European Commission

Offshore Renewable Energy Strategy

19 November 2020
#EUGreenDeal

The EU is raising its climate targets for 2030 and is committed to becoming climate-neutral by 2050.

Renewable energy will play an important role in reaching this higher ambition – including the **generation of more energy at sea and from the sea**.

The EU is already **a world leader** in offshore renewable energy production and technologies. And there is potential for further development in a cost-effective way.

The European Commission's Offshore Renewable Energy Strategy will help to make this happen and **maintain the EU's leadership in this sector**.

This EU Strategy will:

- set **ambitious targets** for the growth of the offshore renewable energy sector
- encourage **public and private investment** in new infrastructure and research
- make it easier for different regions to **work together more efficiently**
- provide a **clear and stable legal framework**

How it started, how it's going, what's the future

	1991*	2010**	Today	2030	2050
Average power capacity of offshore wind turbine	0,45 MW	3MW	7,8MW	↗	↗
EU offshore wind energy capacity	5MW	3GW	12GW	≥60GW	300GW
Ocean energy capacity (e.g. wave, tidal)		3,8MW	13MW	≥1GW	40GW

* First offshore wind farm: Vindeby, Denmark.
** Including UK

Offshore Renewable Energy is good for Europe's economy, environment and society

ECONOMY

- **Investment**, **growth** and **export** opportunities for European industry;
- **Green jobs** for citizens in coastal regions and inland, for example in manufacturing and research;
- **Reduced dependence** on imported energy, including fossil fuels.

ENVIRONMENT

- Reduction of **greenhouse gas emissions**;
- Increased production of **clean and renewable energy**;
- Protection of the **environment** and **biodiversity**.

SOCIETY

- More **affordable energy** for European consumers;
- A more **stable energy supply**;
- Improved **health** and **well-being** of citizens through decreased air pollution.

Main elements of the strategy

Investment

- Encourage the necessary investment to effectively develop offshore renewable technologies - estimated at almost €800 billion between now and 2050
- Increase certainty for investors and smooth the path for investments, ease bottlenecks, and find the best combination of public and private finance

Regional Cooperation

- Promote cross-border cooperation, in particular in the North Sea, Baltic Sea, Mediterranean Sea, Black Sea, Atlantic Ocean, and outermost regions and overseas territories
- Promote a pan-European supply chain involving multiple regions, in coastal and inland areas
- Enhance maritime spatial planning for a successful large-scale deployment of offshore renewable energy and the sustainable use of our sea space and resources

Predictable Legal Framework

- Promote innovative projects that will ensure a cost-effective deployment of offshore renewable energy
- Give certainty to promoters and reduce risk for investors

Strengthening Supply Chains and Supporting Continuous Innovation

- Maintain and develop European technological and research leadership
- Upgrade port infrastructure to support deployment and connection of offshore energy
- Boost the full industrial value chain in Europe, including skills and labour support

Print ISBN 978-92-76-26115-5 doi:10.2833/756349 MJ-03-20-788-EN-C
PDF ISBN 978-92-76-26112-4 doi:10.2833/219143 MJ-03-20-788-EN-N