THE CITY OF TAMPERE

Innovative Tampere – Smart, Green and Open

Stiftung Lebendige Stadt

Conference THE INTELLIGENT CITY: "Energy-Mobility-Administration"

Essen 18.9.2014

Anna-Kaisa Ikonen, Mayor of Tampere, Finland

Tampere scaling factors

- With its 360,000 inhabitants, Greater Tampere is the largest growth center in Finland after the capital region

- The annual population growth is 1,1%

- 2/3 of Finns live within 200 km of Tampere

- GDP per capita is over €35,000

- **R&D expenditure 7% of GDP** (Sweden tops the list of nations with about 4%)

- Technology industry, ICT, chemicals largest industries

- Two universities and one large polytechnic

- Total of 38.000 students, cf. city population of 220.000
  - Students provide the basic beat of change and dynamism for the region
  - Universities have been actively collaborating with industry since late 1970's

Tampere – the most attractive city* in the best** country in the world *National poll **Newsweek Magazine

Traditional and more innovative urban development paradigm

City of the past

- Constructs buildings, roads, and suburbs

- Produces itself all services and requires increasinly more staff

- Uses more energy, materials, and natural resources

- Spreads and overtakes green areas and rural areas

- Has a hierarchical administration and operates without open interaction

City of the future

- Facilitates innovative urban possibilities

- Provides services through a range of means and methods, partners and partnerships

- Decreases its need for energy and resources with industrial symbiosis and high level energy efficient actions

- Shrinks its ecological footprint

- Has an open administration, engages citizens, operates through networks

Smart and Green Tampere

•Open participation
•High level education
•Real life innovation platforms

•Innovation environments
•Services based on citizens' needs
•Wellness and security

•Open Innovation platforms
• Companies as partners
•Industrial ecosystems

People

Living

Economy

BRIGHT CONNECTED OPEN EASY

Mobility

Governance

•Traffic as a service
•Connected, interactive and citizen oriented environment
•Electric mobility

Environment

•Open data
•Innovative procurement
•Transparent administration

•Eco-efficient urban development
•Industrial symbiosis
•Energy-efficient built environment
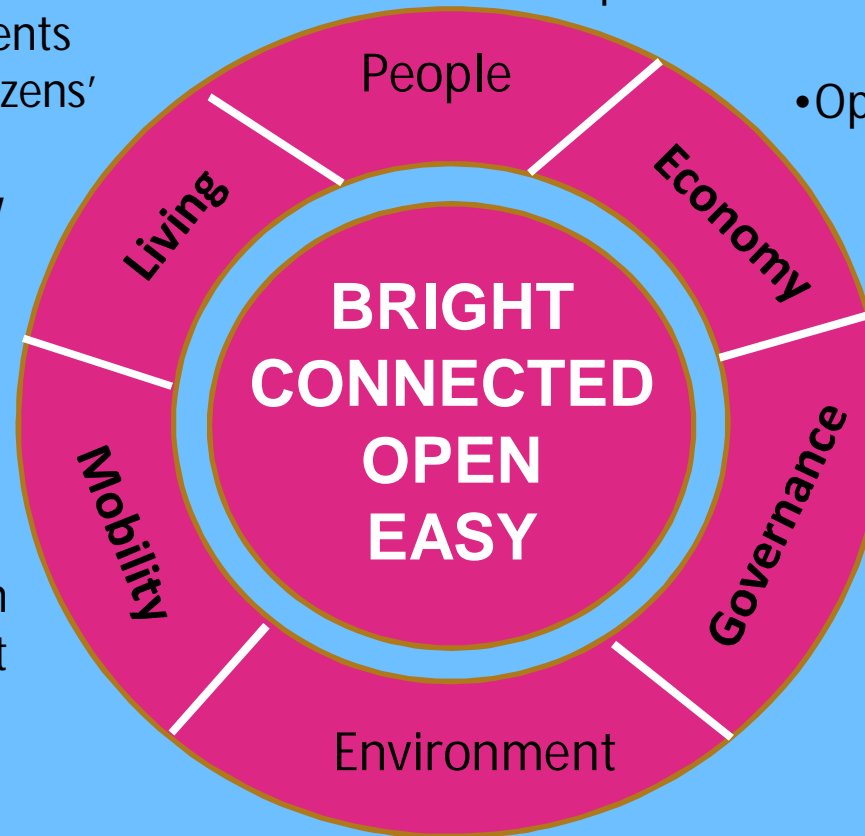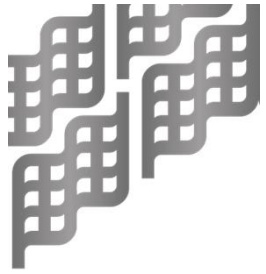
Connected City

