



Safran and Cella Energy enter into an exclusive partnership to develop hydrogen storage systems for aerospace applications

22 September 2014

Safran and Cella Energy are pleased to announce that they have signed an exclusive partnership to develop hydrogen-based power systems.

Cella Energy is a UK company which has developed a safe and lightweight material that stores hydrogen in a solid form. It is plastic-like and releases hydrogen quickly when heated to moderate temperatures. By combining Cella's expertise in hydrogen storage materials and Safran's expertise in aerospace engineering, the companies will accelerate the development of the equipment that can exploit this unique material for applications on-board aircraft.

"We are really excited about this opportunity; it gives us access to world class aerospace engineering and a direct route to market", said Cella Energy's Managing Director and founder Stephen Bennington.

By using a fuel cell, which converts the hydrogen cleanly and efficiently to electrical power, the two companies will make a device that packs much more energy than a battery for the same weight. This technology contributes to the more electrical aircraft, one of Safran's strategic developments in aerospace. The method more commonly used to store hydrogen is to compress it to very high pressures. The system that Cella and Safran will develop over the next year will match the performance of the latest carbon-fibre hydrogen storage tanks and will facilitate hydrogen logistics for aerospace on board applications.

The agreement, signed in July this year, gives Safran exclusive access to Cella Energy's technology for aerospace, not including unmanned aerial vehicles, and provides funding to Cella to build a prototype device with Safran.

Notes for Editor

Cella Energy: Cella Energy is a research and intellectual property company with expertise in materials and hydrogen storage. It owns unique patented technology in safe, low-cost hydrogen storage materials. Cella is a spin-out from the Rutherford Appleton Laboratory (RAL), which is owned by the Science and Technology





Facilities Council (STFC). Work began on the technology in 2007, financed predominantly by the STFC and led by Professor Stephen Bennington with collaboration from the London Centre for Nanotechnology at University College London UCL and the Oxford Department of Chemistry. The company was formed through initial investment by Thomas Swan, a chemical company based in the north-east of England. In October 2011, Cella signed a new round of investment led by Space Florida, which is the State of Florida's aerospace economic development agency, and is currently setting up a second research facility at the Kennedy Space Center. Cella Energy won the 2011 Shell Springboard Award and an Energy Innovation Award.

For more information contact: Stephen Bennington, Managing Director Stephen.bennington@cellaenergy.com

Tel: +44 (0)1235 567505 <u>www.cellaenergy.com</u>

Safran:

Safran is a leading international high-technology group with three core businesses: Aerospace (propulsion and equipment), Defence and Security. Operating worldwide, the Group has 66,300 employees and generated sales of 14.7 billion euros in 2013*. Working alone or in partnership, Safran holds world or European leadership positions in its core markets. The Group invests heavily in Research & Development to meet the requirements of changing markets, including expenditures of 1.8 billion Euros in 2013. Safran is listed on Euronext Paris and is part of the CAC40 index.

* Sales in 2013 restated for the impacts of IFRS11 amounted to 14.4 billion euros.

For more information, <u>www.safran-group.com</u> / Follow @SAFRAN on Twitter

Press contacts :

Catherine MALEK

Tél +33 (0)1 40 60 80 28

catherine.malek@safran.fr

Caroline COUDERT

Tél +33 (0)1 40 60 82 20

caroline.coudert@safran.fr