

# JOINING FORCES for the ENERGY TRANSITION in EU FISHERIES and AQUACULTURE



## PILOTHY PROJECT

28th November 2023

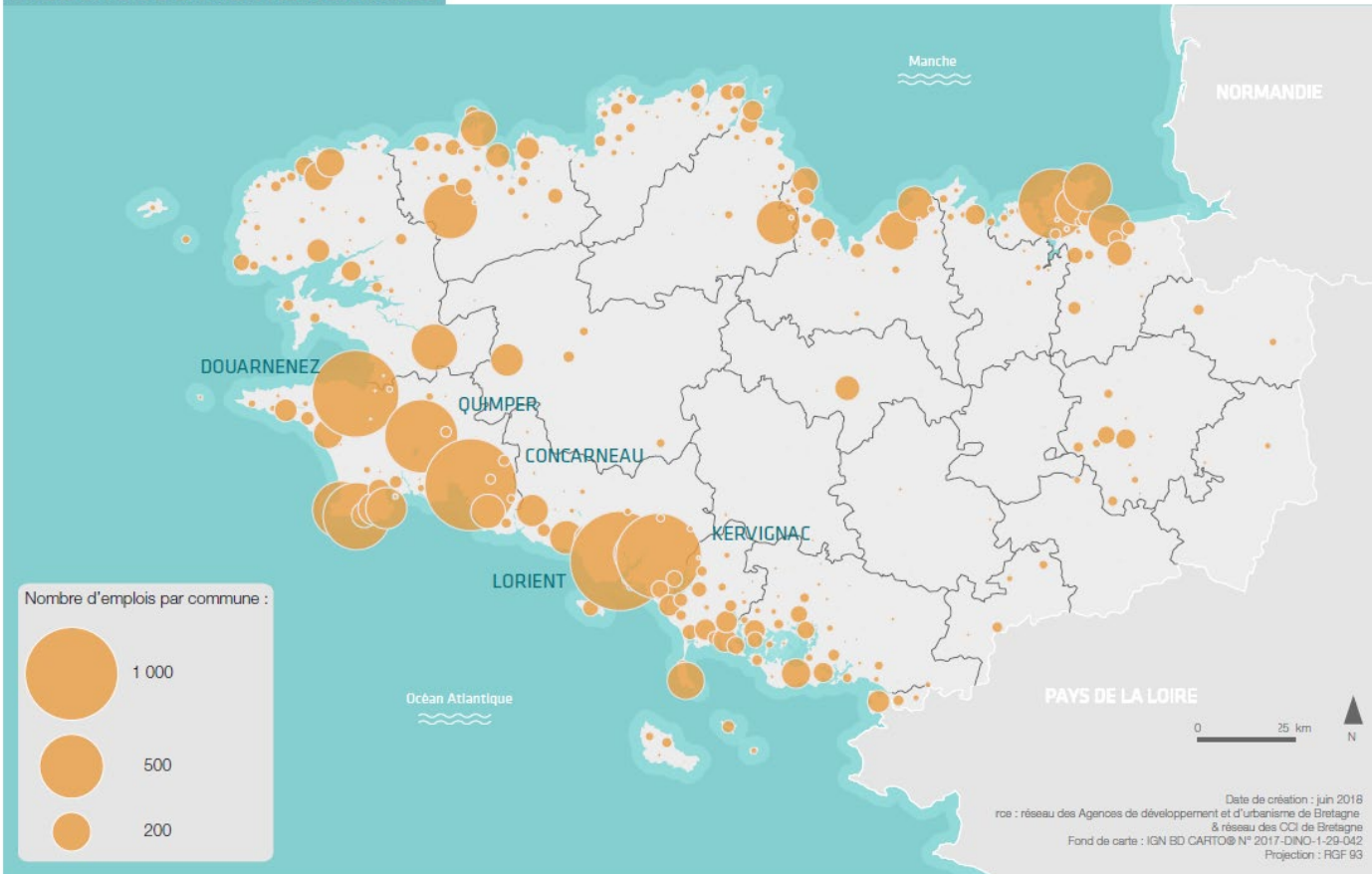
Integration of a hydrogen fuel cell in refit on a fishing vessel



