

# Decarb Garden City



## Contact details

Name:  
Johanna Kieseewetter

Gender: female

Email: [jk@ezeit-ingenieure.eu](mailto:jk@ezeit-ingenieure.eu)

Phone: 0049 3050565636

City: Berlin

Function: Ingenieur

Organization:

**e<sup>+</sup>Zeit** Ingenieure®

Project name:  
Decarb Garden city

HEAT PUMP CITY OF THE YEAR AWARD 2017



# Decarboning the heat for the 99%



decarbonization has to include buildings for the middle and lower class - efficient heat pump systems make it possible

## location

## data

## renewable energy

## purpose

## environmental relevance

## funding / awards



built 1930

refurbished / built  
2014, 2015,  
2016, 2017, 2018

Cooperative owner:  
**Märkische Scholle eg**

- 316 Living units
- 74 new units
- 3 different Systems
- 2 local heat nets
- 1 smart grid
- 2 new buildings

Solar thermics	20%
Ground source	35%
Exhaust air	30%
PV electricity	9%
Net electricity	6%

socially just  
rent increase for  
existing renters

decarbonization

lower heating costs

prime energy  
**170 kWh/(m<sup>2</sup>a)**

before > after

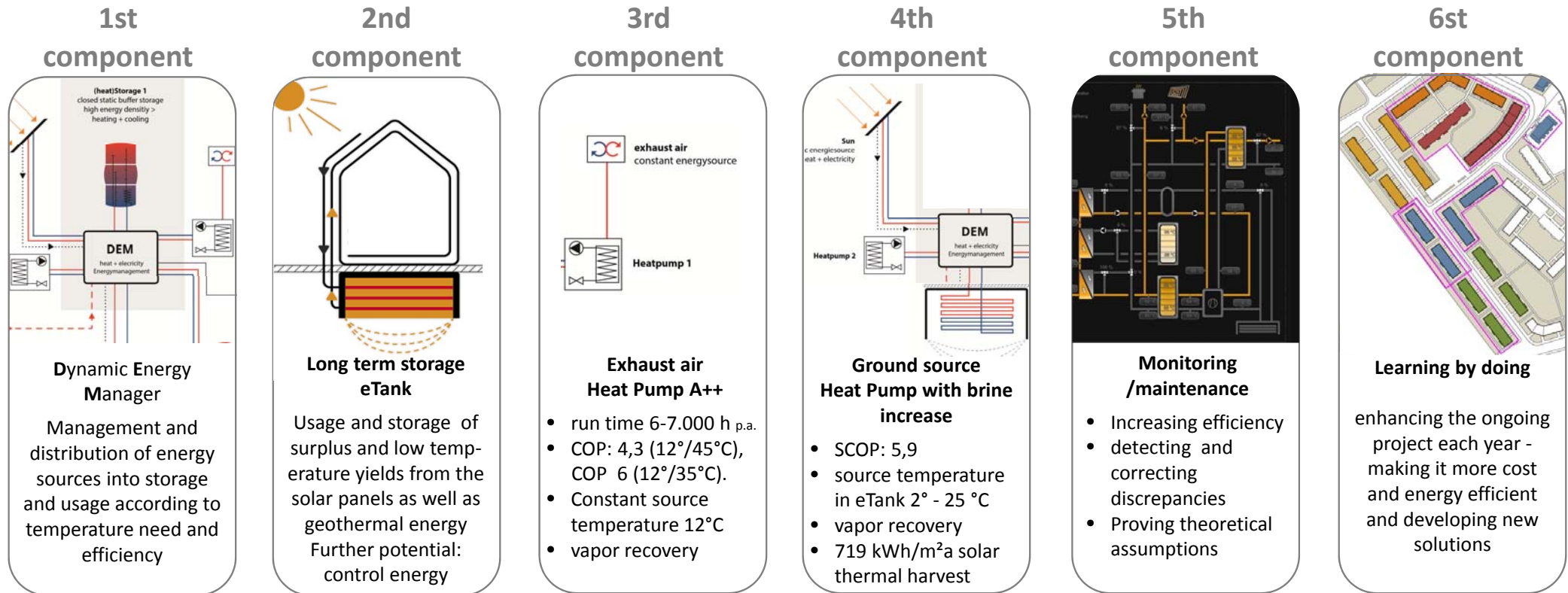
**14,9 kWh/(m<sup>2</sup>a)**  
prime energy



# Laying together the groundwork for decarboning heat



Covering research, development, manufacturing, installation and maintenance in one project with outstanding results

