

**STORHY FINAL EVENT**  
**HYDROGEN STORAGE SYSTEMS FOR AUTOMOTIVE APPLICATION**  
 PSA POISSY, JUNE 3-4, 2008



**Subproject Users – StorHy Targets 2010**

**Objectives**

Based on the overall project goals, the targets of automotive hydrogen storage systems have been defined according to future internal and external developments.

**Achievements**

SP Users represents the major European car manufacturers and contributes to StorHy by steering the different research and development approaches according to the needs and requirements of vehicle applications.

In this context, the “**StorHy 2010 Targets**” were defined. These targets:

- ❖ respect consumer expectations as far as possible,
- ❖ refer to a time horizon of the year 2010,
- ❖ and reflect a realistic estimate of technical developments achievable until then.

Consumer Expectations	Technical Requirements	Unit	StorHy Targets 2010
Driving range > 400 km – 600 km	Hydrogen storage mass	kg	6 - 10
Driving performance	System grav. energy density	kWh/ kg wt.%	2.0 6.0
Usable space	System vol. energy density	kWh/ kg kg H <sub>2</sub> /100l	1.5 4.5
Refuelling convenient and safe	Refuelling rate	kWh/min kg H <sub>2</sub> /min	40 1.2
Safety	Burst pressure 700 bar	bar	1,645
	Filling cycles		3*5,000
	Permeation rate	H <sub>2</sub> Ncm <sup>3</sup> /h *l	EHIP II: 1
	Loss of usable H <sub>2</sub> (boil-off)	g/h *stored kg H <sub>2</sub>	1
Vehicle costs	Costs of storage system	€ kg H <sub>2</sub>	Not defined

Partners	    	
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**Website** [www.storhy.net](http://www.storhy.net)

 The project partners wish to thank the European Commission for financial support of the Integrated Project StorHy– Hydrogen Storage Systems for Automotive Application Contract No.: SES6-CT-2004-502667) within the 6<sup>th</sup> RTD Framework Programme.