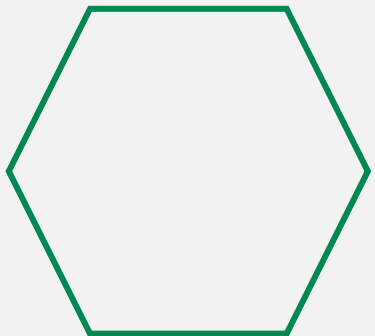
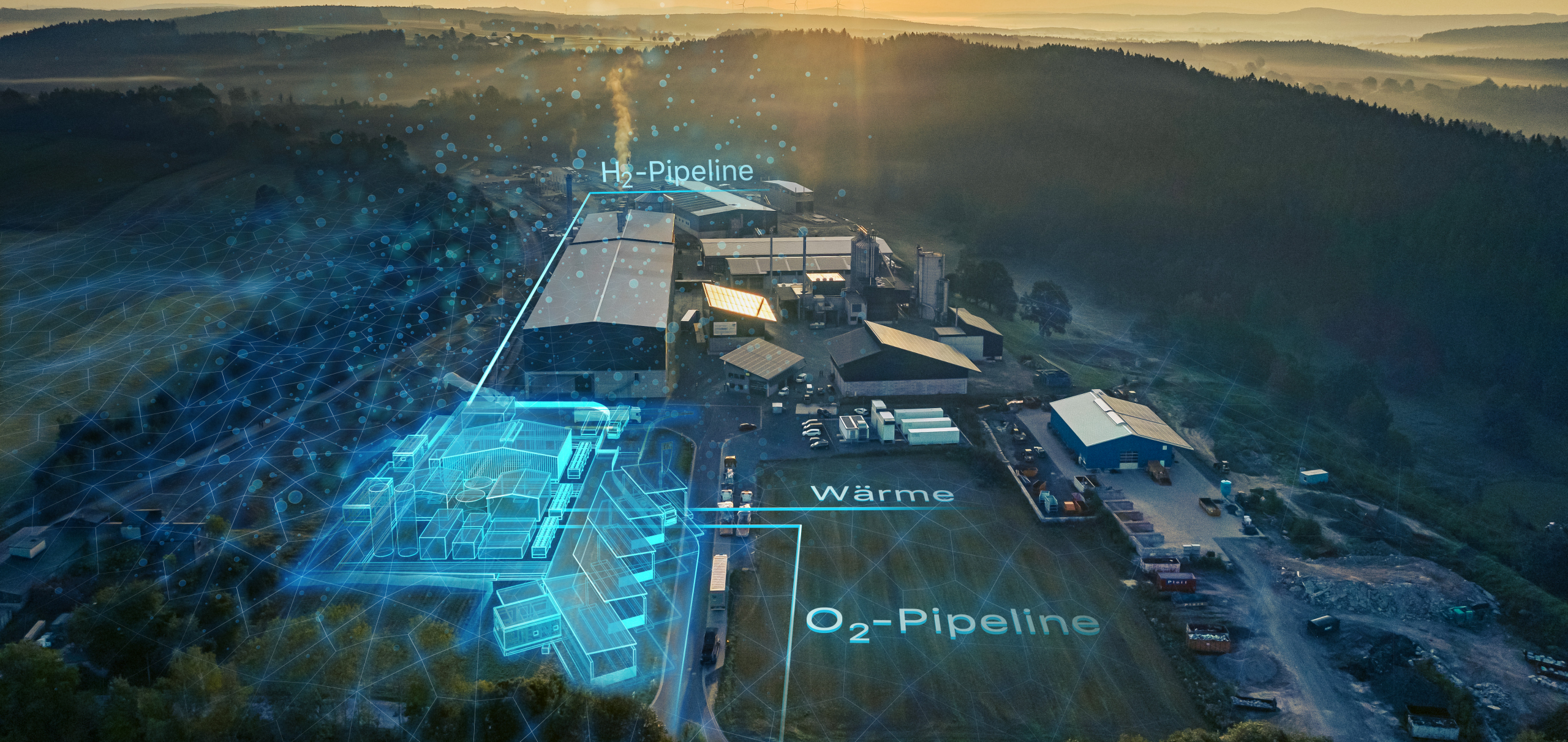


