



POWER HOUSE nearly-Zero Challenge

WORKING FOR A FAIR ENERGY TRANSITION

POWER HOUSE nZEC!

03.07.2014, Versailles



Sorcha Edwards

Sorcha.edwards@housingeurope.eu



The Estonian case - Tallin

WORKING FOR A FAIR ENERGY TRANSITION



Building data



Tallin Õismäe tee 11

EKYL - Estonia | [Estonian Union of Co-operative Housing Associations](#)

Info monitoring

- 1 DISTRICT HEATING meter for SPACE HEATING and WATER HEATING
- 1 THERMAL ENERGY meter for heat produced by the SOLAR THERMAL system
- 1 WATER meter measure the HOT WATER consumed
- 1 ELECTRICITY meter for BUILDING SERVICES

Results have been calculated as follow:

DISTRICT HEAT for WATER HEATING (kWh) = m³ hot water * 58 kWh/m³ - HEAT from SOLAR THERMAL (kWh)

DISTRICT HEAT for SPACE HEATING (kWh) = DISTRICT HEAT total (kWh) - DISTRICT HEAT for WATER HEATING (kWh)

General description

Residential building, 30 flats, 5 stories, concrete prefabricated elements structure. Built in 1975 has been retrofitted in more stages:

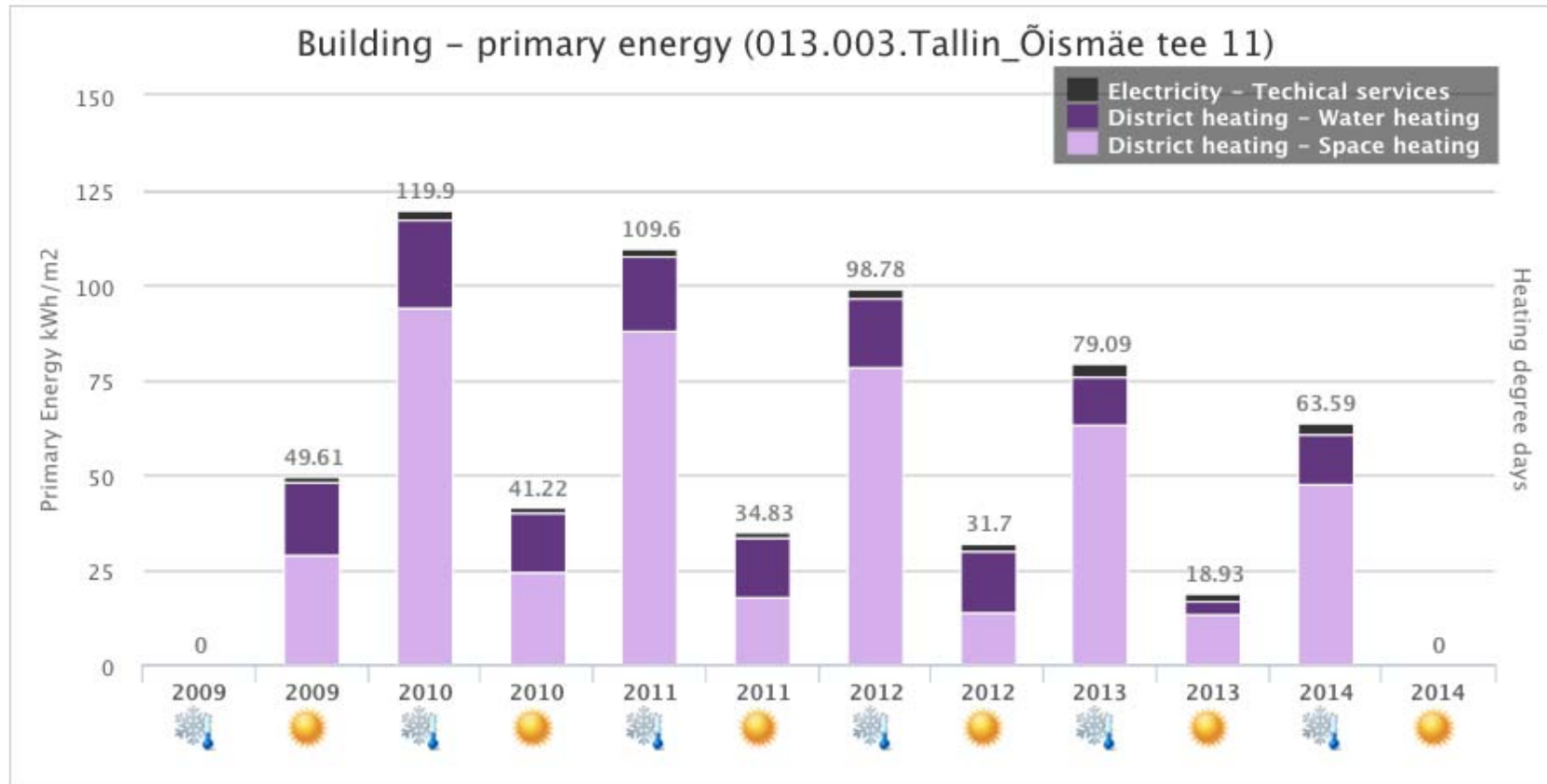
- 2002 roof insulation
- 2003 facade partly insulation (2 walls)
- 2008 pipe heating system
- 2009 individual heat allocation system
- 2012 all walls insulation, heat recovery ventilation system and solar panels for hot tap water (vacuum tubes collectors, 64 m²).





