

Optimal Battery Storage Sizing for Residential Buildings with Photovoltaic Systems under Consideration of Generic Load and Feed-In Time Series

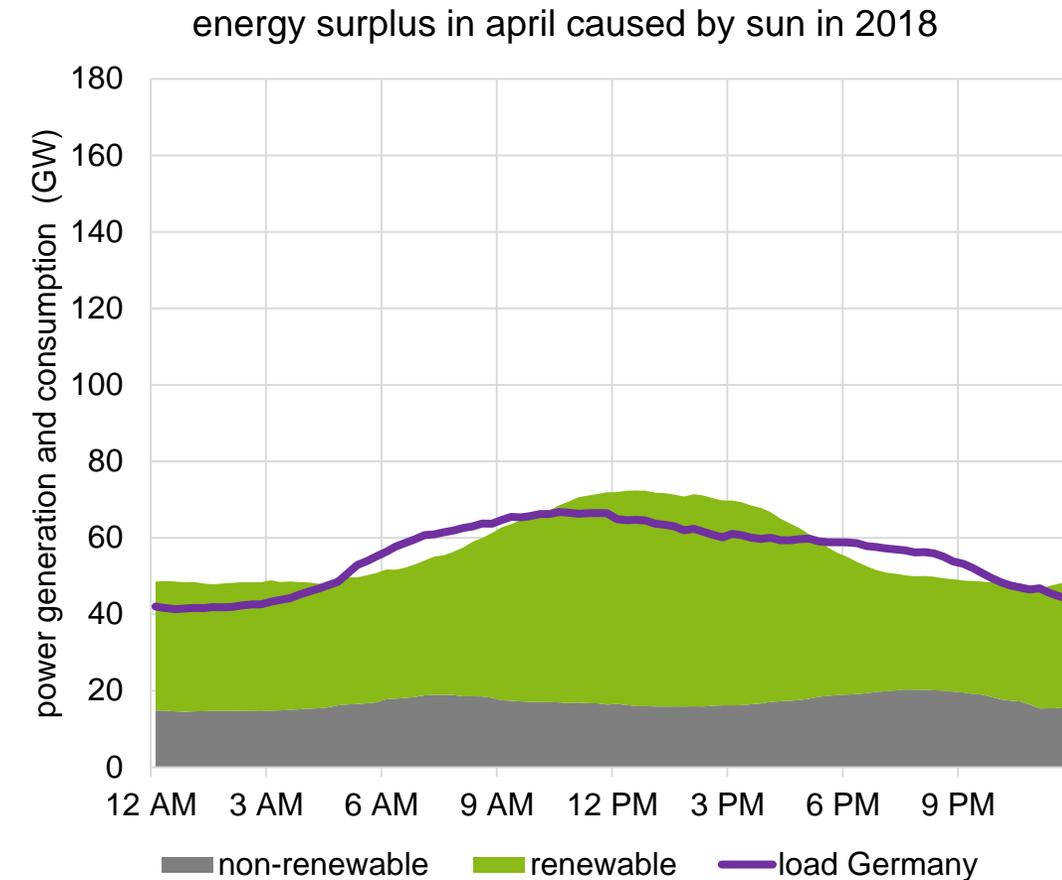
Björn Uhlemeyer

Hybrid Power Systems Workshop

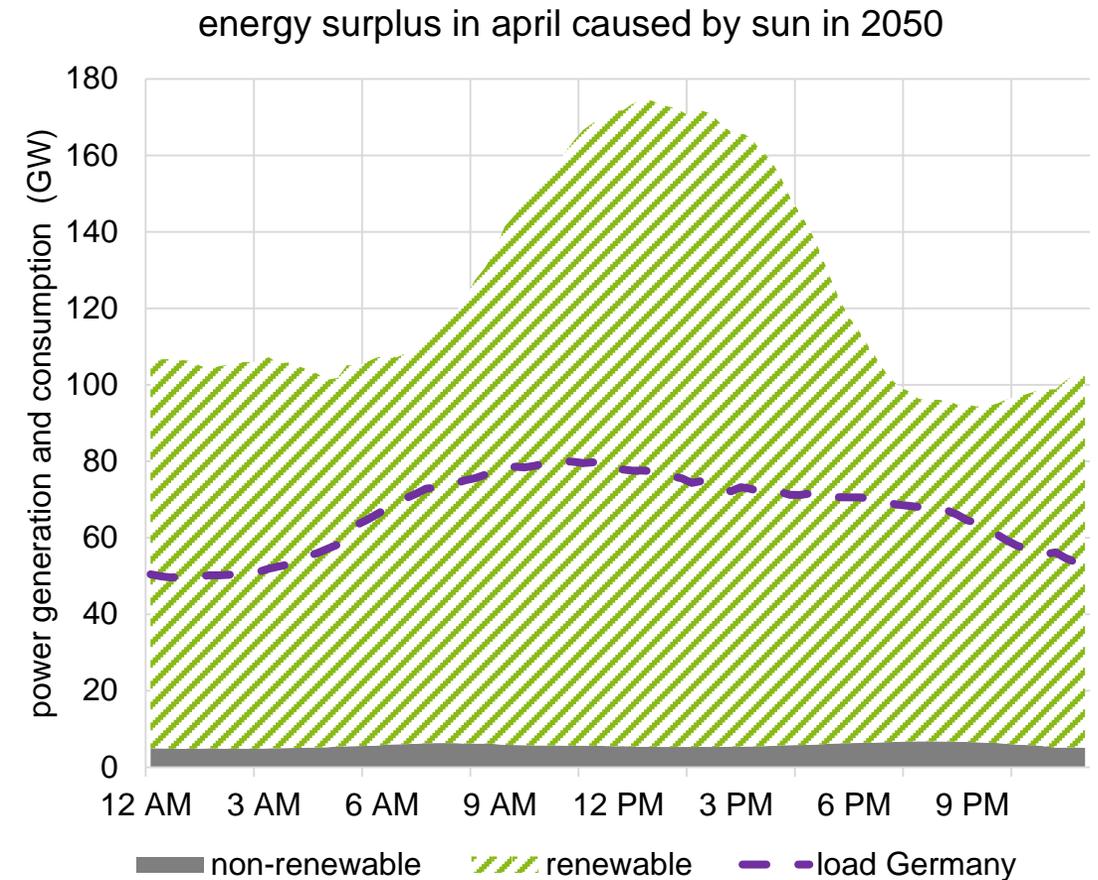