# Online demand response solution in Wunsiedel

Gerhard Meindl, SWW Wunsiedel GmbH



# The Wunsiedel Energy Park



H<sub>2</sub>-Pipeline

Wärme

O<sub>2</sub>-Pipeline

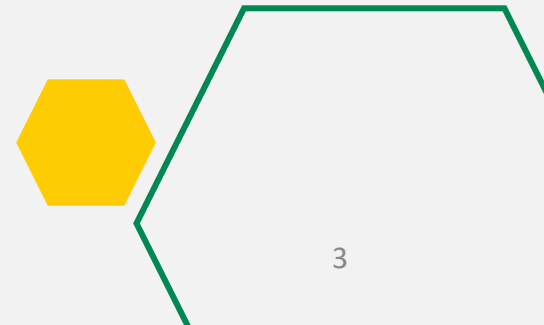
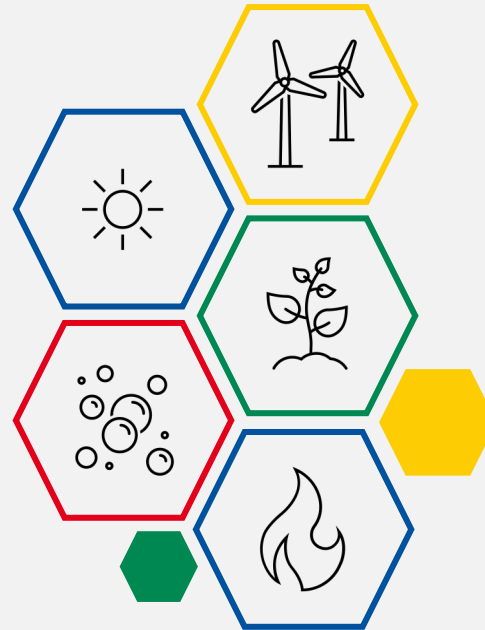


# Our Assets (1)



## Assets integrated in the AURORA system

- Wind 16 MW
- PV 16 MW
- Bio 3 MW
- Natural Gas 15 MW
- BESS 8,5 MW
- P2HY 8,75 MW
- P2Heat 3 MW





# Redispatch 2.0 – Display of assets connected



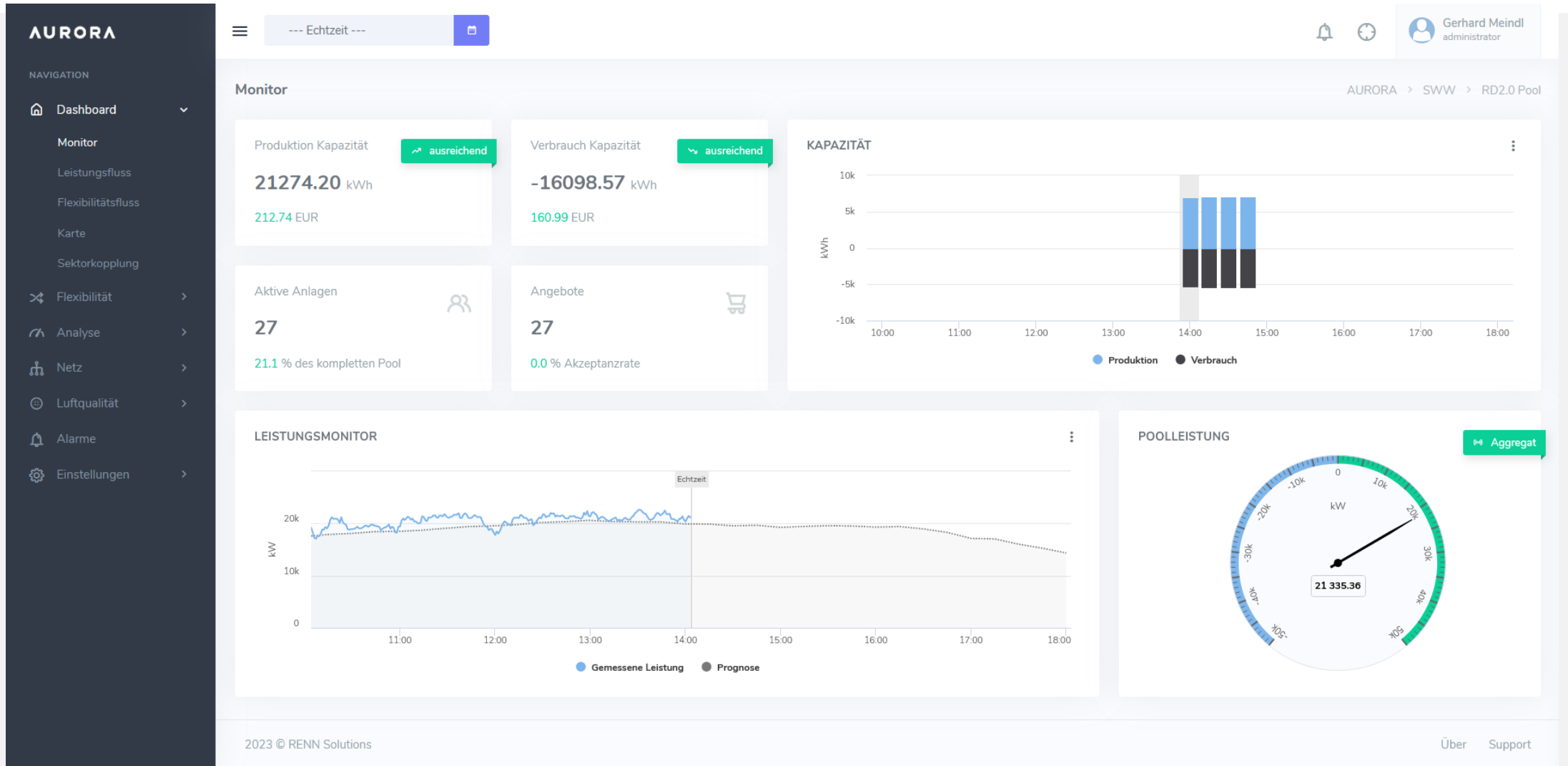
The screenshot displays the AURORA software interface. On the left is a dark sidebar with navigation options: Dashboard, Flexibilität, Prosumer, Angebot Pool, Vergeben Angebote, Manuelle Kontrolle, Analyse, Alarme, and Einstellungen. The main area is titled 'Prosumer Status' and shows a grid of asset cards. Each card includes the asset name, a value, and a status icon (globe or power symbol). The assets and their values are:

