

# Energy Efficient Real Estate

Step to Ecosupport, May 22, 2013

Kick off seminar of Russian – Finnish project

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# Content

- Short presentation of Kymenlaakso University of Applied Sciences
- Description of KyUAS activities in the project
- Actions planned this far



# Kyminlaakso University of Applied Sciences

- A multidisciplinary institute of higher education that produces high-quality professional expertise in close co-operation with working life and other organisations of education, training, and research.
- Owned by the towns of Kotka and Kouvola and the municipality of Iitti
- Rector and Managing Director *Mr Petteri Ikonen*
- Vice Rector and Deputy Managing Director *Ms. Mirja Toikka*
- Service Director *Ms. Pirkko Rautaniemi*
- Turnover €30 million (31.12.2011)
- Permanent staff 377 (31.12.2012)
- 27 degree programmes, 7 of which are master level programmes
- Students total app. 4,171 (20.9.2012)



# Kymenlaakso Province

- Area 7,456 km<sup>2</sup>  
(1.9% of the country)
- Population 181,829  
(1.12.2012)
- Density 35.3 people/km<sup>2</sup>



• [www.kunnat.net](http://www.kunnat.net): Pinta-alat ja asukastiheydet 1.1.2011



# Campuses

- **Kouvola**

- **Kasarminmäki Campus**

- Business
- Design and Media
- Social and Health Care

- **Kotka**

- **Metsola Campus**

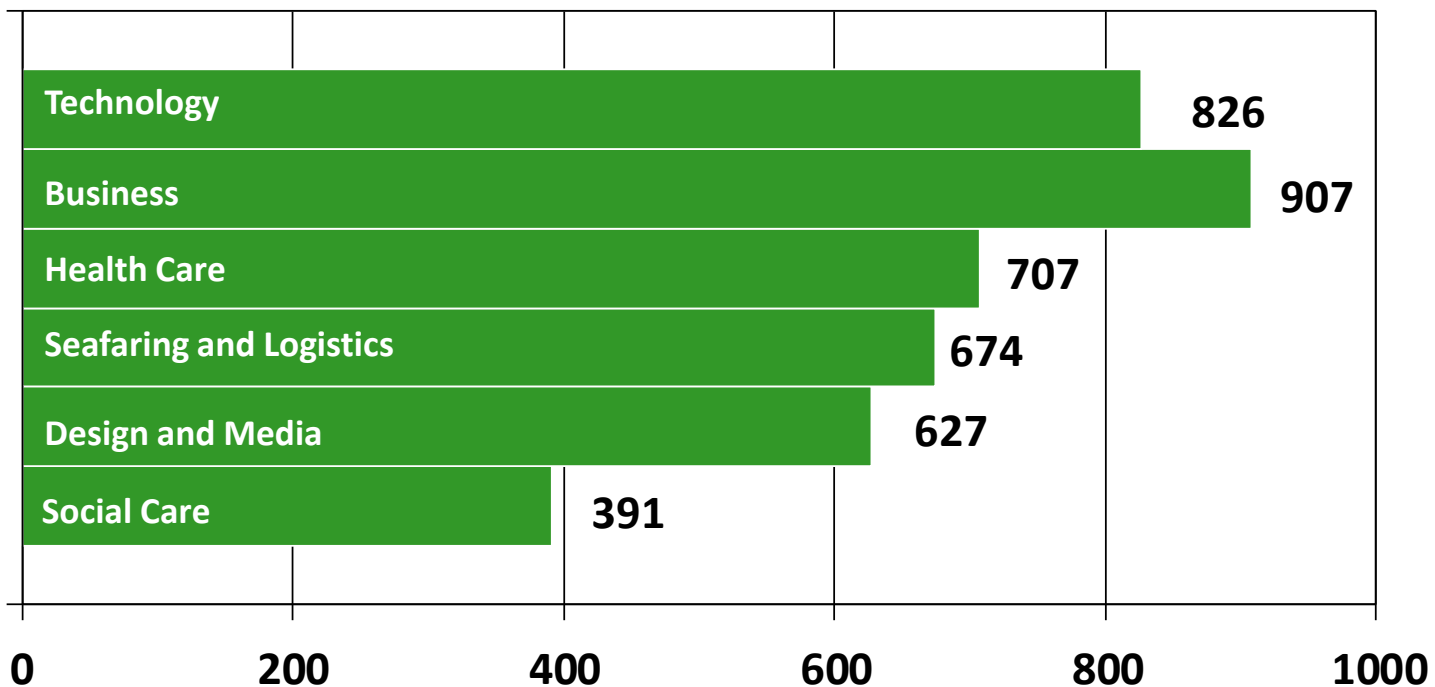
- Technology
- Seafaring and Logistics

- **Jylppy Campus**

- Social and Health Care



# Students by education



The number of Forestry and Wood Technology students is included in the figure of Technology

# STEP TO ECOSUPPORT ACTIVITY 7; ENERGY EFFICIENCY IN REAL ESTATES



# History

- The Ministry of Employment and the Economy:  
New Energy Efficiency Agreement Scheme for the Promotion of Energy Efficiency and Use of Renewable Sources of Energy in 2008-2016
- The EU's Energy Services Directive conferred a nine per cent ( 9 %) energy conservation target upon Finland for the period 2008–2016, which, translated into energy, amounts to 17.8 TWh
- The Energy Efficiency Agreement was undersigned by Kotka Town in 2010
- According to the Agreement, Kotka Town is obliged to take actions for improve energy efficiency and to promote the use of renewable energy resources





# Act7: Energy efficient real estate

- Increased energy conservation awareness
- Creating savings and decreasing greenhouse gas emissions of the Kotka town's real estate property
- Structural changes are needed in the equipment that is used at the buildings to reach the target level (reduction of 9 % of energy consumption)
- The tool: Energy Audits
  - Energy audits are comprehensive studies of energy consumption representing opportunities for the more efficient use of energy, to be implemented in accordance with separate instructions



# Act7: Energy efficient real estate

- During the project, an energy expert will **plan energy conservation measures**, which are then **tested** at the selected real estates within an **implementation programme**.
- **Instructing events** are organized within the project for constructors involved in new development and renovation projects. During these events, an energy expert will provide up-to-date and unbiased information on the energy-efficient **solutions available** and on the **various operators in the field**.
- Information obtained from the tests is vital to create savings and decrease greenhouse gas emissions. Correct control and instruction practices are central for achieving energy efficiency in new development and renovation construction.



# Planned actions

- Energy Audits to the agreed real estates:
  - Kindergarten “Kotilo”, autumn 2013
  - Kindergarten “Welho”, spring 2014
  - City Library, autumn 2014
- Collaboration between the energy technology students, teachers and city employees
- Kotka Town is a owner of abt. 70 pieces of real estate

# The Motiva Model

- Motiva Oy is responsible for the management of energy audits supported by the Ministry of Employment and the Economy, and its tasks include the promotion and monitoring of energy auditing activities, the training of auditing personnel, and the quality control of auditing measures. Applications for assistance for energy audits are handled regionally by Employment and Economic Development Centres.
- For more information:  
[http://www.tem.fi/en/energy/energy\\_efficiency/energy\\_efficiency\\_agreements\\_and\\_audits](http://www.tem.fi/en/energy/energy_efficiency/energy_efficiency_agreements_and_audits)



# Thanks for your attention!

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