https://doi.org/10.1111/gcb.16105

[5] Saba, S.A. et al, (2021).Toward a better understanding of fish-based contribution to ocean carbon flux, Limnology & Oceanography, Vol 66, Issue 5, 1639-1664, https://doi.org/10.1002/lno.11709

In light of the current climate crisis, and as every economic sector needs to contribute to the collective efforts to reduce greenhouse gas emissions, decarbonising the fishing sector must become a priority for the European Union.

In addition, the war in Ukraine has brought into sharp relief the heavy dependency of the EU on Russian fossil fuel energies, highlighting the vulnerabilities that this singular dependency creates, and making it even more urgent to move away from these resources.

The transition to cleaner energy sources required by the European Green Deal and in the legislation being developed to make that transition possible (including the revision of the Energy Taxation Directive)[6] offers an opportunity to decarbonise the fishing sector in the European Union (EU). Indeed, in order to align itself with the objectives of the EU Green Deal and the EU's obligations under the Paris Agreement, the fishing industry needs to diminish its carbon footprint and switch to new and clean sources of energy.

However, for the time being, there are no objectives, action plans nor even has there been public discussion in the EU about decarbonising the fishing sector. For example, the current proposal for a revised EU Emissions Trading System (ETS)[7] excludes fishing vessels from its scope, thereby reducing the incentives for fishing vessels to move away from fossil fuels and start the energy transition.

## Regulatory background

The world's fishing fleet is primarily powered by diesel engines that operate on distillate fuels. Burning these oils releases vast amounts of greenhouse gas emissions, including carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide (N2O), as well as air pollutants. The fishing industry is currently heavily dependent on fossil fuel[8] with no plan to transition to green fuels.

In a bid to reduce the EU's reliance on fossil fuels and to engage in an energy transition, the European Commission launched the European Green Deal in 2020. The Green Deal calls for a 90% reduction in GHG emissions in transport and aims to safeguard ecosystems and biodiversity.[9] The landmark policy proposal of the European Green Deal was the EU's Climate Law, which committed the Union to emissions reduction of 55% by 2030 and climate neutrality by 2050 in *all* sectors of the European economy.[10]

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[6] Taxation and Customs Union. n.d. *Revision of the Energy Taxation Directive*. [online] Available at: <https://ec.europa.eu/taxation_customs/green-taxation-0/revision-energy-taxation-directive_en> [Accessed 2 June 2022].

[7] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0552.

[8] Report: Climate Impacts & Fishing Industry Profits From EU Fuel Tax Subsidies - Stop Fossil Fuel Subsidies

[9] European Commission - European Commission. 2022. *A European Green Deal*. [online] Available at: <https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en> [Accessed 13 May 2022].

[10] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'), OJ L 243, 9.7.2021, p. 1;

Despite this very ambitious policy background, there is no decarbonisation strategy or roadmap for the fishing sector. Even worse, the sector relies on indirect fossil fuel subsidies to operate: a fuel-tax exemption, made mandatory at the EU level, through the Energy Taxation Directive (ETD) as well as an exemption from the EU's Monitoring, Reporting and Verification Regulation for shipping vessels and the upcoming Emissions Trading System and FuelEU Maritime Regulation.

A report released by the European Court of Auditors on 31 January 2022[11] showed that energy taxation and carbon pricing can support efforts to combat climate change. It underlined that current tax levels do not reflect the extent to which different energy sources pollute. It also highlighted that even though renewable-energy subsidies almost quadrupled over the 2008-2019 period, fossil fuel subsidies "*have remained relatively constant over the last decade despite commitments from the European Commission and some Member States to phase them out".*

In this context, DG Mare's consultation on the decarbonisation of the fishing sector offers the opportunity to align with the EU's climate objectives and the Polluter Pays Principle. This will not happen without the elimination of all fossil fuel subsidies (exemptions, tax advantages and rebates). This was recognised by the EU itself in its 8th Environmental Action Programme (EAP),[12] which called for the phasing out of environmentally harmful subsidies, and in particular fossil fuel subsidies. Most recently, at the global level, Heads of State committed through the Glasgow Climate Pact to eliminate "inefficient" fossil fuel subsidies, recognising that if this does not happen, all other climate actions will be negated.