Asset Name	Value	Status Icon
Barthmann	0.00 kWh	Globe
Dalbier	30.00 kWh	Globe
Deyerlinghalle	0.00 kWh	Globe
Farbenwerke	0.00 kWh	Globe
Fickert/Wartinger	0.00 kWh	Globe
Rathbauer	0.00 kWh	Globe
Retzsch	0.00 kWh	Globe
Seefrank	1.00 kWh	Globe
Stembeck	0.00 kWh	Globe
Wolf 1	0.00 kWh	Globe
Wolf 2	0.00 kWh	Globe
Wolf 3	0.00 kWh	Globe
WUN Bio PV3	0.00 kWh	Globe
Göpfersgrün	71.00 kWh	Power
Stemmesgrün	228.00 kWh	Power
Wittenberg	213.00 kWh	Power
Bad Alexandersbad	254.00 kWh	Power
Brettenbrunn	0.00 kWh	Power
Fröber	420.00 kWh	Power
Schönbrunn	381.00 kWh	Power
Schübel	393.00 kWh	Power
Scherzwuth	176.00 kWh	Power
Wun-Bio BHKW	1146.00 kWh	Power
Wun Bio ORC	726.00 kWh	Power
Wunderlich	0.00 kWh	Power
Wun Pellets	8043.00 kWh	Power
Bierenspeicher Wun	1.00 kWh	Warning

At the bottom of the interface, it says '2022 © RENN Solutions' and 'Über Support'.

