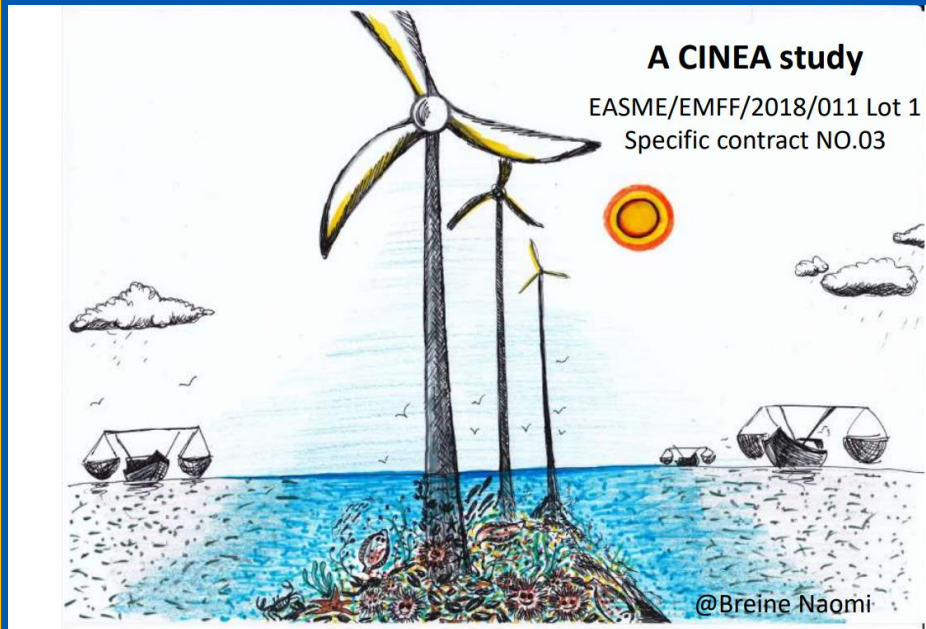


Overview of the effects of offshore wind on fisheries



NWWAC-PeIAC workshop
10/05/2022

Céline FRANK – DG MARE A2

Policy context

EU targets for offshore wind adopted in 2020: 12GW=>60 GW (2030) => 300 GW (2050) + wave and tidal energy, 1GW (2050)

- **REPowerEU** + guidance on renewable energy permitting
- **EP initiative** on the impact on the fishing sector of offshore wind farms and other renewable energy systems (2019/2158(INI))
- **Joint Resolution** on impact of offshore wind farms on fisheries by the **European Social partners** in the sea fisheries sector
- **Maritime Spatial Planning (MSP) Directive** : 1st report on progress in implementing the directive adopted last week (COM(2022) 185 final)
- **EMFF/EMFAF** crisis measures for fishing activities

Studies and projects

- **e-MSP project:** Community of practice on MSP, notably to discuss offshore renewable developments and the ecosystem-based approach (ongoing)
- Environmental Impacts of Offshore Wind Farms in the **Belgian Part of the North Sea** (2020)
- **EEA report** on mapping potential environmental impacts of offshore renewable energy (to be published this summer).
- **ICES:** Workshop on socio-economic implications of offshore wind on fishing communities (WKSEIOWFC) + WGOWDF + WGMPCZM
- **Horizon Europe action:** Wind energy in the natural and social environment (selection ongoing)



CINEA study
Lead partner:
Wageningen Marine
Research

In-depth literature review on ecology,
management, legislation and socio-
economics.



appropriate understanding of the **existing** and
potential future **effects** of offshore wind
installations on fisheries and aquaculture activities



What do we know?

