

"Rakvere sustainable development as a best practice example in regional development"

ANDRES JAADLA

Director of Development and education – Rakvere Smart House Competence Centre.

Member of City Council of Rakvere



Oslo

Stockholm

Copenhagen

Berlin

Warsaw

Riga

RAKVERE

Helsinki

Tallinn

POLAND

LATVIA

LITHUANIA

BELARUS

CZECH

SLOVAKIA

Baltic Sea

North Sea

DENMARK

GERMANY

BELGIUM

LUX.

CZECH

SLOVAKIA

FACTS ABOUT RAKVERE

- First mentioned in 1226, rights of Lübeck in 1302
- Situated ca 100 km from Tallinn and Narva.
- Population in 2014 – ca 16 500
- Nowadays 7-9th largest city in Estonia

ANDRES JAADLA



- 10.03.1965.
- Tartu University – Faculty of Law 1991
- Member of City Council of Rakvere 1993 -...;
- Chairman /member/of the board Estonian Union of Housing Cooperatives 1996 - ...,
- **Mayor of Rakvere 2002 – 2012,**
- Committee of the Regions – member of the commission of Environment and Climate Change (ENVE) 2010 - 2012
- Vice President of UBC (Union of the Baltic Cities)- 2011-2013
- Director of Development and education – Rakvere Smart House Competence Centre 2012 ...
- Member of the board – Housing Europe (biggest housing organisation in Europe) 2014...

The Covenant of Mayors 2008

2008

Rakvere was one of the first cities to join the Covenant of Mayors in 2008 – **so we started...**

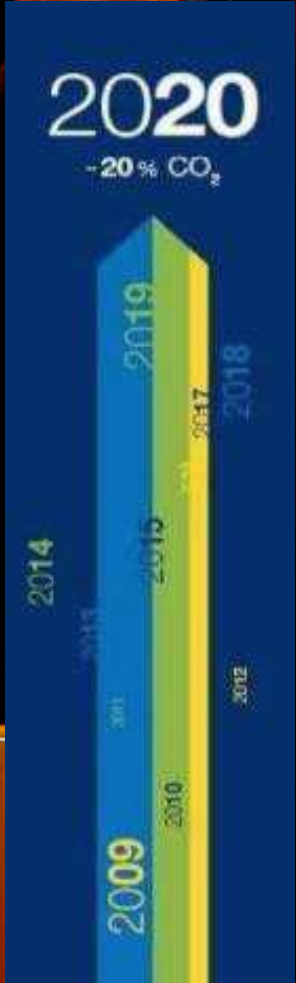


2009



COVENANT OF MAYORS

February 10, 2009



L. QUADRAS
PRESIDENT OF
EUROPEAN PARLIAMENT
4

The Covenant of Mayors: unprecedented growth



1st Covenant of Mayors Ceremony
/10 February 2009/

Hemicycle of the European Parliament, Brussels

370
cities



We made a plan ...

SUSTAINABLE ENERGY ACTION PLAN



6 steps to sustainable development of Rakvere

SUSTAINABLE ENERGY ACTION PLAN (SEAP) IN JUNE 2009

District heating – from fossil fuels to biofuels

Heat consumption – efficient use in municipal and residential buildings, reconstruction and insulation of buildings

Water consumption – efficient use in municipal and residential buildings, possible use of green electricity in this sector.

Street lightning – Green energy, efficiency and green electricity in this sector.

City planning – sustainable development, car free movement, alternatives to motor vehicles.

Urban transport – from fossil fuels to biofuels

2014 - district heating – 100% from fossil fuels to biofuels (wood chips)



