

REPORT

Meeting: **Launch Event “Joining Forces for the Energy Transition in EU Fisheries and Aquaculture”**

Parties: **Fisheries stakeholders, EU Commission**

Date: **16 June 2023**

Location: **Musée Art & Histoire, Brussels, Belgium**

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The high-level conference “**Joining Forces for the Energy Transition in EU Fisheries and Aquaculture**” was the start of the new stakeholder cooperation on the energy transition in the sector. It involved panel discussions, pitches and networking with speakers from the fisheries and aquaculture sector, European institutions, research, and financial institutions on the topics of stakeholder cooperation, finance, technology, innovation and skills. The conference launched the new **Energy Transition Partnership** for the fisheries and aquaculture sector to accelerate the transition towards a resilient and climate-neutral sector by 2050.

The conference aimed to:

- generate broad interest in the Energy Transition Partnership, gathering the first community of actors and boosting further adhesions to the Partnership;
- Start a dialogue about opportunities and challenges within the sector;
- Mobilise actions and measures to contribute to a roadmap with concrete and feasible actions to accelerate the transition in the sector;
- Showcase concrete examples of initiatives from stakeholders, and give visibility to the projects and best practices on energy transition.

Currently, several technical, financial, regulatory, and other barriers prevent many EU fishers, aquaculture producers and other stakeholders from accelerating in the transition. Working together with a wide range of stakeholders to achieve concrete and practical solutions is therefore essential for making the transition.

Stakeholders can express their interest in participating in the Energy Transition Partnership and keep informed of the ongoing developments of the Partnership [here](#). You can also contact the organisers via the e-mail MARE-ENERGY-TRANSITION@ec.europa.eu to be informed about the Energy Transition Partnership.

The conference was divided in several sessions. Starting with high-level opening speeches and continuing with three thematic sessions: (I) Energy Transition Partnership, Skills and Finance for innovation, (II) Skills and Finance for innovation, (III) Knowledge, research and innovation. The conference concluded with a session on Projects on the energy transition in the EU fisheries and aquaculture sector.

The conference was kick-started with high-level speeches by the Commissioner for the Environment, Oceans and Fisheries **Virginijus Sinkevičius**, **Luis Planas Puchades**, the Minister of Agriculture, Fisheries and Food from Spain, **Dan Ericsson**, State Secretary of Rural Affairs from Sweden, **Pierre Karleskind**, Member of the Parliament and Chair of the PECH Committee and **Ricardo Mourinho Félix**, Vice President of the European Investment Bank.

Commissioner Sinkevičius stressed that to avoid soft spots exposed during Covid and Ukraine crises and improve resilience, a transition to more efficient engines and cleaner energy is needed in the fisheries and aquaculture sectors. The ETP will be dedicated to dialogue, collaboration and knowledge sharing to this end, setting priorities and feeding into an actionable roadmap on energy transition, with mid- and longterm measures covering necessary skills, financing, technology, innovation and administration in engine adaptation and adoption of alternative low carbon fuels.

Luis Planas Puchades underlined the role of Spain given the volume of fleet but also given the successful decarbonisation projects in other sectors. The aim is for fisheries and aquaculture to transition to carbon neutrality by 2050, if not before. It is a shared responsibility to switch to sustainability but at the same time it is important to remain competitive and profitable. He noted that while fisheries are not a big emitter of fossil fuels, they are vulnerable to energy crises and therefore need to work on strengthening its resilience. During the Council Presidency, Spain will promote Commission's initiative and the Spanish city of Vigo will organise a conference on energy transition, discussing feasible and practical alternatives for the fleet. He also stressed the need for review of capacity and vessel design to allow for the transition and at the same time to attract new generations through modernisation and improved working conditions and comfort.

Dan Eriksson drew attention to changed political landscape adding to climate and energy issues due to Russian invasion of Ukraine. Fisheries are particularly negatively affected by high energy prices and therefore reduced dependence on fossil fuels will result in increased economic resilience of the sectors and contribute to environmental, social and economic sustainability through innovation. Incentives will be need to fill the existing knowledge gaps.

Pierre Karleskind stressed the need for a consistent approach to redeveloping and redesigning fisheries in view of energy transition in a systematic and genuine way. There are many examples of carbon neutral vessels already and we should draw and learn from these examples. The EMFAF should be used to achieve those objectives to achieve the fisheries of the future, which are resilient and attractive to young generation.

