REPowerEU and access to marine space

MEDAC - WG3 Green Deal meeting

18.10.22

Céline Frank, European Commission

DG MARE.A2

REPowerEU: Objectives

- To reduce the fossil fuel dependence from Russia to zero by 2027.
- Additional investment of €210 billion between now and 2027, and revision of the Recovery and Resilience Facility
- Preparing winter by anticipating storage of gas, diversification of supply and use of Liquefied Natural Gas (LNG).
- Large push to solar energy (roof-top initiative), wind energy and heat pump.

- In the short to medium term, the REPowerEU package supports massive upscale of renewable energy and hydrogen, energy saving and efficiency
- New legislation and recommendations for faster permitting of renewables especially in dedicated 'go–to areas' with low environmental risk

Short-term measures

- **Common purchases of gas, LNG and hydrogen via the EU Energy Platform, new energy partnerships**
- **EU-coordinated demand reduction plans** in case of gas supply disruption
- **Fill gas storage** to 80% capacity by 1 November 2022
- EU **Save Energy Communication** with recommendations to citizens and businesses
- Rapid roll out of **solar and wind** energy projects combined with renewable hydrogen deployment

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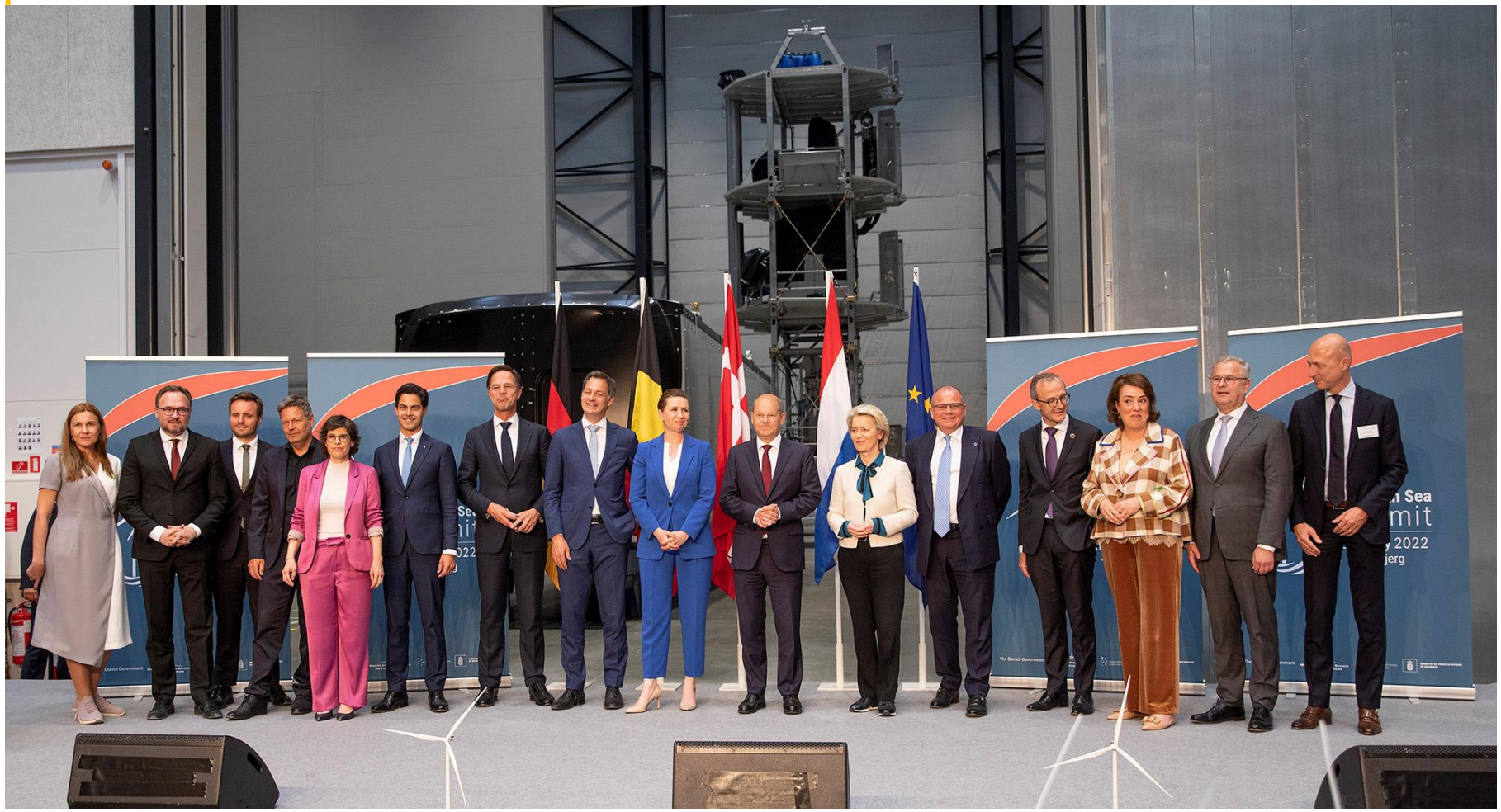
Medium-term measures to be completed before 2027

