



**Government of India  
Ministry of Railways**

**INDIAN RAILWAYS ORGANIZATION FOR ALTERNATE FUELS**

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No. IROAF/CME/BD/RB

Date: 05-09-13

**Executive Director  
Mechanical Engineering (Traction),  
Railway Board,  
New Delhi.**

**Sub: Road Map for LNG in Indian Railways.**

**Ref: This office letter of even no., Dated: 03-05-13 on Concept Paper on Bio-Diesel.**

The recent increase in price of HSD due to withdrawal of subsidy for bulk users has brought in focus the urgent need to induct alternate fuels in diesel traction. Liquefied Natural Gas is one of the main alternatives available to transportation sector worldwide. Even discounting the impact of HSD price rise, LNG ought to have been introduced for reasons of Global Warming and environmental pollution. The increase in prices of petroleum diesel has, however, revived the interest in LNG, which is now being traded in increasing quantities.

A detailed concept paper has been prepared by IROAF suggesting the road map for introduction of LNG in diesel traction and as industrial fuel in the Railways. Trials with LNG in USA, Canada, Germany and elsewhere have been successful and have sparked interest in the business of retrofitting existing diesel locomotives with LNG kits. Railroads worldwide are on the threshold of adopting LNG on a large scale in coming years. LNG also gives us the benefit to leapfrog a few stages of pollution control norms laid down internationally even without much changes in the diesel engine technology. The paper deals with developments worldwide, the national scenario and gives essential technical details on this environment-friendly fuel. The concept paper also provides Global and National perspectives on developments in this field. Finally the document makes concrete recommendations on steps to be taken in short, medium and long terms to achieve the objectives.

It is requested that the concept paper be examined in the Board and necessary directives issued to all concerned so that a firm action plan on the recommendations made therein is set in motion.

  
(Shubhranshu)

Chief Mechanical Engineer/BD

cc: AM/ME: for kind information please.