

$\overset{\text{C}}{\text{APOLLO}}_2$

Leveraging on the CCS hub





Who we are

DESFA, established in 2007, owns, operates and develops the Greek National Natural Gas System (NNGS), employing ~627 people. The NNGS comprises the **National Natural Gas Transmission System** (NNGTS) and the **LNG Terminal in Revithoussa**. The NNGTS spans from Greece's northern borders (connecting with Bulgaria and Turkey) down to Peloponnese, specifically to Megalopoli.

The LNG Terminal on the island of Revithoussa, plays a crucial role in the country's natural gas infrastructure, enhancing the country's and SE Europe's security of supply. DESFA is also responsible for the operation and maintenance of the Trans Adriatic Pipeline (TAP) facilities along pipeline's 550km of the Greek section, the operation and maintenance of Kipic LNG terminal in Kuwait - the 3rd largest LNG Terminal globally in terms of capacity - and the supervision of the EPC to third parties. Since 2018, SENFLUGA, a consortium consisting of Europe's top three natural gas transmission operators, Snam, Enagas, and Fluxys, as well as the Greek energy company DAMCO, acquired, following an international tender, 66% of the share capital of DESFA, while the remaining 34% remained to the Greek state.

The acquisition from SENFLUGA has brought additional value to DESFA and has enabled the provision of excellent and high-quality services in the energy sector beyond the Greek borders, as well as a faster pace toward energy transition, while systematically striving for the reduction of GHG emissions.

Our project, the APOLLOCO₂



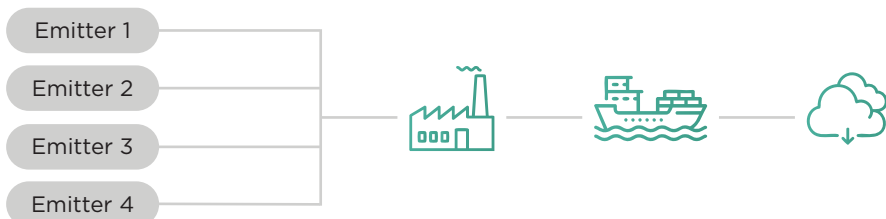
The APOLLOCO₂ project aims to become the first large-scale midstream Carbon Capture and Storage (CCS) infrastructure in South-Eastern Europe, aggregating CO₂ from local emitters in Greece, through a pipeline network to a central liquefaction terminal. In particular, APOLLOCO₂ plans to develop, own and operate the network of CO₂ gas pipelines, connecting mainly industrial emitters in the Southern part of the country, with a Liquefaction and export Terminal based in the island of Revithoussa, near Athens.

The liquefied CO₂ will be transported with low pressure technology ships to Prinos or Ravenna, or other permanent storage facilities in the wider EU neighborhood.

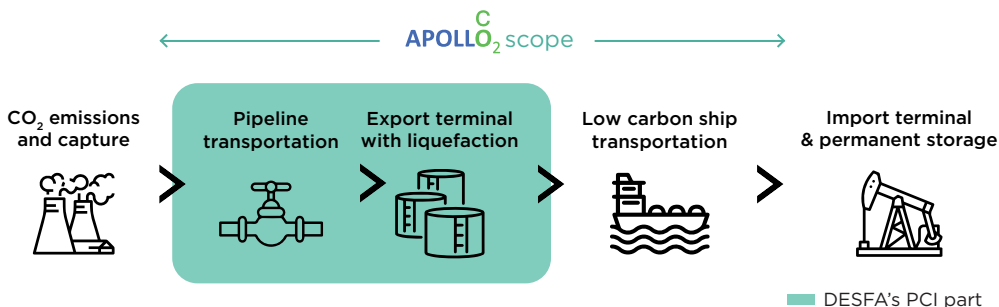
The envisaged investment consists mainly of:

- a) the CO₂ Pipeline** network to aggregate and transport CO₂ to the liquefaction terminal
- b) the Liquefaction Export Terminal**
- c) the shipping of the liquified CO₂ through LCO₂ carriers** for its permanent storage.

The main scope of APOLLOCO₂ is the creation of an open access CCS hub, **in line with EU's vision for the deployment of a widespread CCS value chain**, capitalising on the fact that a centralised solution requires much less infrastructure compared to individual facilities.



At a glance the APOLLOCO₂ scope



The APOLLOCO₂ project under PCI 13.11, also awarded the STEP seal, focuses on CO₂ transportation from hard-to-abate sectors to decarbonize industrial clusters.

Key infrastructure elements include:

- **CO₂ aggregation via pipelines:**
Approximately 200 km onshore and 2 km offshore in southern Greece.
- **CO₂ liquefaction facilities:**
Onshore and offshore liquefaction and buffer storage at Revithoussa Island.

Both facilities will be initially developed for 3 MTPA capacity, with the ability to be further expanded to 10 MTPA

Lever for EU and Greece



1. Platform to decarbonise Greece

- **Inclusion of key Greek emitters for the development of a demand aggregation platform - CCS hub**, aim for no stranded assets
- **Open-access CO₂ network** in line with EU's vision for an integrated CCS value chain, for all possible emitters, existing and new
- **Synergies with low carbon value chains**, e.g. blue hydrogen



2. Scale effects

- **Cost savings** from economies of scale and synergies with Revithoussa LNG terminal
- **Access to a broader set of storage options** enabled by larger LCO₂ vessels, which can cover greater distances



3. Efficient use of EU and national funding

- **Effective allocation of EU funding** due to larger infrastructure and PCI status
- **Lower burden for national funding** for later-stage emitters



4. Simplified “one-stop shop” solution

- **Facilitated permitting & regulatory compliance** by a single body cooperating with the Government
- **Streamlined risk allocation** from emitter fence to sequestration site
- **Resilient network with built-in flexibility** to manage disruptions

Details of the Greek CCS hub solution

