Transition to Renewables in Germany

By Ursel Beckmann
Ecoact, Hamburg, Germany

Part of Proceedings at: https://www.inforse.org/europe/seminar_2021_INFORSE-Europe_DK.htm
Power generation in Germany in the first half of 2021

- Kernenergie: 32.2 TWh
- Braunkohle: 45.8 TWh
- Steinkohle: 20.4 TWh
- Gas: 30.7 TWh
- Wasserkraft: 11.1 TWh
- Biomasse: 22.4 TWh
- Wind: 59.0 TWh
- Solar: 28.3 TWh
PV expansion in Germany

- Restriction max. 52 GWp PV was abolished at the end of 2020.
- 57 GWp in June 2021
- German goal „climate neutrality by 2045“ needs
  → 200 GWp until 2030
  → 450 GWp to 2040
  → 500 GWp until 2045
100 kWp PV
15 kWp PV and
15 m² Vacuum-pipe
50m² Vacuum-pipe
7x 6 kWp PV
Every PV-Modul gets its own optimizer.
Fixing the optimizer
3D-Simulation to find the best roofs
3D-Simulation to get 84% self-sufficiency
Self-sufficiency from February to November

MONATLICHER ENERGIEERTRAG (GESCHÄTZT)

- PV-Erzeugung
- Verbrauch
- Eigenverbrauch
- Wechselrichterverluste durch Leistungsüberschreitung

Durch Leistungsreduzierung verlorene Energiemenge: 0,01%
Thank you and act now