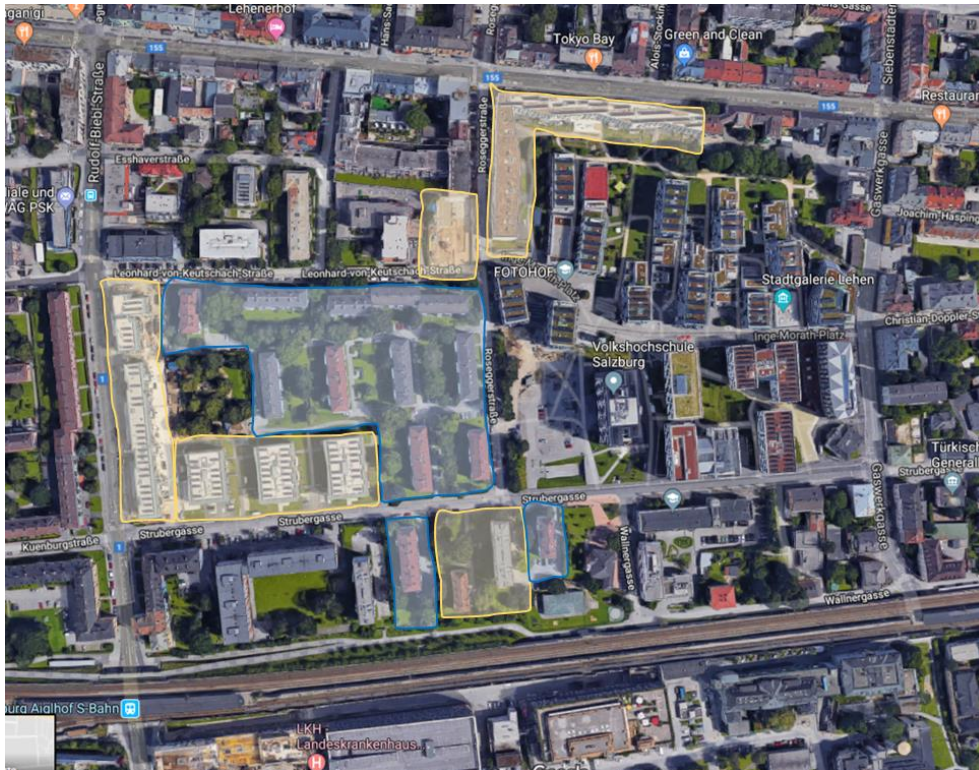


# Renovation of the city area “Strubergasse”

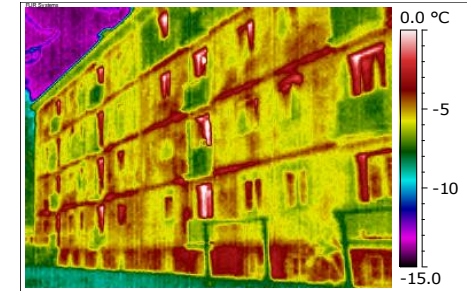


## building typology:

- 95% social housing (common room, hair dresser)

## years of construction:

- Old houses built 1948 - 1960



- no. of buildings: 14 renovation (286 flats)
- and 12 destroyed and rebuilt (before 337 – after 350)
- total heated floor area: about 42.000 m<sup>2</sup> (gross)

- realisation measures already carried out: yes
- renovation period: 2012- 2012
- New built house after house: start demolition 2013, new built finished September 2015 – End 2018

## Overall aim and objective

Enhancement of living quality and up-to-date building standard

Increase of quality and value of the building stock

Better quality of the green areas and the ecology of the city part

Decrease of CO<sub>2</sub> emissions and energy costs

Good image and identification for the city area

**A basic study with analyse of different scenarios and the participation of the tenants were the basic for the political decision renovation or demolition and rebuilt**


## Involved stakeholders

city of Salzburg (owner of the houses, owner of the public playground), gswb and Salzburg Wohnbau -housing associations (new built houses), Salzburg AG (energy supply company) and SIR (scientific partner – leader of the working group)

350 new built apartments in 12 houses

– **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



 Demolition and new built

– **heating demand before renovation: 90 - 150 kWh/m<sup>2</sup>a**


– **heating demand after renovation: 20 – 30 kWh/m<sup>2</sup>a**

– **cooling demand existing: no**



– **energy supply system(s) before the renovation:**

- heat pump
-  natural gas (50% of the apartments)
- oil
- biomass
- district heating
  - renewables
  - fossil
  - mix
-  single heatings with wood or coal


– **renewable energy generation before the renovation:**

-  none
- PV
- solar thermal
- other....

– **energy supply system(s) in new built houses:**

- heat pump
- natural gas
- oil
- biomass
-  district heating
  - renewables
  - fossil
-  Mix (about 50% renewable)
- other....

– **renewable energy generation after the renovation:**

- none
- PV
-  solar thermal
- other....

14 renovated houses with 286 apartments

– **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: 90 – 150 kWh/m<sup>2</sup>a**

– **heating demand after renovation: 25 - 35 kWh/m<sup>2</sup>a**

– **cooling demand existing: no**

– **energy supply system(s) before the renovation:**

- heat pump
- natural gas (50%)
- oil
- biomass
- district heating
  - renewables
  - fossil
  - mix
- single heatings with wood or coal

– **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
- District heating net to each apartment, connection within the next 10 years 100%

– **renewable energy generation after the renovation:**

- none
- PV
- solar thermal – connection to Solar Stadtwerk Lehen
- other....

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

- Total analyze of city area, building construction, energy standards, energy supply, mobility and green areas as basic for a renewal concept
- Combination of renovation and new built area integrated in a concept for the whole city area
- accompanied by a working group process with integration of extern experts (base study), politics, local population and economy
- Successful resettlement für tenants of 337 apartments
- Information of the tenants, community activities (common gardening) and survey for feedback
- New solution of traffic concept and green area
- Winner of the Austrian sustainability price ÖGUT Umweltpreis 2017

*further information:*

[https://www.salzburg.gv.at/verwaltung\\_/Documents/web%20\\_brosch\\_struberg\\_8\\_17.pdf](https://www.salzburg.gv.at/verwaltung_/Documents/web%20_brosch_struberg_8_17.pdf)

