

ENERGY STORAGE EUROPE CONFERENCE, 13/3/2018

Keynote: Energy Storage and Renewable Energies - a Perfect Partnership

by Dr. Simone Peter, president of the German Renewable Energy Federation

Dear Minister Pinkwart, dear Mr. Hauer,
ladies and gentlemen,

It is a **pleasure** for me to speak to you today.

Renewable Energies and Energy Storage are central pillars of new flexible energy markets. And flexibility is key for a future-oriented energy system. Only with a faster expansion of Renewable Energies – in the electricity sector as well as in the heating and cooling sector and in the mobility sector -, we can meet our Climate Goals and the Paris Climate Agreement. If we want to limit Global Warming to a bearable level, we must accelerate Energy Transition much more consequently.

160 million tonnes of CO₂ equivalents were avoided in 2016 alone in Germany by using Renewables – the most relevant factor in climate protection in this country. But we have to do more. The need for action is serious. We have to stop increasing global temperature!

We need drastic changes in the way we live, which means a comprehensive social und ecological transformation, that includes the switch from fossil to renewable sources. The advantage is: The Renewable Energy Economy is an economic powerhouse today. In 2016, investments in renewable energy plants in Germany amounted up to 14 billion euros. 330,000 people work in the field of renewables in Germany – this is five times more than in the coal industry! And: Wind energy and solar energy are already more cost-effective than new coal power plants.

The share of green electricity in the German electricity market amounts up to 36 percent.
- At the same time, Germany has one of the most stable power grids worldwide.

In 2016, the average break time was only 12.7 minutes. Ten years earlier, it was still 21 minutes. Countries with higher levels of nuclear and coal power experienced longer interruptions, for instance France with 50 minutes or Great Britain with 53 minutes.

In interaction, the weather-dependent forms of renewable energy, wind and solar power, complement each other with the stable available energy sources biomass, hydropower and geothermal energy as well as with various flexibility options. For example, power-to-X solutions, load management or storage. This means that even with a new energy system made of 100 percent renewable energy, reliable and predictable power generation is guaranteed every time. On the way to 100 % Renewable Energy we need better framework conditions: The special auctions for wind and photovoltaic announced by the new German government in the coalition agreement has to come quickly. It is necessary to remove or at least significantly raise established limits on the promotion of renewable energy and also find appropriate prices for carbon emissions. In addition: The coalition agreement of the new grand coalition for sector coupling and energy storage has now to be filled with life.

More sector coupling relieves the grids, creates more flexibility and save costs for redispatch and feed-in management. The application possibilities for energy storage technologies are manifold: from industry to the heating market to mobility: Today, decentralized short term storage is already widely used in combination with photovoltaics systems - and their price continues to fall. First battery storages in megawatt scale stabilize the grids. The power-to-gas technology allows to transport and reuse energy in a large scale - independent of energy supply and demand. In the coupled energy system of the future, there will be sufficient possibilities to permanently guarantee a reliable power supply, which significantly reduces greenhouse gas emissions and raises energy efficiency potentials. Cooperations with our neighbors - such as the grid expansion to Scandinavia - also ensures that electricity is available reliably at all times.

And one more thing is particularly important: An accelerated expansion of renewable energies in the electricity sector must not be made dependent on grid expansion, which has been dragged off for years.

There is a large number of effective measures in the area of grids, as well as via sector coupling and storage, which sufficiently secure a significantly higher expansion of renewable energies.

Ladies and gentlemen, The transition to the energy supply of the future is both - ecologically necessary and economically worthwhile. Energy Storage and Renewable Energies are perfect partners for new flexible energy markets: interconnected, sustainable, attractive.

In this spirit let me wish a successful conference and exhibition!

Thank you very much for your attention.