6.10.2014

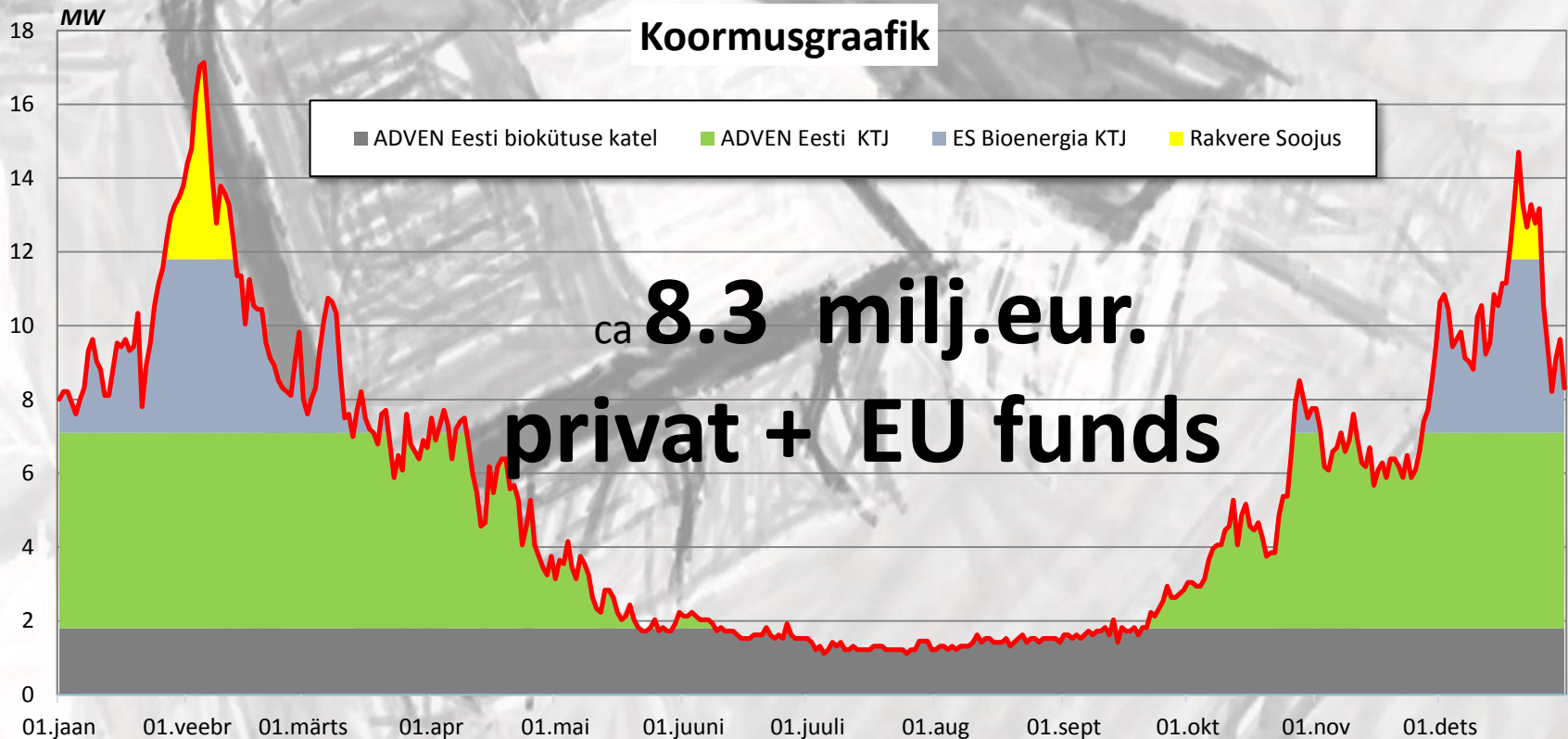


ANDRES JAADLA



Rakvere heat input 2014

The selling price of heat has decreased
68,86€/MWh -> 56,63 €/MWh



Reconstruction of a Rakvere Elementary School into a low-energy consumption building



6.10.2014



EESTI-ŠVEITSI KOOSTÖÖPROGRAMM
ESTONIAN-SWISS COOPERATION PROGRAMME

Reconstructing Rakvere Elementary School into a 2.3 milj. eur. low energy consumption building