The successful result of this consultation is clear: a roadmap for the decarbonisation of the fishing sector including through the phase out of harmful subsidies and obligations to use greener fuels.

## Recommendations

On the switch to sustainable energy sources, fishing vessels are much smaller than cargo vessels, so there is much more technology available to decarbonise them, including the most efficient energy carrier of electrification. However, without clear regulatory targets, the sector will be a technology taker from the shipping industry.

### 1- Regulatory framework

The existing regulatory framework is not sufficiently developed to drive decarbonisation of the fishing sector. The following adjustments would need to be made to drive the decarbonisation of the sector:

1. Publish a roadmap for decarbonisation of the EU's fishing sector

[11] European Court of Auditor report, Review 01/2022: Energy taxation, carbon pricing and energy subsidies

[12] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022D0591

Fishing is bound to the EU's Climate Law to decarbonise. It will not do this without a clear regulatory framework; piecemeal funding for some green fishing boats will not lead to a comprehensive and fair transition. DG Mare must therefore urgently draft a roadmap to chart the route to decarbonisation. This plan must detail regulatory measures to ensure the following: obligations to use green fuels; absolute emissions reduction targets in the short term for example through energy efficiency measures; and implementation of the polluter pays principle to make fossil fuels more expensive. The plan should look into all EU fishing vessels that arrive or depart from EU ports and a variety of policy measures including cap and trade measures, tax measures, clean energy levies, command and control measures and subsidies for green technology. Financing will also be important but is secondary to regulatory measures that ensure a level-playing field and guarantee absolute emissions reduction.

The Plan should include the utilisation of Article 17 of the Common Fisheries Policy, and propose that access to fisheries resources (quota, days at sea or area) is dependent on meeting environmental criteria such as minimum carbon cycle impact, minimum seabed impact and efficiency without subsidies, to accelerate the transition to low-carbon and low-impact fishing.[13]

2. Beginning consultation work to include fishing vessels in the MRV, FuelEU Maritime and ETS in 2024

The current proposals to transition the shipping sector to clean fuels (FuelEU Maritime) the revision of the ETS does not encompass fishing vessels. However, there will be a review of both the EU's Monitoring, Reporting and Verification (MRV) and ETS in the next couple of years to look at including ships not already covered by the legislations. The ETS is the EU's landmark and most-efficient climate tool and there is no valid justification for the exclusion of the fishing sector. That tool will be particularly important for industrial-scale vessels fishing in distant waters that may find a way to refuel in third countries and therefore escape the obligation to pay the higher fuel costs as a result of the ETD. DG Mare must therefore start planning of the inclusion of fishing vessels in those legislations now.

3. Consider the adoption of an energy transition levy

Another policy option is for the EU to introduce an energy transition levy that would exclusively be dedicated to financing this transition. This levy should follow the design and decision making process of the solidarity contribution that is being proposed currently at EU level.

Between the fuel taxation, $CO_2$ emissions payment and a possible energy transition levy at EU level, there could be a policy framework that clearly supports the energy transition, rewards those fishers who adapt their behaviour or make the necessary investments and

[13] Our Fish & Low Impact Fishers of Europe (2021). How the EU fishing fleet can become low environmental impact, low carbon and socially just. https://our.fish/publications/report-how-the-eu-can-transition-to-low-environmental-impact-low-carbon-socially-just-fishing/

penalises those fishers who are continuing the status quo of high fuel consumption and destructive fishing practices.

4. Remove the fuel tax exemption from the ETD

It is clear that the revision of the Energy Taxation Directive alone will not be enough to support and direct the fishing industry towards decarbonisation as it will only address the issues of fuel price and taxation. In addition, the current Commission proposal only envisages to apply a rather small percentage of taxation to vessels operating inside EU waters, excluding de facto from its scope industrial fishing vessels which operate outside EU waters and which are generally the biggest GHG emitters.[14] Therefore, while we are supportive of the proposal of the Commission to put an end to the fuel tax exemption for fishing vessels, we recommend that the level of taxation is increased to equal that of vehicles subject to road tax and that the scope of the taxation is extended to all vessels entering and leaving EU ports (including those that fish on the high seas or in distant waters).