The Estonian case - Tallin

WORKING FOR A FAIR ENERGY TRANSITION

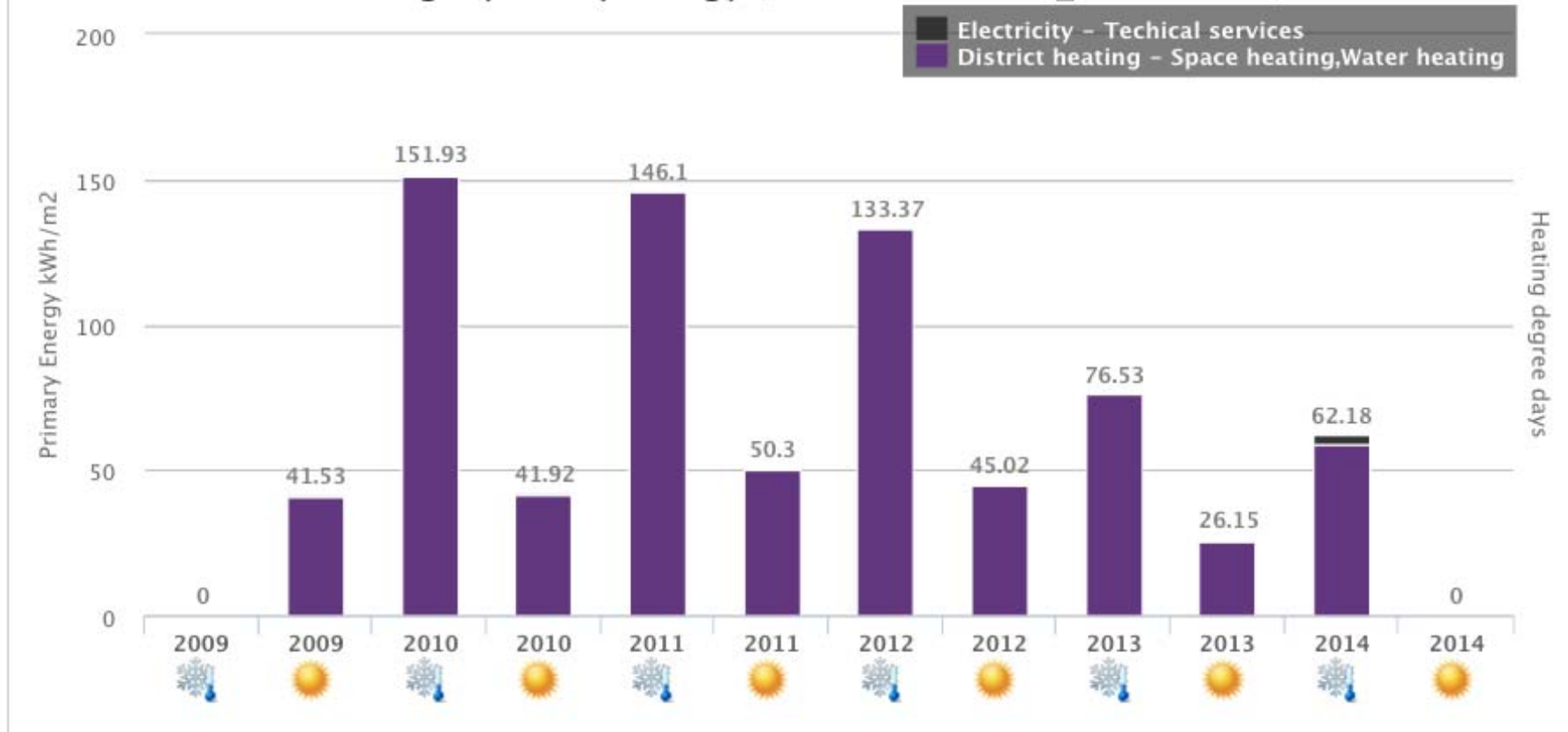


The Estonian case - Rakvere

WORKING FOR A FAIR ENERGY TRANSITION



Building - primary energy (013.001.Rakvere_Tuleviku 10)



The Italian case - Lonato

WORKING FOR A FAIR ENERGY TRANSITION



Building data



Lonato Casa Light

Legacoop Abitanti | [Coop Casa SC](#)

Info monitoring

1 ELECTRICITY METER for each block (2 in total), for BUILDING TECH SERVICES inc. hot water heating; the meter measure also the electricity produced by the PV system released into the grid: the chart present the difference between consumption and production.
1 ELECTRICITY METER for each apartment (18 in total), measures the energy consumed for space heating (heat pump), space cooling (reat pump rev.) and ventilation.

