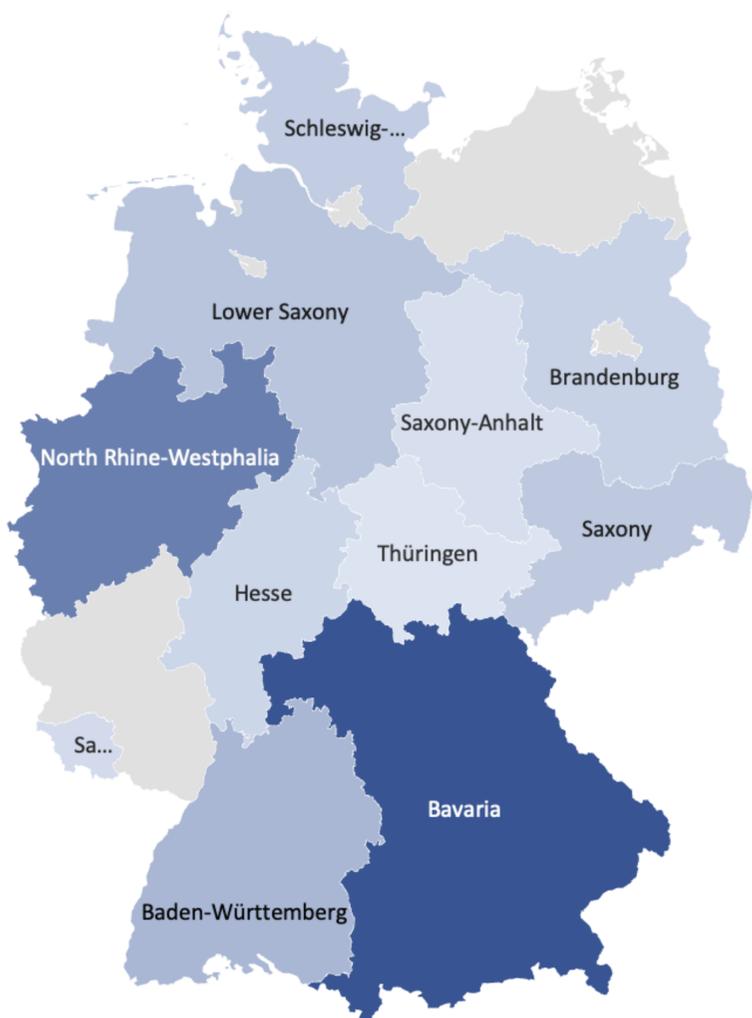


Key Highlights of the Battery Energy Storage Market in Germany

The infographic presents a summary of the installed base of front-of-the-meter (FTM), battery energy storage systems (BESS) market in Germany. The infographic discusses the share of battery energy storage systems across different regions of Germany and the split between co-located and stand-alone battery energy storage system

Overview of Installed Battery Energy Storage System in Germany Geographical Categorization



- Due to various incentives, regulations, and increased awareness of renewable energy and BESS adoption, Bavaria has led the BESS market in Germany. It also ranks 1st among the 16 federal states in successful implementation and the benefits of renewable energy according to The Agency for Renewable Energies.
- North Rhine-Westphalia (NRW) is the hub of battery cell technology research and development facilities. NRW has several large-scale installed BESS, which also includes RWE's second-life BESS at its pumped hydro facility. RWE intends to invest approximately US\$4 Billion in the implementation of renewable energy and storage systems in NRW.
- Thüringen is lagging in the deployment of BESS, with just two large-scale BESS installed presently. Despite having a high percentage of renewable sources, impediments and a lack of attention on the part of authorities and citizens in Thüringen have resulted in a lack of progress of BESS.

Overview of Installed Battery Energy Storage System in Germany Co-located vs Stand-Alone

- Over the last few years, Germany's FTM battery energy storage system market has been primarily dominated by stand-alone systems. The regional transmission companies operate these stand-alone BESS for grid services.
- Co-located refers to battery energy storage systems which are installed along side other power generators i.e., conventional energy or renewable energy.
- Though Co-located BESS has had a lower market share throughout the years, considering higher targets set for renewable sources as well as the prospect of incentives for renewables, plus storage, current dynamics are expected to shift towards a greater adoption of Co-located BESS.

Installation Split (2008-2022)

