



WG Storage-as-a-service VPP (StaaS/VPP) Tool

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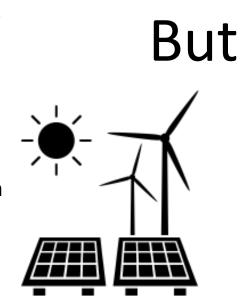
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WG STaaS/VPP Tool Main Motivation

EU has set important targets for the share of renewable energy in generation, as well as ambitious ratios to the amount of CO2 emissions

RES are a solution for the reduction in greenhouse gas emissions and dependency on fossil fuel markets



- RES aren't available 24/7
- There can be unpredictable weather events impacting on RES energy production
- RES can make energy grid instable

The use of storage is a solution for allowing the integration of intermittent renewable generation avoiding Energy grid





WG STaaS/VPP tool Introduction



- It is the WG technological solution for aggregating and managing batteries and distributed RESs in a synergic way, contributing to the energy grid stability and assuring at the same time, the sustainability of the users that manage (energy aggregators) or own (households or corporates) RES and batteries assets.
- This solution aims to help consumers and prosumers (be them households or corporates) to be aggregated and offer to the market their unused storage capacity as well as the spare generation, in the form of a VPP.



WG STaaS/VPP tool main target market and users benefits

WG STaaS/VPP is targeted to energy aggregator but other energy grid users can benefit of it



DSO's Benefits:

- Use storage capacity and controllable energy generation for balancing the grid
- Avoiding RES curtailment
- Increasing hosting capacity, reducing grid instability
- Increase network observability, providing a reliable forecasting of the power profiles



Aggregator Benefits:

- Improved capacity to manage in an aggregated way assets (Batteries/RES)
- Supported sustainability by the possibility to participate to the Ancillary Energy market.
- Simplified customers relationships management

DSO

Energy Prosumer

Prosumers benefits:

- Make available in a simple way unusued storage capacity and spare energy generation gaining a return
- Offering their unusued storage capacity and spare energy generation in an aggregated way strengthen their bargaining force in the Energy Market



WG STaaS/VPP Tool Functionalities

- Monitoring and Management of distributed assets (<u>RES</u>, Batteries)
- Energy Forecasting and Flexibility Estimation
- Market participation/Demand Response (<u>DR</u>) campaigns
- Scheduling and dispatching
- Communication management
- Customer Contract and Billing Management



Thank you!



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