

ABSTRACT

The prospect of finding hydrocarbon fuels within the Cyprus Exclusive Economic Zone of the state, increases the motivation for their exploitation. Using natural gas for energy production combined with its export to neighboring countries promises to renovate the islands within a short period.

This study is concerned with the design of a consumer's network plan for the delivery of natural gas to households within the city of Limassol. At first the terms transportation system and network system are clarified. The materials to be used are presented as are the welding methods expected to be used. The network plan I studied and the population growth rise until the year 2025 is estimated. Taking into account a series of relevant parameters the ideal route for the network I considered. Using methods of analysis and assessment on modern software a mechanical design of the network is proposed. Finally an overview of the network construction and operation is presented from its origin to its firth.

The increasing use of natural gas as an alternative energy source in many countries worldwide leaves no choice to the Cypriot government but to implement into its economy the use of natural gas.