

Press release

Storage Summit in Schleswig-Holstein GP JOULE and watt_2.0 invite you to Reußenköge

GP JOULE, watt_2.0, Energie und Klimaschutz Schleswig-Holstein (EKSH) and the regional government of Schleswig-Holstein are working together to tap the potential of energy storage.

Ove Petersen: "Storage technology will make it possible to make use of power from renewable energies to increase regional added value in northern Germany".

Reußenköge, 24 June 2015. What role can already be played by storage technology in Schleswig-Holstein as a contribution to the change in energy generation and consumption? What is the potential of energy storage technology for northern Germany in particular? These were the questions posed to experts from the worlds of politics, economics and science as part of a colloquium hosted by GP JOULE at its premises in Reußenköge in North Friesland. The around 40 participants, headed by Dr Ingrid Nestle, State Secretary at the Ministry for Energy Change, Agriculture, the Environment and Rural Area for the State of Schleswig-Holstein, discussed a rational approach to fluctuations in generating capacity and the surplus energy produced by wind and solar generating systems.

"We need to drive forward with renewables and modern storage technologies at the same time," said Ove Petersen, Managing Director of GP JOULE and Chairman of watt_2.0. "We cannot have a situation where we have to shut down whole wind farms here in northern Germany because the grid capacity is not sufficient, while elsewhere, power is being generated from coal-fired power plants, which is bad news for the environment. In order to prevent this, we need storage technologies as a supplement and alternative to further expansion of the grid." According to Petersen, storage technologies, also enable economically generated power from renewable sources to be used to increase regional added value in Schleswig-Holstein. Commerce and industry could exploit this to their competitive advantage. In the medium term this would make Schleswig-Holstein an attractive place for investment, particularly for energy-intensive businesses.

Schleswig-Holstein is to play a pioneering role

Schleswig-Holstein is particularly affected by the imbalance between productions and consumption. More than 25% of Germany's installed wind energy capacity (1,303 MW) comes from here. However, the average consumption rate is often below this. "Storage is a key

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technology for intelligent infrastructure in the context of the change in energy generation and the need for security of supply," said State Secretary, Dr Ingrid Nestle. "We will need storage more than ever when renewable energies account for a very large part of our power supply. At this point, these energies will have to cover large parts of the functions currently covered by conventional power plants. The state intends focusing its innovation strategies on this storage function. Research and development are already needed at this stage."

Power-to-Gas as a solution

One example of the intelligent use of storage technologies in northern Germany is the 200 kW Power-to-Gas system commissioned by GP JOULE last May as part of a pilot project. The delegates at the summit were able to view the system for "filling the power gap" for themselves during the event. This Power-to-Gas system uses PEM electrolysis to convert electricity into hydrogen. This can be stored and then fed back into a cogeneration plant together with biogas. In addition, an existing local heat network uses the excess heat generated during electrolysis to provide heating in homes and commercial premises or to heat the biogas plant. This means that it is also possible to save on renewable raw materials and to supply renewable heat.

Energy storage systems change the way we generate electricity, yielding a genuine change in the way we view energy

"We have already achieved a great deal in Germany in terms of expanding renewables," stated Ove Petersen. "However, simply changing the way we generate electricity is only half the story. The use of energy storage systems and, in particular, hydrogen technologies, will enable us to take a decisive step in the direction of a genuine change in how we view energy, making renewables also available in the heat, gas and mobility markets too. This will make a vital contribution to CO₂ reduction and therefore to climate protection."

The requisite technologies are already in place. Hydrogen can be used as fuel, for example hydrogen-powered cars, which, as an alternative to petrol and diesel vehicles, are gaining increasing importance in the context of efforts to reduce CO₂ emissions. In addition, numerous businesses in sectors such as the chemical, pharmaceutical and metalworking industries require large amounts of hydrogen, which are currently produced using high levels of CO₂. "In the longer term, renewable energies will also provide a basis for a withdrawal from carbon consumption," added Petersen.

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About GP JOULE:

GP JOULE is a universal, innovative and committed partner in all aspects of renewable energies. Taking "Trust your Energy" as its motto, the company, which was founded in 2009, develops, plans and implements projects for the forward-looking use of solar, wind, biomass and energy storage systems. Driven by respect and a sense of responsibility for man and the environment, GP JOULE develops intelligent energy concepts and end-to-end solutions, already ensuring that the change in the way we generate electricity also entails a genuine change in the way we view energy. The principles followed by company founders Ove Petersen und Heinrich Gärtner, both of whom are agricultural engineers, include authenticity, trust, fair play, innovation and quality, as well as the stated long-term aim of providing 100 % of energy consumption through renewables in the future. Thus, GP JOULE offers investors forward-looking, highly profitable investment opportunities. GP JOULE has four locations in northern and southern Germany and two international locations in the USA and Canada.

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About watt_2.0 e.V.

As a professional association that operates across many industries throughout Schleswig-Holstein, watt_2.0 e.V. has been focusing on the topics of renewable energies and energy management as a whole since 2011. With members from all areas of the industry - from solar, wind and biomass to thermal, electromobility, energy storage and marketing, the association and its expert members can act as an impartial, objective and constructive partner in advising businesses, economic and scientific bodies and political representatives.

watt_2.0 is committed to exploring the potential and importance of renewable energies, bringing the successful role of renewables to the attention of the public and playing an active part in shaping the change in energy consumption in Schleswig-Holstein. In particular this will involve the future strategy of expanding technologies and the sustainable use of generated energies.



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