- Increased **EU-wide target on energy efficiency for 2030 from 9% to 13%**
- **Increase the European renewables target** for 2030 from 40% to 45%
- **New legislation and recommendations for faster permitting of renewables** especially in dedicated ‘go-to areas’ with low environmental risk
- **New national REPowerEU Plans**

→ modified **Recovery and Resilience Fund**

ESBJERG and MARIENBORG declarations



North Sea

65 GW by 2030

150 GW by 2050

Hydrogen 20GW by 2030

Baltic sea

19.6 GW by 2030

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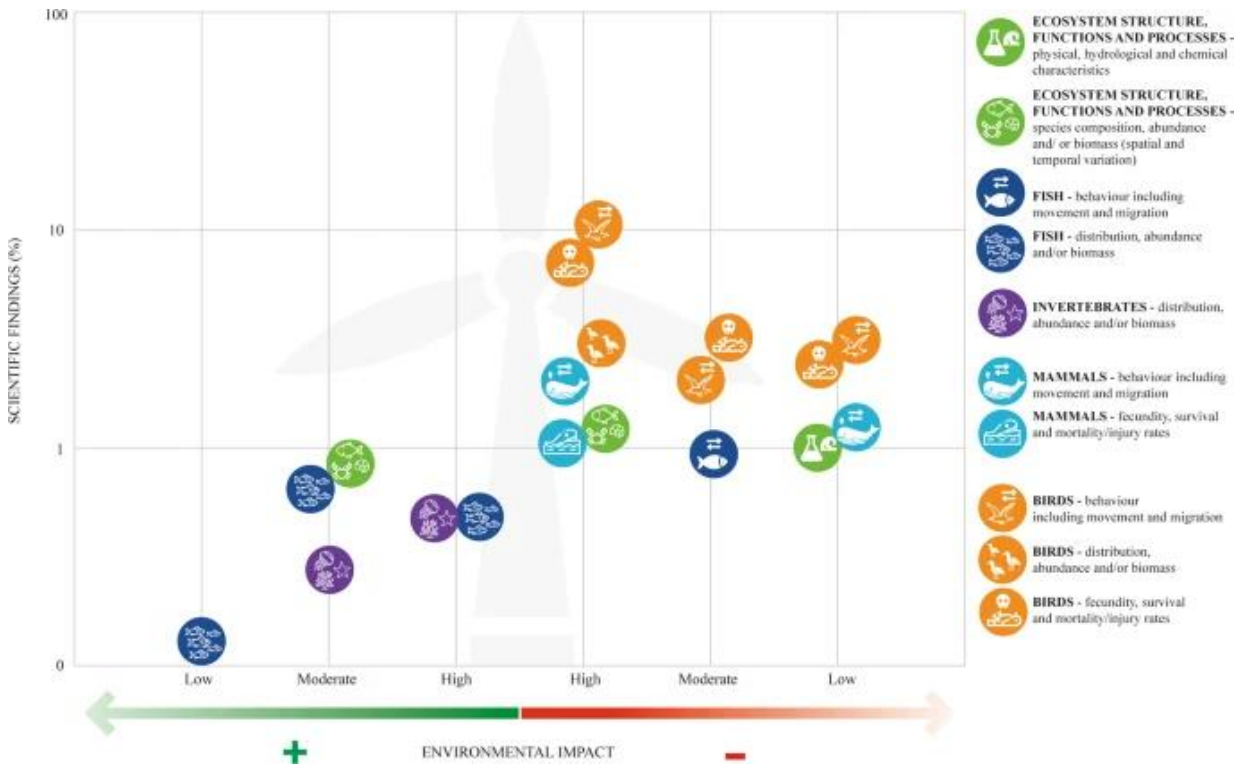
Access to marine space

