

## PANEL 1

## Ocean as a clean energy source and a sustainable driver for world trade (Offshore Renewable Energy and Green shipping)

The ocean is the biggest and most abundant source of renewable energy on the planet. It has the potential to power homes, transports and businesses around the world while also reducing carbon emissions. Current technology for harnessing ocean energy is still relatively immature and not yet economically competitive with other forms of renewable energy.

Nevertheless, if we consider the energy driven by offshore wind floating technologies, there is little doubt that the ocean energy revolution is on the way and will be key to green transition and central to climate neutrality. By harnessing the power of ocean energy, we can reduce our dependence on fossil fuels and ultimately mitigate the impacts of climate change. But the transition to climate neutrality requires cost reductions in existing clean technologies to enable rapid deployment on a large scale, as well as the development of emerging technologies such as green hydrogen.

In addition to providing a clean source of energy, the ocean is also a vital driver of world trade. Approximately 90% of global trade is conducted through maritime transportation, with ships carrying goods and raw materials across the world's oceans. This makes the ocean a crucial component of the global economy, and the sustainability of maritime trade is essential for ensuring the long-term health of the planet and its people.

To promote sustainable ocean trade, governments and businesses around the world are working to reduce the environmental impact of the shipping industry. The efforts to comply with the new regulations from IMO and EU include the use of alternative fuels such as biofuels and low carbon synthetic fuels, as well as to explore the feasibility of alternative technologies like the re-introduction of renewables like wind by using rigid sails.

The production of low carbon synthetic fuels will play an important role in the decarbonization of the shipping industry. For that to happen a substantial increase in the amount of energy will be needed, as the production of synthetic fuels requires large amounts of energy. The ocean is thus viewed as the key to solve the puzzle to decarbonize maritime transportation.