Wednesday, 22. May 2019

Renewable energy surplus in the electrical grid

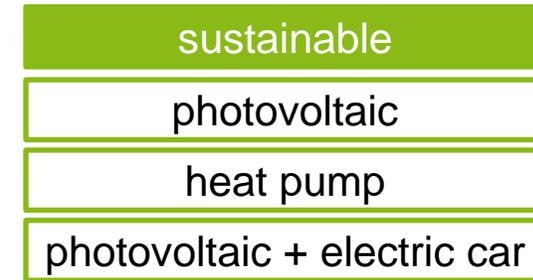
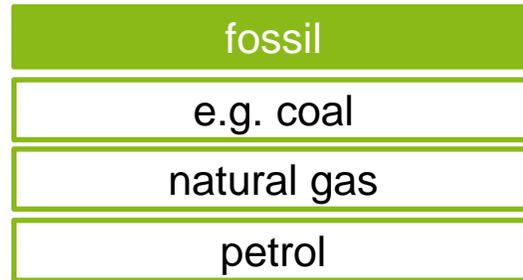
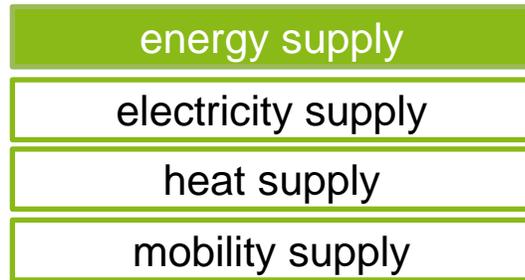
Electrical power supply in Germany in 2018