- **Maritime Spatial planning:** EU Directive – 2nd year of implementation
- **Biodiversity Strategy:** 30% marine protected areas by 2030 (10% strict protection)
- **EU restoration law:** 20% of sea by 2030
- Co-existence and multi-use, EU MSP projects, non-price criteria for auctions
- **Blue Forum** for users of the sea
- Development and political objectives by MS:
  - North Sea and Baltic ministerial declarations (NSEC, BEMIP, HELCOM-VASAB,…)
  - Atlantic (IE, FR, SP, PT) 22-26 GW by 2030, Greece 2GW

Recent studies - reports on ecological impacts



Galparsoro et al. Ecological impacts of offshore wind farms: a systematic review to support strategic environmental assessments of new projects. Ocean Sustainability. 2022

https://www.eionet.europa.eu/etcs/etc-icm/products/etc-icm-reports/etc-icm-report-2-2022-mapping-potential-environmental-impacts-of-offshore-renewable-energy

Pressure type	Ecosystem element	Effect type	Impact magnitude	Spatial extent	Phase	Reference
Noise	Mammals	Behaviour (displacement/aggregation)	High	8–12 km	Prior to construction	Sarnocińska et al. (2020)
			High	26–50 km	Construction	Haelters et al. (2014); Bailey et al. (2010)
			Low	Close vicinity of the foundation (a few hundred metres or less)	Operational	Tougaard et al. (2009c)
		Auditory injury	High	2 km	Construction	Brandt et al. (2009)
	Fish	Physiological	High	2 km	Construction	Mooney et al. (2020)
		Behaviour (displacement/aggregation)	High	15 km	Construction	Boyle and New (2018)
			High	Close vicinity of the foundation (4 m)	Operational	Wahlberg and Westerberg (2005)
		Auditory injury	Moderate	Around the pilling	Construction	De Backer et al. (2014a) Halvorsen et al. (2012a) Halvorsen et al. (2012b)
	Invertebrates	Behaviour	Moderate	10 m	Construction	Solan et al. (2016); Jones et al. (2019); Jones et al. (2020); Roberts et al. (2015)
Electromagnetic field	Fish	Behaviour	Low	Around the cable	Operational	Hutchison et al. (2020)
	Invertebrates	Behaviour	Low	Around the cable	Operational	Sigray and Westerberg (2008)
New habitat/ Artificial reef effect	Benthic habitats	Habitat heterogeneity	Moderate	Inside the wind farm	Operational	Mavraki et al. (2020)
	Invertebrates	Mortality/alteration through #sediment removal	High	Inside the wind farm	Construction	Dannheim et al., 2019
		Colonisation by non-indigenous species	Moderate	From shipping, ballast water, translocated equipment	Operational	Degraer et al. (2020); Dannheim et al. (2019a)
		Increased hard-substrate fauna (increasing moderate organic enrichment, severe reductions in sediment oxygenation)	Moderate	Inside the wind farm	Operational	Dannheim et al. (2019b)
		Altered food availability	High	Inside the wind farm	Operational	Dannheim et al. (2019b)
	Fish	Aggregation	Moderate	Inside the wind farm	Operational	Stenberg et al., 2015; Raoux et al. (2017)

Thank you

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