

### Subproject Users – Vehicle Concepts today - tomorrow

#### Medium-class Car: Fuel cell vehicle with C-H<sub>2</sub> storage

**Today:**

> Driving range lower than 400 km  
e.g. F-Cell 2002



Power:	72 kW
Hydrogen mass:	1.9 kg
C-H <sub>2</sub> storage:	350 bar
Max. speed:	150 km/h
Range:	150 km

Source: DC

**Tomorrow:**

> Driving range of 400 km to 500 km by 700 bar C-H<sub>2</sub> storage systems e.g. F600 Hy<sup>genius</sup> Concept Car



Power:	60/85 kW
Hydrogen mass:	4 kg
C-H <sub>2</sub> storage:	700 bar
Max. speed:	174 km/h
Range:	>400 km

Source: DC

#### Delivery van: FC City Car with range extender

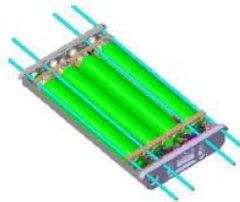
**Today:**



Power	28 kW
Max. speed:	95 km/h
FC power	5 kW
Battery:	15 kWh
Hydrogen C-H <sub>2</sub> 350bar:	1,6 kg
Range H <sub>2</sub> :	70 km
Range Battery:	80 km



**Tomorrow:**



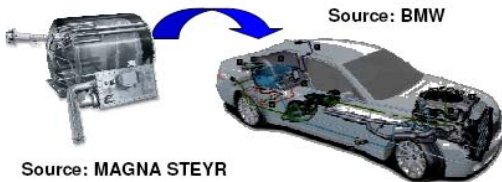
Source: PSA

Power	28 kW
Max. speed:	95 km/h
FC power:	10 kW
Battery:	15 kWh
Hydrogen C-H <sub>2</sub> @700bar:	2,7 kg
Range H <sub>2</sub> :	170 km
Range Battery:	80 km

#### Hydrogen ICE with L-H<sub>2</sub> Storage

**Today:**

Bi-Fuel (L-H<sub>2</sub> + Gasoline)



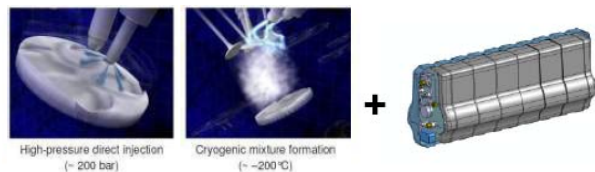
Source: MAGNA STEYR

Power:	191 kW (260 bhp)
Hydrogen mass:	> 8 kg
L-H <sub>2</sub> storage:	Stainless steel Cylindrical
Range H <sub>2</sub> :	> 200 km
+ Range Gasoline:	> 500 km

**Tomorrow:**

Monofuel (L-H<sub>2</sub>)

- Highly efficient hydrogen ICE
- Lightweight cryogenic storage



Power:	> 100 kW (136 bhp)
Hydrogen mass:	> 7 kg
L-H <sub>2</sub> storage:	Lightweight Free-form shape
Range H <sub>2</sub> :	> 500 km

Website

[www.storhy.net](http://www.storhy.net)



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