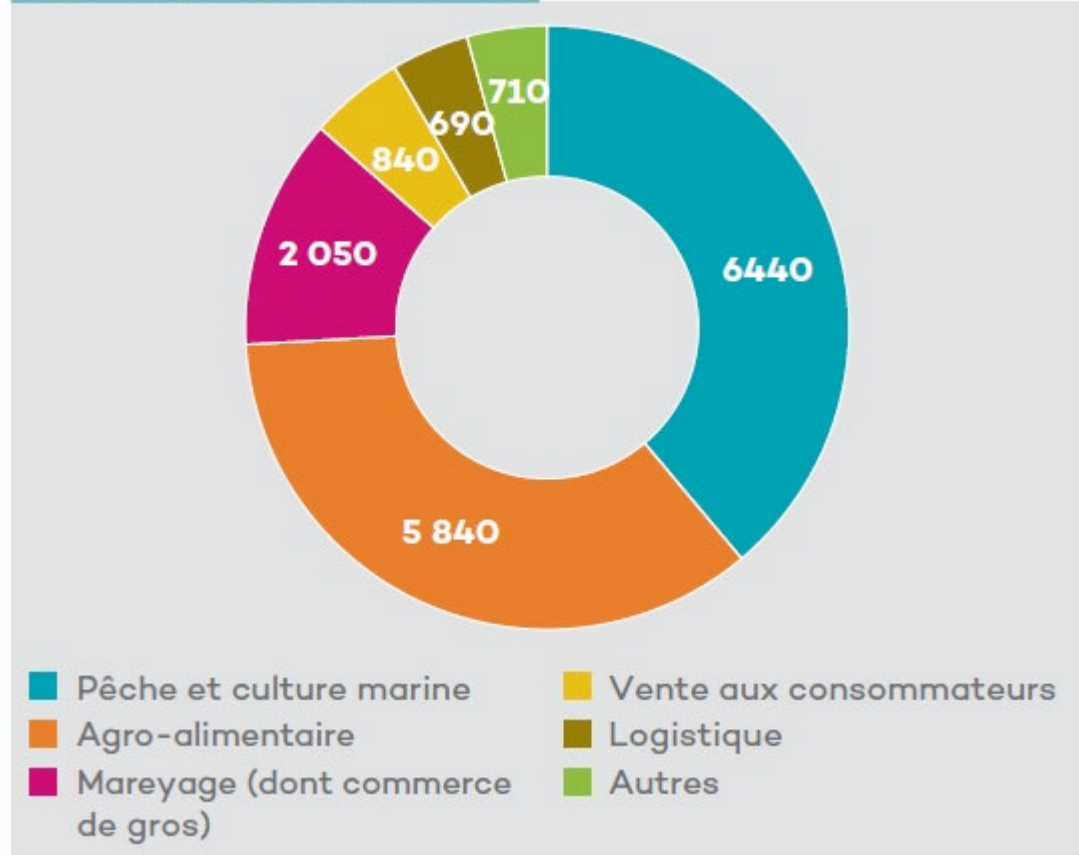
European  
Commission

# Seafood in Brittany

## PRODUITS DE LA MER ALIMENTAIRES

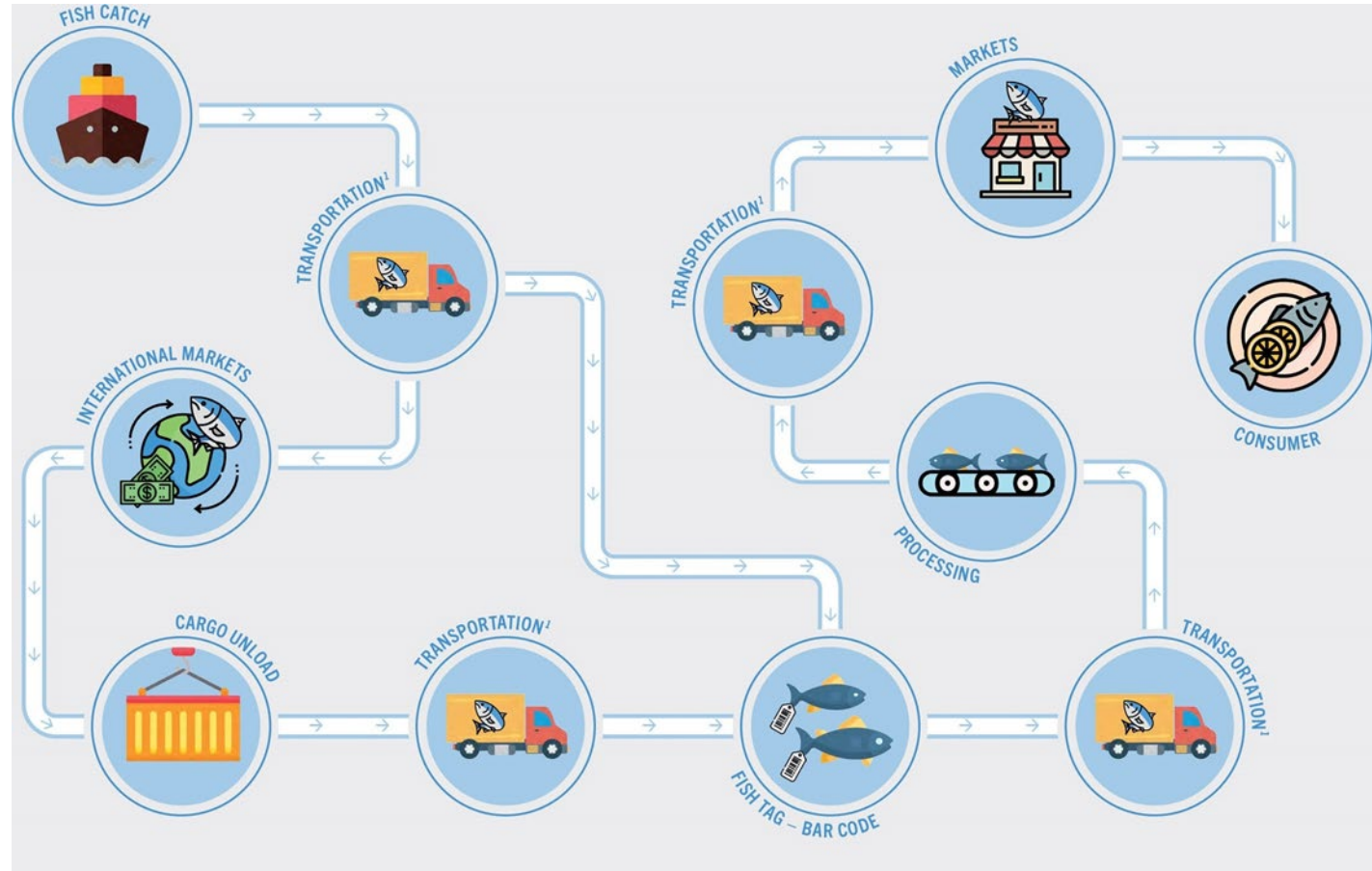


## RÉPARTITION DES EMPLOIS



# Strategy of the Brittany region for resilience in the seafood sector (post-Covid, energy crisis,...)

- ✓ Decarbonize the fishing fleet
- ✓ Improve energy efficiency in harbour and hall auction (ice process, thermal insulation, seawater supply,...)
- ✓ Support the processing sector (energy saving/energy production)
- ✓ Promote label with regional professional structures
- ✓ Ensure best practices in public tenders



# DECARBONISATION OF THE FIRST CHAIN LINK

- Main issues to tackle:
  - Regulatories: EMFAF, CFP, State Aid
  - Financials

## Article 18 EMFAF d)

*for other vessels up to 24 metres in overall length, the new or modernised engine does not have more power in kW than that of the current engine and emits at least 20 % less CO2 compared to the current engine.*

## Article 19

*Increase in the gross tonnage of a fishing vessel to improve safety, working conditions or energy efficiency  
...which does not have a power exceeding the fishing vessel's previously certified engine power*



# DECARBONISATION OF THE FIRST CHAIN LINK

Call for expression of interest "deployment of hydrogen within the fishing fleet"

Call for projects "energy transitions in the Breton fishing and aquaculture sectors"

**PILOTHY – Etude de faisabilité du retrofit d'un navire de pêche**



**Présentation du projet ESTEBAM - Le retrofit de barges mytilicoles**



# DECARBONISATION OF THE FIRST CHAIN LINK

Call for expression of interest "deployment of hydrogen within the fishing fleet"



