

SMART Capital Region 2.0

As a part of SMART Capital Region 2.0, the impacts of a growing amount of regenerative generation and storages for electricity, heat, gas and electro mobility (V2G) are to be investigated. Furthermore, the scientific research activities are focused on the influence of flexible loads from different operating concepts of Power-to-Heat, Power-to-Cool, Power-to-Gas and Power-to-Vehicle on a load profile “administration and other office use”. The still existing Smart Grid on the BTU campus with its peak load of 2.5 MW is serving as an example. In the showcase program WindNODE certain strategies for operation and optimization are developed and an according demonstrator will be installed on the central campus of BTU. In order to contribute to the transfer of the so-gained results towards a wider regional level, a visualization platform will be created. With the help of this visualization platform a continuous illustration of when and where renewable generation and residual loads from approx. 40 substations and developed regions across are occurring in the states of Berlin, Brandenburg and Mecklenburg-Vorpommern will be provided.

Within the SMART Capital Region 2.0 Project inputs on more efficient usage of renewable energy surpluses in north-eastern regions of Germany through controllable loads and storages will be investigated.

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