

Storage Project Waste Disposal District Kassel

# No waste (of solar energy) on the landfill



## ABO Wind ensures higher photovoltaic self-consumption electricity for waste disposal company in Kassel

The waste disposal company Abfallversorgung Kreis Kassel (AKK) in Hesse, Germany has put out to tender a battery storage project. AKK wanted to expand the existing 2.5 MWp photovoltaic (PV) system with a battery storage system. The goal was to increase self-consumption and to use the system as an emergency power back-up as a substitute for the diesel generator.



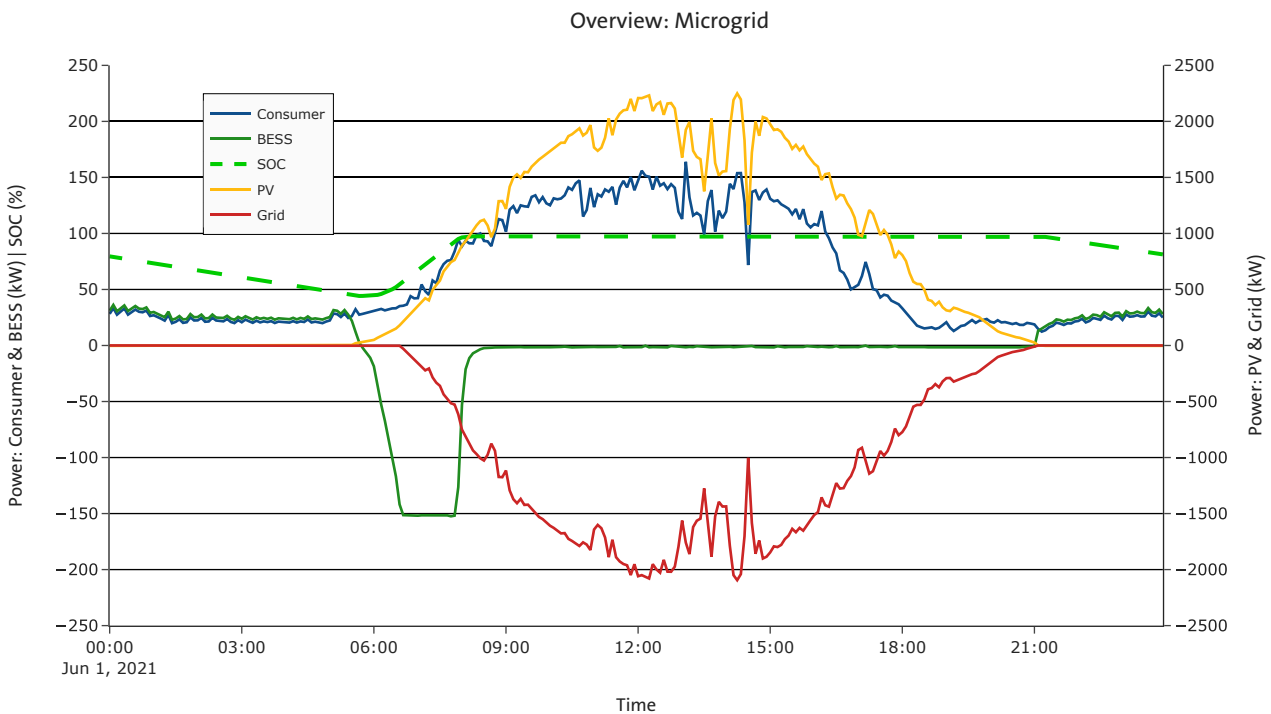
## Project implementation

The project was implemented by ABO Wind as the general contractor in 2020. ABO Wind installed and configured a storage system from Rolls Royce Solutions with a capacity of 150 kVA (445 kWh).

The graph below shows how the combination of photovoltaics (PV) and storage (BESS) covers the electricity purchase on a day in June and demonstrates that no purchase from the grid is necessary. During the day, the green energy from the PV system is used to cover the electricity consumption at the site. Excess energy is first fed into the battery storage. The green dashed line shows that the state of charge (SoC) increases. The remaining share of the PV electricity is then fed into the grid. As soon as the generated energy is no longer sufficient to meet the



on-site demand, the battery takes over to cover the load and the SoC drops. This procedure increases the overall self-consumption of the PV energy.



## Customer feedback

„As a full-service provider, ABO Wind planned, built and connected the plant to the grid,“ explains Andreas Krieter, Head of Landfill and Energy Management of AKK. The experts from ABO Wind are also responsible for the technical management. „The plant is running perfectly,“ says Krieter. „And we now use significantly more of our self-generated solar energy and do not need a diesel generator for emergency power supply.“

## Contact

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<https://www.abo-wind.com/en/range-of-activities/more-clean-energy/storage-systems.html>

## Services ABO Wind

The following services were provided by ABO Wind as general contractor:

- Technical planning
- Procurement
- Turnkey construction, grid connection and commissioning
- Operation, monitoring and maintenance

