

Blue Carbon in EU Climate Policy

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Blue Carbon, the carbon absorbed and stored by marine and coastal ecosystems such as tidal marshes and seagrasses from European Seas, represents a largest natural carbon sink on Earth. Coastal and marine ecosystems and their important role as carbon sinks are, re-emphasized in the Paris Agreement, highlighting the need to optimize management measures to conserve and improve the conservation status of these habitats that act as sinks and reservoirs of greenhouse gases, where adequate. This event, co-chaired by MEPs Ricardo Serrão Santos and Maria Spyraki, aimed to provide a forum for discussing on the role of these coastal and marine ecosystems for climate mitigation and adaptation. The results from the LIFE project Blue Natura were presented, while the discussion further examined priorities, potential gaps and opportunities to support the integration of Blue carbon into European policies.

The panel included:

- Ricardo Serrão Santos MEP
- Maria Spyraki MEP
- Alberto Arroyo Schnell, IUCN European Regional Office
- Miguel Ángel Mateo Mínguez, CSIC, Spain
- Tobias Salathé, RAMSAR
- Maris Stulgis, DG MARE, European Commission
- Herbert Lust, Conservation International

In his opening remarks, **Ricardo Serrão Santos MEP** stressed that climate change calls for political action and governance schemes, and "politicians have an increased responsibility to meet the climate goals". As scientists clearly underline that CO₂ is the cause of climate change and global warming, not taking any political action today is a crime against the planet. Also, the role of seas and oceans in absorption of CO₂ should be better recognized. References to oceans did not appear at first in the draft Paris Agreement, on the contrary forest sequestration of CO₂ appeared several times. The MEP underlined that costal habitats are very important in carbon storage, but not seriously



considerate yet. The crucial question remains how we can limit human pressure on costal ecosystems. Mr. Serrão Santos further referred to the report <u>"Blue carbon: the role of healthy</u> <u>oceans in binding carbon: a rapid response assessment</u>", published by UNEP, IUCN, FAO and IOC/UNESCO in 2009. We should now ask ourselves what had happened since then.

In her introduction, **Maria Spyraki MEP** noted the role of Blue Carbon is a key in reducing emissions and supporting climate action, as we are now discussing about implementing the Paris Agreement and the Paris rulebook. According to the MEP, legislation is a driving force and we have the responsibility to move from reflection to action, including Blue carbon in the EU climate agenda. Destroying ecosystems contributes to the release of CO_2 they absorbed for years or centuries, she pointed out. Although the role of blue carbon ecosystems is well recognized by scientists, a gap analysis is needed to identify research and financial needs, as well as to identify priorities and the way to transfer knowledge across sectors. With reference to the latter, the Life Blue Natura project serves as an example to examine the missing knowledge, moreover as a pilot to transfer the experience to the wider region. The MEP further called for improving the dialogue within the EU, to jointly find solutions and share good practices. At the European level, the Mediterranean region offers plenty of best practices, which should be therefore supported, she concluded.

