



CORE LNGas  
hive

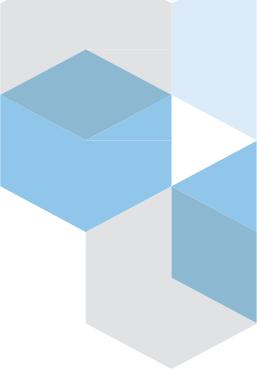
# CORE LNGas hive

## Coordination:



Puertos del Estado

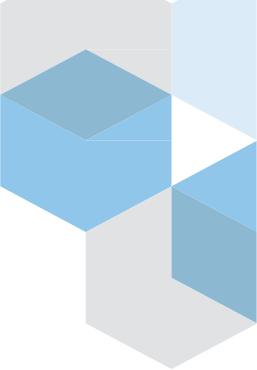




# Index

- **BACKGROUND**
- **OBJETIVES OF THE ACTION**
- **GOALS**
- **KEY ASPECTS**
- **PARTNERS**
- **SCOPE**

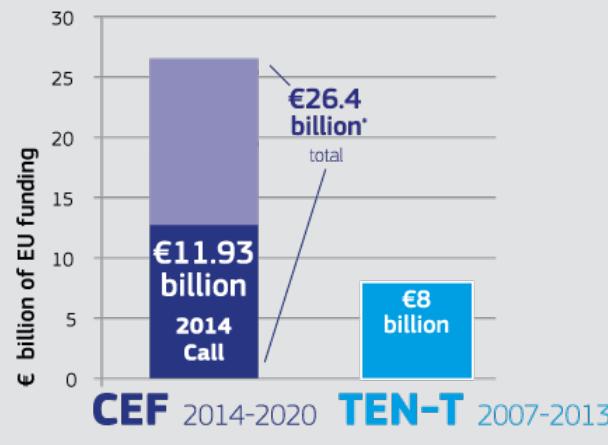




# Background

## 2014 CEF Transport Calls

### CEF FUNDING

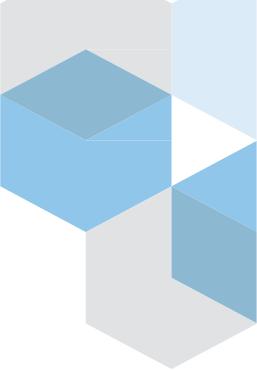


### STRUCTURE

ANUAL			
	• Innovation • Freight Services • Rail freight noise • Telematics applications • Core Network Nodes • Logistics platforms	930 M€	
FO-1	• Core Network projects • FFCC	6.000 M€	
	<b>FO-2</b> Innovation • Safety and Security	160 M€ 90 M€	
FO-3	• Motorways of the Sea • Core Network Nodes • Logistics platforms • SESAR • RIS	250 M€ 500 M€	
	FEDER	Algunas Prioridades	4.000M€



CORE LNGas hive was granted with the 100% of the requested funds



# Objectives of the action

## DEVELOPMENT OF **LNG BUNKERING** IN SPAIN AND PORTUGAL



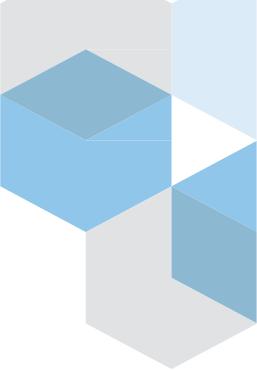
### **REGULATION AND NORMATIVE DEVELOPMENT**

To make a **proposal of the National Policy Framework**, in view of fulfilling the requirements of the **Directive 2014/94/EU**



### **INFRASTRUCTURE DEVELOPMENT**

To define a **roadmap** and an **investment plan to scale up the results** of the Action



# Goals



Breaking the egg-chicken dilemma, adapting the existing infrastructure (marginal investments) for the supply of LNG bunker and small scale services



Boosting the development of the normative needed around LNG bunker to adequately attend the demand



Developing a safety, robust and secure logistic chain



Enabling the Iberian Peninsula to offer holistic solutions to the new requirements of the shipping sector





