Greenpower control station

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Introduction

Greenpower answers the electricity demand increase and the extra demand linked to hydrogen and electric vehicles. It proposes a new decentralized concept for clean mobility.

In Greenpower:
The house is equipped with:
- Solar panels and inverters
- An electrolyser system with gas storage
- A battery
- A control station, the brain of energy production / storage

Energy flow optimization at domestic level between all the players:
- Prediction of energy production
- Prediction of domestic energy consumption
- Prediction of energy needs for mobility
- Prediction feed an optimization block
- Health monitoring algorithms

Control station

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Principle and results

Development & Validation of:
- various optimization algorithms (Exhaustive/Non-exhaustive)
- Adaptive models for consumption & production prediction
- Fuel cell health monitoring algorithms
- Validation platform

Test platform

Cost

- 100
- 45.8
- 34.2
- 31.3