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ESG Measures – Global

Rising investor focus on marine biodiversity will heighten scrutiny of companies' governance and policy measures

A healthy ocean benefits all stakeholders, but also sustains key industries that our economic and trade systems rely on. However, risks to ocean health and marine diversity are increasing, with regional and local regulation and enforcement frameworks posing a challenge for governance. Going forward, we expect investors to place a greater emphasis on identifying and engaging with companies within sectors most exposed to marine biodiversity risks. These include shipping, offshore oil and gas, offshore renewable energy, marine aquaculture, marine fisheries and seabed mining. Companies that fail to demonstrate sufficiently robust governance structures and policy measures to mitigate their impact on marine biodiversity will come under greater scrutiny, raising potential reputational and financial risks.

The ocean is vital in sustaining both natural and human systems. Estimates suggest that oceans absorb a third of global CO₂ emissions,¹ and that marine micro-organisms process four times the CO₂ of the Amazon forests.² However, the UN also estimates that as much as 40% of the world oceans are heavily affected by pollution, depleted fisheries and loss of coastal habitats. In 2016, the importance of the oceans was encapsulated within "Life below water" – one of the 17 UN Sustainable Development Goals (SDG14) that form part of the 2030 Agenda for Sustainable Development.³

The governance and protection of oceans is a key challenge. At the heart of ocean governance is the 1992 United Nations Convention on the Law of the Sea (UNCLOS), outlining issues such as maritime zones, conservation and protection of the environment. The Convention provides guidance for other institutions regarding shipping (International Maritime Organization [IMO]) and fishing (Food and Agriculture Organization [FAO]).⁴ Nevertheless, enforcement of these rules typically takes place at an individual country level. Meanwhile, regionalization of regulations poses a challenge in establishing adequate regulatory frameworks globally.

¹ [Oceans absorb almost 1/3 of global CO₂ emissions, but at what cost?](#), World Economic Forum, March 2019.

² [First study of all Amazon greenhouse gases suggests the damaged forest is now worsening climate change](#), National Geographic, March 2021.

³ See <https://www.un.org/sustainabledevelopment/oceans/>.

⁴ [Mapping Ocean Governance and Regulation](#), UN Global Action Platform for Sustainable Ocean Business, September 2018.

For example, while fishing is governed by Regional Fisheries Management Organizations operating in specific areas,⁵ the migratory nature of fish and the regional distribution of certain fish species, make it difficult to trace illegal, unreported and unregulated (IUU) fishing that may move from one region to another.⁶ IUU fishing contributes to overfishing and damaging marine biodiversity through the use of environmentally-damaging techniques, unproper procedures to manage pollution and dumping of fishing gears (which accounts for roughly 10% of marine debris).⁷

Given the centrality of marine biodiversity and preservation, a sound governance system for impacting industries is pivotal, especially since several industries depend heavily on the oceans. The UN Global Compact Action Platform for Sustainable Ocean Business defines the following six key sectors – shipping, offshore oil and gas, offshore renewable energy, marine aquaculture, marine fisheries and seabed mining – as most reliant on the ocean.⁸

For marine aquaculture, the rapid expansion of fish consumption worldwide has led to a growth of global aquaculture production, posing challenges around ocean space and management of associated concerns, such as disease and escapees. With respect to fisheries, the depletion of marine stocks threatens the food chain, with the FAO stating that roughly a third of fisheries are currently fished at unsustainable levels.⁹

The most material issue for the shipping sector relates to regulation around the Ballast Water Convention. When a large container ship discharges cargo, it loads ballast water (used to provide balance) at source port. When a ship reaches a destination and loads cargo, it discharges ballast water at the destination port. The water at the source port may contain organisms that are foreign or invasive to destination ports. Given that 90% of global trade occurs through the sea, the amount of ballast water discharged represents a threat to marine biodiversity.¹⁰ In 2017, the Ballast Water Management Convention by the IMO came into force to set a better standard on controlling the transfer of potentially invasive species.¹¹ Nevertheless, as of September 2020, the Convention was ratified only by only 79 of 195 countries.¹²

Ocean pollution is also a key issue for the offshore oil and gas industry given the requirement for infrastructure installation, which include seafloor anchors and pipelines. Such infrastructure can cause discharges of water-based and low-toxicity, oil-based drilling muds, which can persist in the sea for many years. Any accidental oil and gas releases would cause further devastating damage to marine biodiversity.¹³

On the other hand, the offshore renewable energy industry contributes to avoiding the worse impacts of climate change, which is positive for the ocean's health. Still, there are concerns with respect to proper management of sites. According to the International Union for Conservation of Nature (IUCN), "even 'clean' energy sources can have significant unintended impacts on the environment," such as through habitat loss for birds and sea creatures, potential collisions with wind turbines and deviation of the migratory routes of birds and whales.¹⁴

Finally, the seabed mining industry operates in retrieving mineral deposits from the deep sea. While still in its infancy, there is limited information on the sector's impact on ocean health and potential mitigation steps that companies can take. As the IUCN states, "the deep sea remains understudied and poorly understood, there are many gaps in our understanding of its biodiversity and ecosystems. This makes it difficult to thoroughly assess the potential impacts of deep-sea mining and to put in place adequate safeguards to protect the marine environment."¹⁵

⁵ [Catching fish in international waters](#), World Ocean Review, accessed April 26 2021.

