

18	Commercial Utilization of Natural Gas As CNG in Tripura	Indraprastha Gas Ltd., Delhi	2001
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EXECUTIVE SUMMARY

Agartala has a natural advantage of being close to natural gas reserves. In addition to this, the existence of Tripura Natural Gas Company Limited (TNGCL) augurs well for acceptance of CNG as an alternative fuel by people of Agartala. Tripura Natural Gas Company Limited (TNGCL) is a Joint Venture Company of Govt. of Tripura & Assam Gas Company (AGC). TNGCL has a consumer base of around 1700 domestic customers, 13 commercials & 7 industrial consumers.

The execution of the project has the following advantages:

- Agartala faces problems of petrol supply during periods of landslide. For weeks the supply of petrol is affected. Use of CNG will help to over come this problem.
- An economically competitive fuel will be available in the city of Agartala.
- The country will save foreign exchange.
- The pollution level will be under control with the use of cleaner fuel.
- Introduction of CNG will lead to a new business and employment opportunities for the local population.

The City Gate Station is being constructed by GAIL. A 5 Kms. long 4” Steel pipeline is currently being laid by GAIL. The pressure in the pipeline is 10 kg. / cms. sq. 4” steel pipeline for CNG station will be from the tap-off at the City Gate Station. An additional flow meter will be required at the City Gate Station for the 4” pipeline. Downstream of the city gate station the total length of pipeline network in the, city has been estimated at 8.5 kms. In addition to the steel grid, the distribution network for the low/medium pressure of 1.5 bar to 4 bar shall also be laid to minimize steel pipeline & thus economies on the network and costs

The market study of ‘AGARTALA” for CNG Distribution Project has been carried out with the objective of covering the automobile sector. In the study two scenarios have been prepared (Scenario-1 vehicles excluding Buses, trucks, LCV & two wheelers and Scenario-2 all vehicles including Buses but excluding Trucks, LCV & two wheelers). In the study of automobile sector the current fuel consumption pattern has been analyzed and the requirement of natural gas has been estimated. The method adopted for carrying out the Market study was 2-Phased.

- > Market Surveys and Data Acquisition.
- > Data Analysis and Demand Assessment.

To have a better understanding of CNG demand in the city a sensitivity analysis was carried out. Two different scenarios are devised. In the first scenario buses are not considered wherein in the second model bus loads have been considered.

In both the scenarios three different models have been developed viz. Base Model, Optimistic Model & Pessimistic Model based on Realistic/Optimistic/Pessimistic CNG demand Estimates.

Results of Scenario Analysis:

The profitability of CNG project in Agartala under different scenarios is as follows:

From the above analysis it is clear that under pessimistic scenario the project is not profitable even if the buses convert to CNG. The CNG sale price would need to be increased in case CNG demand builds up. is not as expected under base / optimistic scenarios. In any case: a minimum sale price of Rs 16.00/kg is necessary for the project. The project execution in Agartala shall require Co-operation and support from State Government on the following:

- Allocation of natural gas for the CNG project.
- Special price for purchase of Natural Gas.
- Conversion of govt. vehicles to CNG
- Incentives for conversion of vehicles to CNG e.g. soft loans. Govt. support to kit suppliers etc.
- Statutory clearances for laying of pipeline with no additional cost. Restoration to be done by the distribution company.
- Legislation for use of CNG in automobile sector.
- Exemption of sales tax / other local levies on distribution of compressed natural gas. (CNG).
- State Govt's help for waiver of customs duty on import of CNG kits/equipments.
- Participation of State Govt. / State Govt. Undertakings in the form of equity.

For the project report the following officials were contacted and interviewed:

- Hon'ble Minister of Industries Commerce (Govt. of Tripura)
- Commissioner of Industries Commerce (Govt. of Tripura)
- Addl. Director Industries & Commerce (Govt. of Tripura)
- GAIL Officials at Agartala Office
- Officials of Agartala Municipal Corporation.
- Officials of Regional Transport Office at Agartala.
- Officials of Tripura Natural Gas Company Limited, Agartala
- I/C, IOCL, Sales Department, Agartala.
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Conclusion

The project appears to be profitable provided the following factors are favorable

- Cost of gas - special subsidized price
- CNG demand - Compulsory running of buses / govt vehicles on CNG
- CNG Sale Price - Not less than Rs 16/kg

If all these factors are favorable then the project is feasible. In other words, Govt. support is required for the project to succeed.