Ricardo Mourinho Félix noted that joining forces was crucial for bringing the change about and suggested that European Investment Bank (EIB) is prepared to support the industry in the transition. EIB is dedicated to transform the blue economy sectors and this commitment is already visible in EIB initiatives i.e. fostering innovation in marine renewable energy such as floating offshore wind investments. There will be further efforts in strengthening resilience and preservation of the ocean, including work on plastics and microplastics, good governance and marine conservation. So far the EIB has managed to leverage with 7 billion EUR of

investments additional 24 billion EUR. The current lending in the fisheries sector is 270 mio EUR, which is only a fraction of total investments. EIB will have a vital role in this mission and is ready to develop additional finance instruments.

Session 1: Energy Transition Partnership

Charlina Vitcheva, Director-General at DG MARE, opened this session by stressing the importance of stakeholders and Advisory Councils feeding into public consultations and noted that collaboration between stakeholders and ‘connectivity’ will be even more crucial in this exercise as the transition cannot be carried out with one sector only or in isolation. There are also other challenges of the sector that need to be addressed such as fleet modernisation at large, but also generational renewal and regeneration of stocks. She reminded that other maritime sectors are ahead in the energy transition and that inspiration could be sought there by connecting with those that are advanced to share knowledge and experience in the so-called synergies by design. A compendium of best practices will be established on the ETP website, which will be regularly updated to constitute a “living document”. ETP consultation process has officially been launched with this event and stakeholders are invited to express interest. In addition, an ETP declaration of intentions will be signed by crucial partners to solidify the commitment. First deliverable will be a voluntary cooperation on the ET Roadmap, which will include a programme of actions in different segments. A guidance on financing is also set to be provided soon. There will be debates on gaps in knowledge, skills, new technology, and matching the skills with these technologies, the final goal of which will be carbon neutral sector by 2050 or before.

The panel consisted of **Javier Garat**, President of Europeche, **Carlos Botana**, Head of Sustainability and development Policies at Puerto de Vigo, **Eleni Marianou**, Secretary General at CPMR, and **Javier Ojeda**, General Secretary of the Federation of European Aquaculture Producers.

Javier Garat assured the audience that Europe fully support the need to reduce CO2 emissions and reminded that fish is already the lowest carbon footprint food. There has been a positive downward trend in CO2 emissions by almost 60% since 1990, which explicitly shows the efforts and the commitments of the sector. Nevertheless, the sector is prepared to do more to advance the transition to zero-emission energy sources. He pointed to the need to upgrade the vessel design to allow for a just transition, while the technical progress is ongoing (i.e. existing diesel-electric engines, electric propulsion, alternative energy sources, recycling of materials etc.). The definition of fishing capacity will need to be revised to allow integration of voluminous installations. He note that ET will be challenging from technological and financial point of view. EMFAF is currently not fit for purpose and other sources of financing will need to be explored. He stressed that more holistic refurbishing will need to take place than just replacing the engine as the average age of EU fishing vessels is 31.5 years. He also advised against introducing fuel taxation. He stressed that keeping in mind that some fleets are long distance, the new alternatives need to be viable, applicable to many fleets and different circumstances.

Carlos Botana presented several ongoing projects and commitments by the Port of Vigo, such as self-sufficient terminals with renewable energies, solar panels, clean energies (methanol, ammonia, electricity, hydrogen). He exposed some of the challenges still persisting and where trade-offs will need to be made, such as the Atlantic corridor, job creation, sustainability objectives, level playing field, energy and food sovereignty.

Eleni Marianou presented CPMR, an association initiated and funded by its members and as such not an EU initiative. She underscored the importance of this partnership and its connecting nature, noting that different actors bring to the table different perspectives, approaches, challenges and opportunities. She noted that regions are especially important in this partnership, they implement projects, promote R&D, replenish skills, and make sure innovative ideas come to life. Among other she mentioned Smart Specialisation Strategy, a place-based approach characterised by the identification of strategic areas for intervention, maritime clusters, and intermediate managing authorities for funds that help channel funds where they are needed and ensure their proper uptake. Collaboration with socio-economic stakeholders was highlighted as was the role of ports as technological hubs. The challenges ahead will be the continuous war in Ukraine and the fact the EU is not energy autonomous. Financing will need to be reimagined and strengthened.