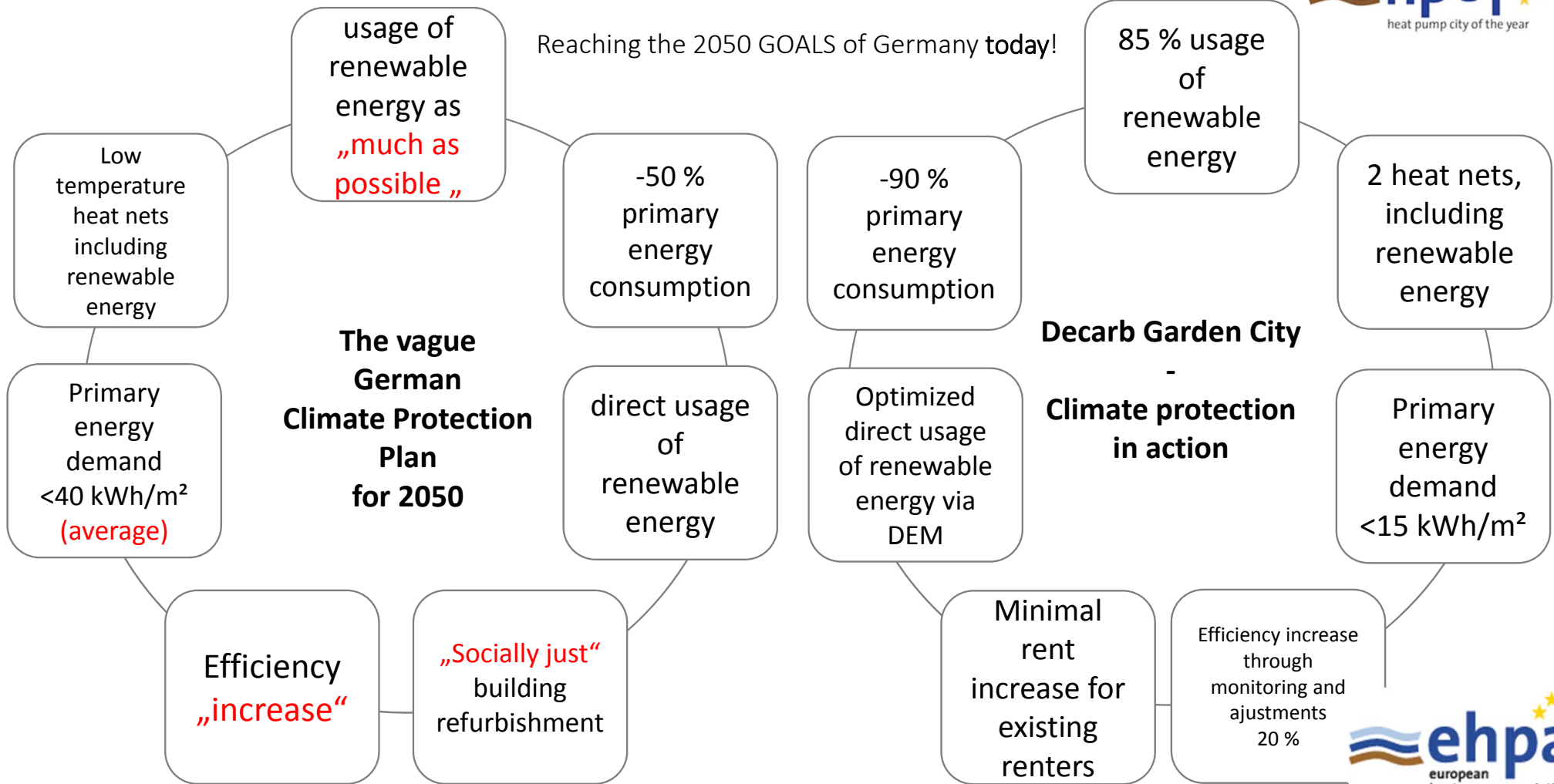


**Overall system SCOP proven via Monitoring: 6**

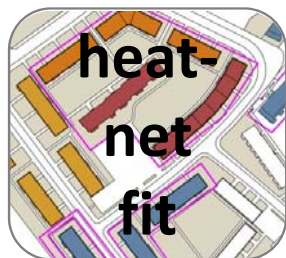


# DECARB HEAT? YES, WE CAN!

Reaching the 2050 GOALS of Germany today!



## IF WE CAN - EVERYBODY CAN



replicable  
in cooler or  
hotter  
climates

**Decarboning  
heat now**

includes all  
kinds of  
renewable  
energy

**Reaching  
the 99%**

**Possibility  
of heating  
and  
cooling**

**Reaching  
2050  
goals  
now**

Possibility of  
different  
system  
combinations

Applicable  
in new and  
old  
buildings

No building  
restrictions

**Overall  
SCOP  
6**

provides  
"control  
energy"

**Efficiency  
proven**

**Award  
winning**



## WHAT IT NEEDS

**Forward  
looking  
owner with  
open mind**

**KNOW  
HOW**

efficiency  
fundings  
rather than  
insulation  
fundings

**Mandatory  
monitoring**

**open  
minds**

**Quality  
control**

break up of  
monopolies  
in electricity  
and heat nets

## LET'S TALK ABOUT IT MORE

HEAT PUMP CITY OF THE YEAR AWARD 2017