Where Technology, Communication and Design

meet creating an ideal environment in which to live and work.

CONNECTED VIA

Buses & Trams

WiFi Infrastructure

Hotspots & Co-Working Stations

Wireless Charging Stations

Comprehensive City Platform

Bicycle & Walking Paths

Personal Interactions

THE CITY OF TAMPERE

Urban and Green

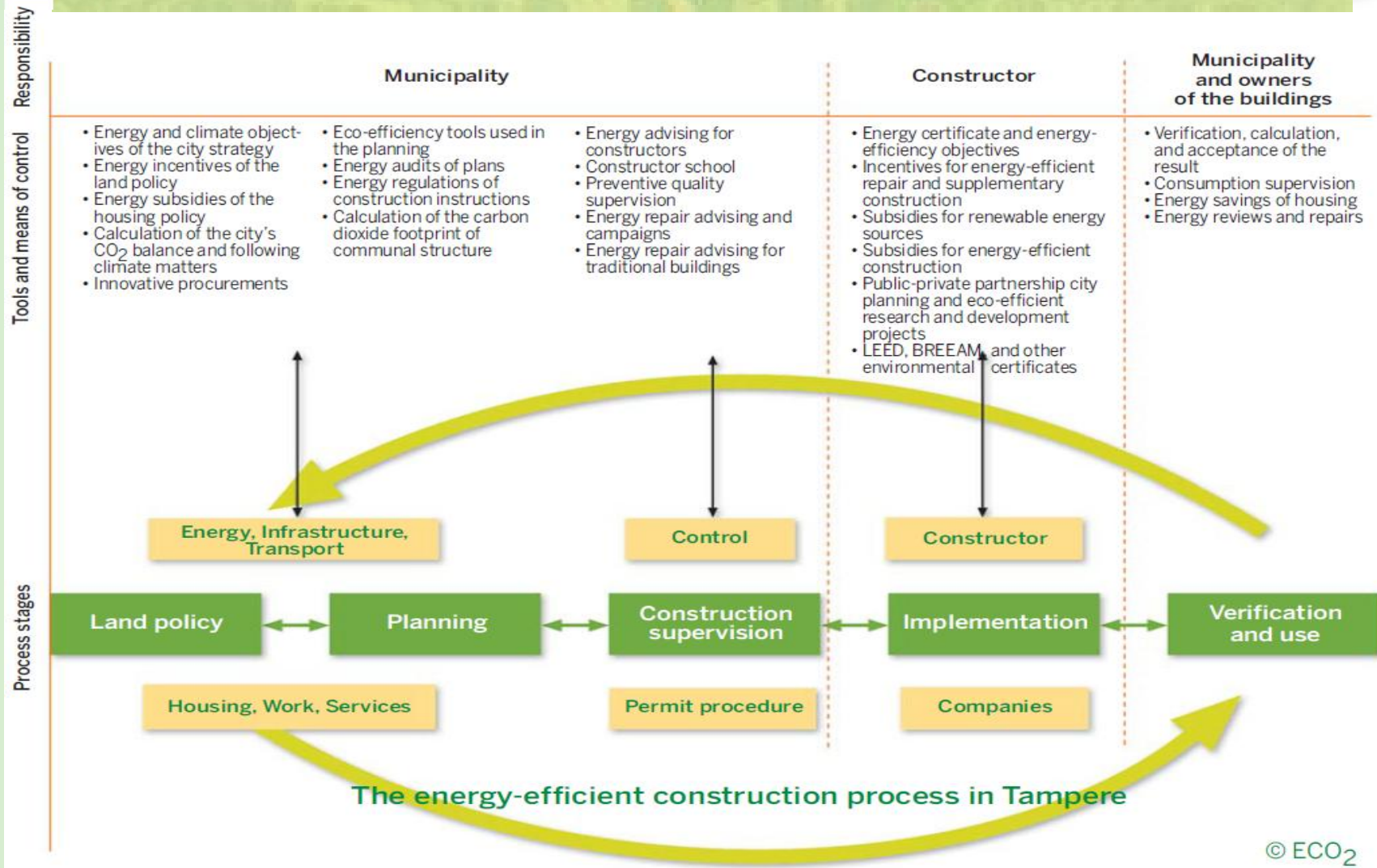Densification is more eco-efficient than urban sprawl