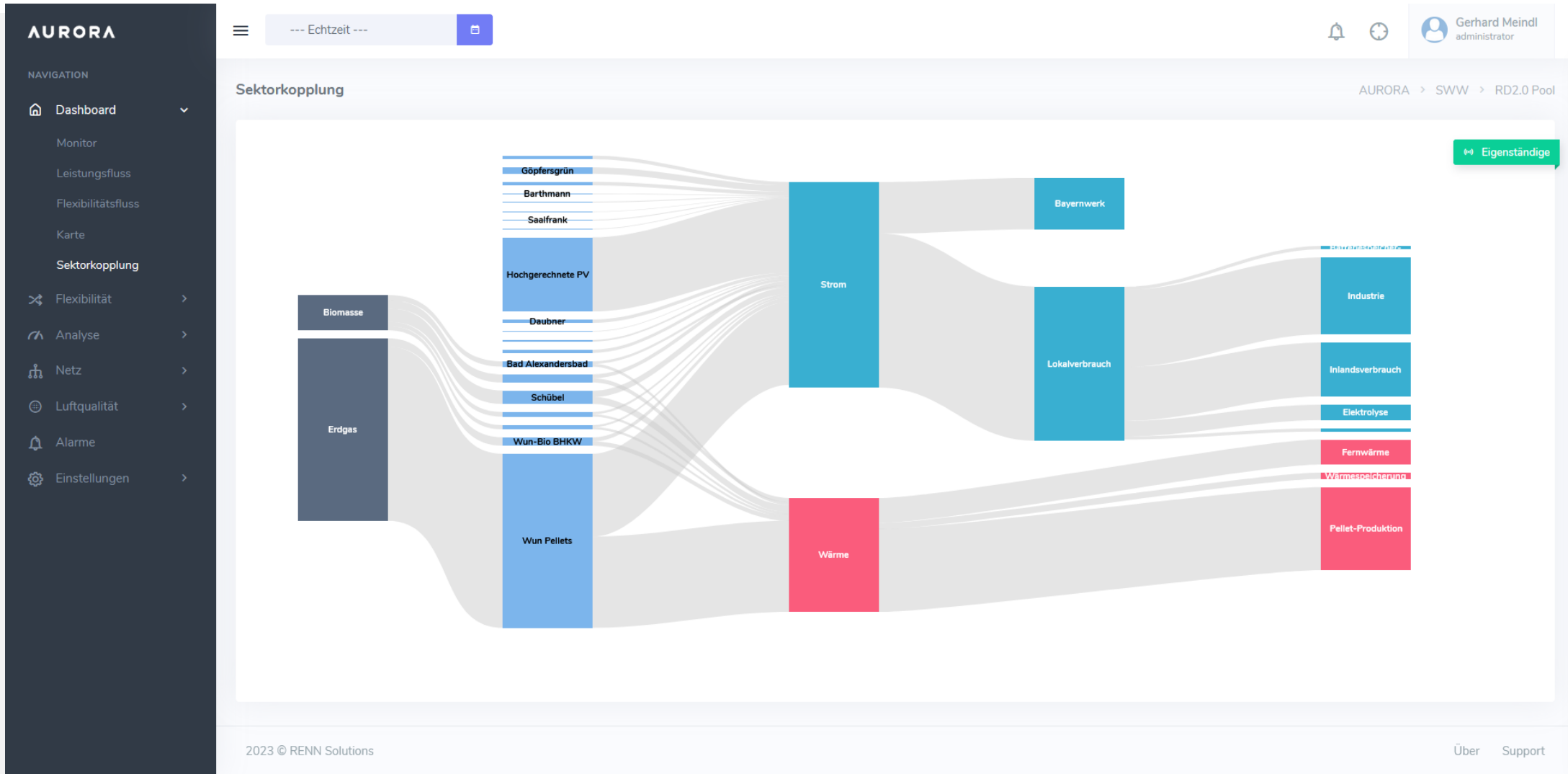


# Production and Flexibility (1)





# Production and Flexibility (1)





# How it looks (1)





# How it looks (2)





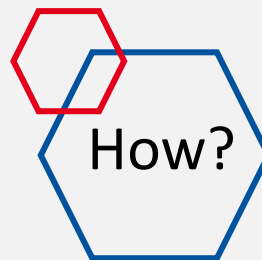


# The Existing System – Demand-Side-Management



A customer was configured in the AURORA platform

Allows **energy and power comparison** between  
Redispatch generation capacities and the load of SWW



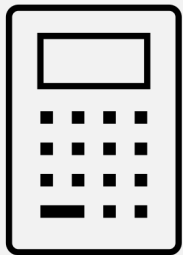


# DSM – How it works (1)



Various measurements are collected from the meters  
(automatically in 1-minute interval)

Are then **stored in a database**



By adding Kocos 1 and 2 Calculate total active power, the  
**total active power is calculated**



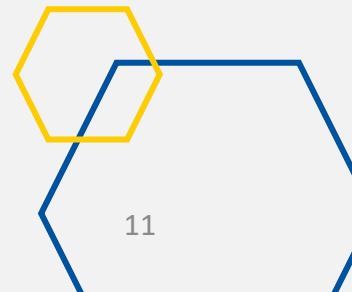
# DSM – How it works (2)



## **Benchmarking**

Comparison of Redispatch generation vs. Customer production is done in 2 ways:

