

Evonik developing the world's largest lithium ceramic battery

- New battery will make universal storage of wind and solar energy easier in the future
- Pilot project aims at a one megawatt energy storage device
- High potential and strong, patented technology offer good prospects in a future billion-euro market

In Germany, Evonik Industries and its partners are developing for this purpose the world's largest lithium ceramic battery. This has been made possible by CERIO® technology, a special combination of ceramic materials and highmolecular ionic conductors, which ensures greatly increased safety combined with a small footprint and long cycle lifetime.

As a first step, an energy storage device with an output of one megawatt (MW) and a storage capacity of about 700 kWh is being developed at the Völklingen power plant site in the Saarland. An example gives an idea of the performance of such a device: If it were charged and discharged every 15 minutes, the energy supplied would meet the needs of 4,000 households a year. Following the development of the 1-megawatt storage device, an expansion to 10 MW is planned.

“We're using our unique lithium ion expertise, which is already revolutionizing the electrification of the car, to enter an entirely new market,” says Dr. Klaus Engel, chairman of the Executive Board of Evonik Industries AG. “Using lithium ceramic technology, we've achieved, for the first time ever, cost effective decoupling of the generation and consumption of power. We can stabilize grid fluctuations arising from solar and wind power generation, and can therefore organize power generation with far greater overall efficiency. As in the automotive sector, this will be a billion-euro market,” predicts Engel. Experts estimate market volume for advanced energy storage devices at more than €10 billion in the long term.

Lithium ion batteries are currently being intensively developed worldwide for the drive systems of the future. This unique patented technology from Evonik is also at the core of our partnership with Daimler AG, which aims at mass producing electric vehicles from 2012 onward. In addition to the anode and cathode material, the SEPARION® ceramic membrane serving as a separator is at the core of the innovation.

March 6, 2010

Grace Li
Communications
Tel +86 21 6119-1501
Fax +86 21 6119-1049
grace.li@evonik.com

Cathy Ho
Communications
Tel +86 21 6119-1296
Fax +86 21 6119-1065
cathy.ho@evonik.com

About Evonik

Evonik Industries is the creative industrial group from Germany which operates in three business areas: Chemicals, Energy and Real Estate. Evonik is a global leader in specialty chemicals, an expert in power generation from hard coal and renewable energies, and one of the largest private residential real estate companies in Germany. Our strengths are creativity, specialization, continuous self-renewal, and reliability. Evonik is active in over 100 countries around the world. In its fiscal year 2008 about 41,000 employees generated sales of about €15.9 billion and an operating profit (EBITDA) of about €2.2 billion.

Evonik Industries has been producing specialty chemical products in China since the early 1990's; with wide-ranging trading relations already in place prior to this. The Group now has a total of 20 companies and 16 production sites in the region. In fiscal year 2008, 4,000 employees generated sales of over €820 million. Evonik regards China as one of the driving forces of the global economy, and we consequently intend to increase our business in Greater China to around €2 billion in the medium term.

Disclaimer

In so far as forecasts or expectations are expressed in this press release or where our statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties. Actual results or developments may vary, depending on changes in the operating environment. Neither Evonik Industries AG nor its group companies assume an obligation to update the forecasts, expectations or statements contained in this release.