General description

New built, 18 flats in 2 blocks, certificated passive hosuse standard, 20 kWp of photovoltaic on each block.

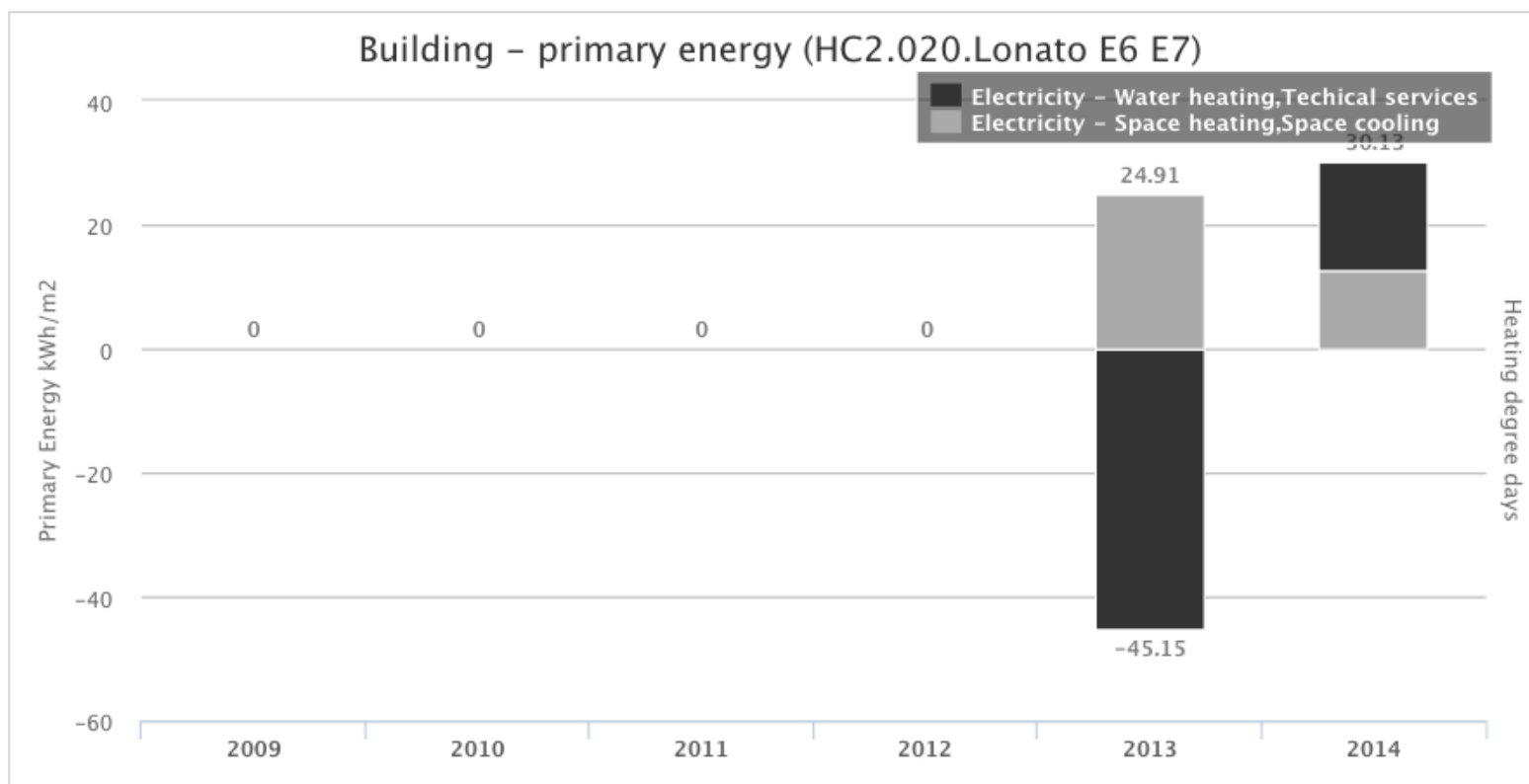
Each flat has a heat recovery ventilation unit with authomatic summer by-pass + a air-air heat pump which can be used also for active cooling.

Hot water is produced by mean of a centralize air- air heat pump (one for each block).



The Italian case - Lonato

WORKING FOR A FAIR ENERGY TRANSITION





Tracking real energy consumption in Powerhouse Europe project

WORKING FOR A FAIR ENERGY TRANSITION

- Real consumption data are often different from calculated ones => **Monitoring and comparing is important!**
- the **Hive platform** (<http://panel.hiveproject.net>): a good opportunity to grow consciousness around Europe
- Results also support the dissemination activities
- **JOIN** the information campaign!



Thank you for your attention!

Sorcha Edwards

sorcha.edwards@housingeurope.eu

Visit:

www.powerhouseeurope.eu

