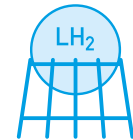


Energy density of CNG compared to various forms of hydrogen

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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 deployment 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