5. Encourage EU Member States to adopt GHG emission reduction measures at the national level

The Commission should also support and press all EU Member States to adopt national GHG emission reduction measures that apply to the fisheries sector. These measures should analyse how to improve the capacity of the marine environment to store carbon. For example, from 2020, Norway introduced a CO2 tax for vessels refuelling in nearshore waters. Some vessels were able to apply for a compensation for the CO2 tax according to their share of the landing value of their catch, to facilitate the transition to a polluter pays scheme; the scheme aims to reward the most efficient vessels due the relation between utilised fuel and landing value for the catch, with inefficient vessels likely to receive a lower share of the total sum of compensation. On 1 January 2022 Norway further introduced an amendment so that bunkering abroad would not qualify in the compensation scheme. Denmark is also in the process of introducing a CO2 tax for the fishing industry, although their scheme is less advanced than Norway's.

Similar to Norway, a taxation model could be developed, according to which those who produce more GHG emissions and have a greater impact on the capacity of the ocean to store carbon should be taxed more whilst those who emit less GHG emissions and have fishing techniques which impact less the ability of the ocean to store carbon should be taxed less or get tax rebates.

6. Ensure ports and harbours do their part in the green transition

Ports must play their role in the transition. That means implementing strong legislation to

[14] Reference to Our Fish Study

ensure the availability of clean energy carriers, starting with OPS (onshore power supply) to eliminate port pollution. DG Mare should implement rules for OPS and electrification in fishing ports as well as prepare to include this fishing vessels and ports in the Alternative Fuels Infrastructure Regulation (AFIR).

## 2- Funding

A strong regulatory framework will ensure the fishing sector transitions altogether to a clean future. In support of these aims, funding will also play an important role in supporting first-movers.

The current European Maritime Fisheries and Aquaculture Fund[15] adopted in 2021 does not take decarbonisation into account. On the contrary, it is built on the idea of supporting the sector even when it is economically or environmentally unsustainable. Future funds should include a clear vision for EU fisheries and give a strategic direction so that the funds proactively support a fishing sector that delivers environmental and social benefits. However, the EMFAF should be used to support low impact fishing and more selective fishing as a matter of priority. Indeed, using less destructive fishing practices and more selective gears is the first action available to the fishing sector that will reduce their dependence on fossil fuels and their carbon emissions. Available financial support should also be used to start the energy transition of the fisheries sector towards zero-emission solutions (batteries or e-fuels).

In the existing funding regulations, there are limitations for the building of new fishing vessels due to the state of overfishing in most EU seas. However, conversion of existing fishing vessels towards green solutions is supported and can already be used.

Some alternatives to fuel can be developed through conversion of existing engines or fishing vessels, but depending on which technology will be used, at some point decarbonisation might also require building new fishing vessels. Future funding for this possibility will have to be developed hand in hand with a reflection on how to calculate and limit fishing capacity, taking into account the health of fish populations in EU waters and in waters where EU vessels operate, as well as the impacts that the fishing techniques employed on board of these vessels would have on the capacity of the ocean to store carbon or on the potential disturbance these fishing techniques could cause to precious marine carbon sinks.

The Just Transition Fund and the initiative RepowerEU will also offer support to innovative projects aiming at decarbonising the fishing sector.

## 3- Research & Innovation

[15] Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and amending Regulation (EU) 2017/1004, OJ L 247, 13.7.2021, p. 1

Research will have to encompass not only the ability of the clean energy to allow for fishing activities, but also to cover security and safety on board for fishers. Environmental toxicity will also need to be researched as ships use new clean fuels with different chemical profiles to conventional fuels.

The EU must not only remain open to changes, but nurture, inspire and incentivise an innovative mindset for the transition of the fishing sector to a decarbonised and low environmental impact future. Drawing a parallel with the car sector: in the space of 10 years electric cars have become a reality and the transition went much quicker than imagined or planned. It is possible that such rapid developments can take place in the coming years for the fishing sector, indeed, if we are to halt the catastrophic impacts of the climate crisis, they must.