



CONSORTIUM FOR
**BATTERY
INNOVATION**



LEAD BATTERIES: ENERGY STORAGE CASE STUDY



Asantys Systems GmbH

Eco-safari fuelled by sunlight and batteries

Grumeti Hills, Tanzania

In ten safari lodges in the Serengeti, Tanganyika Expeditions is powering their operations using solar energy and lead battery storage.

Disconnected from the Tanzanian utility grid, the safari lodges are provided with a self-sufficient electricity supply generated from sustainable solar power.

“A project that demonstrates the great potential for a climate-friendly mobility transition in Africa through used vehicle conversion to e-drive and battery powering by solar electricity.”

Johannes Germ, Managing Director, Asantys Systems

Technical Specification

The energy storage systems, developed by system Integrator Asantys Systems and energy consultant Olk, features:

- Two SMA stand-alone grids with 55 kW peak PV power
- Lead battery storage
- Electric vehicles charged with PV power

Providing solar power around the clock for the accommodations and laundry facilities, it is also used to warm up shower water for guests.

In an added element of sustainability, the eco-safari has switched its vehicle fleet from diesel to electric vehicles. Both the safari and service vehicles are then charged using the SMA stand-alone grid supplied with solar power.



The solar batteries used to store the energy for the lodges are fully recyclable at end-of-life, and provide a high-performing, safe and sustainable solution.

Technical Summary

Overall capacity	2 x systems 55 kWp with SMA Sunny Tripower PV inverters
Battery specification	Lead-SLA batteries
Available stored energy	2 x 220 kWh battery storage systems
Inverters	2 x Multiclustor Box 6 each with 6 battery inverters Sunny Island 8.0

About the Company

As a system integrator, Asantys Systems specializes in optimally designing solar systems for energy requirements, offering high-quality system components at the best prices and implementing project implementation including logistics, installation and project management cost-effectively and quickly.

With these services, we position ourselves as a specialized partner for project developers, plant operators and providers of financing concepts.



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