

High Level Side Event on Climate and Oceans: Actions Speak Louder Than Words

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Making Protecting the Ocean a Driver for Climate Action

Nicolas Entrup, Ocean Policy Expert, Co-Director International Relations

Dear Ministers, Commissioner, Secretary General, Delegates, Representatives from Civil Society, including those passionate young people who, at this moment, hold their own Youth Climate Summit or are out on the streets watching us what actions are taken to address the climate crisis.

I am grateful for the invitation by Minister de Backer to be able to address challenges and potentials of making protecting the oceans a driver for climate action from a civil society perspective on behalf of OceanCare, a Swiss based and internationally acting NGO, founded 30 years ago by Sigrid Lüber.

One might assume the 30th anniversary is a reason to celebrate, but we find ourselves in a situation - as anybody else at the table - under pressure to deliver.

There is extensive information about the oceans and the role they play for the climate out there. Including a recent publication involving experts from the International Monetary Fund on the importance of ecosystem services from great whales that add significantly to the amount of phytoplankton in the oceans and to the carbon they capture each year, as well as due to the accumulation of carbon in their bodies during their long lives. Meaning that healthy and thriving whale populations are a contributor to climate action. The authors calculated the value of each great whale currently worth with 2 million dollars.

But I recommend we all fully reflect on the upcoming IPCC report on the Ocean and Cryosphere in a Changing Climate which is to be released this week.

Title of today's event is: ACTIONS SPEAK LOUDER THAN WORDS. I cannot agree more. And I am going to tell you why QUIETING our activities in the ocean, would be a significant and important contribution to climate action.

[IMAGE of KRILL]

Please allow me to take you on a brief journey: The world's oceans are predominantly an acoustic world. Sound plays an essential and vital role for the marine fauna. Orientation, communication, finding prey, avoiding predators, ... it is kind of the essence of the marine world.

In 1991 scientists posed 10 speakers in the Southern Indian Ocean (Heard Island), blasting a monotonous 57 Hz tone with 200 dB for a few days. Hydrophones were placed at various locations even in far distance. The tone was even recorded near Vancouver Island almost 19.000 kilometre away. There cannot be a more convincing evidence of the transboundary nature of sound and when SOUND becomes NOISE it is one THE transboundary pollutants. Accept my simplified message today, which I am happy to elaborate at any time in detail: noise does create severe problems for the marine ecosystem.

When you think about NOISE as pollutant to impact on marine life, many will still think about whales as being those impacted most. But research in the past decades have taught us, that we have to assume that noise impacts on all marine life, from the largest mammals, turtles, tuna, haddock, squid, down to the smallest life, krill or zooplankton.

[VIDEO showing an AIRGUN]

This is an AIRGUN. It is used for emitting sound towards the seabed searching for hydrocarbon resources: Oil and Gas. During so called seismic surveys, it is “fired” every 10 to 15 seconds in an intensity of up to 260 Decibel, 24 hours, day and night, for several weeks, sometimes even months. For your own safety reasons, we won’t play any sound to you in this room.

[IMAGE – KRILL]

In 2017, Australian researchers published findings about the impacts of ONE SINGLE AIRGUN on krill. The study area covered 1.2 kilometres. The documented findings are: All krill larvae was killed. The biomass of 1/3 of the other plankton species decreased by over 95 percent. The ‘kill zone’ could be detected 15 minutes after the airgun passed and continued to expand for 1.5 hours.

This was one airgun for a short duration, not the 18-48 airguns conventionally used in seismic surveys for weeks or months. The researchers rightly concluded their results showed “*enormous ramifications for ... ocean health ...*”.

[IMAGE – SEISMIC VESSEL]

This is one out of many documented disastrous impacts caused by this technology. In this case it impacts the base of the marine food web. Other studies document the significant reduction in fish catch rates and many other consequences.

Applying this technology is still the current practise by the fossil fuel industry.

Let’s be open and allow a critical reflection – a kind of reality check – when comparing the operational conditions of two industries within the energy sector, both emitting intense impulsive noise. The renewable energy sector which emits intense impulsive sound while pile driving activities establishing offshore windfarms and the hydrocarbon sector when undertaking seismic surveys.

[IMAGE – Simplified comparison between the renewable ENERGY SECTOR with the HYDROCARBON SECTOR]

Some States did impose a mandatory threshold for pile driving activities when piles are kind of hammered into the seabed. With such mandatory threshold the industry was kind of “forced” to identify ways to reduce noise levels due to mitigation and/or identifying new technologies when setting up offshore windfarms.

The consequence has been that various noise reduction measures have been developed, as well as investment been done into the developing new construction methods [incl. bubble curtains, suction caissons. etc.]. In comparison, while there are alternatives to the conventional airgun out there, which are less invasive, the hydrocarbon industry continue to refuse using it, no comparable mandatory thresholds have been imposed. The reference to placing „Marine Mammal Observers“ on seismic vessels is nowhere near to be an acceptable mitigation measure.

The example shows that a MANDATORY FRAMEWORK is thriving investments and providing incentives and technological development.

