

REPORT

Meeting: **Reconciling Biodiversity and Climate Ambitions: Offshore Renewable Energy**

Parties: **WWF, other**

Date: **26 April 2022**

Location: **Zoom**

Chair/moderator: **Chris Davies**

Rapporteur: **Tamara Talevska**

Moderator Chris Davies opened the webinar noting that offshore renewables constitute an essential part of the EU's energy transition. The webinar dealt with the question on how is this to be achieved and whether the EU is on track to meet the goals for renewable energy and marine protection.

Ester Asin from WWF European Policy Office stressed that climate and biodiversity need to be considered when deploying renewable energy. Ocean is full of solutions, large fish species (shark, tuna) and seaweed have CO₂ absorption rate greater than forests. The EU climate and biodiversity agendas need to consist of reduction in fossil fuels, improved energy efficiency, and expansion of renewable energy. The latter must reconcile with other activities at sea, such as fisheries, transport and nature conservation. Asin highlighted the role of women as important in designing climate objectives as they are the ones affected the most by the changing environment.

Felix Leineman from DG MARE outlined policy context of energy transition, which is the EU Green Deal. He noted that offshore renewables could generate a quarter of all electricity by 2050. With MSP Directive implemented in 2020, MS are required to adopt marine spatial plans. The Commission is planning to issue implementation report by the summer.

Giles Dickson from Wind Europe introduced planned expansion of offshore wind and noted that so far industry is meeting the targets (450GW by 2050). He stressed that wind energy is sustainable, with a short ROI (5 years) and 85-90% recyclable turbines. He said blades are challenging in terms of recyclability. Wind Europe ensures sustainable sourcing of its materials and components. Long-term cumulative impacts on biodiversity are not yet known and are subject to research as the projects unfold. Impacts could be on various levels:

- Sedimentation, changes in physical particles
- Stratification of water and solid matter in seabed
- Implications on currents and waves
- Impact on wider ecosystems

Dickson said that seabed tends to be cleaner inside wind farms than outside, as there is no disturbance with trawling/dredging. He also highlighted potential creation of artificial reefs where the wind structures are located. There are some noise mitigation measures in place

already. Bubble curtain laid on the seabed around the turbine decreases the noise and protects the hearing of marine mammals. Some wind farm benefits are seabed restoration, development of aquaculture, seaweed farming, mussels farming.

Dickson stressed the importance of engaging communities – regeneration of coastal communities affected by the decline of other industries (shipping, fishing) by wind developments. He mentioned collaboration with the fishing industry on MSP. North Sea agreement in the Netherlands is a best practice example.

It was noted that floating windfarms are worse for fishing than fixed turbines. There is a floating structure on the surface and three cables attached to seabed – meaning more barriers and obstacles. This to be further discussed with fisheries.

Claire Hagget, Senior lecturer in sociology and sustainability at University of Edinburgh presented on engagement of coastal communities in the context of coexistence. How offshore projects can be compatible with coastal communities.

- Identify communities
- Engage with them
- Offer meaningful benefits to them

It is important to recognize communities that are affected, and to distribute costs and benefits equally. Fair process is vital and affects how outcomes are viewed, increasing legitimacy of solutions. Development done well spreads positive news about projects and avoids effective opposition.

Important to develop ongoing relationships, proactively identifying trusted stakeholders and intermediaries. Deliver meaningful benefits: just transition, other powerful perceptions of a disparity between global benefits of wind

Benefits include: community funds, apprenticeships, educational programmes, local investments, funding local facilities and projects etc.

Jacob Fjalland, WWF Denmark presented the role of Member States in MSP using a case of Denmark.

Danish case for offshore renewables:

1. MSP and strong industrialisation of the sea
2. ecosystem-based MSP
3. rethinking and innovation, and probably disruption of some industries (fisheries)

In DK there was world's 1st offshore wind park, hence Danes are aware of the limits and conditions of marine environment.

DK Govt announced 30% of space reserved for renewable energy – new MSP to be launched.

Recommendations so far:

- ecosystem-based MSP,

- better scientific data,
- cumulative pressures to be taken into account (like trawling),
- 10% strictly protected areas,
- take into consideration other ecosystem services (blue carbon, climate adaptation abilities, climate effects etc.)

There is an overlap of different uses. It is not possible to do this in business as usual. There must be some kind of rethinking, reconciliation and some disruptions. Broad societal debate is needed.

In the North Sea there is little space for development, large portions are already taken. Distribution of marine life and services needs to be considered including the connectivity also/especially beyond national borders.

Are windfarms good or bad for fish? Depends on how, where and when you construct them, and the price that one is ready to pay. In shallow waters construction is cheaper, but there is where most marine life occurs.