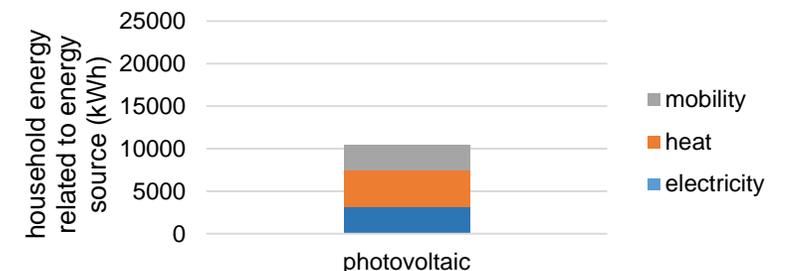
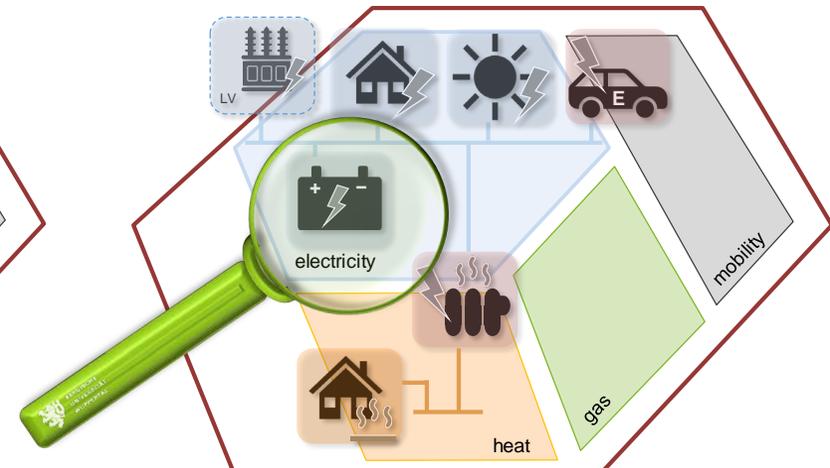
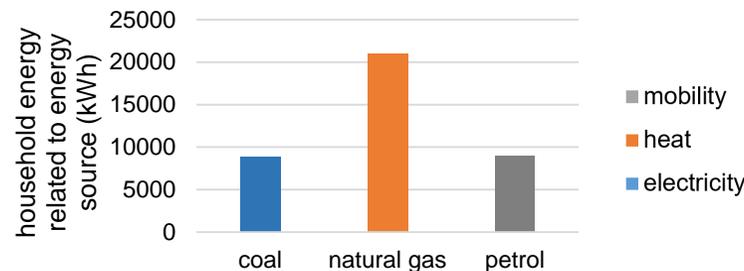
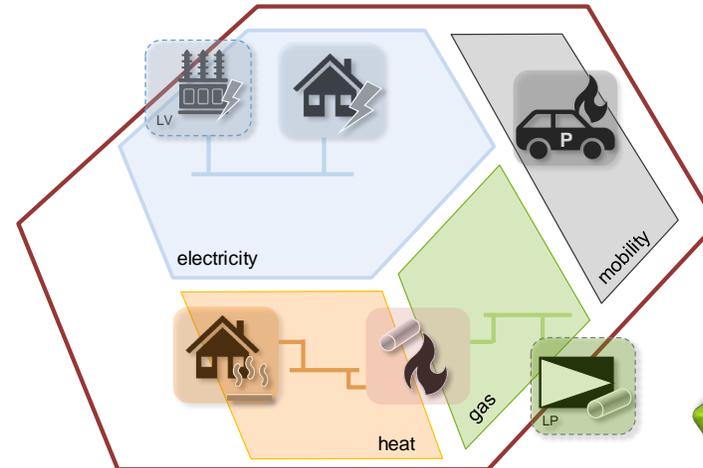
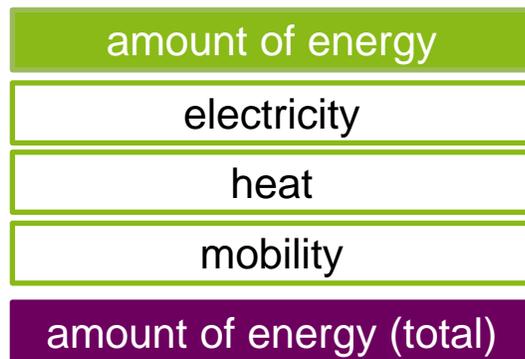
Electrical power supply in Germany in 2050