RAKVERE MUSIC SCHOOL



6.10.2014

ANDRES JAADLA



Euroopa Liit
Euroopa
Regionaalarengu Fond



Eesti tuleviku heaks

RAKVERE MUSIC SCHOOL



European Union
Regional Development Fund

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Investing in your future



DRES JAADLA

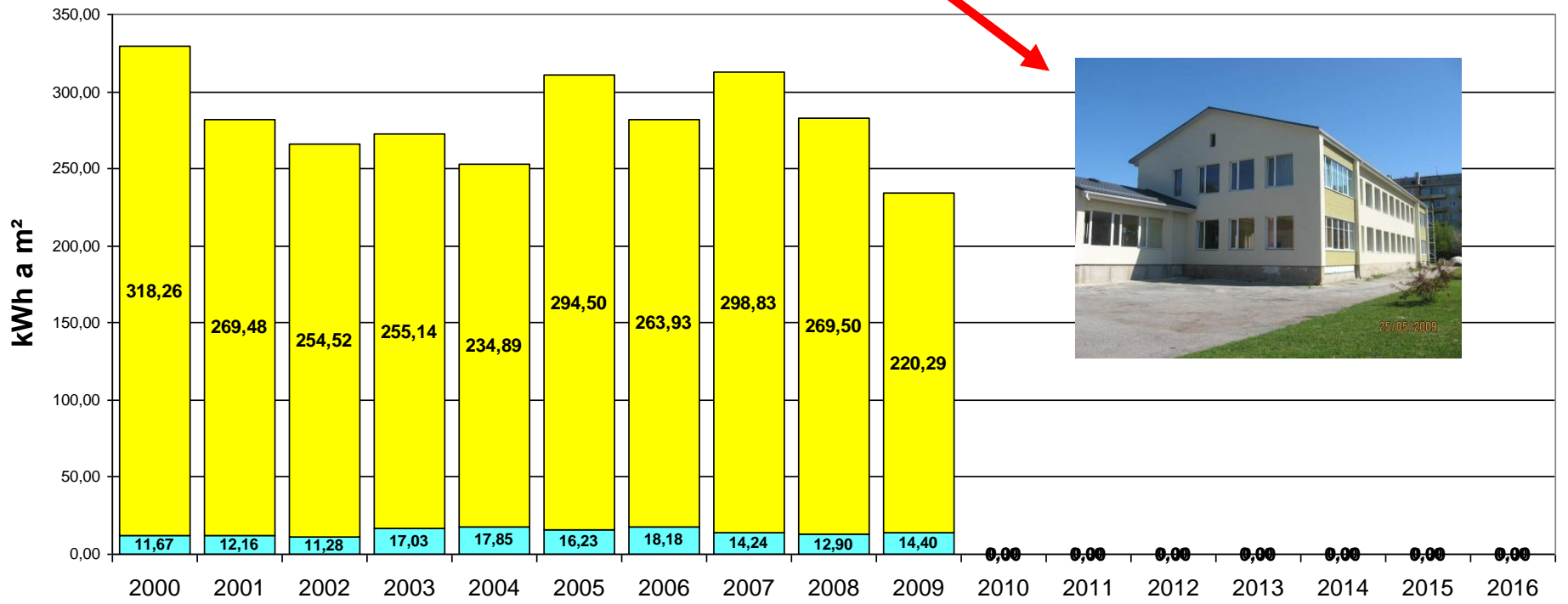
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RAKVERE MUSIC SCHOOL



Energy specific consumption kWh/m², Rakvere Music school

■ Elektri erikasutus hoone pinna kohta
 ■ Soojuse erikasutus hoone pinna kohta



Programm Baltic Sea Region 2007-2013

“Urb.Energy: energy efficient and integrated urban environment action”



0.2014



Part-financed by the European Union
(European Regional Development Fund)

Insulation of multiapartment buildings

Seminari street in Rakvere



Approx. 70% of Rakvere's citizens live in multi-apartment buildings.

