Pilot Region Gorenjska, SI

PV_REDOX

Dr. Leopold Herman
University of Ljubljana
Slovenia

Univerza v Ljubljani
Fakulteta za elektrotehniko
Before AlpStore: Our Challenges

- Remote areas in the alpine space (small villages, farms, tourism infrastructure...)
- Long overhead distribution lines
- Trojane is a small alpine village in Slovenia
During AlpStore: Our Activities

- Define the PV_REDOX concept
- Define technical requirements
- PV_REDOX system
  - 50 kW PV power plant
  - 5 kW/20 kWh ESP
  - EV charging station
- Development of:
  - Operational scenarios
  - Control algorithms
- Results monitoring
After AlpStore: Our Achievements

✔ The installed system allows the restaurant to:
  ✔ Store the surplus energy from a PV source
  ✔ Peak shaving
  ✔ Power on failure functionalities
  ✔ ...

![Diagram of power supply equipment and systems]
After AlpStore: Our Recommendations

1. Small sized energy storages in home energy systems together with PV systems can be a good solution for remote areas;
2. Attract attention and improve the acceptance;
3. Keep an eye on the development in the field of storages;