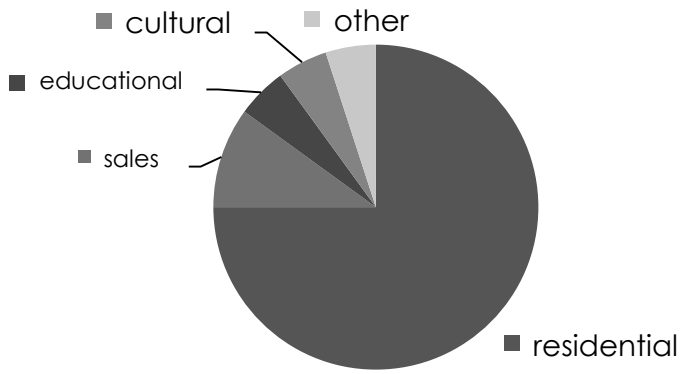
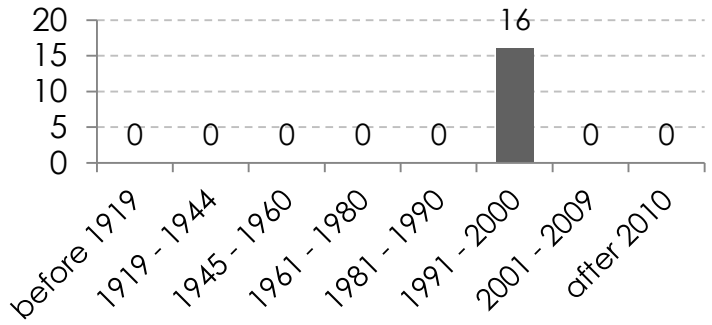
Success Story - Boavista neighbourhood, Lisbon

- **no. of buildings: 28 (renovated)**
- **total heated floor area: ≈ 80.000 m²**

- **building typology (whole neighbourhood):**



- **years of construction (building renovated):**



- **renovation measures already carried out: yes**
- **implementation period: 03/2013 - 09/2013**

Success Story - Boavista neighbourhood, Lisbon

EBC
Energy in Buildings and Communities Programme

Overall aim and objective

The project was executed in the framework of "Eco-Bairro" initiative, which comprised not only an intervention in the buildings but also information campaigns for energy savings behaviour change. The main objective of buildings renovation was to improve energy and thermal performance while considering the environmental performance of the buildings intervened. Ecological materials were used that responded to the need to improve the thermal performance of the dwellings and consequent comfort of its inhabitants. For this purpose, in the first phase of the project, thermal insulation (Black cork agglomerate) was applied on the envelope. The second phase of the project contemplated replacing the existing window frames with PVC window frames with double glazing. In addition, installation of solar thermal energy was implemented in the pool and sports complex.

Involved stakeholders

Recreational Association of Bairro da Boavista Residents

Lisbon Municipality

Gebalis - Municipal company that ensures an integrated management policy, which aims at the administration of the neighbourhoods, the quality of life of the resident population and the conservation of the municipal real estate in Lisbon.

Lisboa E-Nova – Municipal Energy Agency

Success Story - Boavista neighbourhood, Lisbon

- **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: 4045,34 MWh/a**
- **heating demand after renovation: 3692,44 MWh/a**
- **cooling demand existing: yes (no information regarding cooling demand)**

- **energy supply system(s) before the renovation:**
  - □ heat pump
  - □ natural gas
  - □ oil
  - □ biomass
  - □ district heating
    - □ renewables
    - □ fossil
    - □ mix
  - ✖ others: electric heater
- **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 …

Success Story - Boavista neighbourhood, Lisbon

Why is this intervention worth studying? / Why should it be part of the Success Stories?

The Boavista neighbourhood case is an interesting intervention, among other aspects, because it is the first phase of a project with a significant intervention area - 20 hectares, where approximately 5000 people live.

The intervention was made taking in consideration not only energy efficiency but also health and thermal comfort concerns.

The intervention also had sustainability concerns regarding the insulation material implemented in the ETICS.

It combines energy efficiency measures with renewable energy sources.

further information:

http://lisboaenova.org/wp/eco-bairro-boavista-ambiente/

http://www.cm-lisboa.pt/fileadmin/Noticias/ficheiros/Eco-District_Boavista__PT_.pdf