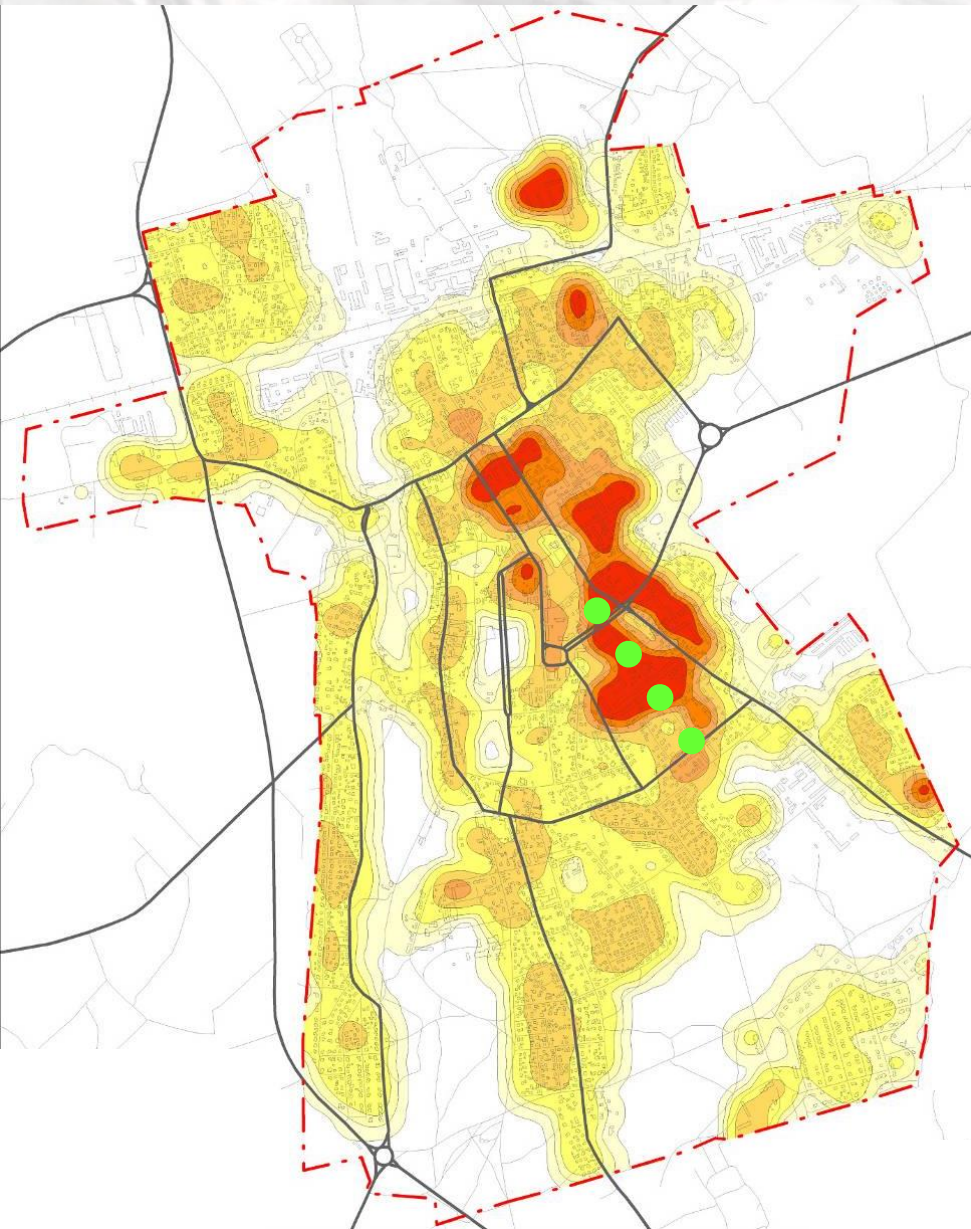
The city produces ca 16 000 tons of CO₂.

CO₂ emissions would be diminished by 8,2% if all multiapartment buildings went through insulation works of houses

