Nabovarme is a word for community heating
Pellet heating systems in Christiania

Large red dots: major systems

Small orange dots: some of many independent units
History of heaters
Kamstrup Multical 602 - first to be reverse engineered
Communities with Communities inside
Christiania - an old army base
Christiania today

- 46 year old squatted area
- 900 inhabitants
- 265 houses
- 24 hectares land
- 1 km from Danish parliament
What is Nabovarme?

- Heating Production
- Heating Consumption and Metering
- Prepaid Heating Account System
- WIFI NAT Propagation
Kamstrup solutions

- No WIFI option - requires additional infrastructure
- No open software to receive data
- Enterprise
Nabovarme users share their WIFI

- 350+ users
- 150’000€ worth or wood burned yearly
- Huge diversity in income, social class, heritage etc.
- Low level of interest in heating
ESP8266 - Microcontroller with wifi for 1$
MeterLogger Hardware

MeterLogger PCB

Kamstrup Connector

ESP8266

MeterLogger PSU
Meterlogger Firmware
Overview of client
Accounting systems
We need your help!

- Stoffer IS our busfactor. If you run him down hundreds of people may loose their heating!!
- We want big data but no surveillance!
- We need a scalable billing system for various types of utility meters
- We want to be able to get bank accounting information without ending up with another subscription model.

COME WORK WITH US ON THIS

You can APPLY at Christiania Researcher in Residence and work with us in Opensource
Thanks and come visit us! - Questions?

- nabovarme.github.io
- crir.net/apply.html