

# Local biomass district heating networks

regional heating heroes to answer the lack of installers

Stefan Drexelmeier  
Energiewende Oberland  
21.03.2023, Brussels  
Final Conference – Solutions Session



[replace-project.eu](https://replace-project.eu)

*Disclaimer: The views expressed in this presentation are the sole responsibility of the author and do not necessarily reflect the views of the REPLACE consortium*

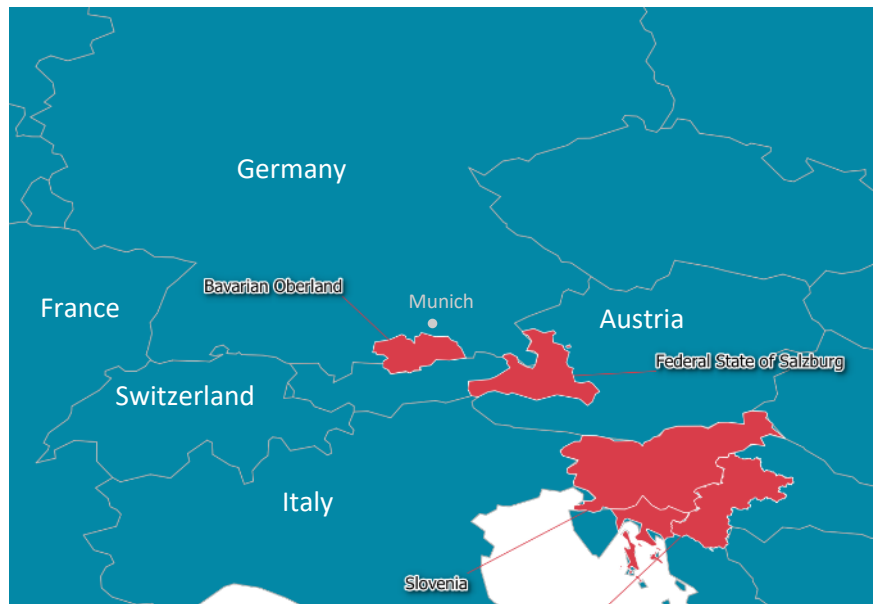


This project has received funding from the European Union's Horizon 2020 Research and innovation programme under grant agreement No 847087.



# Region Oberland

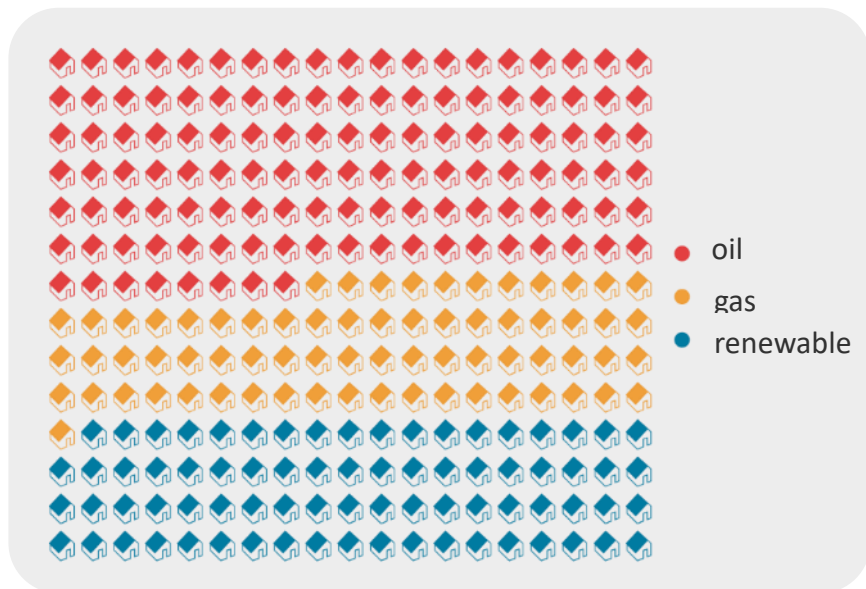
---



- Based South of Munich
- 440.000 inhabitants
- 4 administrative districts
- 94 municipalities
  - 600 – 23.330 inhabitants
- Rural area
- Attractive and expensive place to live