An Energy Effecient City

Increased supply of renewable energy to district heating customers

90 % of housing is within the district heating grid

Eco-efficient urban development process

Responsibility	Municipality			Constructor	Municipality and owners of the buildings
Tools and means of control	• Energy and climate object-ives of the city strategy • Energy incentives of the land policy • Energy subsidies of the housing policy • Calculation of the city's CO_2 balance and following climate matters • Innovative procurements	• Eco-efficiency tools used in the planning • Energy audits of plans • Energy regulations of construction instructions • Calculation of the carbon dioxide footprint of communal structure	• Energy advising for constructors • Constructor school • Preventive quality supervision • Energy repair advising and campaigns • Energy repair advising for traditional buildings	• Energy certificate and energy-efficiency objectives • Incentives for energy-efficient repair and supplementary construction • Subsidies for renewable energy sources • Subsidies for energy-efficient construction • Public-private partnership city planning and eco-efficient research and development projects • LEED, BREEAM, and other environmental certificates	• Verification, calculation, and acceptance of the result • Consumption supervision • Energy savings of housing • Energy reviews and repairs

Process stages

Energy, Infrastructure, Transport

Control

Constructor

Land policy ↔ Planning ↔ Construction supervision → Implementation ↔ Verification and use

Housing, Work, Services

Permit procedure

Companies

The energy-efficient construction process in Tampere

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An Innovative City

- Novel innovation platforms are open environments that produce ideas, tackle wicked problems and form growth companies.

- These innovation environments are joint undertakings of the universties, of the corporate world, of the public sector and of the individual – we call it the QUADRUPLE HELIX

Smart Economy –
Open innovation platform

DEMOLA AS A PLATFORM

An unique platform to operate open innovation activities internationally

1.

**Existing network
as a backbone**
Ecosystem
engagement and
partnerships

2.

**Demola tools
and processes**
Compatible
platform and rapid
development

3.

**Professional
facilitation**
Capability to deliver
end-to-end service

Demola Tampere

Demola South Sweden

Demola Budapest

Demola Oulu

Demola East Sweden

Demola Vilnius

Demola Maribor

+ upcoming Demola nodes
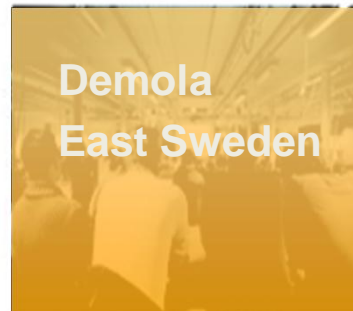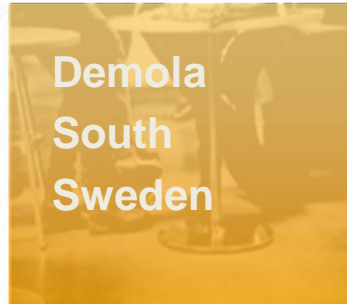
AER regional innovation award 2010

The Best Summer Job 2011 in Finland

Baltic Sea Region Innovation award 2012

DEMOLA NETWORK

Open Data Tampere Region project was founded in the beginning of 2013 to speed up opening and utilising public data.

