

## Press release

For immediate release

## Nordic leading cleantech company PowerCell develops a Range Extender for electric vehicles

[Gothenburg, Sweden, October 22, 2014.] **The Swedish Energy Agency has granted leading** fuel cell technology company PowerCell a contribution of 7 MSEK for the MoRE Zero project, an ERA-NET, to develop a fuel cell system for use as a range extender for electric vehicles. The goal of the project is to increase consumer awareness and acceptance of electric vehicles by increasing the range by means of installation of a zero emission range extender based on fuel cell technology.

PowerCell will with the help of a funding granted by the Swedish Energy Agency of 7 MSEK develop a hydrogen-powered range extender for electric vehicles based on fuel cell technology in European ERA-NET project

With the support from the Swedish Energy Agency PowerCell will together with partners in the MoRE Zero consortium develop and demonstrate a fuel cell range extender for existing electric vehicles to be able to combine zero emission with high mileage. As part of this project PowerCell will develop a modular and scalable fuel cell system in the order of 20-25 kW, based on the Power Cells fuel cell technology. Fuel cell systems must be integrated and demonstrated in three different types of electric vehicles by other partners in the project.

Road traffic has increased steadily in recent years and the settlement is expected to continue to grow globally. Without strong action, air pollution and  $CO^2$  emissions from transport continue to grow. The EU is committed to significantly reducing greenhouse gas emissions by at least 80% by 2050 in order to meet this goal, we need transport sector have decreased by as much as 95%.1

PowerCell has for many years been developing PEM fuel cells. Since 2010, the development of a new fuel cell platform (S2) lingered. This is now in the final stages of development and will be launched as a commercial product by the end of 2014 S2 will be produced within the power range of 5 -25 kW. This covers a void in the fuel cell market. Fuel cell stacks up to 20 kW are also available from some manufacturers, but in the range 10-30 kW, there is more or less nothing available on the open market.

"The fuel cell stacks that are made for these small power classes (<30 kW) are typically designed for stationary applications where packing volume and cost targets are not nearly as stringent as in the automotive industry. These designs require a smaller initial investment cost than automotive fuel cell stacks, but will never be anywhere near as cost-effective high volume. The PowerCell fuel cell stack is developed according to the standard for vehicles and for use in automotive environment and a power range that is appropriate for the range extender–application", said Magnus Henell, CEO of PowerCell Sweden AB.

PowerCell has developed fuel cell technology for more than a decade, and has perfected a unique design that enables the production of a light, versatile and reliable source of power for

<sup>&</sup>lt;sup>1</sup>McKinsey Global GHG Abatement Cost Curve; International Energy Agency World Energy Outlook 2009; US Environmental Protection Agency; European Environment Agency (EEA).



the automotive, transportation and stationary applications. PowerCell's fuel system converts hydrogen to electricity in an energy efficient and environmentally friendly manner, with zero emissions and quiet operation.

The More Zero consortium consists of partners from four countries that have joined together in an ERA-NET project to develop a modular range extender concept that can be used in a variety of vehicles, based on the PowerCell's fuel cell technology. Partners in the project are:

- IDIADA, Spain
- Triphase, Belgium
- Hexagon Studio, Turkey
- E-Trucks Europe, Belgium

ERA-NET is an instrument created for the European Commission to develop and strengthen the R & D collaboration between countries and regions in Europe.

The Swedish Energy Agency operates in various sectors of society to create the conditions for an efficient, sustainable and cost-effective use of energy in Sweden.

For additional information please contact:

Magnus Henell CEO, PowerCell

Phone: +46 739 10 37 03

Email: magnus.henell@powercell.se

## About PowerCell

PowerCell is a leading energy technology company with a unique and patented technology for generating electricity from fuel cells in an efficient and environmentally friendly way. PowerCell develops and distributes advanced fuel cell systems for the transport industry, the telecommunication industry and the military sector.

PowerCell has developed fuel cell technology for more than a decade, and has perfected a unique design that enables the production of a lightweight, versatile and reliable power source for automotive, transport and stationary applications.

By combining their fuel cell- and reformer technology PowerCell has developed a fuel cell system that converts diesel fuel to electricity in an energy efficient and environmentally friendly manner, with minimal emissions and quiet operation. The fuel cell system is initially adapted to supply electric power to the telecom industry.

PowerCell is a spinout from the Volvo Group with the objective to develop and produce environmentally friendly power systems based on a unique fuel cell and reformer technology that matches existing fuel infrastructures. PowerCell is based in Gothenburg and is owned by Volvo Group Venture Capital, Fouriertransform, Midroc New Technologies and Finindus. For further information, please visit: www.PowerCell.se