

ECONOMIC STORAGE SYSTEMS WITH LITHIUM-ION BATTERIES

REQUIREMENTS OF THE "ENERGIEWENDE" FOR STORAGE SYSTEMS

Reliable and economic compensation of the fluctuations of renewable energy

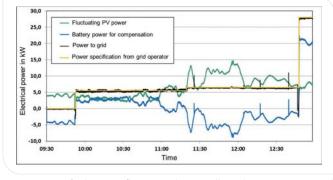
KIT-SOLUTIONS FOR THE "ENERGIEWENDE"

- Highest transport and operational safety compliant with the KIT checklist
- Modular, cost-efficient battery design in units of 3 kWh – 3 MWh
- Target cost of 250 €/kWh by economies of scale until 2017
- Development of Li-ion cells particularly for stationary applications



Safe modular battery system based on high-quality Li-ion cells

COST OPTIMIZATION
RENEWABLE ENERGY ON DEMAND



 $Compensation \ of \ solar \ power \ fluctuations \ by \ an \ intelligent \ battery \ system \ control$

- Cycle life of up to 7000 full cycles, suitable for 20 years in stationary use
- Development of control algorithms for an economic and grid-stabilizing system operation
- Independent self-learning forecasts for power generation and load
- Autonomous intelligent battery system control depending on forecasts for generation and energy demand

AUTONOMOUS SYSTEM CONTROL