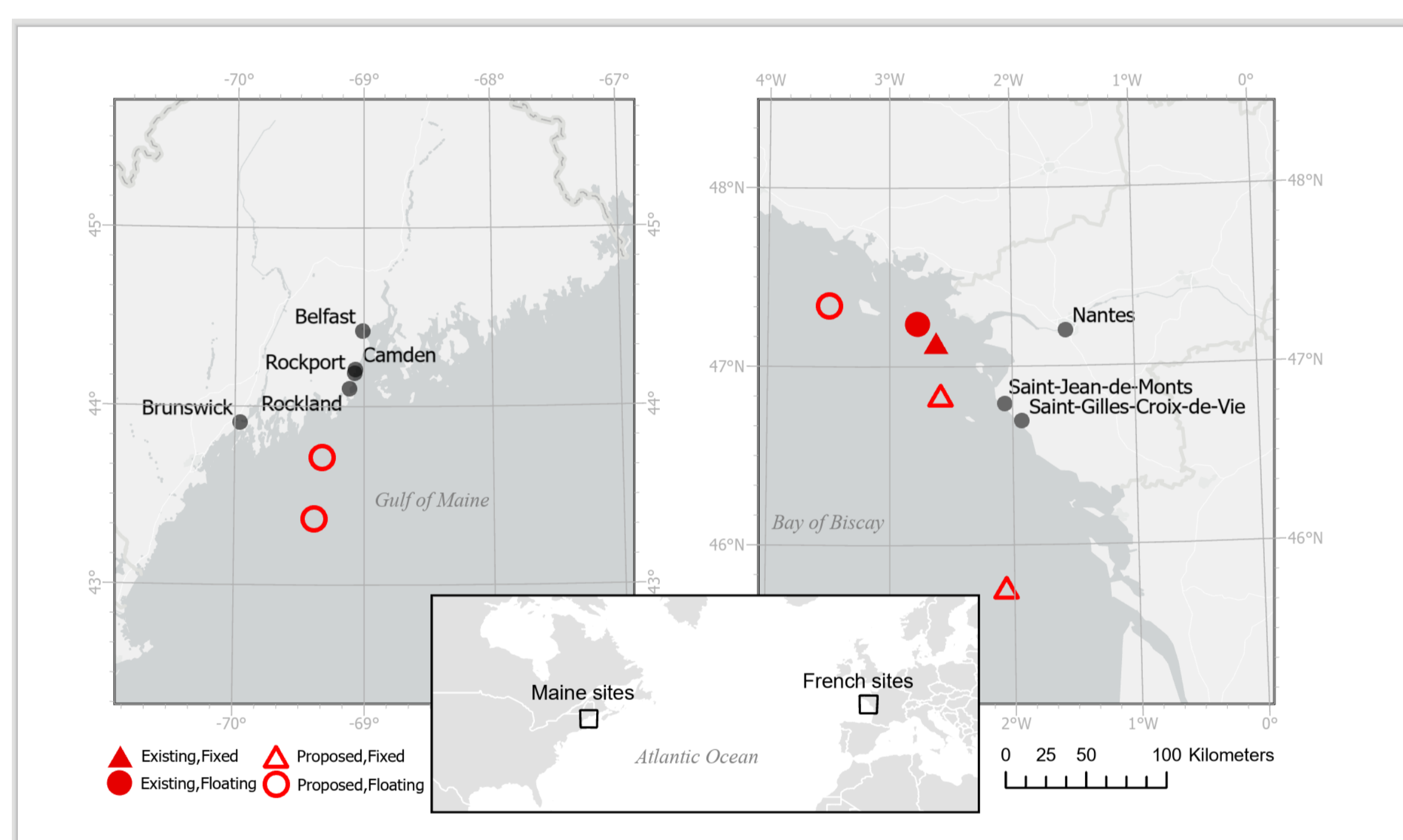


Transatlantic insights of Coastal communities perceptions & opinion on Floating Wind Farms & Artificial reefs

Dubois A., Bates A., Mahieu P-A., Lin A., Meredith J. & Schoefs F.

Background

- Offshore Wind Farms often face community opposition¹
 - ↳ mostly because of concerns about impacts on coastal recreation, tourism, fishing, and marine biodiversity
 - Integrating community views into the development process is crucial for a socially responsible shift
 - Eco-engineering solutions² can balance impacts and opportunities for local and coastal communities
- ⇒ Testing perceptions about FOWF and biodiversity enhancing concept



Sampled sites (semi-structured interviews)

About floating wind farms

- **Pros:**
 - ✓ Clean energy
 - ✓ Space optimisation
 - ✓ High efficiency
- **Cons:**
 - ✗ Biodiversity impacts (anchors)
 - ✗ Maintenance needed (mooring lines)
 - ✗ Aesthetics degradation
 - ✗ Potential collisions
- **Note:**
 - ✗ Still a lack of knowledge



The concept

- Structure designed for FOWF application
- Mainly recycled steel pipes
- Optimal volume for marine life
- Cost estimated with steel volume



On going study

- Willingness-to-pay study
- Only aiming regions where OWF or FOWF are planned
- 503 respondents from France and 501 from the U.S
- ✓ Analysis on structure material, local economy revenue impact, marine biodiversity increase
- ✓ Once again artificial reef concept was **well received** by people
- ✓ People with life depending on ocean (ex. fishermen, coastguards and chefs) greeted the concept
- ✗ Overall 9.5% of respondents were totally against OWF

⇒ **Final analysis still on-going... stay tuned!**



Artificial reef opinions

- Newly concept of artificial reef highly greeted by both countries ✓
- Any potential negative impacts would be outweighed by biodiversity increase ✓
- Communities saw the creation of opportunities for fishermen ✓
- Recycled steel option was well received ✓
- Concerns about steel quality facing corrosion ✗
- People were afraid of being overcharged ✗
- No change of opinion for people against FOWF development ✗
- Strengthening of convictions ↵

Financial support



¹Machado & de Andrés, 2023 "Implications of offshore wind energy developments in coastal and maritime tourism and recreation areas: an analytical overview."

²Glarou *et al.*, 2020 "Using artificial-reef knowledge to enhance the ecological function of offshore wind turbine foundations: implications for fish abundance and diversity".