1. Energy generated vs. Energy consumed
2. 15-minute profile comparison for identification of gaps due to dynamics

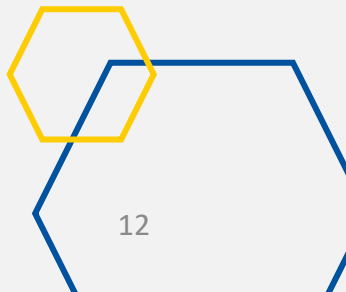




# GLocalFlex – German Demo




- Combination of Redispatch 2.0 system and flexibility aggregation system
  - In connection with metering data and PQ-measurements
- Located in the village of Schönbrunn including the local CHP





# CHP Schönbrunn (1)

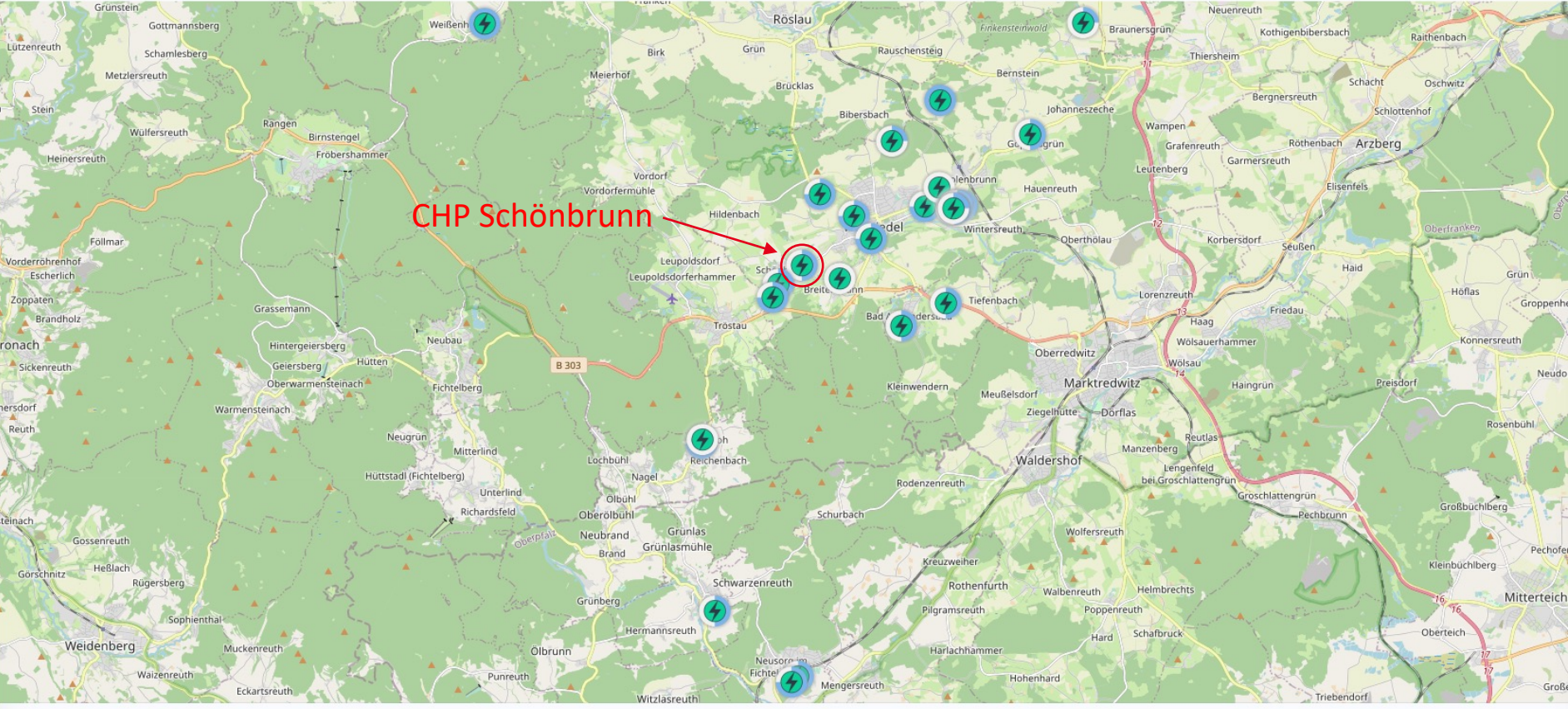


**AURORA** --- Echtzeit --- 

NAVIGATION

- Dashboard
- Monitor
- Leistungsfluss
- Flexibilitätsfluss
- Karte**
- Sektorkopplung
- Flexibilität
- Analyse
- Netz
- Luftqualität
- Alarmer
- Einstellungen

Karte AURORA > SWW > RD2.0 Pool



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# CHP Schönbrunn (2)





Thank you!

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