The Commission response to the topic on capacity ceiling was that currently the national ceilings are higher than what is actually taken up, allowing this remaining margin to be exploited. In addition, with technological advances, the batteries and installations are becoming ever smaller, therefore in the future possibly using less space than what is currently the case. This might mean that no revision of capacity ceilings will be needed. In terms of regulatory framework, Vitcheva informed that the Commission is preparing another paper on taxonomy where fisheries and aquaculture are included, which will give the visibility and transparency to investors. Vitcheva also assured that this platform, as requested by one of the speakers, will not be used to demonise certain fishing techniques, such as bottom trawling and that approach “if you have a headache, chop the head” will not be used. She reiterated that “no one is trying to kill the sector, but we must give it space to change”. She suggested using CO2 taxes to fund the transition and stressed the importance of measuring carbon along the life-cycle in order to create baselines and monitor progress.

The take-home messages were:

- Work together, all sectors and all administrations;
- Address technological gap;
- Strengthen finance for fisheries and aquaculture;
- Create healthy business environment;
- Create and maintaining a level playing field;
- Keep entrepreneurial spirit alive;
- Prioritise projects and initiatives (pick our fights);
- Improve governance framework and coherence between policies;
- Improve level playing field with imports;
- Develop better consumer information;

- Reach out to and involve regions, communities, all socio-economic partners and the youth.

Session 2: Skills and Finance for innovation

The session was introduced by **Kestutis Sadauskas**, the Deputy Director-General of DG MARE, noting that ETP will be a platform for identifying knowledge, skills and investment gaps and matching available capabilities with the needs.

There are currently no energy transition investments in fisheries and aquaculture through European Investment Bank (EIB) as so far there's been a lack of bankable operations presented to EIB. In general, there are very few projects in seafood sector, despite considerable interest. EIB is now ready to consider ET investments in fisheries. Examples of investments: port infrastructures supporting low-carbon solutions for fishers, low-carbon solutions for fisheries production provided that these operations are certified as sustainable or committed to be, low-carbon energy efficient seafood processing solutions, holistic approaches (supply chains, stock rebuilding). It is also important to look to other sectors for how deals can be shaped to mobilize capital whilst retaining an equitable share of benefits. Private capital will remain an important building block.

This panel consisted of **Andrew Smith**, the Executive Director of Executive Director at Greenbackers Investment Capital, **Andrea Albertazzi**, Policy Officer for Fisheries at European Transport Workers' Federation, **Assunção Cristas**, Professor at Nova School of Law, **Franck Jesus**, Blue Economy Coordinator and Senior Department Climate Advisor at European Investment Bank and **Benoit Loicq**, Director Technical and Environmental Affairs at SEA Europe.

It was noted that energy transition should be seen as a transition, not a revolution, its goal being to reach a healthy and productive ocean for all. Raising awareness, improving blue skills and building common language are imperative to achieve that. Interactions between different blue sectors will unlock new opportunities. It was also underlined that fishers support the transition, yet it has to be fair, taking into account the people in the sector and the realities and specificities of the different sectors. Some of the takeaways were that small fishers should not be left behind, that supply of alternative fuels needs to reach each and every port, that fishing capacity should be redefined to allow for more space for the crew – this is crucial to attract young people and women through better working and living conditions.

It was also highlighted that transition needs to happen not only in shipbuilding, but also maritime equipment manufacturing and suppliers. Highly skilled workers should be attracted, trained and retained.

The Commission is planning to engage with stakeholders on skills and finance for ET by:

- Looking into other areas to achieve cross-pollination
- Turning to local communities, schools, universities, practitioners etc.
- Equipping youth with transversal skills (digital!)

- Underlining entrepreneurial skills as essential.

On funding, it was noted that:

- Public funding is not fit for purpose; private funding is faster and less bureaucratic. Capital/investment markets should be engaged to harness the potential;
- It is important to send the message that transition is not going to happen on its own, making a business case for investment will be needed;
- BlueInvest is one of the tools matching investment needs and business pitches with investors;
- For EIB there are no limits as long as the project is viable, feasible, interesting;
- EIB doesn't lend money itself, but connects with public capital markets.

Specific skills necessary to propel ET:

- Entrepreneurial
- Financial
- Sustainability (including social)
- Teach and train people with all these components
- Enable people's interactions across sectors
- Modernise fleet to attract young people
- Private sector will tackle transition only if capital requirements are linked with transition
- skills will have to match the needs of these innovations
- Certifications between MS will need to be updated
- Training institutes need to be prepared for the upgrade
- Harmonised upgrade across MS and regions / level playing field

It was also noted that the reliability of current engines has increased notably. Competences of the crew have decreased relative to progress in engines, which needs to be taken into account when implementing alternative fuels. In addition, the sector is severely aged and while energy transition is not the main factor of attraction, it is an important one. Fisheries is one of the rare sectors that does not suffer from international competition as there is local demand and will remain in the future. Shipyards currently suffer from the lack of qualified workforce (i.e. welders). It was suggested that a pool of mobile qualified workers be made, applied and shared across Europe.

