



# Tartu SmartEnCity

**Smart City for the Citizens:  
The Game Changer for the Cities**

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# Smart Home solution by EnLife

18 buildings,  
~700  
apartments

Wired  
and  
Wireless  
technology

Heating,  
metering,  
smoke alarm,  
energy  
dashboard

Open  
platform,  
integration  
with  
Cumulocity

# Structure

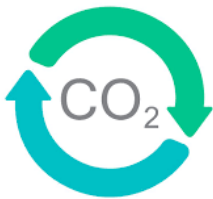
→ Cloud

- ◆ 18 apartment buildings
  - 2-3 staircases per building
    - 4-5 floors

- ◆ 4 apartments per floor
  - 0..2 bedrooms in apartments

→ Cumulocity

- ◆ EnLife SMART gateway
  - LAN/Modbus connection
    - Wireless repeaters
- ◆ Smart Home devices



JUS | SMART

# Home Features

- Temperature monitoring
- Heating control
- Remote metering
  - electricity,
  - cold and hot water,
  - gas
- Smoke alarm detection
- CO2 monitoring
- Ventilation intensity control
- Energy dashboard on tablet
- Intercom video calls



# User interface, onwall tablet

KODU ABI KASUTAJAD Demo kasutaja

23,5°C  
- 23,5°C +

Elutuba  
Köök  
Lastetuba  
Magamistuba

AUTO  
MIN 30 min  
MAX 10 min

416 ppm

1,3 m3 -6% KÜLM VESI  
0,5 m3 -5% SOE VESI  
49 kWh -6% ELEKTER  
2,6 m3 +16% GAAS

09:53  
R, 15. mai  
13,8 °C

Energiasääst  
Välisuks

2,1 MWh  
18 kW  
PÄIKE

Room temperature

Outdoor temperature

Vent.modes, CO2 monitoring

Leave home, energy saving

Energy dashboard

Intercom, door

PV info

# Integration with Video Intercom

- **common user management**
  - no need to manage users separately in smart home and intercom systems
  - self service for habitants
  
- Possible to **make a photo on entry**



# Info



## Remote metering

All meter readings are reported to Property Management Systems

## Connected to cloud

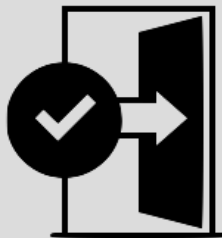
Smart home system integrates with smart city cloud platform to push and pull data



# Wireless technology

## Floor repeaters - 3 radios:

- Z-Wave gateway
  - Thermostat
  - Smoke detector
- 868MHz repeater
  - Remote meters
- WiFi Access Point for tablets
- LAN switch for floor-to-floor connection



## Home devices

- Zwave
  - Thermostat
  - Smoke detector (repeater)
- 868MHz RF
  - Electricity counter
  - Water counters
  - Gas counter





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