1. Encourages and helps to open the data.
2. Activates utilising the data.
3. Brings opening the data into the normal operation of the city of Tampere.
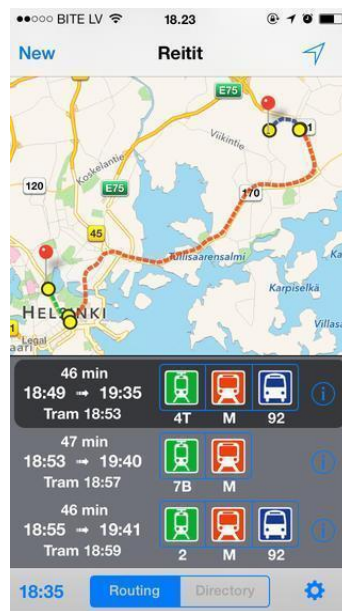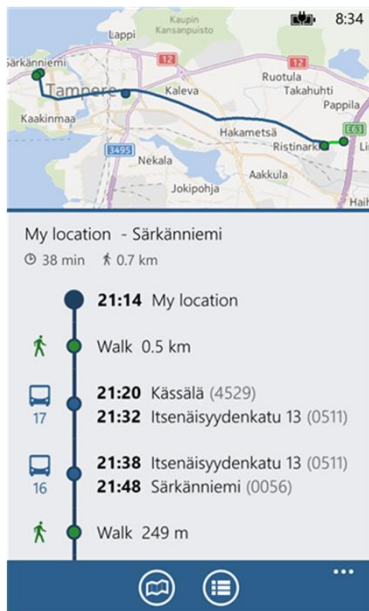4. **Develops opportunities for businesses in the region.**

