1st LNG-fuelled green truck of India

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<u>In news</u>—Blue Energy Motors, a two-year old start-up backed by a Singapore-based firm, unveiled <u>India's first Liquefied</u> Natural Gas (LNG) fuelled green truck in Chakan near Pune recently.

About LNG-fuelled green truck-

- The trucks are powered by Iveco FPT, global powertrain brand of Iveco Group.
- The company claimed that the engines generate high torque and help trucks deliver best in class TCO (total cost of ownership) and offer unmatched ride comfort and safety for the drivers for long hauls.
- The FPT Industrial engine is one the most powerful natural gas engines in the market and is compatible with CNG, LNG and biomethane; it uses multipoint stoichiometric combustion to assure best-in-class fuel consumption and lower noise than diesel engines.
- These are long-haul trucks that can travel up to 1,400 kilometres in one fill.
- It is to be noted here that with LNG, logistics cost can be reduced by 16 per cent.
- The market entry of the LNG-fuelled trucks will start with the introduction of 5,528 4×2 tractor by the end of September 2022.
- It's cost effective and a change-maker for the transport sector. It is a great alternative to petrol and diesel at a time when India Import so much.

Liquefied Natural Gas (LNG)-

 Natural Gas is frozen in order to turn it into liquid form.

- It takes up less storage space than CNG.
- It offers an energy density that can be compared to diesel fuel.
- Commonly used in long haul transportation/import.
- Using proper procedures, LNG can be converted to CNG.

Compressed Natural Gas (CNG)-

- Natural Gas is pressurized to the point where it is very compact.
- It is easier to refuel than LNG, which requires special handling and equipment.
- CNG is much safer to handle and cheaper than LNG.

CNG vs. LPG Comparison-

- Chief component of CNG is methane. It is lighter than air.
- CNG releases less greenhouse gas than LPG.
- Main constituents of LPG are propane and butane (heavier than air).
- LPG releases carbon dioxide, but is still cleaner than Petrol and Diesel.
- In the case of a spill, CNG quickly dissipates, whereas LPG will settle on the ground.
- In general, CNG is considered safer than LPG, since LPG is difficult to disperse.