

Offshore Renewable Energy

Resilience Report Summary

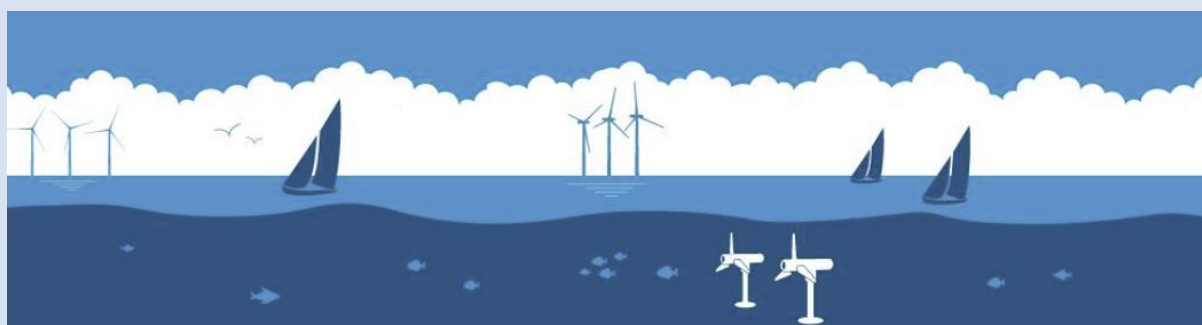
Background

Offshore renewable energy (ORE) sector is recognized as vital to achieving energy security and green transition in Europe. Europe has large renewable energy potential in offshore wind and ocean energy that are expected to contribute to more than 50% of electricity production by 2050 and deliver on Green Deal Agenda making the Europe a first climate neutral continent. According to EU Renewable Offshore Energy Strategy, the following capacity shall be installed:

2030 targets ➡ 60 GW offshore wind 1 GW ocean energy

2050 targets ➡ 300 GW offshore wind and 40 GW ocean energy

To achieve these ambitious targets, there needs to be a rampant scaling up of technology and increased renewable energy production over the next 20 years.



Why resilience is important?

Even though the ORE sector is of the strategic importance for European decarbonization strategy, there is a lack of specific support measures or mechanism on EU / National level that can strengthen its resilience. The Sector continues to struggle with number of factors such as insufficient R&D investments, market impediments to technological maturity and commercialization, supply chain disruptions, lack of financing and support schemes as well as growing inflation along entire value chain that delays contracts and project implementation.

The impact of unexpected events such as Covid-19 Pandemics and energy crisis in 2021 have made the ORE sector additionally vulnerable and slowed the investments of critical projects across Europe. The aim of the report was to investigate critical resilience challenges and provide recommendations for its improvement.

Industry feedback

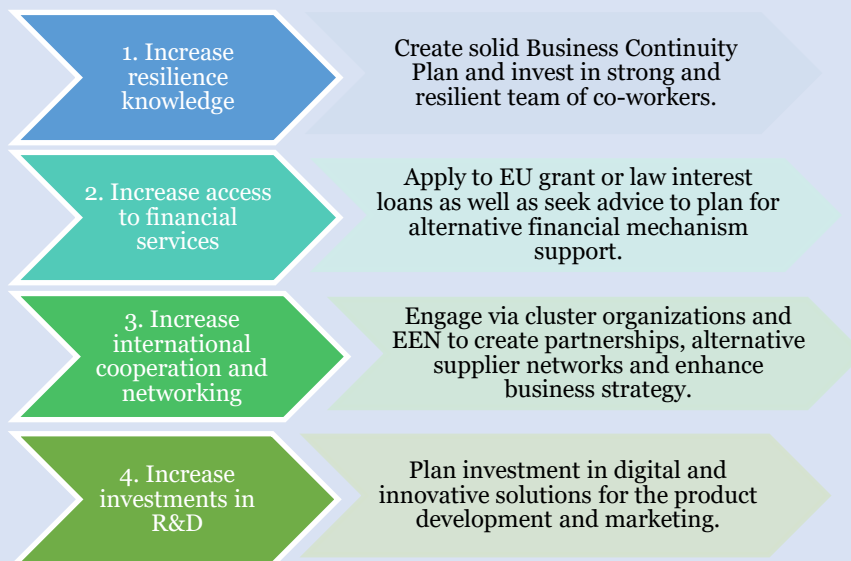
The report highlights industry challenges in coping with unexpected events and their expectations in terms of resilience support. The feedback covered around 50 companies across ELBE supply chain operating in offshore wind, wave and tidal energy from Spain, Belgium, France, Norway, Poland, Denmark and Sweden.

The survey showed that 66% companies received none or limited support from EU/State/Region level to alleviate effects of the Pandemics of Energy crisis and even when they received the support it didn't help them recover from the crisis. The biggest challenges continue to be disruptions in supply chain, loss of profit and business, inadequate resilience skills and financial incentives. Besides that, only one third of the companies have Business Continuity Plan to prepare for disruptive and unexpected events.

Key recommendations

Strengthening resilience of ORE sector is in direct relation to its survival and would require actions both on the side of companies as well as public bodies and governments to achieve expansion of the renewable offshore energy production and meet the Green Deal targets.

The report suggests following measures to strengthen the resilience of ORE companies:



These measures should be complemented on policy level by introducing specifically designed and dedicated financial incentives to support the critical projects in renewable offshore energy in Europe, as well as increasing public investments in R&D and strengthening cluster collaboration via European support networks.