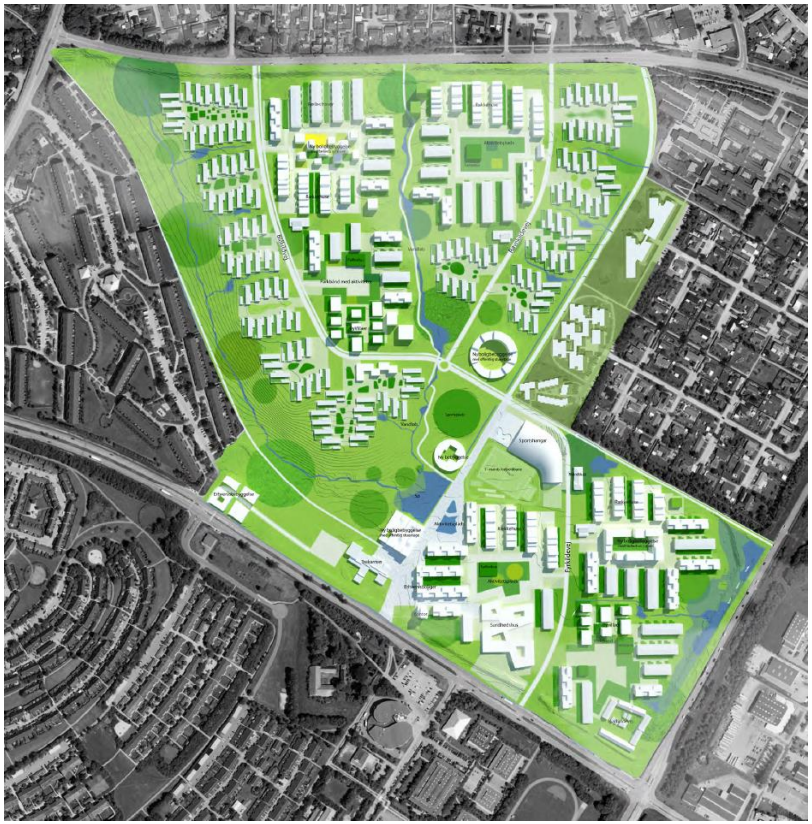
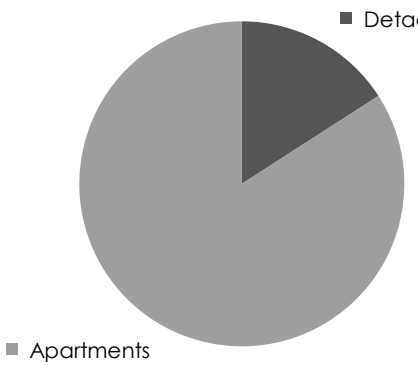
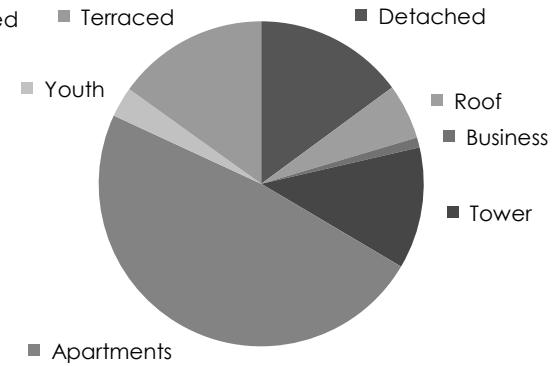
Kildeparken, Aalborg



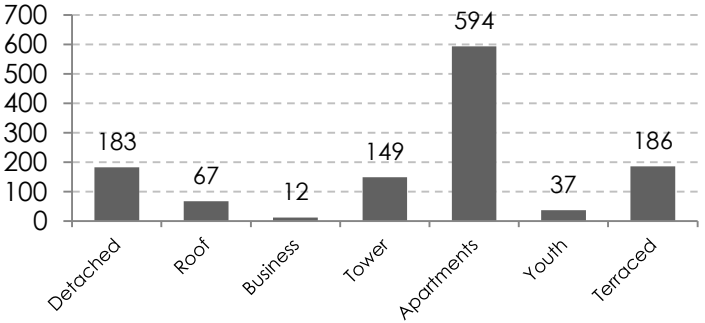
	Before	After
- no. of dwellings [-]	942	1,228
- total heated floor area [m²]	96,000	120,000

– **building typology (no. of dwellings):**





– **number of dwellings (after renovation):**



– **renovation measures already carried out: renovation in progress**
– **implementation period: 2014 - 2020**

Kildeparken, Aalborg

EBC
Energy in Buildings and Communities Programme

Overall aim and objective

- Kildeparken is a social housing district in Aalborg and it used to be on the Danish "Ghetto-list" (marginalised neighbourhood).
- The overall aim of the renovation is to transform Kildeparken into an attractive and sustainable district that is an integrate and exciting part of Aalborg city.
- The 942 homes and surroundings will undergo a radical transformation. All buildings will be renovated and some blocks of flats turned into terraced houses.
- New housing types will be added (terraced houses, roof apartments and tower buildings).
- The aim for the existing buildings will be 70 kWh/m^2 primary energy demand and for the new buildings it will be 30 kWh/m^2.

Involved stakeholders

Himmerland Housing Association was looking to partner with Municipality of Aalborg and Aalborg District Heating Company in developing a Smart-Grid solution.

The purpose was to create synergy between energy optimization at building level and on energy system level, contributing to the sustainable conversion of Aalborg East.

Kildeparken, Aalborg

- **What kind of renovation measures were/are being carried out?**
  - ☒ renovation of the thermal envelope
  - ☒ renovation of the existing heating systems (decentralized in buildings)
  - ☐ new central district heating
  - ☒ modification of the existing district heating
- **heating demand before renovation:** 200 kWh/m²·a
- **heating demand after renovation:** 70 kWh/m²·a
- **heating demand new buildings:** 30 kWh/m²·a

- **energy supply system(s) before the renovation:**
  - ☐ heat pump
  - ☐ natural gas
  - ☐ oil
  - ☐ biomass
  - ☒ district heating
    - ☐ renewables
    - ☐ fossil
    - ☒ mix
  - ☐ other….
- **renewable energy generation before the renovation:**
  - ☒ none
  - ☐ PV
  - ☐ solar thermal
  - ☐ other….

- **energy supply system(s) after the renovation:**
  - ☐ heat pump
  - ☐ natural gas
  - ☐ oil
  - ☐ biomass
  - ☒ district heating
    - ☐ renewables
    - ☐ fossil
    - ☒ mix
  - ☐ other….
- **renewable energy generation after the renovation:**
  - ☒ none
  - ☐ PV
  - ☐ solar thermal
  - ☐ other….

Kildeparken, Aalborg

Why is this intervention worth studying? / Why should it be part of the Case Studies?

Kildeparken is prepared for low temperature district heating (larger radiators etc.) when district heating will be low temperature district heating based 100 % on renewables in 2050.

The aim was:

- **reduce the energy consumption by 50% in existing buildings and**
- **meet the 2015 requirements for new buildings.**

Partnering and Smart-Grid was the initial idea but unfortunately this proved difficult. This case can demonstrate some of the difficulties/obstacles related to co-operation among building owners, energy companies and municipalities.

Demonstrates how it is possible to renovate an entire neighborhood while at the same time lifting its reputation, going from ghetto to attractive neighborhood by diversifying the types of dwellings and planning the surroundings as well.

Renewables????

further information:

www.kildeparken2020.dk (in Danish)