A panel discussion followed, moderated by Alberto Arroyo Schnell, IUCN European Regional Office. Within this, Miguel Ángel Mateo Mínguez presented the results of LIFE Blue Natura Project, an innovative European project that aims to find the mechanisms, tools and the knowledge to address all these challenges in order to improve ecosystems management and restoration projects using carbon financing mechanisms. He highlighted that information is still fragmentized at the EU level in terms of distribution of these ecosystems and we have enormous gaps in knowledge regarding their carbon store and sequestration event their capacity is been proved very large. The project aims at filling knowledge gaps on Blue Carbon ecosystems along the coast of Andalucía, incorporating Blue Carbon ecosystems into climate strategies as well as addressing existing policies and requirements to maintain healthy ecosystems by promoting dialogue at a national and regional level. He further shared the results of the work of the Life Blue Natura project in Spain, unlocking the potential of European Posidonia seagrass and coastal marshes as natural capital for mitigating climate change. Mr Mateo explained that seagrasses in Europe (covering approx. 30,000 km²) for instance are more efficient in stocking carbon, and present with saltmarshes a total carbon sink the equivalent of 57% of the carbon stocks in all EU forests. However, the estimated 2% global annual loss of Blue Carbon ecosystems is about potential emissions of 90 Mt CO₂, similar to the annual CO₂ emissions of Belgium. The estimates strongly suggest that even if only based on the carbon sequestration service, the conservation and restoration of EU seagrass meadows and saltmarshes could be economically sustainable. He stressed that it remains fundamental to quantify the extension of Blue Carbon ecosystems and the size of the sink. Avoiding the loss of BC ecosystems should be a priority in the EU policies to avoid these emissions and to preserve the other key ecosystems services they provide. The recent Andalusian Climate Law in October 2018, provides for measures to combat climate change and further support prevention and restoration of littoral ecosystems among others, through carbon offsets projects. Following this example, conservation of blue carbon ecosystems in the EU could be economically sustainable by monetizing the avoided emissions through combined offset projects.

In his intervention, **Tobias Salathé** <u>presented</u> the Ramsar Convention, an intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. At their last Conference of the Parties in October 2018, parties adopted a Resolution to promote the



conservation, restoration and sustainable management of coastal blue carbon ecosystems. Wetlands are among the most diverse and productive ecosystems. Furthermore, these ecosystems mitigate the effects of costal storms or extreme events, as well as being an important carbon sink. However they continue to be degraded and converted to other uses. Amongst RAMSAR parties, 151 countries have at least 1 blue carbon ecosystem, 71 countries have all 3. There is a strong need for synergies in international actions to preserve blue carbon ecosystems. In the Resolution, Ramsar parties agreed to develop national programmes of data collection and analysis, to make inventories, identify threats, evaluate ecosystem services for people, quantify carbon storage and fluxes as well as updating national GHG inventories with guidance from the Scientific and Technical Review Panel. The parties also agreed to provide resources for training to increase management capacities (using IPCC guidelines and case studies) and to work with the IPCC on Blue Carbon ecosystem assessment (hotspots) modelling carbon stocks and greenhouse gas emissions. Last but not least, Mr Salathé called for a better communication strategy in order to support action, as messages from the scientific community can sometimes be difficult to understand. Support from citizens is also key, he concluded.

Maris Stulgis from DG MARE presented the perspective of the European Commission on Blue Carbon. Mr Stulgis mentioned recent policy developments related to climate change, as the latest IPCC Special Report on Global Warming of 1.5°C, the "Clean Energy for All Europeans package" and the Decarbonization strategy 2050 presented on 28/11 by the Commission. Furthermore, the IPCC Special Report on oceans and cryosphere is expected to be published by the end of 2019. According to Mr Stulgis, this is a very crucial moment to address the role of oceans as part of the solution in the Climate Policy, where Blue Carbon and the conservation and restoration of coastal habitats are some of the key solutions. There is a huge amount of carbon stored in oceans and vegetated marine habitats, he explained, but their gradual destruction increases greenhouse gas emissions (up to 2% of annual total emissions are caused by destruction coastal marine vegetation) and reduces climate change mitigation potential. In the UNFCCC process, 28 National Determined Contributions include a reference to coastal wetlands (in terms of mitigation), but none in Europe. There is a big potential to improve mitigation strategies considering for instance saltmarshes and seagrass in Europe. Mr Stulgis suggests to prioritize conservation and restoration of Blue carbon ecosystems as well as to strengthen the international ocean governance with joint actions to protect and restore costal habitats. Further, countries, organizations, citizens could look at their carbon footprint and contribute to carbon offset projects linked to Blue economy. Also, negative carbon emissions projects/businesses could be considered as priority for Blue economy investments. The EU could further play an important role in boosting blue biotechnology for CO₂ emission reduction as well as in sharing knowledge, good practices but also improving education and awareness raising amongst students and civil society. Blue carbon game, developed under the BlueNatura Life project, is a great example of experiential learning.