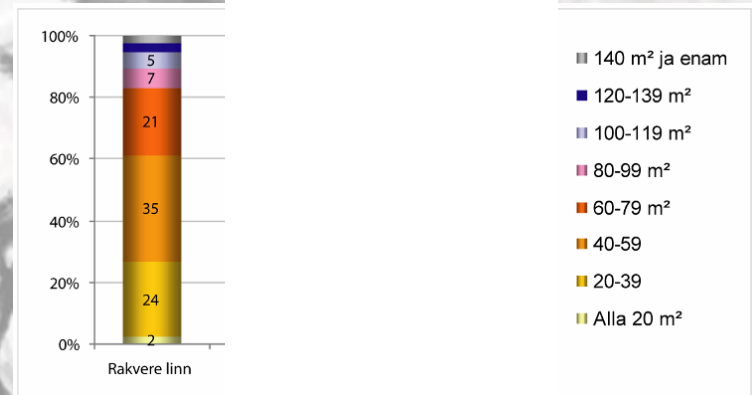








- ✓ District with the highest density of population:
- ✓ 18 apartment buildings,
- ✓ 8 different types of apartment buildings,
- ✓ about 900 apartments, area 1,8km²



**URB –
ENERGY
80 000 eur.**

Architectural competition

VÖIDUTÖÖD

„Elementaalne” autorid: Kai Süda, Diana Taalfeld ja Risto Parve OÜ KARISMA Arhitektid

„Linna Metsa” autorid: Kadri Klementi, Aet Ader, Grete Soosalu, Kaidi Õis, Karin Tõugu, Mikk Meelak ja Kalle Komissarov



OSTUAUHIND: „Roheline Konstruktor” autorid Mihkel Tüür, Ott Kadarik ja Villem Tomiste Arhitektuuribüroo KOSMOS OÜ

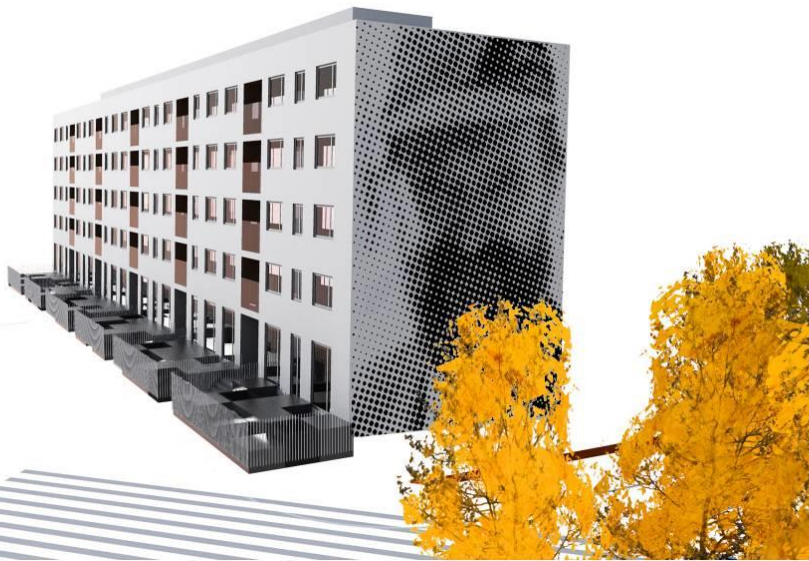


OSTUAUHIND: „Liinid” autorid Eva Kedelauk, Kristel Niisuke, Maie Raud, Kristiina Remmelkoor, Olav Remmelkoor ja Siim Tiisvelt



OSTUAUHIND: „Fake Forest” autorid: Lea Järve- Eronen, Erik Joasare ja Tiina Tuulik Arhitektuuribüroo Järve & Tuulik

