



Solar mini-grids and e-mobility for small- scale fisheries

Prof. Dr. Wolfgang Schade & Team

wolfgang.schade@voltviewafrica.de

Why Africa ...?



Solar-powered laundromats



Washing clothes in Sub-Saharan Africa is a women job mainly done by hand, cold water and outdated washboards. Very often the kids have to help their mothers in the morning before they go to school.

The Powerhouse concept combined with clean water production allows easy installation of electric washing machines, solely powered by the sun.

Fishing on Lake Victoria



- **Nutrition and economy for 50 million people**
- **Depleting fish stocks** threaten food security
- Destruction of **underwater habit**
- **Pollutant emissions**
- **Over-fertilization**
- ...

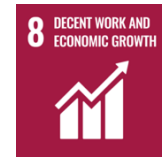
Zero-Emission Mobility for Small-Scale Fisheries



5.240

fishing trips completed with
ASOBO e-mobility

 SUSTAINABLE DEVELOPMENT GOALS



Environmental and economical impact of e-mobility fishing



Petrol propelled fishing boats

CO₂ 2.4 kg/l petrol
4.000 l/a 9.6 t CO₂/a/boat

35%

less than the monthly
expense of running a petrol
powered outboard

Solar charging station at Lake Victoria



Igombe, Luchebele and more in planning

Innovative sodium-ion-battery technology



SodiumX power box

24 V, 1.5 kWh for
electric propulsion

Customer training, service and education



VoltaViewAfrica and SodiumX for the community



Niedersächsische
Bingo-Umweltstiftung