NANTES May 19th, 2015

BLUE GROWTH in EUROPE

Fishing Vessel of the future

Bureau
MAURIC

A 25 m Diesel Electric Prototype

Bureau
MAURIC

A 25 m Diesel Electric Prototype

- Under construction at Socarenam Shipyard (Boulogne/mer)

SOCARENAM Bureau MAURIC ENAG IXBLUE DEEP INSIGHT. SHARPER SENSES. MARINELEC TECHNOLOGIES

- Designed , built and evaluated as part of the French Research Program “Navire du Futur” (Ship of the Future)

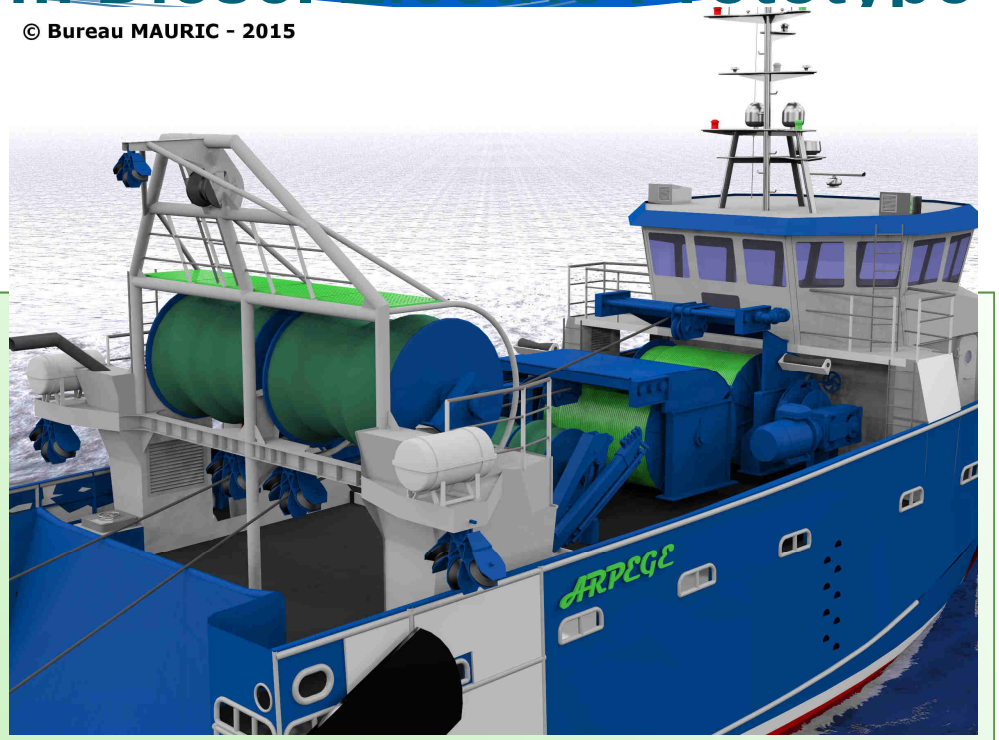
- The Project is partially subsidized by the French Agency ADEME

ADEME
Agence de l'Environnement et de la Maîtrise de l'Energie

- The Project Budget :
  - Overall cost : 8,2 M€
  - Subvention : 2 M€
  - Owner: 3 M€
  - Consortium : 3,2 M€
- The vessel is planned to be delivered this summer 2015
- Then she will be tested at sea for six month