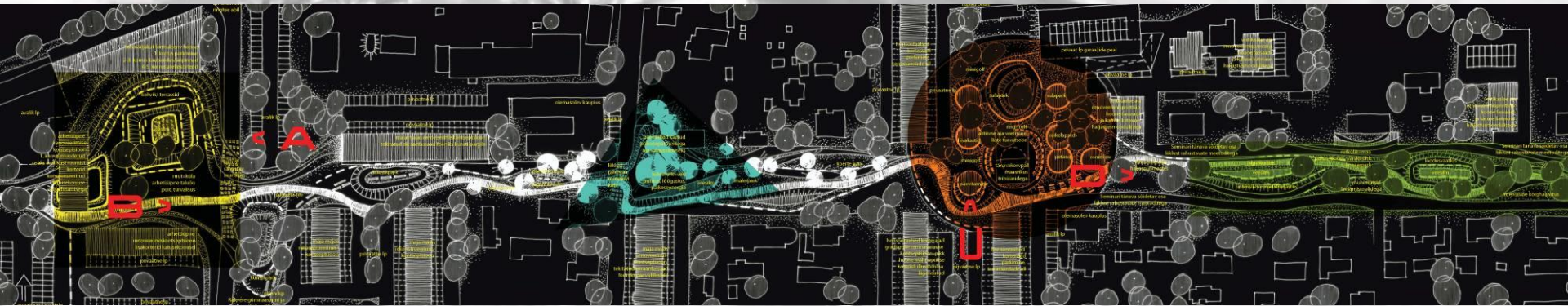
IDEAS



OSTUAUHIND: „
VÕISTLUSTÖÖ Baruto” autorid Anna-Liisa Unt, Martin Mc Lean, Robert Kähr ja Tiit Sild Sport OÜ

SEMINARI tn.

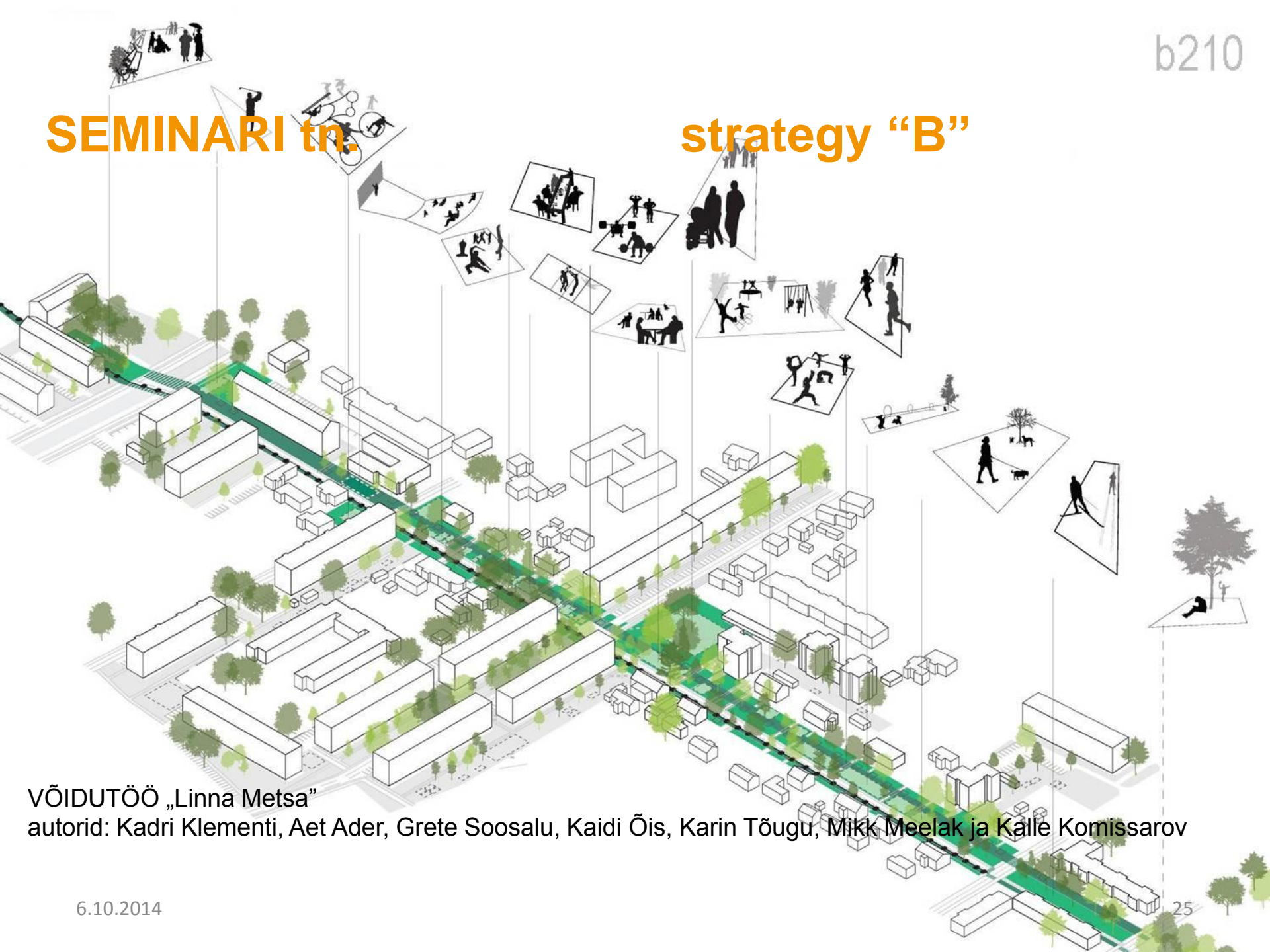
strategy “A”