# Key Aspects

## COORDINATOR



## LEADERSHIP



## PARTNERS

**42**

8 Public Partners  
13 Port Authorities  
21 Industrial Partners  
(NG operators, ship owners,  
external services)

## TIMETABLE OF THE ACTION

**2014-2020**

## NUMBER OF PROJECTS

**25**

## TOTAL BUDGET

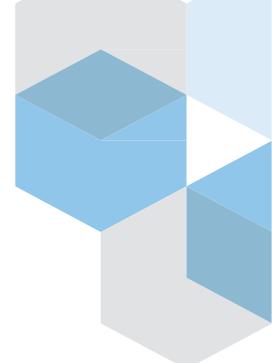
**33,3 M€**



Co-financed by the European Union  
Connecting Europe Facility

<http://www.coreLNGashive.eu/>





# Partners



Puertos del Estado



<http://www.coreLNGashive.eu/>



# 81 Stakeholders



Ports de Balears  
Autoritat Portuària de Balears



Almazán  
ingenieros



<http://www.corelngashive.eu/>



# Stakeholders



**Marubeni**



**sedigas**



Generalitat de Catalunya  
Departament de Territori i Sostenibilitat  
Direcció General  
de Qualitat Ambiental



**UNIVERSIDADE  
DA CORUÑA**



**Gradiant**



<http://www.corelNGashive.eu/>



# Stakeholders



<http://www.corelngashive.eu/>





# Scope

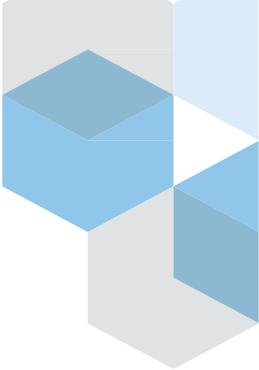
**REGULATION,  
NORMATIVE,  
MARKET**

**INFRASTRUC.  
EQUIPMENTS**

- Proposal of the National Policy Frameworks
- Studies of demand and development of the logistic chain
- Safety, environmental and technical standards
- Social acceptance of LNG
- Training needs
  
- Adaptation of LNG Terminals to offer small-scale services and LNG bunker
- Developments on LNG logistic chain
- Use of LNG in maritime sector and port environment

# REGULATION, NORMATIVE, MARKET

## TRANSVERSAL STUDIES



### NATIONAL POLICY FRAMEWORK

- National Objectives
  - Incentives
- Measures to promote demand
  - Observatory

### TECHNICAL, SAFETY ENVIRONMENTAL SPECIFICATIONS

- Bunker infrastructures
  - Use of LNG in port environment

### LNG ADVANCE TRAINING REQUIREMENTS

- Training needs
- Training centers
- Accreditation processes

### LNG SOCIAL ACCEPTANCE

- Improve social perception
- Advantages of the product
- Smooth landing of LNG

# REGULATION, NORMATIVE, MARKET

## MARKET ANALYSIS

LNG DEMAND  
AND SUPPLY  
CHAIN  
ATLANTIC  
CORRIDOR

LNG DEMAND  
AND SUPPLY  
CHAIN  
GIBRALTAR  
STRAIT &  
PERIPHERAL  
REGIONS

LNG DEMAND AND  
SUPPLY CHAIN  
MEDITERRANEAN  
CORRIDOR

- To foresee LNG demand along the Iberian façades of the corridors
- To define the most suitable logistic solution depending on distance and demand
- To analyze different business models

# INFRASTRUCTURE, EQUIPMENTS

## ADAPTATION OF LNG TERMINALS FOR BUNKERING

Engineering for new dedicated LNG jetty in MUGARDOS LNG TERMINAL

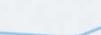


Adaptation for LNG mixed bunker/big/small scale services in existing jetty



Multimodal LNG bunker berth in PORT OF HUELVA

Adaptation for LNG small scale services in big scale jetty in BILBAO LNG TERMINAL



BARCELONA: dedicated LNG flexible hoses for bunkering



Adaptation for LNG bunkering/small scale services in REGASIFICATION PLANT OF SAGUNTO



# INFRASTRUCTURE, EQUIPMENTS

## BUNKERING BARGES AND MULTIMODAL LOGISTIC

**BARGE RETROFIT** for LNG  
bunkering in the Cantabrian coast



**EPT2:** Multimodal transport for  
LNG logistics supply chain  
(rail/road/sea)



**EPM2:** Barge retrofit for LNG  
bunkering within the port

# INFRASTRUCTURE, EQUIPMENTS

## LNG UTILIZATION IN PORTS

New tugboat  
powered by LNG in  
Bilbao port



Straddle carrier retrofit in  
Barcelona port



Design of a tugboat powered  
by LNG in Barcelona port



Retrofit study of a rescue boat  
powered to LNG



Retrofit study of a port  
locomotive powered by LNG  
in Tarragona port



LNG Powered electricity  
generator mobile unit for  
Offshore Power Supply



Construction of a  
LNG/CNG mixed station  
for vehicles and small  
boats in Valencia port



Design of a tugboat powered by  
LNG in Valencia port

# Thank you



CORE LNGas  
**hive**

[www.corelngashive.eu](http://www.corelngashive.eu)



**Disclaimer:** The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein

