

Economics of natural gas utilization in Iran

Abstract

World hydrocarbon gas reserves stand at about 150 tcm of which about 26 tcm belongs to Iran. Most of the Iranian gases are rich (contain ethane and heavier h.c. components) and in terms of calorific value is close to twice the proved crude oil reserves.

Natural gas (predominantly methane) has various applications and end uses, but incomes generated and long term benefits to Iran in each case differ significantly. Therefore it is of paramount importance for Iran to optimize utilization of its gas resources.

In this paper, different utilization of natural gas, as listed below, has been economically analyzed and income generated in each case compared, and priorities have been outlined.

- Export of natural gas in form of LNG.
- Export of natural gas via pipe line.
- Substitution of crude oil derived products by natural gas.
- Generation of electricity for export.
- Injection of natural gas into oil fields for enhanced recovery.
- Conversion of natural gas into dimetlye ether (DME).
- Conversion of natural gas into liquid products (GTL).