Võidutöö „Elementaalne” autorid: Kai Süda, Diana Taalfeld ja Risto Parve OÜ KARISMA Arhitektid

SEMINARI tn.

strategy "B"



VÕIDUTÖÖ „Linna Metsa”

autorid: Kadri Klementi, Aet Ader, Grete Soosalu, Kaidi Õis, Karin Tõugu, Mikk Meelak ja Kalle Komissarov

Sale CO2 AAU (Assigned Amount Unit) insulation
7 public buildings in Rakveres 2012- 2013

7.78 milj. eur.
Assigned Amount Unit (AAU)
is a tradable 'Kyoto unit'

Estonian Smart House/Smart City Competence Centre in Rakvere



6.10.2014

ANDRES JAADLA

Alver Arhitektid OÜ

Estonian Smart House/Smart City Competence Centre in Rakvere

- *The new building of the competence centre will be the **first public near-zero-energy building in Estonia** that utilizes different building automation technologies and has been engineered from start to finish using the BIM methodology.*
- *Different sustainable energy sources, like solar panels and geothermal heating pumps will be used for the heating of the building. A unique demo and testing environment will be set up inside the centre that enables to develop and test different building automation systems*

Estonian Smart House/Smart City Competence Centre in Rakvere

- *Rakvere Smart House Competence Centre is a **new competence centre in Estonia** that focuses on **smart house / intelligent building / smart city / technologies**.*
- *With partners from most of the universities in Estonia, regional vocational schools, companies and local authorities the competence centre contributes as a central hub of the industry to support development and innovation.*