The RENEWABLE ENERGY SECTOR has proven to take on the challenge to MITIGATE adverse impacts on

marine life. The situation is by far not perfect, problems still arise, but there is a tendency which the hydrocarbon sector has never performed in the past decades.

Furthermore, SPATIAL PLANNING, EIAs & SEAs are tools, instruments and procedures proven to be successful and could act as best practise when implemented appropriately by regulators.

In this context, we read the BRUSSELS DECLARATION as a strong commitment towards generating incentives and framework to facilitate the development of renewable ocean energies, following spatial planning that safeguards biodiversity, resilience, connectivity and food security.

BUT what are the lessons learnt reflecting on the HYDROCARBON INDUSTRY?

Until today we see this sector, that has been heavily subsidized and supported in many different ways, operating in full swing. At the global level, energy subsidies are estimated by the IMF at \$5.2 trillion (6.5 percent of GDP) in 2017. Coal remaining the largest source of subsidies (44 percent), followed by petroleum (41 percent), natural gas (10 percent), and electricity output (4 percent).

This is an industry which works hard to downplay its impacts.

Downplayed the impacts these airguns cause, oils spills have and last but not least impacts of CO2 emissions on the climate.

An industry that has not accepted – until today – to keep their hands off any area in the world's oceans, claiming that every proposal in any habitat should be decided by regulators on a case by case decision, when we all know, we have to KEEP HYDROCARBONS IN THE GROUND.

There is an implicit need for all International Finance Institutions (IFIs) which are operating with shares from States – public monies – to cancel any investment into the hydrocarbon sector immediately. Discussion has started, but we need action.

[IMAGE – CENTRAL/EASTERN MEDITERRANEAN SEA]

Yes, the central eastern part of the Mediterranean Sea is a tiny part of the world's oceans. But it just serves as an example to reflect upon current practises.

The BLUE SQUARES indicates where hydrocarbon industry has started and intends to search for new oil and gas resources in the coming years. It includes areas, such as the Hellenic Trench, which are at least twice as deep as the region in the Gulf of Mexico where the Deepwater Horizon catastrophe occurred.

The situation might differ a bit in other parts, but the overall message is clear:

We haven't done our homework yet.

Every information we have, calls on us to stop burning fossil fuels, but we even continue to search for new sites.

The ENERGY TRANSITION is without alternative.

So, allow me to conclude: we need a BINDING PHASE-OUR STRATEGY for stopping exploration activities for new hydrocarbon resources.

STOPPING seismic activities would switch off the most intense noise source and be an essential important climate action and reaching SDG13 combating climate change and its impacts.

[IMAGE – cargo ship]

Another sector is SHIPPING.

It is responsible for noise levels that – in some parts in the oceans – doubled every decade since the 1950ies.

It is one of the industries – as we have heard from previous speakers – that has to come up with concrete actions to reduce GHG emissions significantly. We all know that with a projected continued significant increase in global shipping activities, this is a major task.

The target agreed within the IMO is a reduction of 50% of GHG emissions by 2050.

A wide range of technological measures, the improvement of energy efficiency, as well as development of alternative fuel is in discussion and development, including improvement in ship design, retrofit and others.

There are opportunities, in particular to now thrive for a reduction in GHG and NOISE emissions. The Canadian government has taken the lead in pushing for noise reduction within the shipping sector and launched an initiative within the IMO. We understand that a few countries, including Belgium and France, are very open to this initiative, and we can just encourage governments to join in support. At the same time, we all know that most of such measures will have an effect mid to long-term, given the lifespan of a cargo vessel is up to 30 years. This won't be enough to reach any ambitious objective. Therefore technological solutions are not sufficient.

We have to consider one immediate management measure would be highly effective: SPEED REDUCTION.

I refer to the recent publication by Russell Leaper [2019] who calculated that a 10% of reduction in shipping speed of the global large vessel fleet would generate a decrease of 13% of GHG and 40% of noise emissions. Faber et.al [2017] provides additional calculations on the reduction of GHG emissions when reducing speed by 20 [24%] and 30% [33%].

We strongly urge you to consider speed reduction is an operational measure to be imposed immediately.

[IMAGE – life below water]

I hope I was able to make a brief but convincing case that QUIETING THE OCEANS are an important CONTRIBUTION TO CLIMATE ACTION. An ACTION that speaks LOUDER THAN WORDS.

The Take Home Messages are clear:

- Binding Phase-Out Strategy of any hydrocarbon exploration activity
- Introduce speed reduction for the global cargo fleet (all large vessels) which would serve as contribution towards GHG emission reduction, on global, but also regional and port to port basis, as well as noise reduction measure as immediate management measure
- Promote a Blue Economy which is truly sustainable, by applying proper marine spatial planning, including progressive EIAs and SEAs as management tools, following a precautionary approach in safeguarding biodiversity
- The adoption of a strong and passionate HIGH SEAS TREATY to build ocean resilience is an utmost necessity
- speeding up the establishment and proper implementation of marine protected areas (MPAs) and related management plans [30% by 2030]

**But CORE to any action is:
COMPLIANCE, ENFORCEMENT & ACCOUNTABILITY.**



In that respect, I invite you to reflect upon the often communicated claim

“decision makers have to be held accountable!”

