GOALS

Regulation and normative development
Implementation of the National Policy Framework, the needed specific regulation and normative for the development of LNG Bunkering activities according with the Directive 2014/94/EU on the deployment of alternative fuels infrastructure (Clean Power for Transport).

Infrastructure development
Infrastructure pilot development for the provision of LNG for transport services in the maritime and port sector, and roadmap for an investment plan to scale up the results.

- Breaking the egg-chicken dilemma, adapting the existing infrastructure (marginal investments) for the supply of LNG bunker and small scale services.
- Developing a safety, robust and secure logistic chain.
- Boosting the development of the normative needed around LNG bunker to adequately attend the demand.
- Enabling the Iberian Peninsula to offer holistic solutions to the new requirements of the shipping sector.
SCOPE
- Regulation, normative, market
  - National Policy Framework
  - Studies of demand and development of the logistic chain
  - Safety, environmental and technical standards
  - Social acceptance of LNG
  - Training needs
- Infrastructure equipments
  - Adaptation of LNG Terminals to offer small-scale services
  - LNG bunker chain
  - Developments on LNG logistic chain
  - Use of LNG in maritime sector and port environment

TRANSVERSAL STUDIES
- LNG advance training requirements
- National policy framework
- Technical, safety environmental specifications
- LNG social acceptance

MARKETING ANALYSIS
- LNG demand and supply chain
  - Atlantic corridor, Gibraltar strait & peripheral regions, and Mediterranean corridor
  - To foresee LNG demand along the Iberian façades of the corridors
  - To analyze different business models
  - To define the most suitable logistic solution depending on distance and demand

Adaptation of LNG terminals for bunkering
- LNG terminal
- Dedicated LNG flexible hoses for bunkering in Barcelona LNG terminal
- Adaptation for LNG bunkering in small scale services in Sagunto LNG terminal plant
- Adapted LNG mooring jetty for small scale services in Cartagena LNG terminal
- Multimodal LNG bunker berth in Port of Huelva
- Engineering for new dedicated LNG jetty in Mugardos LNG terminal
- Adaptation for LNG mixed bunker/big small scale services in existing jetty

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 port locomotive powered by LNG in Tarragona port
- Construction of a LNGCNG mixed station for vehicles and small boats in Valencia port
- Design of a tugboat powered by LNG in Valencia port

Bunkering barges and multimodal logistic
- Barge retrofit for LNG bunkering in the Cantabrian coast
- Multimodal transport for LNG logistics supply chain (rail/road/train)
- Barge retrofit for LNG bunkering within the port of Barcelona
- LNG powered electricity generator mobile unit for DFS
- Retrofit study of a rescue boat powered to LNG
  - CORE LNGas hive activities
  - EU Mediterranean Corridor
  - EU Atlantic Corridor
  - Iberian Peninsula main pipelines