Session 3: Knowledge, research and innovation

This session consisted of **Delilah Al Khudairy**, Director of DG MARE.A, **François Bastardie**, DTU-Aqua Senior Scientist and method developer at DTU, **Claire Delpeuch**, OECD Head of Unit for Fisheries and Aquaculture, **Jaap Gebraad**, Secretary-General at Waterborne Technology Platform, **Hendrik Kramer**, Sustainable Fisherman at Metanoia, **Adam Weiss**, Programme Director for Europe at ClientEarth.

The panel highlighted the existing tools for energy transition, such as the Blue economy observatory. The techno-economic survey on cost and benefits is planned for end 2023.

Efforts in data collection will be enhanced, particularly on energy consumption and emissions. Upscaling of existing solutions and proliferating innovative technology and bringing about suitable innovation ecosystems through supporting frameworks such as Horizon Europe, Mission Ocean and inter-regional cooperation Smart specialization platform will be important amplifiers.

A presentation of OECD Fisheries Committee was held. It offers an interface for evidence-based dialogue, identifying best policies and practices for ET in fisheries. OECD [Review of fisheries 2022](#) is Committee's flagship report on the state of fisheries supporting policy makers and sector stakeholders in their efforts to deliver sustainable and resilient fisheries by analysing data submitted by governments. It shows that there is currently no widespread adoption of ET mechanisms globally yet. There's a need for reliable data and timely scientific input: on policies, high resolution data on emissions to capture even the small changes in fuel use and to see the evolution and capture progress.

Francois Bastardie, DTU Aqua, presented his research on resilient fisheries. His main points were:

- Important to maintain fishing strategies with precautionary fishing effort targets (<F_{msy}) and CFP minimal effects objective (long term marine habitats protection)
- Ensure a correct CFP to protect stocks, which is a prerequisite for resilient fisheries sector and successful ET - "fishing less, earning more"
- Improvements in stock status will give higher catches and less fuel needed to attain these catches, which in turn improves resilience to shock factors in relation to i.e. climate change.
- Retrofit vessels and upscale greener fuels, upskill and fund new education schemes, ensure grid infrastructure with other energy-demanding sectors and promote the use selective gears;
- Reinvest profit and tax collection into support for transition;
- Implement carbon auditing to shift towards best available fishing techniques and small scale fishing (allocating more quota to small-scale was mentioned);
- Investigate feasibility, upfront costs and payback time
- Unlock barriers and change mindsets to upscale technological solutions.
- Limit dependency on unreliable fossil fuels will increase resilience to possible future crises affecting ocean productivity and economy.

In addition, it was stressed that socio-economic studies are important to determine the cost of ET for fishers. Further, a proposal was made on installing technology to help operate fisheries with more precision i.e. "precision fishing".

Hendrik Kramer, Sustainable Fisherman at Metanoia, presented its family business in fishing and the way in which he retrofitted his old vessel into an energy efficient vessel (MDV) with 80% fuel reduction through hybrid engine. He offered some food for thought by comparing offshore wind with fishing: area expansion vs. area reduction, high return on investment vs. low ROI, increased certainty vs. increased uncertainty, enables transition vs. adapts to transition, the first attributed to offshore wind and the latter to fisheries.

Waterborne Transport Association was presented as a European Technology platform for the waterborne sector and related Strategic research and innovation agenda (SRIA) for the EU waterborne sector. There are 3 Working groups on ships and shipping, blue growth, and port & logistics. The zero-emission waterborne transport partnership includes R&I TO develop and demonstrate zero-emission solutions for all main ship types and services by 2030, which will enable zero emission waterborne transport by 2030. Carbon footprint of EU fisheries was presented (6,94 million tonnes of CO₂ emissions annually on average, from STECF 2020 report) and noted that STECF report does not account for CO₂ released from the seabed through bottom trawling. It was also underlined that energy solidarity requires all polluting sectors to contribute to the general effort in emissions reduction to reach the climate change objectives of the EU Green Deal. It was also noted that EU fuel tax exemptions supports the status quo and disincentivises ET. Support for so-called decarbonisation subsidies to replace fuel subsidies was expressed. You may find more information [here](#).

