

H2Fuel2Go

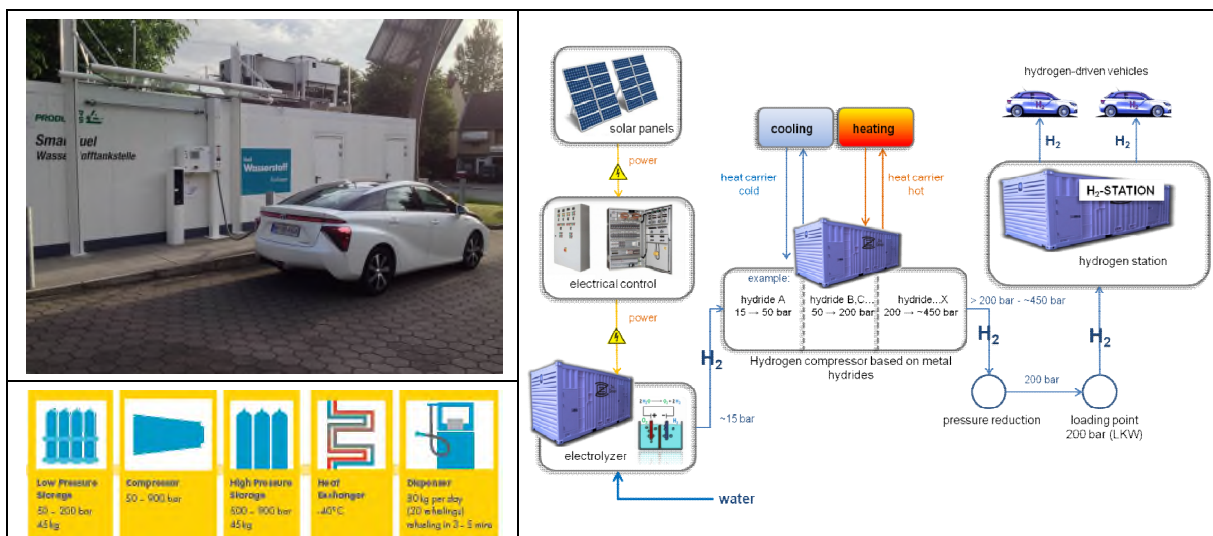
completely renewable energy-based hydrogen cycle system

novel hydrogen recycling system with new, maintenance free and energy efficient solid state compressing and supplying technology developed at ZTC, Olpe

Technical Data	
construction year	2012
guideline	97/23/EC
type	S200 EU 700 BAR
medium	hydrogen
category	IV
system	containerised station with integrated dispenser
concept	storage at gaseous state
dispensing capacity	output 80 kg per day or about 20 vehicles fills
pressure	700 bar for passenger vehicles
total hydrogen storage capacity	90 kg (upgradable)
low pressure storage	45 kg at 200 bar
high pressure storage	45 kg at max. 900 bar
compressor	Hydro-Pac two stage piston compressor
area needed	14 x 7 m
permissible operating temperature	- 40 to 65 °C
H ₂ stock	bottle bundle 200 bar – 45 kg hydrogen

Operating principle

Start with power generation by solar panels, H₂ is generated by electrolysis, which is then compressed to at least 450 bar pressure using a specially developed "metal hydride compressor" (200 bar connection point to existing H₂ filling station, "700 bar study"). At 200 bar it is further piped into a H₂ filling station, which in turn refuels two H₂ vehicles.



technical data subject to alterations