

# Czechs open production of batteries based on nanotechnology

December 19 2016, by Karel Janicek



Company HE3DA President Jan Prochazka shows qualities of a new battery during the official start of a battery production line in Prague, on Monday, Dec. 19, 2016. The new battery is based on nanotechnology and is supposed to be more efficient, long-lasting, cheaper, lighter and above all safer. The battery is designed to store energy from renewable electric sources and cooperate with smart grids. Next planned type will be suitable for electric cars. (Michal Kamaryt /CTK via AP)

A Czech company opened on Monday a production line for batteries

based on nanotechnology, which uses tiny parts invisible to human eyes. The batteries are touted as potentially more efficient, longer-lasting, cheaper, lighter and above all safer.

The automatic line will operate for several months to get all necessary certifications. Then, Prague-based company HE3DA said Monday it is ready to launch other lines in a new plant built in eastern Czech Republic, and at a factory in Slovakia.

Nanotechnology can increase the size and surface of batteries electrodes, making them sponge-like so that they can absorb more energy during charging and ultimately increasing the energy storage capacity.

There's an appetite for batteries that would hold more energy, last longer, be cheaper and safer, a crucial step key for the development and success of many technologies, from solar and wind energy to electric cars.

Several ways are being explored by researchers around the globe on how to achieve that. Tesla Motors has also been building a "gigafactory" to produce conventional lithium-ion batteries for use in its electric cars and potentially to store electricity for homes.

HE3DA president Jan Prochazka said he was confident his invention provides a solution other current products can't offer.



A new battery based on nanotechnology is on display during the official start of a battery production line in Prague, on Monday, Dec. 19, 2016. The new battery developed by the HE3DA company is supposed to be more efficient, long-lasting, cheaper, lighter and above all safer. It is designed to store energy from renewable electric sources and cooperate with smart grids. Next planned type will be suitable for electric cars. (Michal Kamaryt /CTK via AP)

"We don't want to compete with anyone on the market," Prochazka said. "We're building a new market."

His battery is designed to store energy from renewable electric sources. Next planned type will be suitable for electric cars.

The price has not been set yet but it is supposed to be about a half of the cost of current lithium batteries of the same capacity.

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