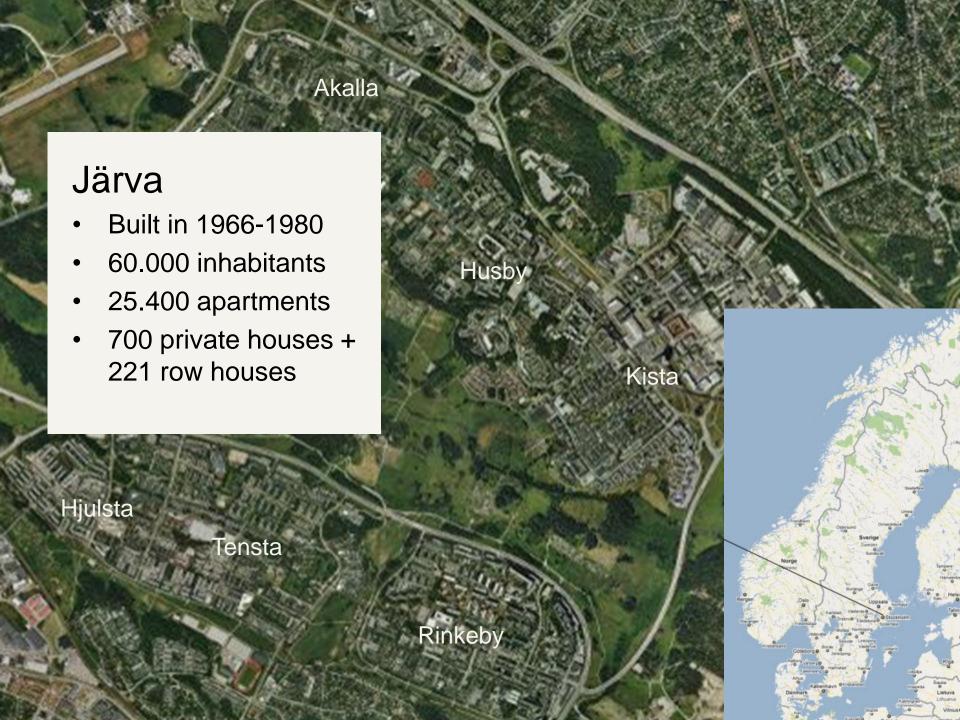
# Sustainable Järva! 2010-2014

Lisa Enarsson, Project manager





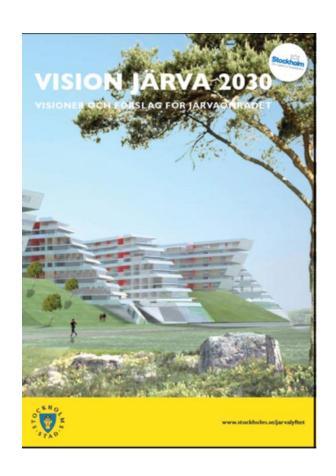




### Vision Järva 2030

#### Four main themes:

- Good housing and a more varied urban environment
- Everyday safety and security
- Improved education and language teaching
- More jobs and enterprises







Governamental funding: 55 Mkr Total cost: 200 Mkr)

- 1. Energy efficiency
- 2. Renewable energy
- 3. Sustainable transportation
- 4. Participation and information
- 5. Evaluation





# **Energy efficient renovation**

From 180 to 88 kWh/m<sup>2</sup> A-temp, 50 % energy reduction

### Three house-styles

- different methods
- Traditional construction
- Pre-fabricated elements
- Vacuum insulation
- Heat recovery of sewage









# **Energy efficient renovation**

- FTX-ventilation with heat recovery
- Improved thermal insulation of walls and roofs
- New windows- low U-values
- Energy efficient building sites

http://youtu.be/Vy3ioEv4L7Q





# **Energy efficiency for households**

- Individual measuring of warm water
- Water saving taps
- Led-lighting in public areas, kitchens and bathrooms
- Energy efficient household equipment
- Information campaigns to minimize energy use





# Can energy efficiant renovation be combined with preservation of cultural historical values?









# Renewable energy

# Electricity and warm water production

➤ 10 000 m<sup>2</sup> photo voltaics

Power: 1,4 MWp

Production: 1 300 000 kWh/year

15-20 % of the electricity of the

property

280 m² solar thermals160 000 kWh/year





# Renewable energy

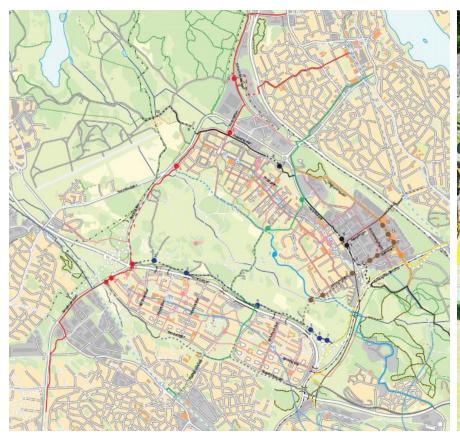
### Järva - the city of sun

- Create the most photo voltaic dense city distict in Sweden (10000 m²)
- Develope a system to follow up and do research
- Visualise the photo voltaics and the production of electricity
- "Label" houses with sun energy installed
- Strengthen the sustainable identity of Järva
- Inspire other property owners and cities

















# Participation and information

- The Järva Dialog
- Environmental hosts and ambassadors in each building
- Local employment





# Schools and study circles

#### **Schools**

- Education in nurseries and schools
- Culture-historical path
- The Tensta Apartment characteristic of the period
- The "Lekoprick" shop
- The Climate Scale

# **Study Circle leader educations** for associations

- Pilots in living
- Sustainable lifestiles
- 164 study circles running









### **Evaluation**

Doctoral candidate at the Royal institute of Technology will follow-up technical, social and economical aspects

Comparison with Hammarby Sjöstad and other Environmental profiled urban districts

Future workshops;

Climate neutral energy system – autumn 2010

Solar panels & cultural historical values - spring 2011

