



Decarbonization: technical and economic calculations

Decarbo:tec is a unique programme we use to create evaluations as a part of a draft concept. Technical, ecological and economic data are calculated in order to create several case studies for you.

The main components of our calculations are:

- Your 15-minute load profile at the network connection point
- Your area identification for energy production [PV, wind power plant, existing plants, etc.].
- Your requirements for interconnection of sectors | Power-to-X [battery storage, electrolysis, e-mobility, and many more].

The result:

A survey of your energy potentials and an evaluation of possible investment decisions!

Decarbo:tec is our service for determining energy potential and evaluating investment decisions.

1. Technical and economic calculations
2. Forecast of renewable energy generation
3. Calculation of the savings potential for CO2
4. Integration of battery storage systems
5. Integration of hydrogen
6. Integration of electromobility
7. Integration of thermal energy
8. Optimization of technology sizes
9. Comparison of variants
10. Visualization of the decision parameters



Hanna Schmiegel

Engineering Decarbonisation
BU Omexom Full Service

Omexom Smart Technologies GmbH

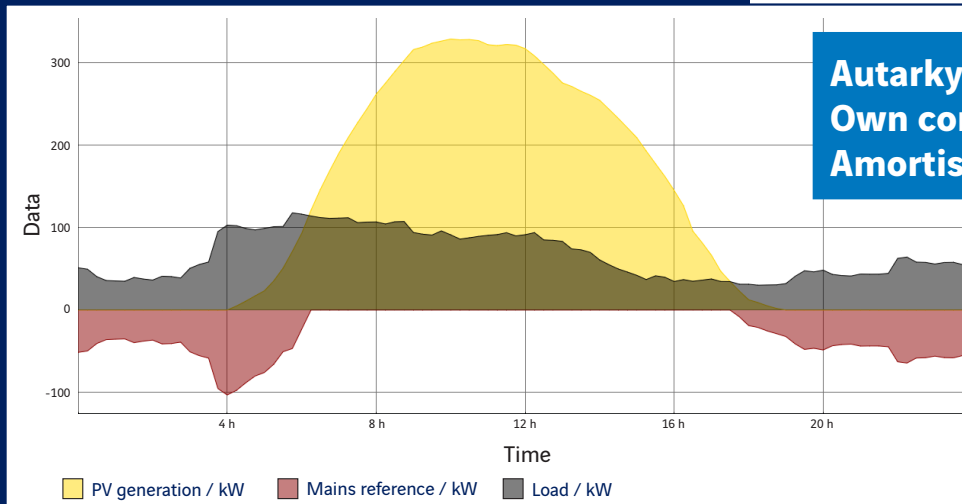
Horlemannplatz 1 | 47589 Uedem
+49 2825 89 321

decarbotech@omexom.com
www.omexom.de

„Transparency is the key to actively developing the energy transition. Reliable data are essential for investment decisions. Our job is to analyse, optimise and evaluate them for you.“

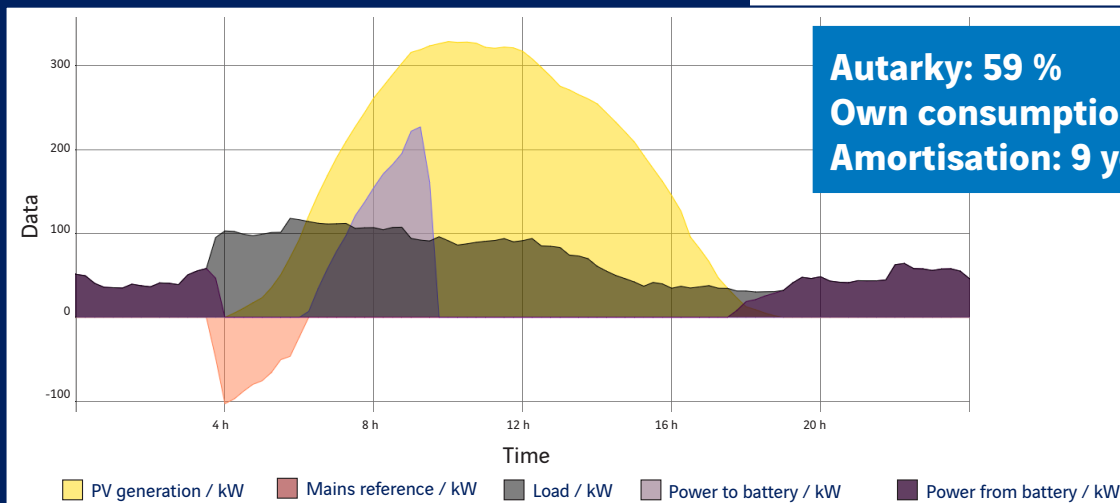
EXAMPLE DRAFT OVERVIEW

Case 1: Location: NRW
Load: 600 MWh
PV generation: 700 kWp



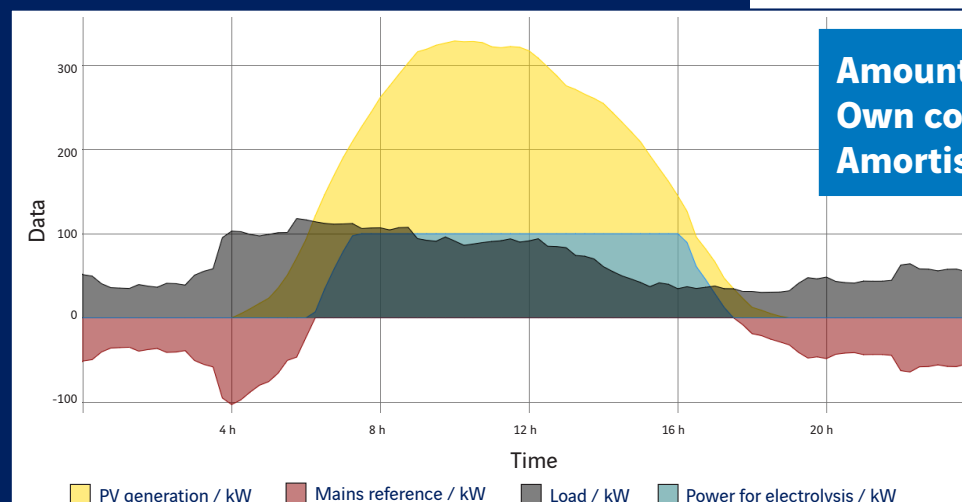
Autarky: 40 %
Own consumption: 35 %
Amortisation: 7 years

Case 2: Case 1 + Battery 500 kWh



Autarky: 59 %
Own consumption: 53 %
Amortisation: 9 years

Case 3: Case 1 + Electrolyser 100 kW



Amount of hydrogen: 4,3 t/a
Own consumption: 72 %
Amortisation: 12 years