Austria flow battery technology

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"Burgenland has set a clear goal: We want to and will be climate-neutral by 2030, energy-independent and therefore also price-independent", emphasizes Governor Hans Peter Doskozil at the presentation and press conference in Eisenstadt, Austria. One could have had it easy and rely on lithium-ion energy storage.

In regard to the fact that Organic SolidFlow batteries do not require critical raw materials such as lithium or cobalt, Professor Martin Selmayr, Head of Representation of the European Commission in Austria, spoke of the special importance of the technology for the European energy market and the independence it achieves from widely ramified supply chains, but also from states whose governments display unfair or even extortionate behavior:

The expansion of renewable energies is not only for climate; it is geopolitically the need of the hour. Because no dictator can turn off the wind or the sun. The EU has set its goal to double the share of renewable energy for energy consumption to reach 42.5 % by 2030. In doing so, we need to be careful, of course, that we don"t enter a new dependency. This is why it is so important that we strengthen the competitiveness of the European CO2-neutral industry, expand production capacities in this area and create a global net of reliable raw material suppliers via a new agreement.

This is not an either/or, rather both. If we want to achieve a successful energy transition, we need a corresponding expansion of the grid. And, of course, storage solutions also help us to make sensible and optimal use of grid capacities.

With this successful delivery the foundation has been laid for testing our technology in a wide range of applications. Our focus for the coming weeks will be to evaluate our technology"s performance and then deliver further storage systems with a total capacity of 300 MWh to Burgenland.

Independency means that we produce our energy in Burgenland ourselves throughout the year and have it available - for every hour of the year. We can achieve energy independence with the energy resources that nature is giving us. In Burgenland, that"s wind and sun. I have always talked about the gold of Burgenland. But we also have to accept that this gold isn"t available during every hour of the year.

Sharma explained that a typical wind and PV day in Burgenland has two phases. "A deficit of demand, followed by an excess of demand. To adapt to this and enable an energy-independent system, we need an energy storage capacity of up to 300 megawatt hours by 2030."

Furthermore, Sharma says that the issue of energy security has become highly relevant for the population due to the war in Ukraine and the discussions about blackouts. "We notice that the insecurity of the past years has led to a massively increased demand for energy storage systems. Within one year, the installed storage

capacity in Europe has tripled."

The storage system has achieved outstanding results in the lab so far. Of course, the application in the field - at the hybrid wind and PV site in Schattendorf, Austria - will give us new insights. Maybe some challenges in some form or another. But together we will do everything we can to make the technology fully operational and reach market maturity as soon as possible.

Burgenland Energie is a green tech company. Leading in the area renewable energies wind and photovoltaic. Burgenland Energie has been operating wind turbines since 1997 and has been number 1 in wind energy in Austria for almost 20 years. Since 2022, the company has also been number 1 in photovoltaics in Austria. Burgenland Energie pursues the goal of enabling its customers and partners to become energy independent with green technologies.