⁶ [Achieving Transparency and Combating IUU fishing in RFMOs](#), OCEANA, June 2019.

⁷ [Ghost fishing gear](#), World Wide Fund for Nature, October 2020.

⁸ [Mapping Ocean Governance and Regulation](#), UN Global Action Platform for Sustainable Ocean Business, September 2018.

⁹ [The State of World Fisheries and Aquaculture 2018](#), Food and Agriculture Organization, 2018.

¹⁰ [Ocean shipping and shipbuilding](#), Organisation for Economic Co-operation and Development, accessed April 22 2021.

¹¹ [Ballast water management – the control of harmful invasive species](#), International Maritime Organization, accessed 22 2021.

¹² [International Convention for the control and management of ship's ballast water and sediments](#), UN Treaty – entry into force on September 8 2017.

¹³ Cordes, E., Jones, D., Schlacher, T., Amon, D., Bernardino, A., Brooke, S., Carney, R., DeLeo, D., Dunlop, K., Escobar-Briones, E., Gates, A., Génio, L., Gobin, J., Henry, L., Herrera, S., Hoyt, S., Joye, M., Kark, S., Mestre, N., Metaxas, A., Pfeifer, S., Sink, K., Sweetman, A. and Witte, U., 2016. Environmental Impacts of the Deep-Water Oil and Gas Industry: A Review to Guide Management Strategies. *Frontiers in Environmental Science*, 4.

¹⁴ Bennun, L., van Bochove, J., Ng, C., Fletcher, C., Wilson, D., Phair, N., Carbone, G. (2021). *Mitigating biodiversity impacts associated with solar and wind energy development*. Guidelines for project developers. Gland, Switzerland: IUCN and Cambridge, UK: The Biodiversity Consultancy

¹⁵ [Deep-sea mining](#), International Union for Conservation of Nature, accessed April 22 2021.

Investors to place greater emphasis on marine biodiversity

Going forward, [we expect investors to place a greater emphasis on identifying and engaging with companies within the sectors most exposed to biodiversity risks](#). Companies that fail to demonstrate sufficiently robust governance structures and policy measures to mitigate their impact on marine biodiversity will come under greater scrutiny, raising potential reputational and financial risks.

Below are some examples on how individual companies across our coverage of exposed sectors are taking steps to manage ocean and marine biodiversity-related risks.

A.P. Moller-Maersk is the world's largest shipping company in terms of TEU (Twenty-foot equivalent unit) capacity, operating over 700 ships. The company reports that all vessels delivered from 2012 follow the IMO Ballast Water Management Convention and have been equipped with treatment systems. This represents best practice, especially when considering that the company operates in over 130 countries, many of which have not ratified the IMO Convention. Moreover, the company supports ocean science research through data collection and partnerships with several bodies, including the US Department of Commerce and National Oceanic and Atmospheric Administration.¹⁶

Mowi is one of the world's largest seafood companies and has faced some controversies in the past regarding salmon farming and overcrowding that leads to disease outbreaks. However, building on this, the company now reports transparently on the level and reduction of antibiotics used per year. Moreover, it has implemented measures to reduce sea lice loads – such as, by adapting to use cleaner fish, reducing the use of medicine and using non-medical treatment systems – to prevent outbreaks. Mowi also conducts R&D on prevention of disease outbreaks.¹⁷

EDF is a French electric utility company, which operates offshore wind farms, among other activities. At its North Sea wind farm location, the company conducted an environmental impact assessment to ensure the protection of dolphins, whales, seals and sharks, and the findings were integrated into the project's design and construction. Furthermore, the company deployed a specialist team to monitor marine life before it started piling (i.e. grounding the foundations of the wind turbines to the ocean floor).¹⁸

¹⁶ [Ocean Health](#), A.P. Moller-Maersk, April 2019.

¹⁷ [Salmon Farming Industry Handbook 2019](#), Mowi, accessed May 19 2021.

¹⁸ [Mitigating biodiversity impacts associated with solar and wind energy development](#), International Union for Conservation of Nature, April 2021.

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