# Where we started out 2019



107.240 domestic houses  
in the region

- 46% heated with oil
- 26% heated with gas
- 28% renewable



28.03.2023

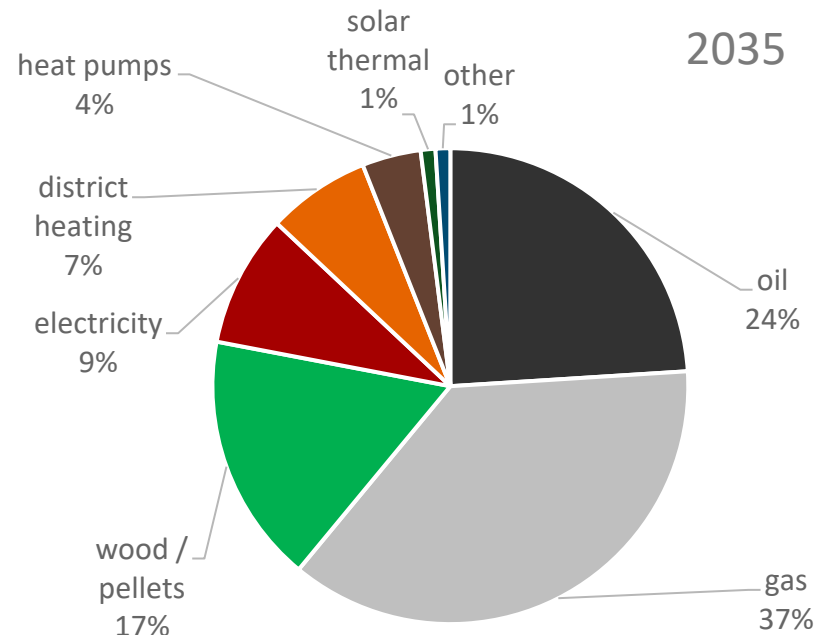
REPLACE

Page 3

# Scenarios for heating replacements

## Scenario 1 – Moderate Replacements

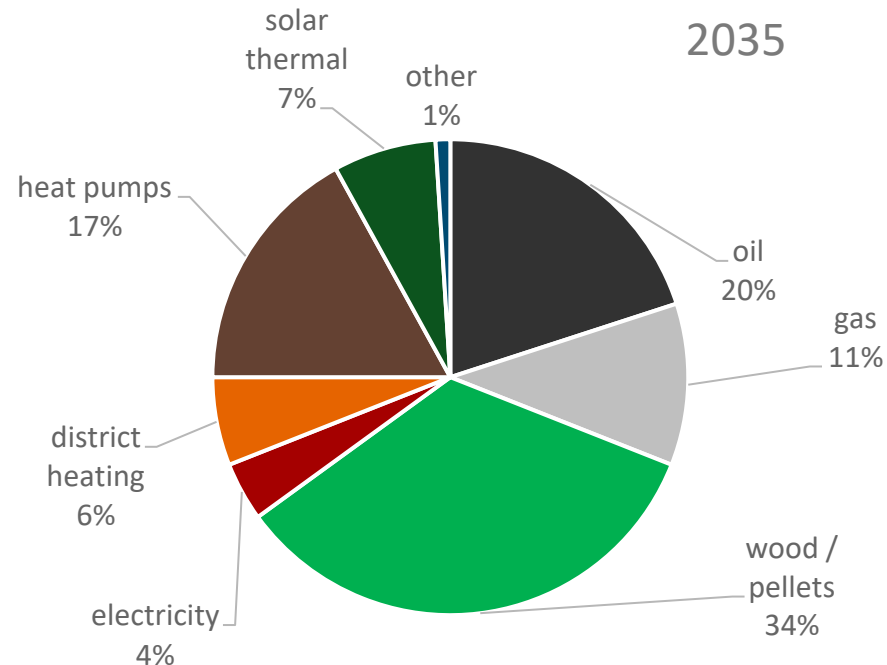
- 4% of oil heating systems are replaced p.a. (1.977 p.a.)
- Replaced by
  - 32% oil
  - 32% gas
  - 18% biomass
  - 8% district heating systems
  - 2% heat pumps
  - 1% solar thermal