Bureau MAURIC

A 25 m Diesel Electric Prototype

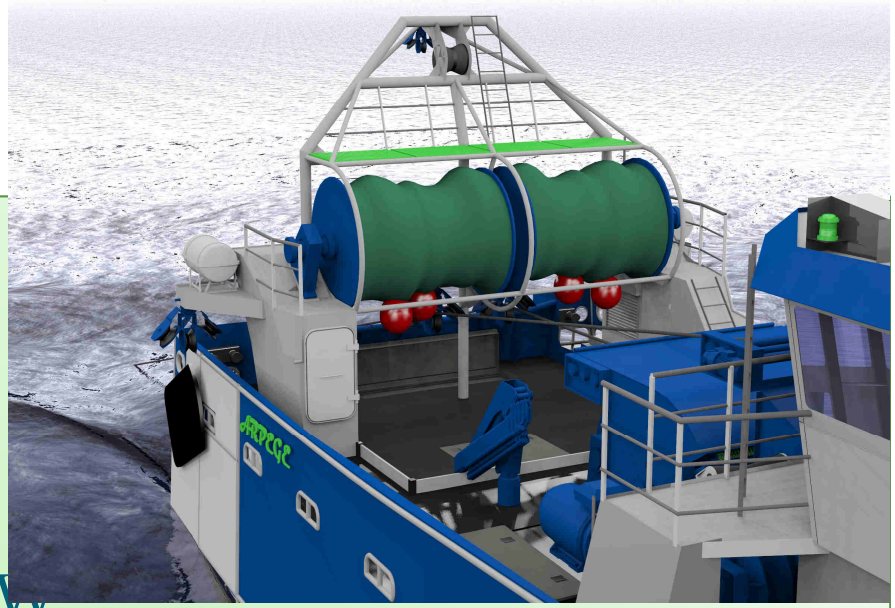


- A fishing vessel equipped for:
  - Bottom trawling,
  - Pelagic trawling
  - Fly shooting

- The aim of the concept:
  - A reference for the renewal of the ageing French and European fishing fleet
  - A new product line based on ARPEGE Prototype
  - Safer : Freeboard higher, full stability criteria
  - Low consumption: Fuel consumption reduced by 25 %
  - More profitable / Fish processing aboard
  - Comfortable at sea / Separation between working and living area

Bureau MAURIC

A 25 m Diesel Electric Prototype



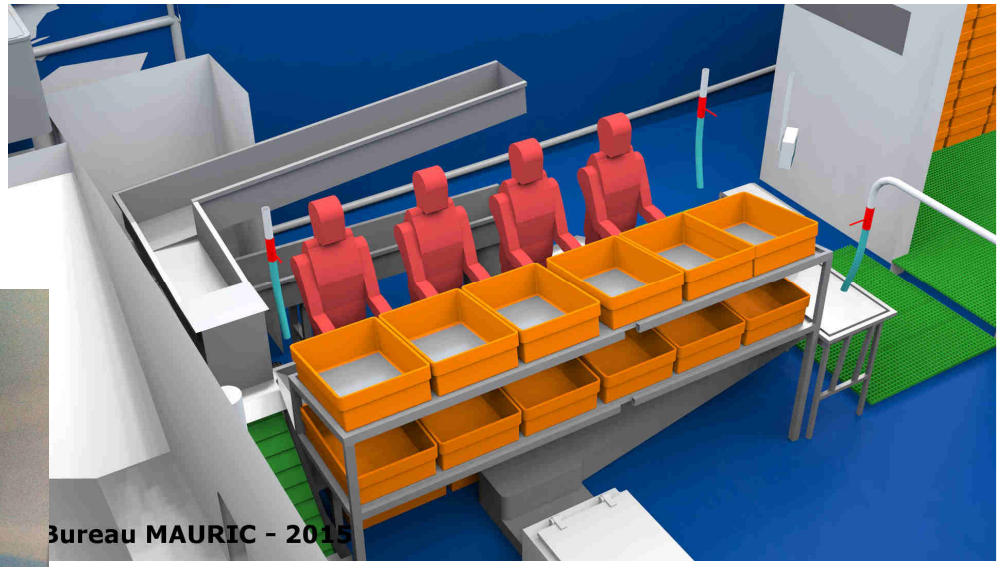
- The Main Characteristics
  - Hull length: 25 m
  - Breadth : 8,50 m
  - Displacement : 300 t
  - Propulsion Power : 2x 220kW
  - Genset: 2 x430 Kwe
  - Crew: 8 persons
  - Hold Capacity : 80 m3

