

# Hydrogen in maritime applications

## NEW-H-SHIP

**NEW-H-SHIP has gathered a unique consortium group who is leading in the maritime field in Europe. With this project Europe is taking the major steps towards using Hydrogen at sea**

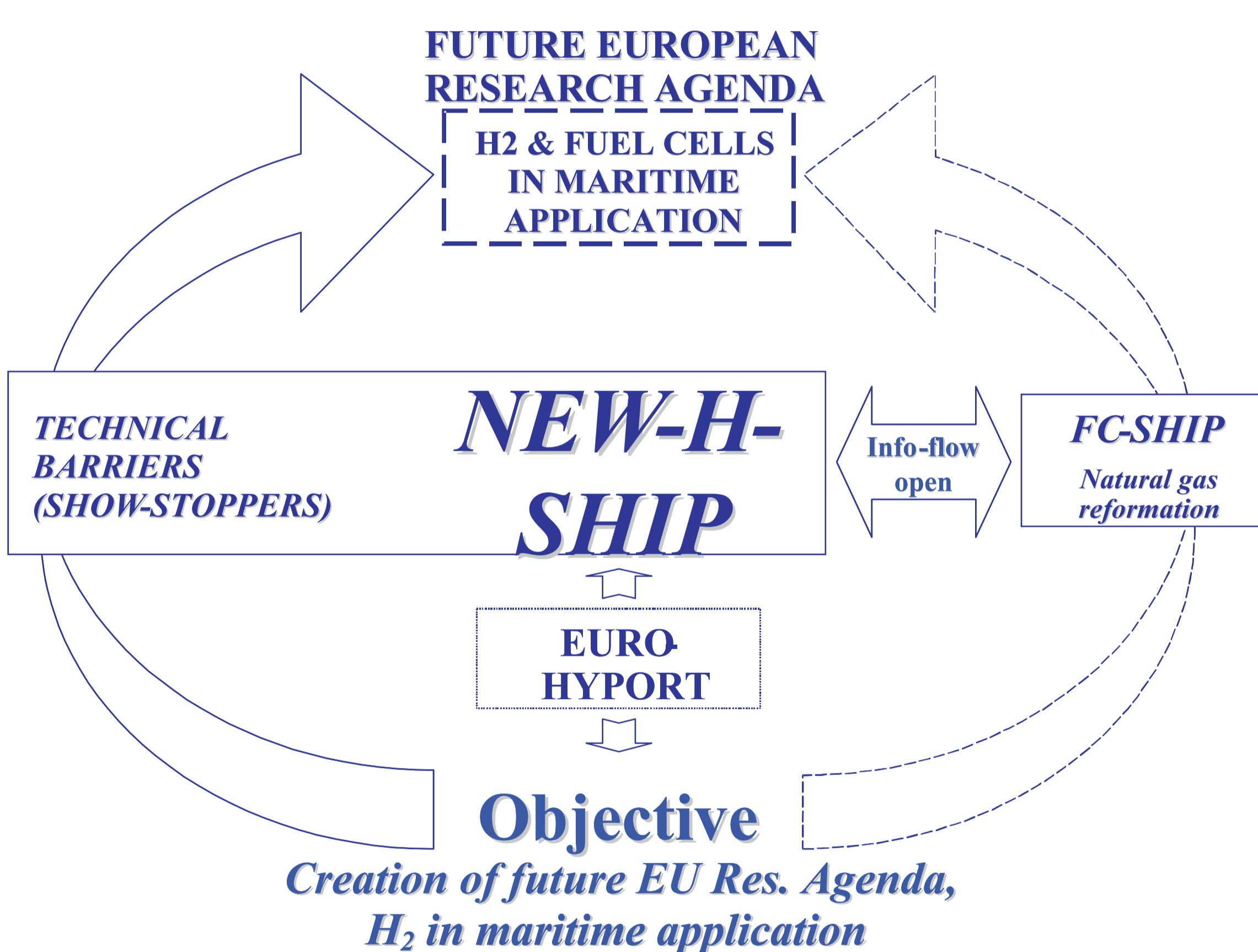
### Outline

This 15 month project is a specific supported action (SSA) to ensure continued work on earlier national initiatives and EC projects concerning the use of hydrogen as fuel in marine applications. The foundations are the outcomes of projects like the FC-SHIP (ended in June 2004) and EURO-HYPORT (ended in July 2003). The New-H-Ship will bridge the gap in this field to assist in the creation of a new European Research Agenda. The kick off was February 15th, 2004

Taking fuel cells and hydrogen aboard a ship will demonstrate a fairly new technology in a completely new environment, which is both wet and salty and hard on electronic equipment. This offers new challenges related to the shipboard requirements.

The aim of the project is to identify technical, operational and societal obstacles related to the shipboard system- requirements and infrastructure for maritime fuels.

As preparation for real demonstrations, the project will suggest mitigating actions so that investments and the technology for using hydrogen on board will be feasible



The project is performed in close connection with the FC-SHIP project and fills the research gap between the conclusion of that project and the creation of a new European Research Agenda regarding using hydrogen and fuel cells in maritime applications.

### Main goals

- Identification of technical barriers (showstoppers) for FC and H<sub>2</sub> on board ships
- Mapping the road to H<sub>2</sub> drive propulsion in ships and making recommendations for further Research and Development
- Creation of reference list of R&D activities regarding fuel cells and hydrogen in maritime applications
- The project will identify supporting European activities in the field of hydrogen and fuel cells in maritime applications and pre-screen potential partners



### Partners' list:

Icelandic New Energy Ltd (Iceland)  
Fisheries Technological Forum (Iceland)  
SINTEF Energiforskning (Norway)  
Marintek (Norway)  
Det Norske Veritas (Norway)  
Germanisch Lloyds (Germany)  
MTU Friedrichshafen GmbH (Germany)  
Norwegian Shipowners Association (Norway)  
Delft University of Technology (Netherlands)  
Technological Institute of Iceland (IceTec-Iceland)  
Fincanterie (Italy)  
University of Applied Sciences Hamburg (Germany)

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