



COMPRESSED NATURAL GAS TRANSPORT SYSTEM

The general objective of GASVESSEL is to prove the techno-economic feasibility of a new CNG transport concept enabled by novel patented Pressure Vessel manufacturing technology and a new conceptual ship design including safe on- and offloading solutions at 300 bar. GASVESSEL is assessed and compared primarily based on the geo-logistic scenarios identified in WP2 covering three regions: East Mediterranean, Black Sea and Barents Sea. The target in WP2 was to identify different cases per geo-logistic scenario where CNG ship transport technology could potentially be considered a solution for connecting regional resources with regional gas markets.





In each case, CNG was compared with alternative concepts such as pipeline and LNG to uncover the potential niche market for GASVESSEL and the volume / distance range for which CNG is cost competitive against pipeline and LNG options. This enables the setup of contour plots highlighting the volume/distance area for which CNG is cost competitive.

Topsides 1 Cas 1260 km Mainland Greece

The cases identified in WP2 for further analysis provide realistic solutions to enable gas transportation from the production location to the market. For example, the case study of connecting gas resources located offshore Cyprus to onshore Cyprus and Greece is considered a realistic scenario that has been evaluated using different development concepts including pipeline and LNG and compared finally with the GASVESSEL solution. The result of this case study together with similar exercises are presented in WP7.

The table below gathers details on the gas volumes transported per case investigated in WP2 and includes the costs estimated for conventional development concepts that theoretically could connect the gas resources in each geo-logistic area with the most relevant markets. Furthermore, the below graph presents the breakdown of the costs to develop these concepts.



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