- **Why Diesel Electric ?: A controllable network safe and efficient for energy saving**

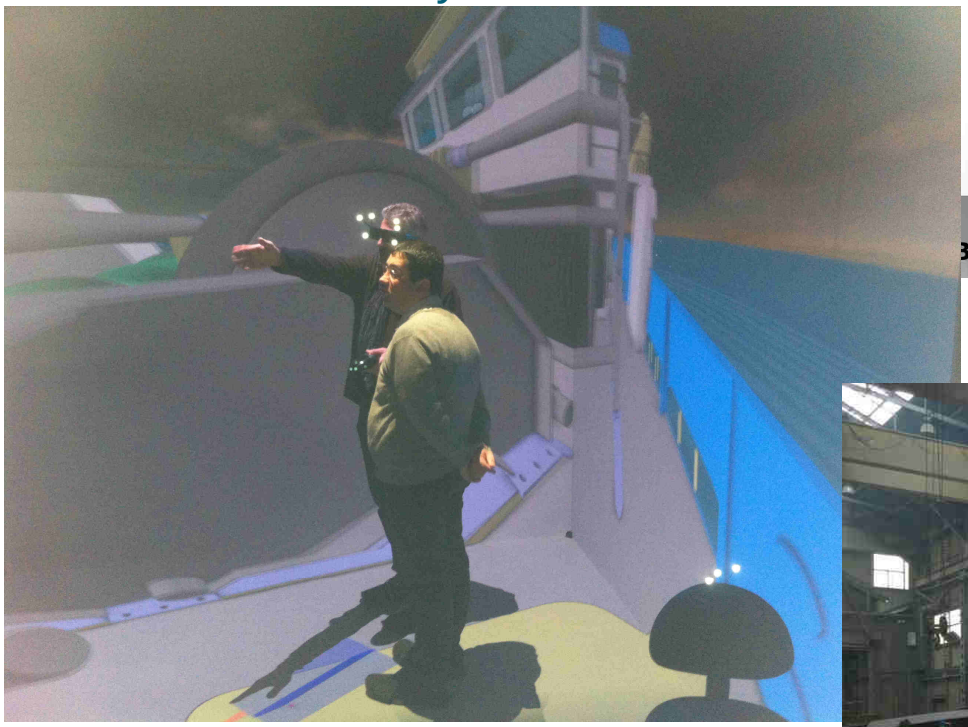
Bureau MAURIC

A 25 m Diesel Electric Prototype

Ergonomy strategy



3D Virtual Reality



Under construction

Bureau MAURIC

Projets FILHyPyNE (FILière Hydrogène pour la Pêche polyvaleNtE)

mh2 Mission Hydrogène

DCNS

COREPEM
Comité Régional des Pêches et des Elevages Marins des Pays de Loire

BUREAU MAURIC
Naval Architecture & Marine Engineering

ricep

ENSM
ÉCOLE NATIONALE SUPÉRIEURE MARITIME

Bureau MAURIC

Projets FILHyPyNE (FILière Hydrogène pour la Pêche polyvaleNtE)

A dedicated approach on global energy system for fishing: Wind propeller !!!!