- ✓ Breaking the barriers through innovation for H2 fishing fleet deployment
- ✓ Energy savings (propulsion systems, structure vessel, fishing gear)



- ✓ Overall call for projects budget: €1.5 million
- ✓ Regional aid up to €375k per project – **€87k for Pilotry**



- ✓ Two-year project
- ✓ Deployment of technology (market entry) within three years of project completion



- ✓ Consortium with majority Breton operators
- ✓ Sharing experiences in networks (EU & International)

# PILOTHY PROJECT

Integration of a hydrogen fuel cell in refit on a fishing vessel



## Fishing Vessel - ANITA CONTI

- Trawler 17,30m built in Brittany in 1980
- Actual owner : SAS STARTIJENN, Julien LE BRUN
- Coastal fleet (weekly at sea)



# PILOTHY PROJECT

## Selected projet:

Propulsion engine: diesel

Fishing gears & onboard needs: Hydrogen with Fuel cell, H2 tanks (9 tanks of 10kg H2 – 350 bar)

**10 -15%** of energy by FC

**90kg** of H2 by fishing tide

**500L** of diesel saved by fishing tide

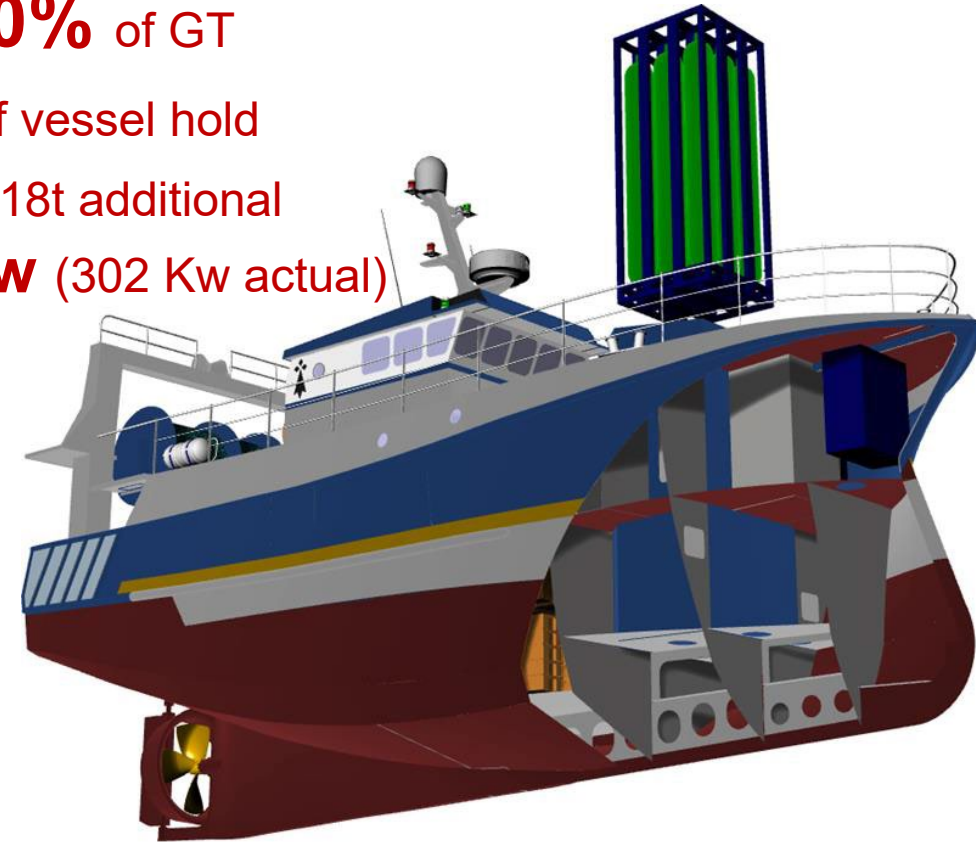
**75 t CO2eq** saved per year

**+15 -20%** of GT

**-30%** of vessel hold

**-Speed** 18t additional

**+ 147 kw** (302 Kw actual)





# Thank you !

[spech@bretagne.bzh](mailto:spech@bretagne.bzh)  
[delegation.bruxelles@bretagne.bzh](mailto:delegation.bruxelles@bretagne.bzh)  
[sebastien.crom@bretagne.bzh](mailto:sebastien.crom@bretagne.bzh)