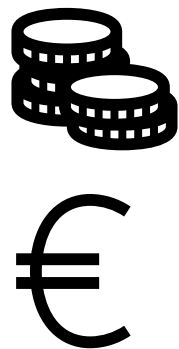
# Scenarios for heating replacements

## Scenario 2 – renewable

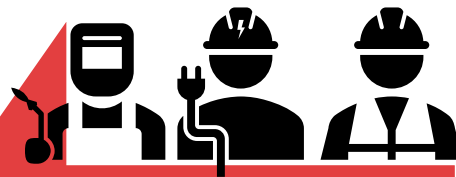
- 4% of all inefficient, fossil heating systems are replaced: oil, gas, electricity p.a. (3.461 p.a.)
- Replaced by
  - 35% biomass
  - 30% district heating
  - 25% heat pumps
  - 10% solar thermal



# The condition in Germany in a nutshell from a regional perspective

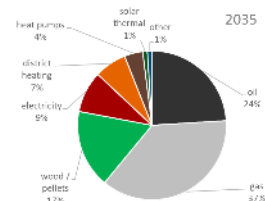


Attractive  
federal subsidies  
since 2020



Lack of installers

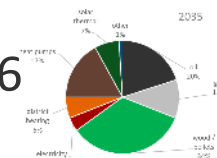
Missing 1261 - 2246



1.977 p.a.



3.461 p.a.



# Regional history of local district heating systems – we call them „Village heatings“



2010



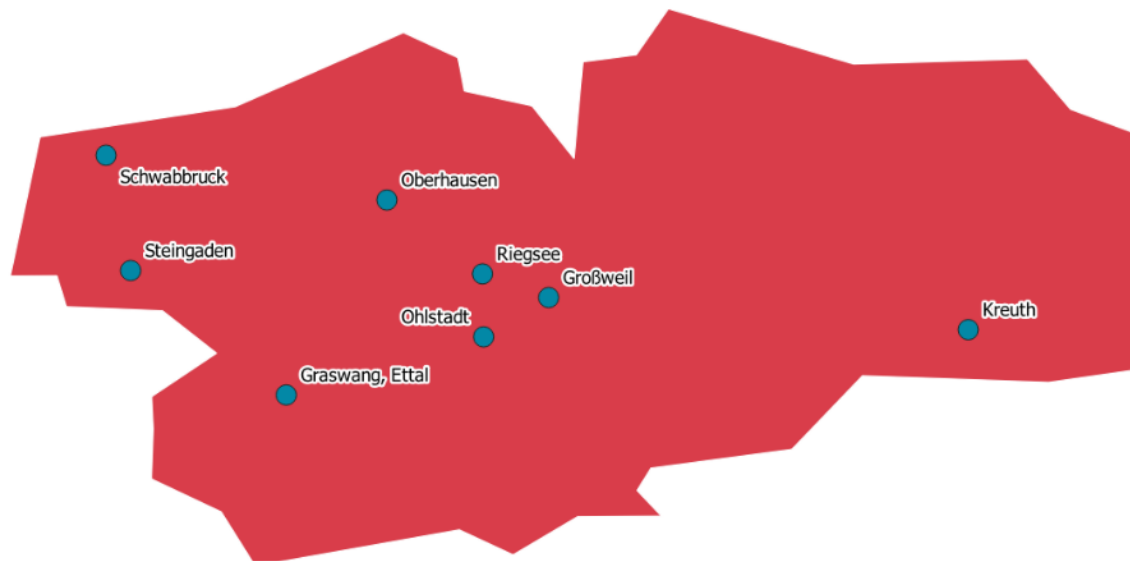
# And the idea (was) spread across the region



