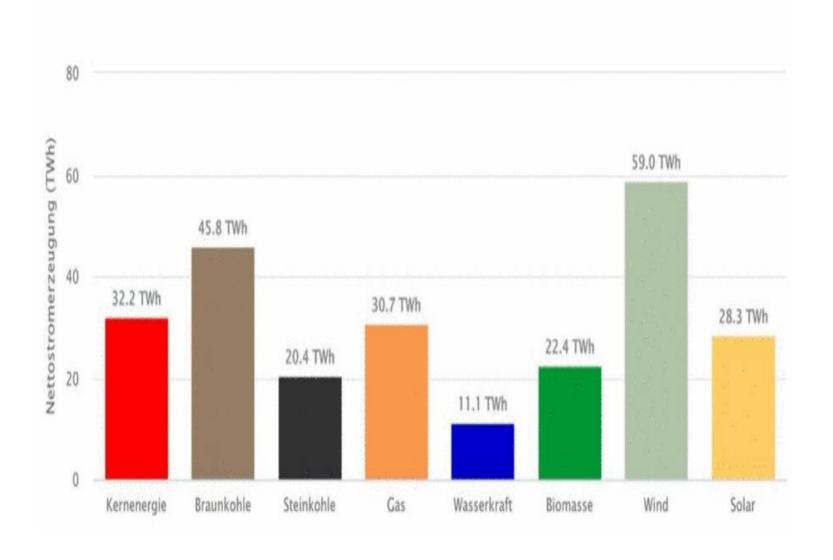
INFORSE-Europe - European Sustainable Energy Seminar at the Nordic Folkecenter for Renewable Energy, Denmark August 17-20, 2021

### Transition to Renewables in Germany

By Ursel Beckmann Ecoact, Hamburg, Germany

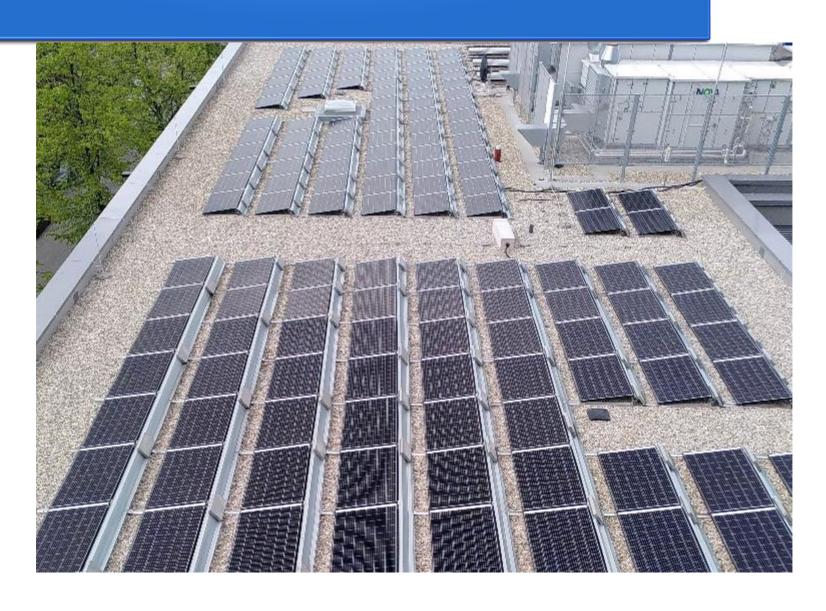
## Power generation in Germany in the first half of 2021



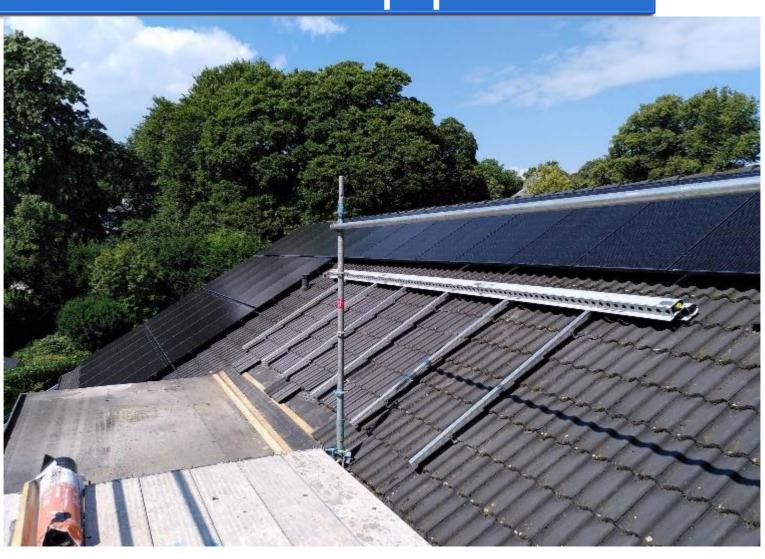
# PV expansion in Germany

- •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 m<sup>2</sup> Vacuum-pipe



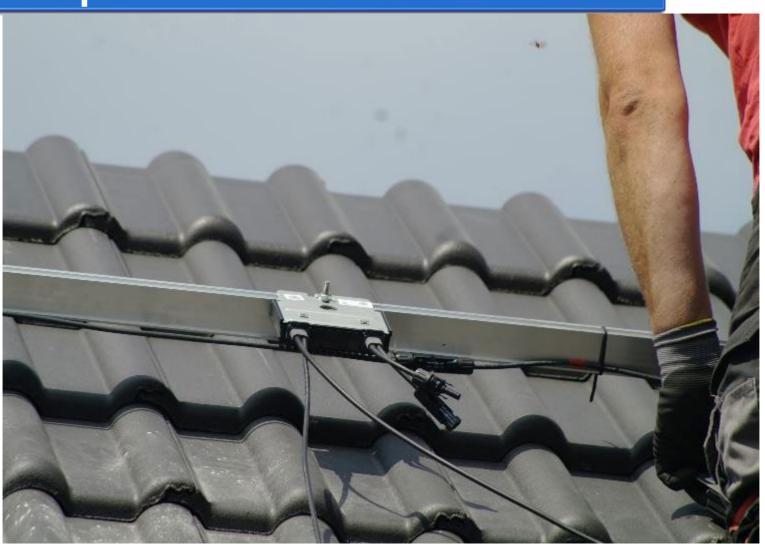
#### 50m² Vacuum-pipe



### 7x 6 kWp PV



# Every PV-Modul get's an own optimizer



### Fixing the optimizer



## 3D-Simulation to find the best roofs



### 3D-Simulation to get 84% self-suffiency

39B, WILFARTH (NORD)

iburg, 22399, Germany | Norbert Wilfarth | 22. Apr. 2021







31 PV-Module



1 Wechselrichter



31 Optimierer



Batterien

# Self-suffiency from February to November



### Thank you and act now