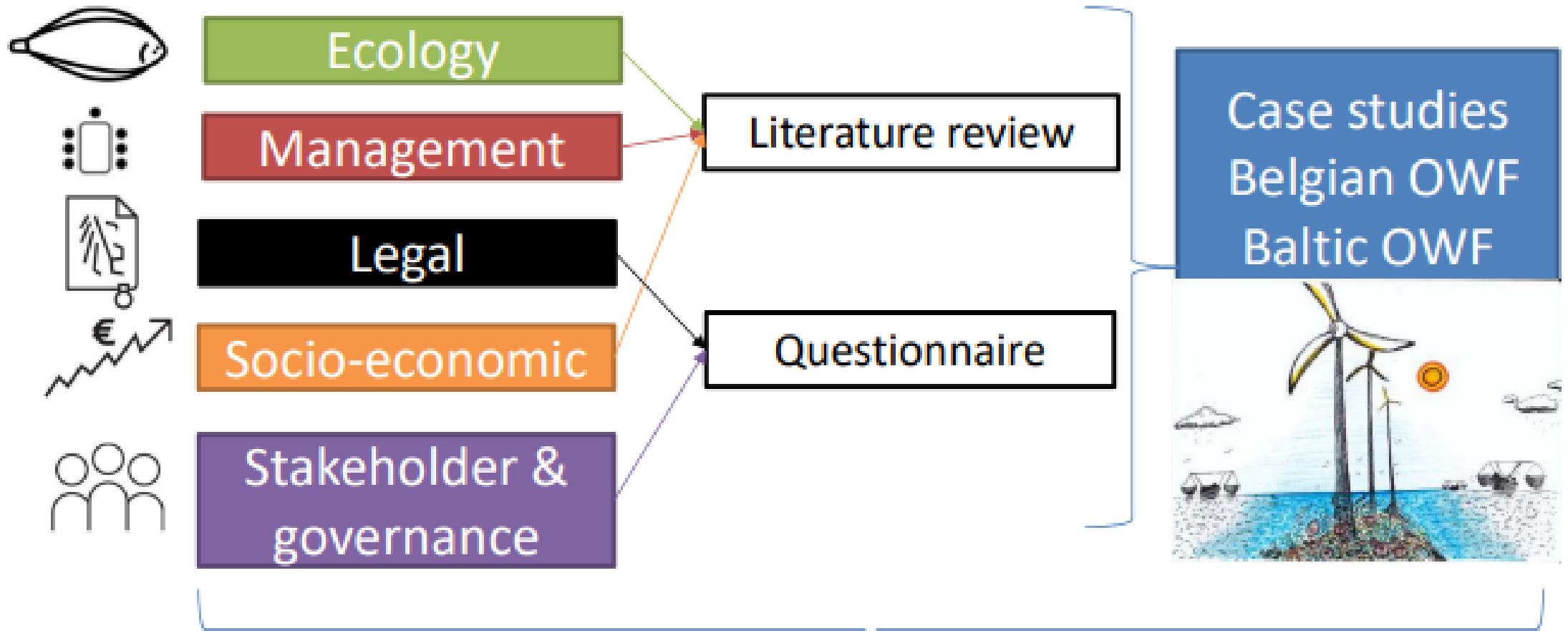


What are the gaps?



Recommendations.

Review the effect on:



Summary / Recommendations



Phase	Turbine	Scour protection	Cables	Fishery/aquaculture
Construction	Habitat modification leading to altered biodiversity (medium)			
	Increased sediment resuspension - negative (medium)			
	High impulsive sound , effects on mobile species behaviour - negative (medium)		Sediment displacement , impoverishment of sea floor ecosystem - negative (low)	
Operational	Artificial reef effect - positive (medium)		Artificial reef effect depending on cable protection - positive (medium)	Refugium and recovery area for long-living benthic species and - positive (medium)
	Altered biodiversity and changes in ecosystem functions and processes - negative (low)			
	Stepping-stone effect , increasing population connectivity (e.g. invasive species, red list species) - negative (low)		Electromagnetic field effects - negative (low)	
	Changes in hydrodynamics → increased suspended material and local organic enrichment - mixed (low)			
	Changes in trophic interactions - mixed (low)			
	Operational sound in the long term - negative (low)			
	Chemical pollution from corrosion protection - negative (low)			
Decommissioning	Effects are still poorly understood. Some lessons could be considered from oil and gas industry and wrecks work - negative (low)			



Management



- Maritime spatial planning process
- **Co-location**
 - Fishery: mostly impossible in practice - **Passive fisheries allowed**
 - Aquaculture: clear potential
- Key management strategies
 - **Consultation**: early and better consultation
 - **Compensation**: no simple matter



Fishery: input and influence are minimal, no compensations
OWF developers: multi-use potential is there
Policy: broad consultation necessary & multi-use should be the intention



Legal and socio-economic aspects

- Construction: navigation is in general forbidden
- Operation: variable rules exist, **vessels <24 m can be exempted** from safety zone
- Need for quantitative studies to assess the **monetary value of the loss of fishing**
- **Case-by-case** arrangements between developers and local fisheries organisations: possible change of design, compensation, monitoring, etc.
- **Early engagement in discussions and planning**, on a continuous basis and by taking into account the fishery and aquaculture needs → MSP

Main conclusions

- **Strong progress in knowledge** (offshore wind companies, regulators, conservationists, fishery, aquaculture sector and scientists). **More is needed.**
- For fishers, OWF tends **to restrict their activities** due to **safety implications** (cable, collision).
- **No negative effect on fisheries** observed based on yearly aggregated VMS-logbook data in **Belgium** between 2006 and 2017.
- For **ecosystems**, some benefits are noticed **at local scale** (e.g. artificial reef effect, passive refugium in the long-term), no quantification at population level.
- **Increased local production** (cod and pouting) + indication of increased catch rates of plaice around OWFs in BE.

Thank you. Questions?

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Publication and additional material:

- [Overview of the effects of offshore wind farms on fisheries and aquaculture - Final report](#)
- [REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL outlining the progress made in implementing Directive 2014/89/EU establishing a framework for maritime spatial planning](#)
- https://ec.europa.eu/oceans-and-fisheries/ocean/blue-economy/marine-renewable-energy_en