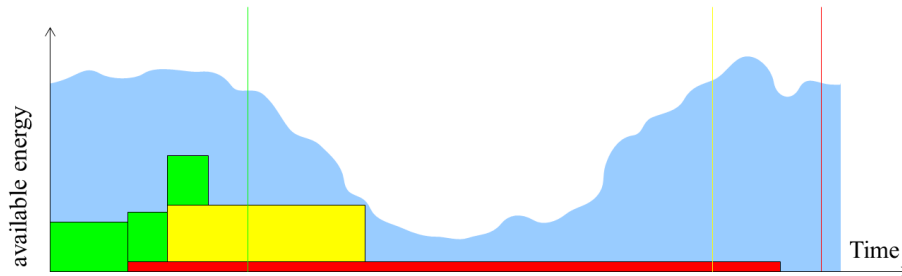


Smart Grid case study



How to involve single energy consuming devices to balance availability of renewable energy.

→ Consume when energy available

We use a commercial-available, powerline-based, distributed-intelligence home control system with integrated energy-measurement functions to control electrical devices

→ Examples: Electrical vehicles, Heating pumps, Refrigerators

→ Device categories: Delayed On and Short period off

We used a running system to compare 2 algorithms:

Simple and Packaging against historical data:

- Simple algorithm performed better with many devices than the 2D-packing algorithm.
- Packaging algorithm performs slightly better with fewer devices. (With few devices delaying power ON devices is much more important.)