Sustainable energy supply for residential buildings

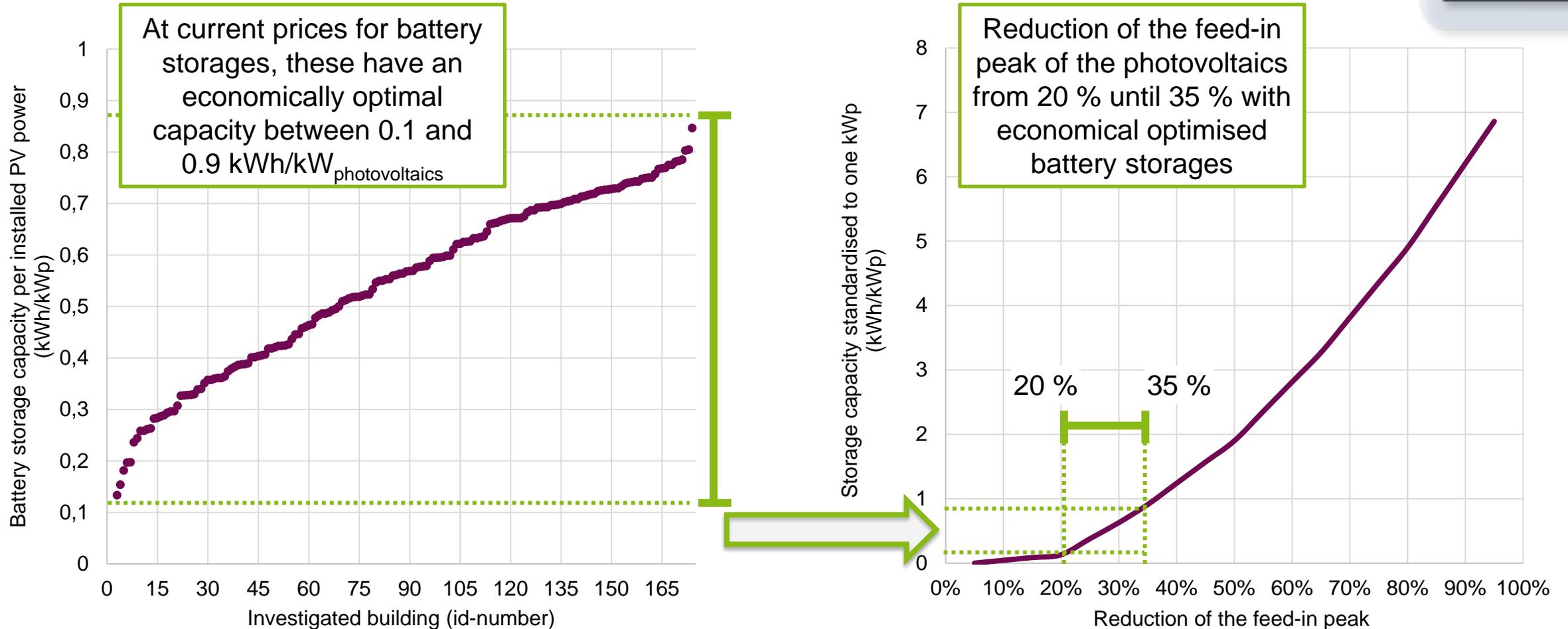
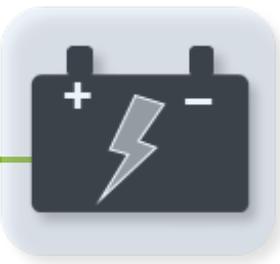


- Electricity
- Gas
- Heat
- Sector Coupling
- Interfaces to upstream and downstream networks
- Energy cell



residential building

Optimal battery storage sizing





BERGISCHE
UNIVERSITÄT
WUPPERTAL

Björn Uhlemeyer
Research Group Operational Concepts and Sector Coupling
Chair of Electrical Power Systems Engineering
Rainer-Gruenter-Str. 21, 42119 Wuppertal
bjoern.uhlemeyer@uni-wuppertal.de