The concept of captive fleet for fishing

Production électricité - EMR

Électrolyser : Hydrogen production

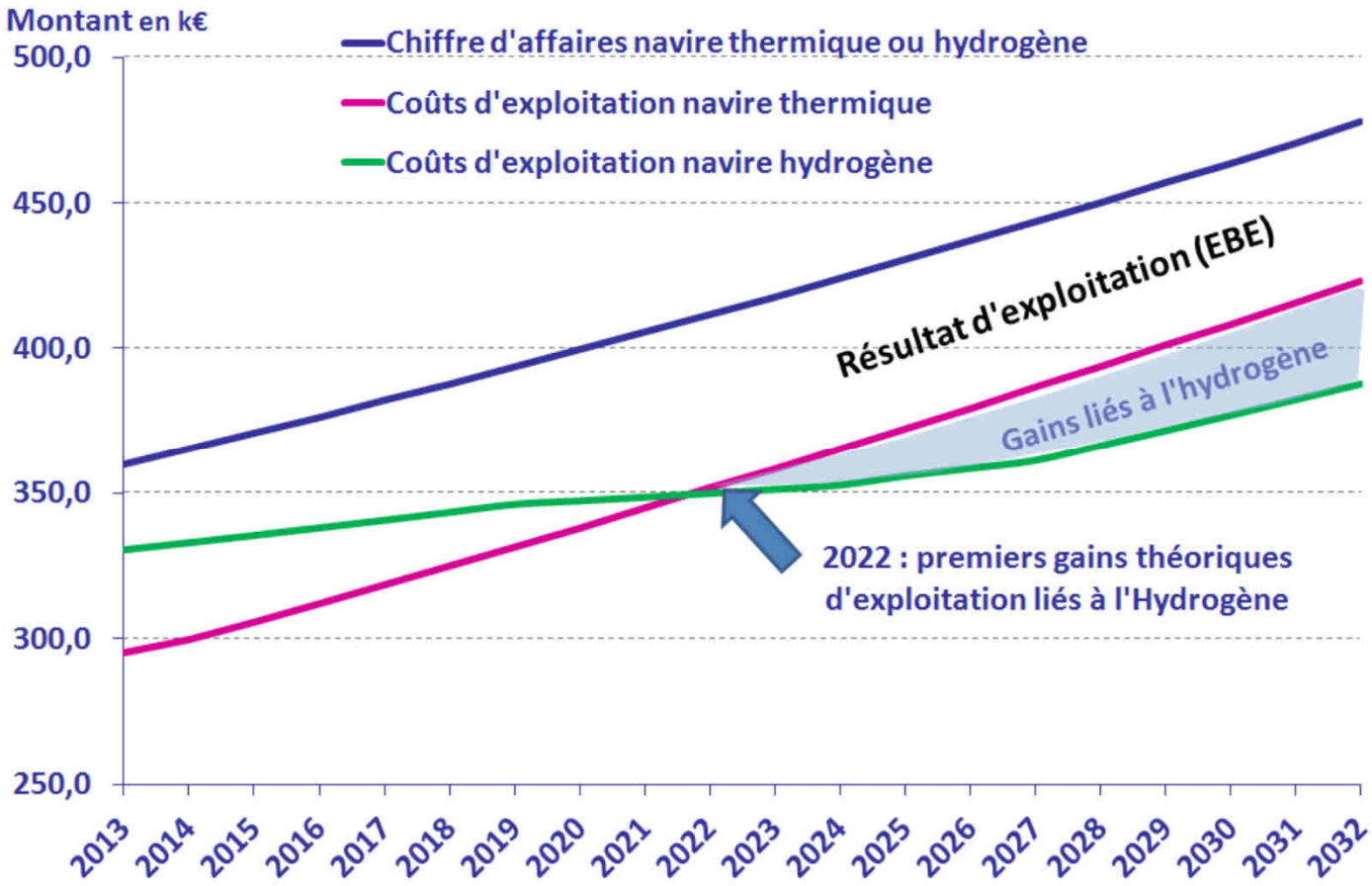
Hydrogen storage

Hydroge Distribution

FILHyPyNE

Bureau MAURIC

FILHyPyNE Project objectives



Since 2022, the propulsion hydrogen - electric become interesting from an economic point of view