http://data.tampere.fi
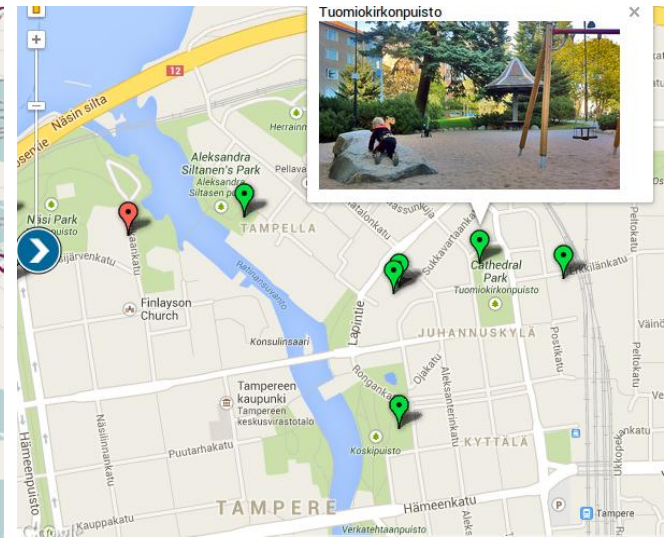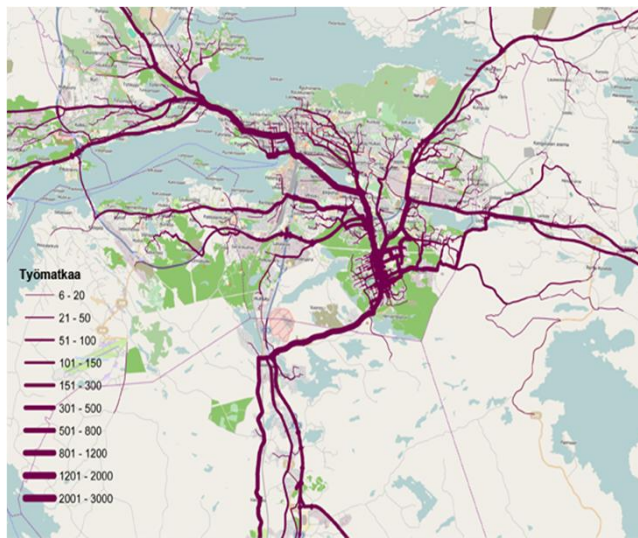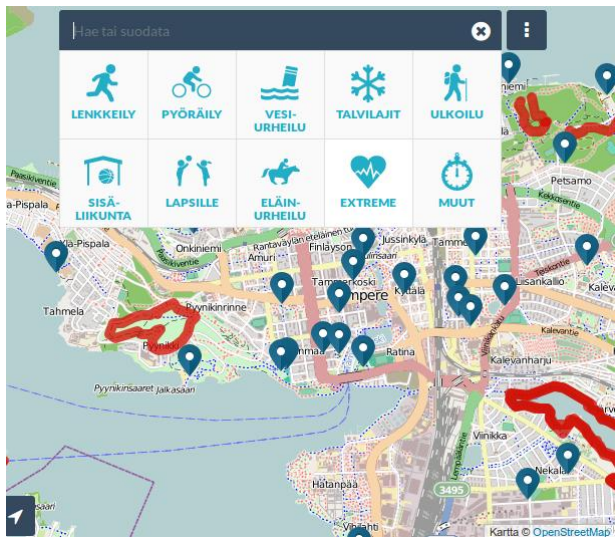
Over 20 apps & services
based on published data
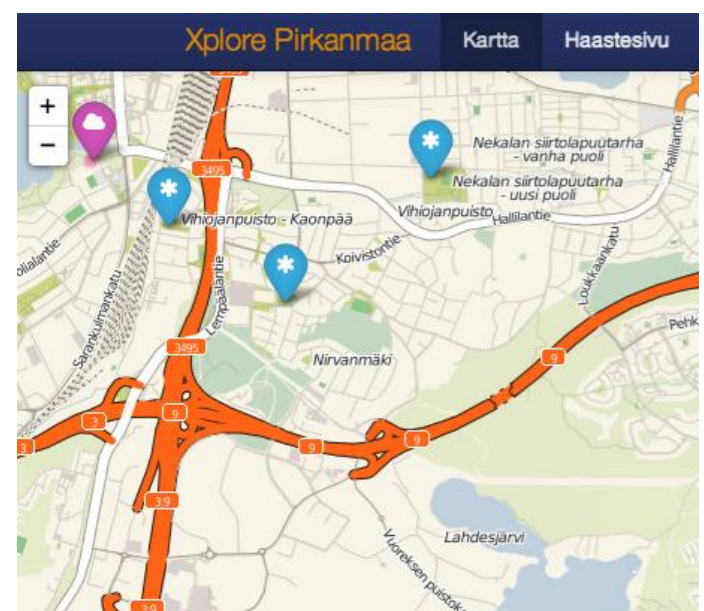
Smart Mobility – Traffic as a service

ITS Factory

Tampere-based innovation, experimentation and development environment for smart traffic. Open traffic data is a key element in the future's smart traffic.

http://itsfactory.fi
http://data.itsfactory.fi

ITS Data Sources

New data sources for innovative services and applications for the end users

Road Traffic

Traffic Flow
Roadworks and Streetworks
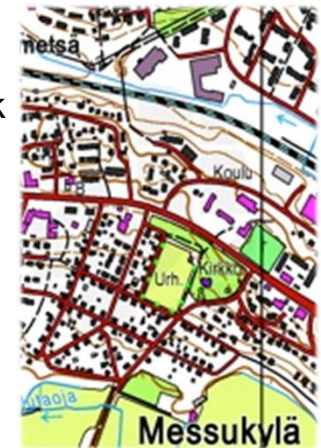Incidents and Accidents
Road Weather

Parking

Occupancy
Facility
Information

Geodata

Road network
Other traffic infrastructure
Street addresses
Map data
POIs

Public Transport

Timetables
Stop Timetables
Bus Location
Route Planning

Pedestrians and Cyclists

Cyclist & Pedestrian Traffic Flow
Route Planning

Thank you!
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