Antonella Battaglini from Renewable Grid Initiative, spoke about climate and biodiversity crisis and said that optimisation is needed across supply chains, space and users. Commitment from the COM and MS to address the multiple crises and political objectives, which are often contradictory. Evolutions, innovation and disruptions are needed, some users will be winners and some losers.

Lack of knowledge is paralysing actors to take actions; it requires innovative ways to gather and use data. Need to identify clear restoration targets and solutions to achieve those targets.

Fishermen asked for moratorium for wind and electricity grids. Are project developers open to listen? Yes, there is a lot of interest, but there are also the “cowboys” of the industry not interested in stakeholder engagement. We need robust guidelines, monitoring and control of how things are being dealt with. Even the most committed project developers have to commit to be good actors globally and not only in the North Sea, for example. Cowboys need to be sanctioned. Need for MS need to develop MSPs – this is crucial, especially where there are large number of projects already in authorisation stage.

Examples of best practice are being collected at the moment, large database to be developed. There are new ideas on how to showcase these practices in a so called community of practices. Need for courage to talk about what didn't work and learn from failures too.

Dan Wilhelmsson, independent scientist, spoke about the greening of blue energy by identifying and managing biodiversity risks and opportunities of wind industry.

Key environmental issues: fish, birds, benthos, hydrology etc.

Risks and opportunities to consider:

- Construction phase (noise and other disturbances)
- Operational phase (habitat loss, migration barriers, bird collisions, seabed changes)
- Concerns:

- Trawling/fishery exclusions
- Artificial reefs
- Navigational hazards/oil spills
- Hydrological changes

Scale and importance of effects:

- Sensitivity of species and habitats
- Research gaps: long-term effects are unknown, ecosystem effects, cumulative effects

Mitigation/optimisation

- Location
- Time of construction
- Methods/technical adaptation/design

Panel discussion

EU Nature restoration law, planned for spring, has been delayed due to fuel crisis.

MPAs could be windfarm areas too. DG ENV Guidance in November 2020 with Offshore renewables strategy – co-existence possibilities under certain conditions. Applicable to offshore and onshore wind development.

One piece of legislation missing: while there is framework for regional cooperation on economic and energy issues, there is *lack of regional environmental cooperation*. Ecosystem approach requires *action beyond national borders*.

Currently MS have support to coordinate MSP across borders according to MSP Directive. Impact of implementation of MSP to be assessed by the COM shortly. HELCOME is an example of ecosystem-based approach to MSP. OSPAR hasn't been involved in MSP as much as HELCOME. WWF assessment of HELCOM's work concludes that measures are locally defined, not with mentality of ecosystem-based management. There is a push towards cross-border collaboration, however permits are approached nationally. Link: <https://www.wwf.eu/?6106591/Baltic-countries-lead-EU-for-sustainable-sea-space-management-but-still-put-nature-at-risk>

Dutch government initiative on *net positive effect on nature of projects* was mentioned:

- https://www.researchgate.net/publication/340787563_Nature-Inclusive_Design_a_catalogue_for_offshore_wind_infrastructure
- https://offshorewind.rvo.nl/file/download/ce29c209-818e-4727-9c44-68c4902e7caa/1540220273rvo%20hkz%20iii%20and%20iv%20maindocument_15october_2018_lowres_web.pdf

While long-term effects of huge expansion are not known, long-term monitoring programmes are in plan.

Wind Europe represents 450 members, whole value chain. Best practices: Sustainable sourcing, decommissioning of components etc. these trends are increasing among all players due to evolution of industry and political pressure. Stable relationships with the NGOs if the practices are coherent with biodiversity objectives. Government objectives and strategies are important for industry's work. Centralisation of monitoring windfarms – one good example is Belgium.

WWF is pressing the COM to implement the existing acquis – only 6 MS adopted MSP so far, which is unacceptable. Infringements are on the way for improper implementation of the Birds and Habitats directives. Nature restoration law is important and missing – nature restoration provides economic benefits and climate change potential. The dependency on fossil fuels needs to be halted, as well as the construction of new hydropower plans, nuclear plans etc. Transition to renewables cannot be delayed.

Cesar Luena, MEP S&D rapporteur for Biodiversity Strategy said that development offshore wind needs to be aligned with Biodiversity Strategy 2030. Civil society and scientists need to be involved. Climate and biodiversity crisis are connected. Risks involved: optimal time, location and technical adaptation. Engagement with local communities is part of a just transition. Costs and benefits should be equally distributed. Need for biodiversity law. 10% of strictly protected areas should not be used for energy development. Environmental impact of any developments should be minimal.