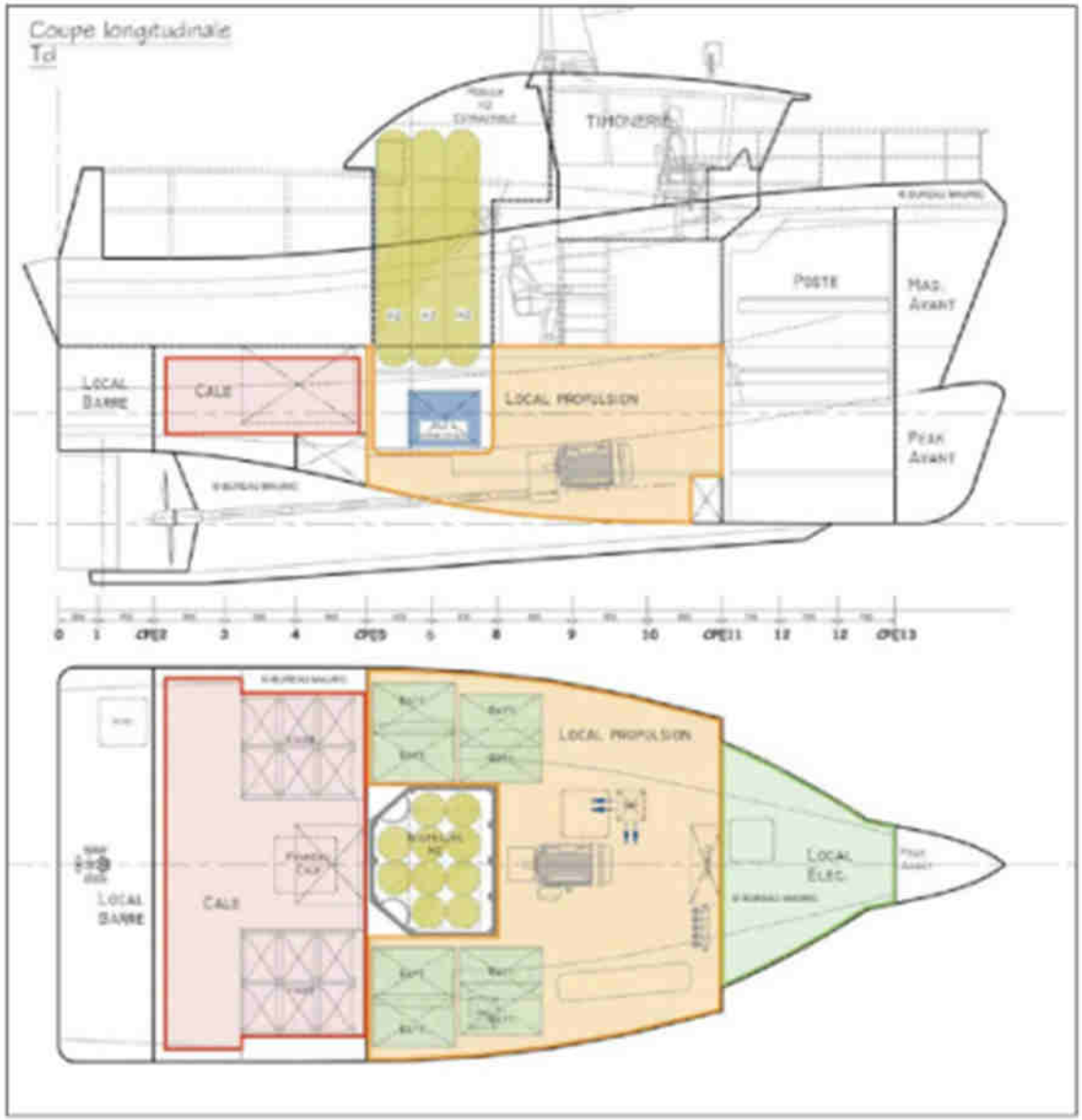
Bureau MAURIC

FILHyPyNE Project objectives

A 12 m long fishing vessel dedicated for net or line fishing

Validate the hydrogen propulsion architecture in real coastal fishing activity

- Technical performance,
- Economical efficiency
- Environmental impact
- Societal integration



Bureau MAURIC