[Fastwater](#) project was presented, ensuring fast-track to clean and carbon-neutral waterborne transport through gradual introduction of Methanol Fuel: Developing and Demonstrating an Evolutionary Pathway for Methanol Technology and Take-up.

Adam Weiss from Client Earth noted that while “Necessity is the mother of invention”, the EU does not have a legal framework for ET in place through which necessity would spur. He stressed that legal innovation is needed for technological innovation. He also underlined that taxing fishing fuel will not ruin the industry and suggested to bring the fishing industry in the the EU ETS and FuelEU maritime regulation. He supported the distribution of quota to low impact fisheries by implementing Article 17 of the CFP which stipulates the following: ‘When allocating the fishing opportunities available to them, as referred to in Article 16, Member States shall use transparent and objective criteria including those of an environmental, social and economic nature. The criteria to be used may include, *inter alia*, the impact of fishing on the environment, the history of compliance, the contribution to the local economy and historic catch levels. Within the fishing opportunities allocated to them, Member States shall endeavour to provide incentives to fishing vessels deploying selective fishing gear or using fishing techniques with reduced environmental impact, such as reduced energy consumption or habitat damage’. Weiss also reiterated that monitoring, recording and reporting emissions will be an important factor in ET. Compliance with sustainable catch limits were also stressed, while enforcing the landing obligation. He also advocated for ending bottom trawling practices in MPAs due to their proven negative impact. Sala et.al paper was mentioned, which was met with a fierce response from the audience’s fishing representative that Sala paper was rebutted and should not be cited in official presentations anymore. Another comment was made on pulse fishing ban which was called for by the NGOs in the past, and now the same NGOs are listing it as one of the solutions for energy efficiency. The representative concluded that what is needed is level playing field and clear rules of the game to which all actors subscribe. It was also highlighted that fishing is not the largest polluter, yet is demonised and presented with many challenges. There is a need for a change of narrative.

In addition, CINEA’s (European Climate, Infrastructure and Environment Executive Agency) contribution to ET was presented. Through EMFAF, Life Programme, Innovation fund, Horizon Europe, Renewable Energy Financing mechanism, Just Transition mechanism and

Connecting Europe Facility 2, CINEA works towards accelerating ET. One of the projects on commercialising methanol was exposed due to its sustainability, scalability, and storability. Alternative propulsion systems were also presented, such as the Bound4Blue using wind as complementary propulsion and multiple alternative fuel options. The challenges identified were: no global bunkering infrastructure available, high costs, and scientific concerns about their unknown effect on environment. eSails were particularly cheered, noting that more than 80% of existing fleet could start using eSails in immediate future, offering a competitive advantage due to its immediate cut in fuel costs and fast ROI. So far there have been 10 installations co-funded by EU.

Tim Haasnoot presented the **Catching the potential project**, launched by the ProSea Foundation, an educational NGO. Catching the potential's ultimate goal is to develop a European standard for sustainable fisheries training. It was noted that fishers nowadays need a different and wider suite of skills (MSP, law, economics etc.) The project is focussing on 3xP (people, planet, profit). The current training requirements by IMO are deemed insufficient. CTP addresses this gap with partners such as the Dutch Pelagic Freezer Trawler Association and Europeche. The project resulted in 14 pilot courses, train the trainer initiative, revision of the STCW-F convention. The challenges remaining are the fact that training pathways differ substantially between member states or are absent altogether. The STCW-F provides minimum standard, however it is not ratified in all MS. A recommendation was voiced to extend educators network, promote implementation of CTP standard and ratification of STCW-F, and to install similar mechanism for mutual recognition of certificates.

- The session was summarised with the following findings:
- There is a need for additional space and access to waters and new players join the playground;
- Fishing sector is willing to engage in ET, but it is questionable if it make a living out of it? More certainty/predictability is needed.
- There is a need for human capital, particularly young people who see perspective in fisheries;
- EU licensing should be ensured for third country workers/skippers;
- There is a need new healthy business models and supply chain of the future.

The event was closed by **Charlina Vitcheva**, Director-General at DG MARE, announcing that the Energy Transition Partnership declaration will be signed following the event. The Partnership is therefore officially launched and stakeholders are still invited to become partners and contribute to agenda setting. The main message she delivered was that the ET can only be successful and comprehensive if all work jointly, so that interests can be aligned in the long-term by mutual understanding of challenges and maintaining a constructive approach to common challenges.