Estonian Smart House/Smart City Competence Centre in Rakvere

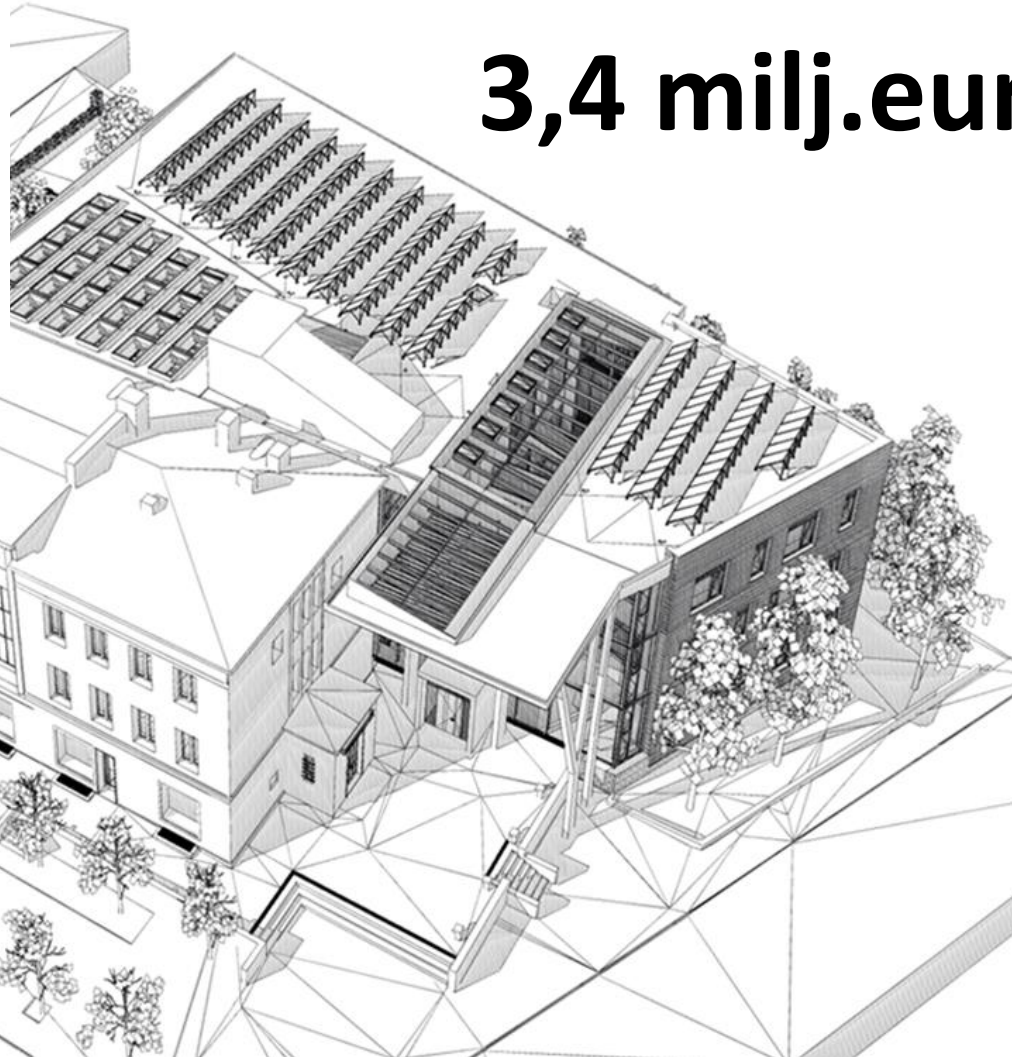


European Union
Regional Development Fund



Investing in your future

3,4 milj.eur.





6.10.2014

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We have achieved...

investments to the region
changing the profile of the
city
reducing CO2
we accomplished the goals



Front page of the Covenant of Mayors newsletter July 2012 –

the best practise from 4363 cities

Article 1407

Recalculer cette page *



Covenant of Mayors
Committed to local sustainable energy

www.eumayors.eu

Newsletter

Covenant Monthly Newsletter

July - August 2012



Reaping the benefits of energy efficiency

Interview with Andres Jaadla, Mayor of Rakvere, Estonia

After signing the Covenant of Mayors in January 2009, Rakvere became the first city in Estonia to take the political commitment to adopt a Sustainable Energy Action Plan (SEAP) in order to meet EU climate and energy targets. This SEAP, which fostered the emergence of an energy efficiency movement

Sustainable development of Rakvere

2009 – 2013

43 - financed project applications.

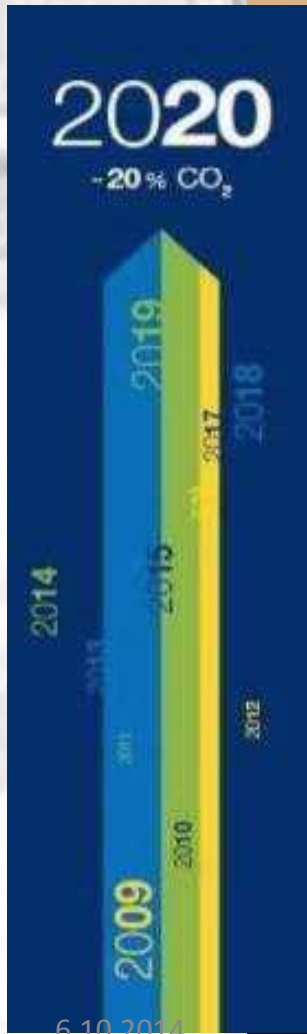
Investments **2009 – 2013**

ca 47 173 363 EUR

- Almost the total amount of **three year city budgets !**
- 2012 – most investments per inhabitant **268 EUR** in Estonia!

Sustainable development of Rakvere, as a best practice example.

SEAP audit 2012 savings CO₂ – 42%



2012
42%





Even large things start from small matters

THANK YOU!

www.rakveretarkmaja.ee