Herbert Lust from Conservation International (CI) brought the NGO perspective to the panel. In his intervention, he elaborated on how the EU can make a difference in untapping the potential of Blue Carbon. He presented the CISPATA project in Colombia, which is the first mangrove blue carbon conservation project aiming at producing verified emissions reductions through the Verified Carbon Standard. Its aim is to improve finance and long-term development for livelihood through conservation initiatives with local communities. A large number of communities depend on mangrove forests for their livelihood, at the same time, mangroves are very important for climate mitigation. However, their destruction is a matter of fact. Mr Lust called for action to restore blue carbon ecosystems worldwide. In Indonesia for example, home to 25% of worldwide's mangroves



forests, the situation is critical. The protection and conservation of these ecosystems in collaboration with local communities is crucial, he added. Therefore, CI recommended stepping up policies at international and European level. Countries have to be encouraged to include blue carbon in their NDCs. For the post-2020 budget, the EU should reinforce climate and environment funding. Moreover, the EU has to tackle the impact of consumption on third countries' ecosystems, particularly on imported wood and deforestation, as well as promote and support partnerships to improve environmental policies and practices. To conclude, Mr. Lust highlighted the role of individual actions and the importance of these ecosystems for biodiversity. Awareness raising campaigns are important for the consumers to make more sustainable choices. Information on opportunities of investments in Blue Carbon should be also encouraged.

During the **discussion with the audience**, the International Association of Oil and Gas Producers represented by Mr Vanheule brought an industry perspective to the discussion. Highlighting that the best energy is the one we do not use, the speaker stressed the need to switch from coal to natural gas to move towards decarbonizing our economy. Sequestration of emissions play a key role, he added, be it via Blue Carbon or via Carbon Capture and Storage (CCS). He also mentioned the "Seabed Survey Data Model" Initiative" and Proteus project which aims at improving data and knowledge, also on mangroves and costal ecosystems. Last but not least, Mr Vanheule also added how funding incentives can enhance Blue Carbon and CCS mechanisms.

A speaker from the JRC highlighted the need to recognize the role of seaweed in Mediterranean and Atlantic areas. Mr Mateo responded that macro-algae DNA analysis is currently in progress to identify local (buried in situ) and 'externalized' carbon sinks (exported and buried in deep waters). However, today, macroalgae are not considered as long term sink because their production recycles within the same year. A question was raised about the remaining budget for Blue Carbon as of today, compared to ten years ago. Maria del Mar Otero from IUCN added that the EU faces a lot of loss and damage of coastal habitats; furthermore these ecosystems lose their capacity to store carbon, while it is difficult to quantify these losses. The roadmap for inclusion of wetlands into the Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry (LULUCF) by 2026 will help to update the role of these ecosystems at EU level and the national contributions (NDCs and national GHG inventory submissions) by countries. Further mechanisms were recommended to be explored by marine ecosystems such as seagrasses. Alberto Arroyo Schnell added that the results of the evaluation of the Habitat Directive are expected in 2019, which might lead to a revision including its adaptation to specific environments and ecosystems. A further recommendation for DG Mare was to explore its participation in the International Partnership for Blue Carbon.

The discussion further reiterated the urgency to act, as the recent IPCC clearly indicated that we have less than 15 years to reduce emissions and carbon capture is a key tool to reach the Paris Agreement goals. The need for an enhance collaboration between governments, private sector and NGOs, as well as investments was raised. Still, how we handle emissions from the aviation and shipping sectors would remain crucial.

In his closing remarks, **Ricardo Serrão Santos MEP** stressed that marine habitats play a crucial role in providing ecosystem services and for climate change mitigation. They are under pressure, both in and outside of Europe. We need to act quickly to conserve them and investments are essential to achieve this objective. Strengthening EU regulations and enforcement of these will be of paramount importance, in order to finding a balance economic development and habitats conservation.



Documents of the meeting can be found here.

This event was co-organised with:

