

*Modern Eco-Cities Developing the Baltic Sea
Region: Example of Tampere*

Modern eco-cities 15.9.2011
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ECO₂
Ekotehokas
Tampere 2020



SITRA

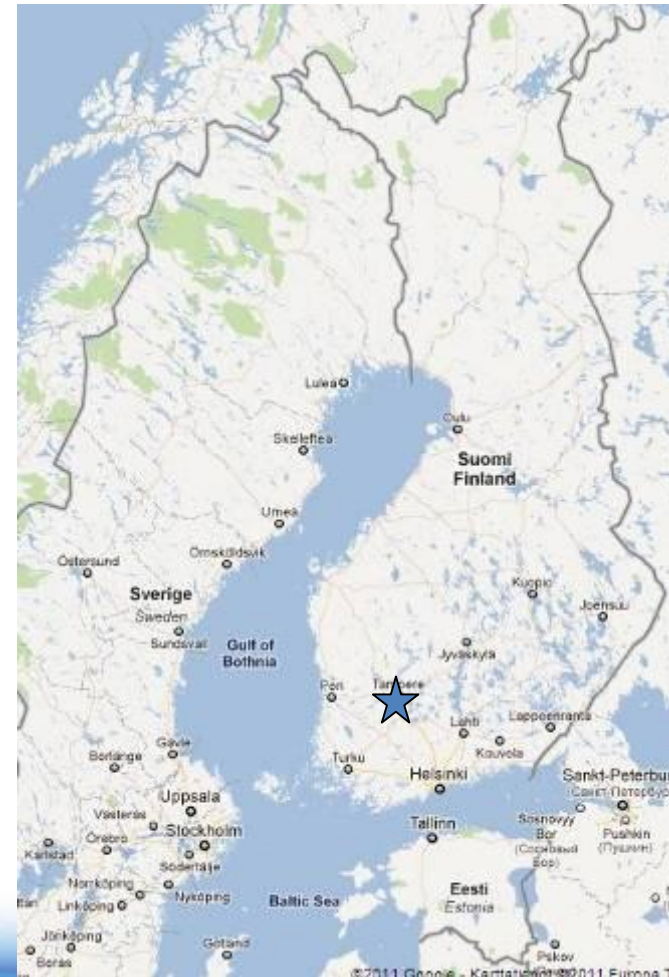
Content of the Presentation

- ECO2: what and why
- Our role in supporting green growth
- ECO2 themes and project examples
- Partnerships and networks



Tampere and Tampere Central Region in figures (2010)

- Tampere has 213,000 inhabitants, 3rd biggest city of Finland
- Tampere Central Region has 356,826 inhabitants, 2nd biggest growth centre of Finland
- Net migration into Tampere Central Region 2,100 inhabitants
- 2/3 of the Finns live within 200 km range from Tampere
- In Tampere Central Region GDP/inhabitant over 35,000 Euros (anticipated information 2009), GDP-index 108 (Finland=100)



ECO₂ – ECO-EFFICIENT TAMPERE 2020

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- Implementing the Climate commitments of city of Tampere
 - Decreasing greenhouse gas emissions by more than 20% by 2020
 - Increasing the share renewable energy to 30% by 2020
- Changing city development practices towards sustainability
- Facilitating growth in sustainable business
- Becoming a forerunner in climate change abatement



Why ECO2?



- The idea for ECO2 came about when the strategic regional planning for Tampere region started in 2007
 - à Regional Climate Strategy 2010
- The implementation of the Regional Climate strategy required cross-sectoral coordination



The benefits of tackling climate change:

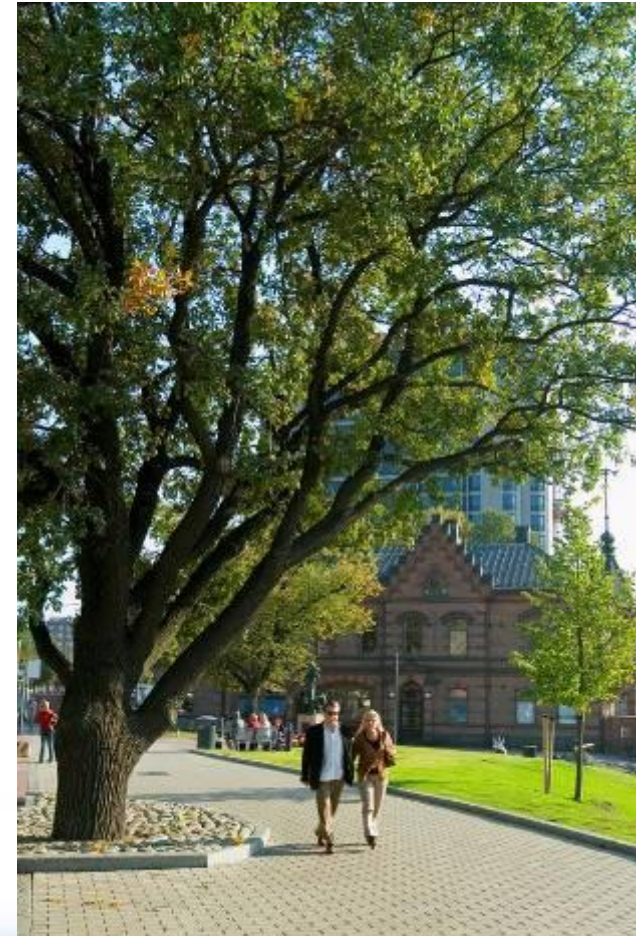
- Supporting green growth
 - Cost benefits
 - A more comfortable city for citizens
 - The benefits for city image
- Preparing for stricter climate regulation in the future

Cities are key actors in climate change abatement



ECO₂ – ECO-EFFICIENT TAMPERE 2020

- ECO2 team coordinates and supports the climate activities of the city of Tampere and initiates co-operation and new projects
 - Wide-ranging cooperation between various actors
 - New city planning tools
 - Development projects
 - Energy-efficient pilot projects
- Eco-efficient built environment, mobility and renewably energy



ECO₂ – ORGANISATION



Supporting green growth

Showing that the city is committed to low-carbon development

Creating networks

Providing platforms for eco-efficient city development

Funding for eco-efficiency projects

Creating markets through green public procurement
e.g. Own building stock, plot assignment competitions, public transport

Showing an example

Eco-efficient built environment

- Tools for ecoefficient urban planning
- Economic incentives for low energy buildings (piloted in Vuores)
- Energy system analysis as a part of the urban planning process (e.g. Koukkuranta, Isokuusi)
- All new buildings constructed by the city are at least energy class A
- A new information center for sustainable building and construction and energy use in housing
- Promoting eco-efficient complementary construction (Tammela)
- Eco-efficient urban development projects in: e.g. Härmälänranta, Vuores housing fair area, Koukkuranta, Nurmi-Sorila "Sun City"

à Steering the whole urban planning process towards eco-efficiency



Sustainable mobility



more options for energy efficient
mobility through Car-Sharing



Sustainable energy – Tampere Power authority's vision

Vision 2030

- Reduce our emission more than 50 %
- Increase the amount of renewable energy at least up to 40 %

Our goals 2010 - 2030

- Renovating existing power plants for using only biomass or biogas à 1000 - 1500 GWh
- Renovating hydro power plants
- Increasing ownerships on both Onshore and Offshore Wind Power companies à 200 GWh
- Waste burning plant building project in cooperation Regional Solid Waste Management Ltd à 50 - 70 MW
- Large scale heat pumps to exploit waste water heat à 2x18 MW



Source: presentation by Mika Pekkinen 9.9.2010

Renewable energy

- Renewable energy pilot project together with 6 largest cities in Finland
 - Tampere: solar energy, wood pellet power plant, small-scale bio district heating
- Charting the potential for small-scale wind power and solar energy in the city area



ECO2 – Eco-efficient Tampere 2020

Partnerships



The project implements the climate and energy objectives of the City of Tampere. The programme supports projects that promote a low-carbon and carbon-neutral urban structure in the fields of sustainable construction, energy and mobility.

Project examples	Partners	Role of ECO2	Expected Outcomes
Härmälänranta Housing area	Skanska Construction Ltd	Expert advice	Low-carbon living area
Tampere Central arena	NCC, Tampereen keskusareena oy	Co-funding for eco-efficiency study	Eco-efficient Central Arena
Tool for eco-efficient urban planning	Tekes, VTT, Syke, Skanska, YIT, other cities, Ministry of Environment	Joint development project	A new tool for eco-efficient urban planning
TAPRE	Tampere real estate services, Axovaatio oy, Local retailers Kesko and POK, The Evangelical Lutheran Congregation, Pirkanmaan hospital district, Pirkanmaan isännöitsijät	Joint development project	Energy efficient renovations in public buildings
Vuores housing area	Vuores-project, construction companies, Tampere power utility, research partners,	Expert advice, funding, joint projects	Low-carbon living area, new practices in urban development

Cooperation at the national level Mayors' climate network



- The mayors of the the six largest cities of Finland established the Mayors' climate network in Spring 2011.
- The mayor of Tampere Timo P. Nieminen is the chair and the ECO2 team acts as secretary.
- In August 2011 six tangible climate initiatives were announced:
 - development of a roadmap on energy-smart construction for each city
 - development of construction instructions and supervision in the direction of energy information and quality management
 - development of climate information and support for citizens' climate acts through a joint project by the cities
 - assignment of eco-support staff for workplaces
 - lowering the need for travel by introduction of teleconferencing
 - climate impact assessment in budgeting



International cooperation

- City networks Eurocities ja Civitas
- Covenant of Mayors
- Cascade: Cities exchanging on local energy leadership
- International competitions:
 - The first price in Solutions 2011 -competition
 - A finalist in Nordic energy city 2011 - competition
 - A finalist in European Public Sector Awards 2011



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Showing an example

Thank you!

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