



## **NEWS RELEASE**

### **Intelligent Energy takes technical lead in programme to further develop fuel cell stack for future mass manufacture**



**Loughborough, UK – 8 May 2017**

A programme has launched to provide a blueprint to enable fully automated future mass manufacture of fuel cell stacks for the automotive market. Intelligent Energy is the programme's technology lead with overall coordination provided by CEA Tech-Liten. The two companies will front a pan-European industry group to further commercialise fuel cells for the mass automotive market.

The programme, named DIGIMAN, is a €3.5 million programme, receiving funding from the Fuel Cells and Hydrogen Joint Undertaking (FCH JU) under the EU programme Horizon 2020, which will focus on creating a robust platform for future stack production for zero emission vehicles. Also involved in the three year programme are Freudenberg Performance Materials SE&Co.KG, WMG at the University of Warwick, and Toyota Motor Europe. The latter will be responsible for best practice requirements for future automotive stack production. Project management support and communication activities will be provided by the SME Pretexo.

Representatives from the partner organisations gathered at Intelligent Energy's Loughborough headquarters recently to kick off the scope of work. The programme outputs will demonstrate operational and supply chain cost reduction via seamless integration of digital manufacturing techniques and advanced technology optimised for automated production. Once developed, the blueprint design will enable build-to-print machine configurations with ready to scale production capacity to meet future requirements of more than 50,000 fuel cell stacks by 2020.

Intelligent Energy's Head of Manufacturing, Richard Peart said: "Hydrogen fuel cell powered vehicles are available now, but to continue to drive customer adoption, we need to ensure future fuel cell stacks are robustly industrialised and remain cost competitive in the future. The programme will bring significant opportunity to further develop Intelligent Energy's proprietary Air Cooled fuel cell architecture. Additionally, as Intelligent Energy's Air Cooled fuel cell stack technology operates across multiple products and applications, the project will benefit commercialisation within multiple market sectors, including stationary power and drones."

Martin Bloom, Group CEO at Intelligent Energy, added: "As the adoption of hydrogen technologies continues to gather pace, Intelligent Energy is ideally placed to be the technical lead on this programme. With the wealth of experience we have in this area resulting from our on-going joint manufacturing venture with Suzuki (SMILE), in addition to almost 30 years of fuel cell development, we have the know-how and capability to ensure we support and mobilise this ecosystem of partners."

Bart Biebuyck, Executive Director of the FCH2 JU, said: "The reduction of the production cost of fuel cell systems to be used in transport applications is one of the five techno-economic objectives of the FCH, and Digiman fully contributes to the overall strategy. The project will indeed improve the manufacturing techniques by reducing the production time and costs, and increase the quality levels of PEMFC stacks. The project, which gathers industry, academia and research centres, is contributing to maintain Europe at the competitive edge on the key technologies for clean transport."

This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 736290. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme, Hydrogen Europe and N.ERGHY.

**Ends**

## About Intelligent Energy

Intelligent Energy Holdings plc delivers clean energy solutions for the distributed energy, diesel replacement, automotive and aerial drone markets. Working with international companies, Intelligent Energy aims to embed its fuel cell stack technology into applications across its target market sectors.

With its principal facility and headquarters in Loughborough, UK, the company also operates in Japan, India, China, Singapore, France and the US. Intelligent Energy Holdings plc is listed on the London Stock Exchange (LSE: IEH.L).

More information on Intelligent Energy is available at [Twitter](#), [YouTube](#) and [LinkedIn](#). Or visit <http://www.intelligent-energy.com>

## About the FCH JU

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) is a unique public private partnership supporting research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Its aim is to accelerate the market introduction of these technologies, realising their potential as an instrument in achieving a carbon-lean energy system. The three members of the FCH JU are the European Commission, the fuel cell and hydrogen industries represented by Hydrogen Europe and the research community represented by Research Grouping N.ERGHY.

## Further information on the project partners:

- CEA Tech - LITEN: <http://liten.cea.fr/cea-tech/liten/>

CEA is the French Alternative Energies and Atomic Energy Commission, a European leader in research, development and innovation. CEA-LITEN is composed of 1000 employees, and is the institute of CEA dedicated to new energy technologies, focussing on three key areas: solar energy, hydrogen and fuel cells, and advanced materials, addressing electricity production, building, transport and mobile electronics as main markets.

- Toyota Motor Europe: <https://www.toyota-europe.com/>
- Freudenberg: <http://www.freudenberg-pm.com/>
- WMG: [www.wmg.warwick.ac.uk](http://www.wmg.warwick.ac.uk)

WMG was established by Professor Lord Kumar Bhattacharyya in 1980 in order to reinvigorate UK manufacturing through the application of cutting edge research and effective knowledge transfer. WMG is a world leading research and education group and an academic department of the University of Warwick.

WMG has pioneered an international model for working with industry, commerce and public sectors and holds a unique position between academia and industry. The Group's strength is to provide companies with the opportunity to gain a competitive edge by understanding a company's strategy and working in partnership with them to create, through multidisciplinary research, ground-breaking products, processes and services.

- Pretexo: <http://www.pretexo.com>

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