



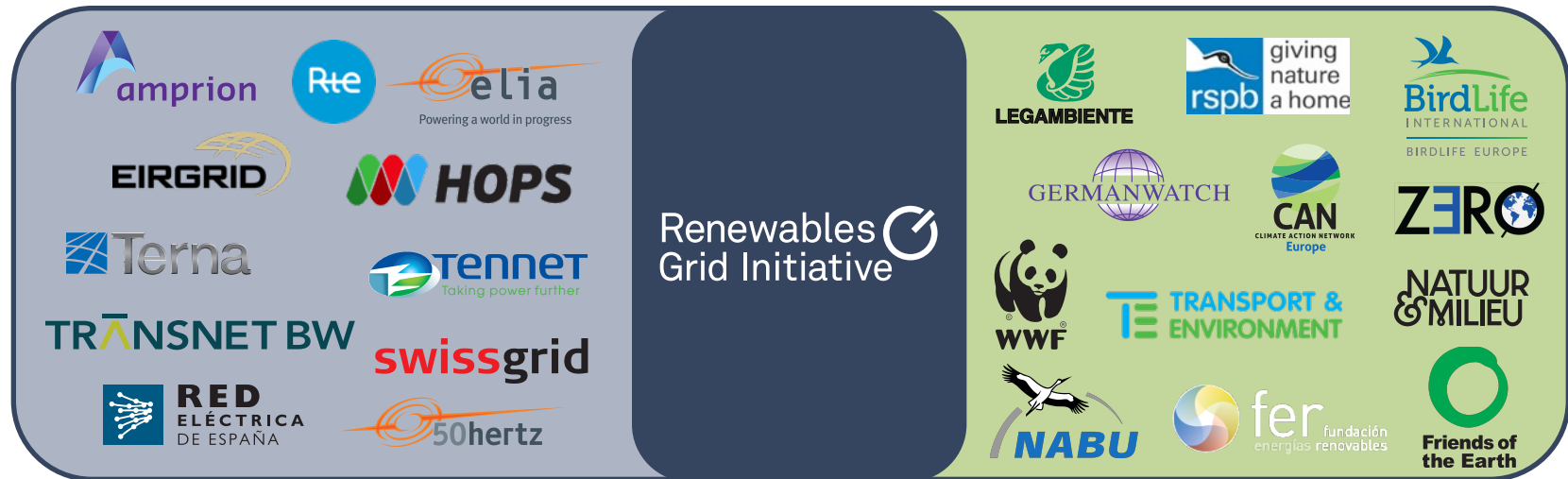
Opportunities for integrated offshore grid planning

Workshop MSP & Offshore Wind Energy | 22 September 2020

Johanna Meier | Renewables Grid Initiative

RGI – a unique cooperation between industry and civil society

RGI is a unique collaboration of NGOs and TSOs from across Europe engaging in an ‘energy transition ecosystem-of-actors’. We promote fair, transparent, sustainable grid development to enable the growth of renewables to achieve full decarbonisation in line with the Paris Agreement.



What does 'European' mean?



Offshore wind development & the grid



- Conflicting interests & limited space
- Need for resource optimisation
- Offshore renewables and its connecting infrastructure cannot be built in isolation.

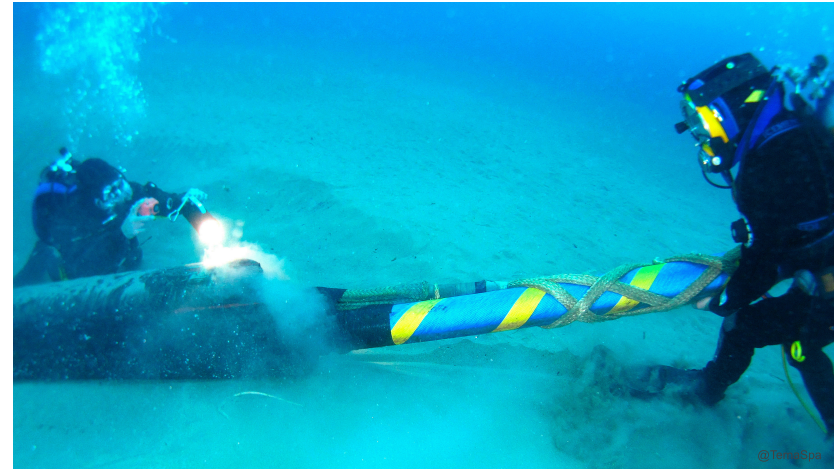
Offshore development: Key challenges

Technological challenges

Regulatory challenges

Ecological challenges

- Potential impacts of marine grids:
 - Disturbance, underwater noise, heat
 - Emission, electromagnetic fields, and contamination
- Landing points in environmentally sensitive coastal waters
- Cumulative impacts of human activities on nature
- Effects only visible over time



Offshore wind development: Opportunities for solutions

Plan together

- Voluntary, integrated cross-sectoral processes combining generation and transmission to identify sites and solutions for low impact
- Plan across borders for the entire sea basin
- Find new solutions in design and engineering
- Find regulatory solutions for cross-border projects

Plan in line with marine conservation objectives

- Energy infrastructure needs to be built efficiently to minimise impact
- Proactive comprehensive ecological sensitivity mapping
- Identify knowledge gaps and enable consistent monitoring
- Consensus on how to measure cumulative effects of human activities

Plan ahead

- Plan all the way to full decarbonisation
- Plan with a lifecycle perspective

Practical examples

- PROMOTioN
- Eurobar

- North Sea Agreement
- Marine Grid Declaration
- RGI-led Coalition on wind development and environmental protection

Thank you!



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