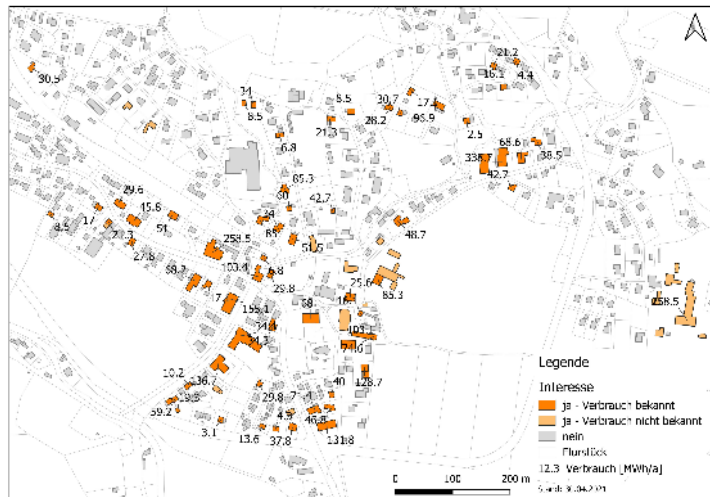
# Heat transition needs local change agents



# Collective actions in the Region Oberland



# The technical part: Know your key accounts



Household survey

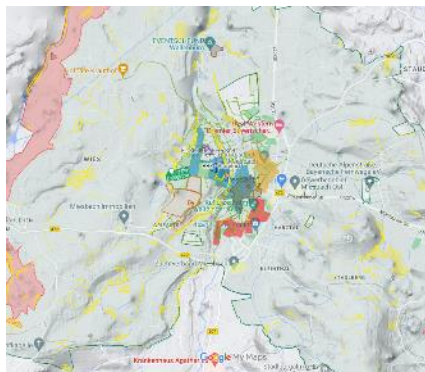


heat demand map



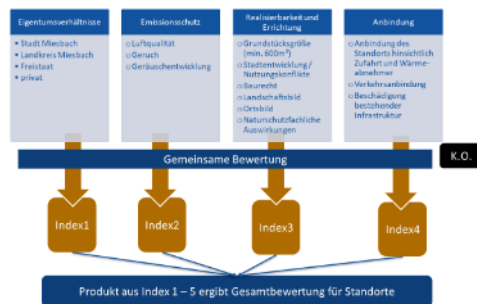
# Decision support tool for finding the right spot

## GIS Analysis



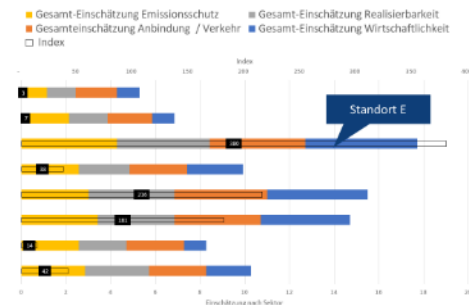
## Definition of criteria

### Festlegen der Kriterien & Bewertung



## Find your (average) favorite spot

### Ergebnis: 5 potenzielle Standorte und ein Favorit



## The tricky part: the business model

---

- High ownership of local community
- Municipality often willing to invest, but restricted through financial regulations
- Newly developed companies struggle to receive financing due to a lack of business history
- Key factor: main actors have to be respected and known by a majority in the village
- Price models have to be transparent and also take the risks taken into account



# Informational events as key moments

---



# Celebrate ... and ...



...Spread the word again 😊



28.03.2023

REPLACE

# Contact

---

**Stefan Drexlmeier**

**Energiewende Oberland**

drexlmeier@energiewende-oberland.de

T. +49 (0) 8856 80 53 6-10

Am Alten Kraftwerk 4 | 82377 Penzberg | Germany

[www.energiewende-oberland.de](http://www.energiewende-oberland.de)

**Further info:**

[www.replace-project.eu](http://www.replace-project.eu)



[linkedin.com/company/H2020Replace](https://linkedin.com/company/H2020Replace)



[twitter.com/H2020Replace](https://twitter.com/H2020Replace)



[facebook.com/H2020Replace](https://facebook.com/H2020Replace)



This project receives funding from the European Union's Horizon2020 research and innovation programme under grant agreement No. 847087.

Any communication activity related to the action reflects only the author's view. The European Union and its Climate, Infrastructure and Environment Executive Agency (CINEA) are not responsible for any use that may be made of the information any communication activity contains.