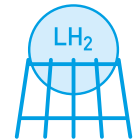


Energy density of CNG compared to various forms of hydrogen

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| | CNG at 250 bar, compressed natural gas | Compressed hydrogen gas at 350 bar | Compressed hydrogen gas at 700 bar | CryoCompressed hydrogen at 300 bar | Liquid Hydrogen |
|---|--|---|--|--|------------------------------------|
| Temperature | 25 °C | 25 °C | 25 °C | -235 °C | -253 °C |
| Pressure | 250 bar | 350 bar | 700 bar | 300 bar | Close to atmospheric pressure |
| Density | 0.185 kg/L | 0.029 kg/L | 0.057 kg/L | 0.080 kg/L | 0.071 kg/L |
| Toxicity | TWA 1,000 ppm | non toxic | non toxic | non toxic | non toxic |
| Flammability (% in air) | 5 - 15 % | 4 - 74 % | 4 - 74 % | 4 - 74 % | 4 - 74 % |
| Volumetric Lower Heating Value (LHV)(MJ/L) | 9.2 | 3.4 | 6.8 | 9.6 | 8.5 |
| Gravimetric LHV (MJ/kg) | 48.6 | 120 | 120 | 120 | 120 |
| Infrastructure readiness for large scale deploy- ment in mid-term H/M/L | H | M | M | L | L |
| Commercialisation status and pilot projects | Many commercial CNG cars and fuelling stations worldwide | Many commercial FCEV Buses and HRS systems eg Van Hool A330 FC and Maximator | Commercial FCEV cars and HRS systems, eg Toyota Mirai and Maximator | TOTAL multi-energy filling station in Detmoldstraße, Munich | Australia to Japan LH2 shipping |