I agree.

But I extend it. We are all decision makers in our jobs and daily lives. Whether you are a politician, work within the private sector, an NGO or as a consumer.

The decisions we make will be the judgement whether we can honestly look into the eyes of our children!

Thank you.

*Delivered by Nicolas Entrup, OceanCare,
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Nicolas Entrup, Ocean Policy Expert, OceanCare







"enormous ramifications for ... ocean health ..."



ENERGY SECTOR - COMPARISON

RENEWABLE ENERGY SECTOR

OFFSHORE WINDFARMS

Mandatory Threshold

**MITIGATION: Noise Reduction
e.g. bubble curtains, suction caissons, etc.**

Time & Area Closures

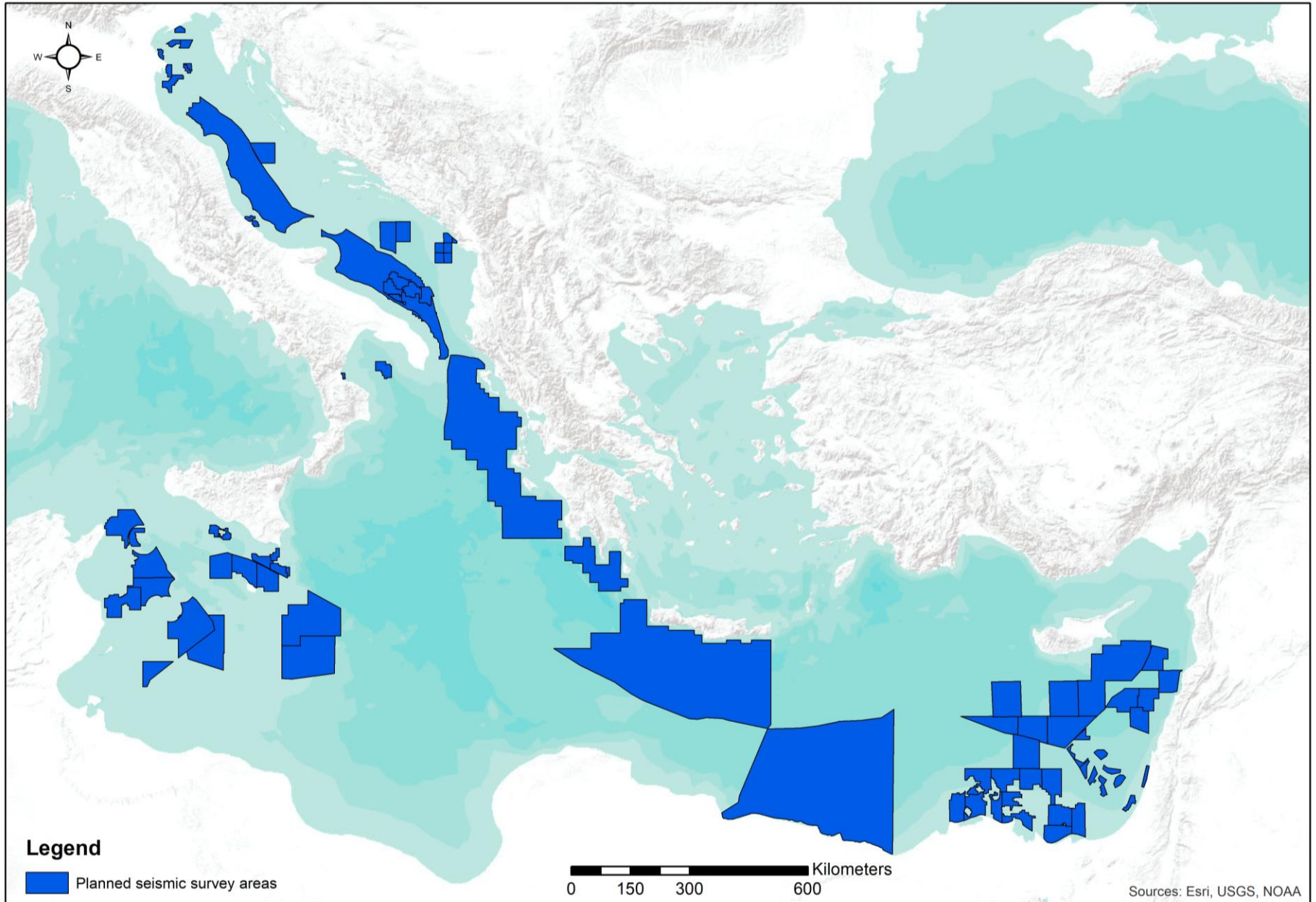
**Investment into Innovation & New
Technologies**

HYDROCARBON EXPLORATION

SEISMIC ACTIVITIES

No Threshold

"Marine Mammal Observers"



Legend

 Planned seismic survey areas

0 150 300 600 Kilometers

Sources: Esri, USGS, NOAA



