



McPhy Energy pioneers the renewable energy storage market on solid state hydrogen

The company delivers the first Magnesium Hydride storage tank to CEA Liten in Grenoble

Grenoble, France, April 19, 2010 – McPhy Energy, a leading company in solid state hydrogen storage technology, has signed a research contract with CEA Liten (Laboratory of Innovation for New Energy Technologies and Nanomaterials), one of the leading European research centers dedicated to new energy technologies. The purpose of this agreement is to manufacture two full size magnesium hydride storage prototypes and to test them at industrial scale. During the test campaign, they will be coupled to an electrolyser and a fuel cell simulating a real-world renewable energy storage application.

The first storage tank with a hydrogen capacity of 1 kg, has been delivered on March 29, 2010 to CEA Liten. Within this agreement a second larger system (15 kg hydrogen) will be installed and tested during the second half of 2010.

Such a system coupled to a hydrogen production device using renewable energy will solve the intermittent nature of these new energy sources. The targeted applications are electricity production in isolated sites, or peak shaving of electrical networks, with an improved safety and no negative environmental impact (no release of CO₂ or wasted heat).

McPhy Energy develops, designs, manufactures and sells hydrogen storage systems based on metal hydrides.

Magnesium hydride has been known for decades, but the very low kinetics of the hydrogenation-dehydrogenation processes were roadblocks for their industrial application. Thanks to a nanostructuring of the material and the addition of proprietary additives developed by CNRS (Néel institute – CRETA – LEGI), the systems commercialized by McPhy Energy can store at low pressure large quantities of hydrogen within tens of minutes. The modular design of the storage systems, initiated at CNRS, integrates a Phase Change Material which enables loading and unloading with almost no energy losses.

The storage systems developed by McPhy Energy, are therefore totally safe and provide an excellent energy yield. Compared to compressed gas storage, they can store at atmospheric pressure as much hydrogen as a 500 bar storage within the same volume. The systems developed by McPhy Energy meet the needs of industrial customers for renewable energy storage applications based on hydrogen energy technologies.

About McPHY Energy – www.mcphy.com

McPhy Energy is a young innovative company created in 2008 to industrialize the patents developed by the CNRS labs (Néel institute – CRETA – LEGI) in Grenoble France. McPhy Energy owns a revolutionary process to store hydrogen using magnesium hydrides. The company is managed by Pascal Mauberger and supported by EMERTEC venture capital and AREVA. Member of the TENERDIS cluster, McPhy Energy is involved as a partner or a subcontractor in several research projects.

Contact: Pascal Mauberger , CEO

pascal.mauberger@mcphy.com

Tel. + 33 4 75 71 37 02 - Mob. + 33 6 74 59 87 22

###