Common EU definition of storage could unlock potential: SolarPower Europe

By Andy Colthorpe | Apr 04, 2016 11:49 AM BST | 0

A framework that values solar-plus-storage is needed in Europe, the report’s authors Solar Power Europe, EUROBAT and EHPA have argued. Image: EC.

The EU’s lack of regulatory definition for energy storage is among major factors holding back the potential of the technology in the continent, particularly for integrating renewables, SolarPower Europe has argued in a new report.

The trade group, formerly the European Photovoltaic Industry Association, has authored the “Solar and Storage Policy Paper – April 2016” along with the Association of European Automotive and Industrial Battery Manufacturers (EUROBAT) and the European Heat Pump Association (EHPA).
The trio's joint proposals outlined in the paper push for the greater recognition of storage as a way to increase the value of solar by enabling greater on-site consumption of PV power, as well as valuing the potential network-side benefits of storage. The latter includes easing pressure on grids by using solar-plus-storage to meet peak demand, which in Europe occurs in the evenings.

In order to get the best use of "zero marginal cost" solar electricity and to get to higher ratios of self-consumption, while potentially also unlocking the use of storage systems to provide demand side flexibility, the report's authors make a number of recommendations.

**Modern networks require modern configuration**

First and foremost of these recommendations is to "provide a common EU legal definition of storage". As has been seen in Europe and markets elsewhere, electricity markets and grids have been historically designed to accommodate centralised, usually fossil fuel-based generation, transmission and distribution of energy.

In the case of storage, one of the biggest issues raised by this is that networks are not configured to cope with a device that, like a battery, can be any number of things simultaneously including generator, load or transmission asset, depending on where it is placed on the grid and what it is used for. In many regions such as the UK, this means transmission network operators cannot invest in storage if it would mean becoming involved in the power market too, to give one simple example. At the same time, SolarPower Europe, EUROBAT and EHPA argue that the creation of a European storage market is hampered by this lack of definition.

An "appropriate framework for self-consumption" is needed, the policy paper also says, urging the EU to create one through its Renewable Energy Directive framework, which currently calls for 20% of the EU's energy demand to be met with renewables by 2020. Some countries, such as Spain, have levied taxes on PV system owners using their own power, while even Europe's longstanding PV market leader, Germany, has rules limiting the amount of self-generated power one can use that one industry advocate recently said are "very strange".

Among the other recommendations for action are a call for greater coupling between energy sectors – electricity, heating and cooling and transport. Storing power in the form of heat, or optimising EV charging to cause the least stress on the grid could also be important in adding flexibility to energy networks. The paper also calls for more R&D and temporary support programmes, such as the limited cash rebate paid to German buyers of home battery storage systems to be rolled out.

SolarPower Europe, EUROBAT and EHPA argue that storage can help make the energy system more cost-effective by allowing the use of power when it is cheaper and by balancing out peaks in pricing throughout the day.

**Tags:** european union, regulatory definition, regulatory issues, solar-plus-storage, peak demand, renewables integration, grid integration