



# Sustainable Urban Development in the City of Nürnberg

## Green IT and ICT as strategic elements for the smart and carbon-neutral City

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Networking intelligent Cities for Energy Efficiency (NiCE) project  
launch event - Brussels, September 13, 2011



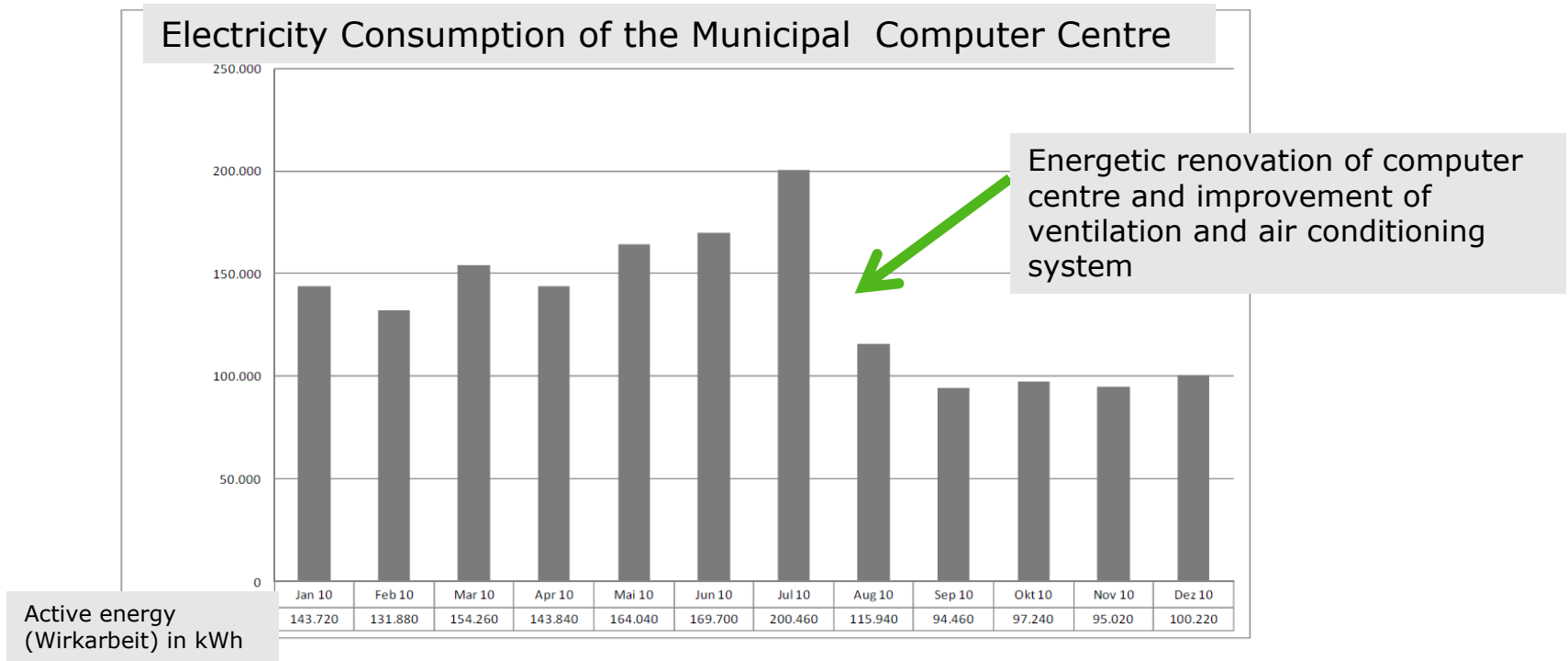


## **Key-elements of the roadmap for the carbon-neutral city of Nürnberg**

- Improvements of energy efficiency in the building sector (“energetic renovation” of existing building stock and high energy efficiency in new buildings)
- Implementation of smart technologies/ICT (smart metering - smart grids – smart quarters – smart cities)
- Green IT
- Integration of e-mobility in the future urban transport and energy supply systems
- Rural-urban cooperation in promoting renewable energies

# Implementation of the Green Digital Charter

## 1. Action on emissions from ICT itself - two examples:



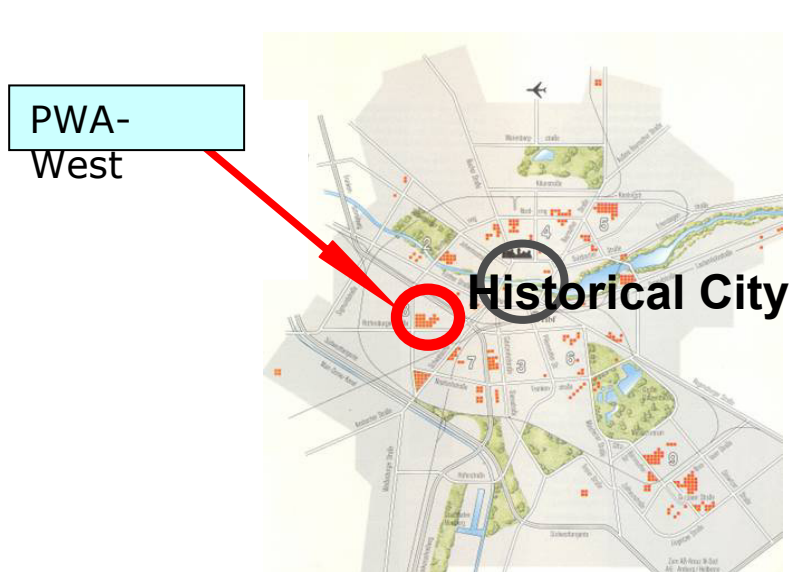
Virtualization – Consolidation – Improved Data Storage Systems in the Computer Centre of the Local Public Utility **N-ERGIE** resulted in reduction of energy consumption by 66 % (from a 120 server/240 processor equipment to a 3 server/72 processor unit) winning the certificate/award as „Green Data Center“

## 2. ICT enabling greater energy efficiency – three project concepts:



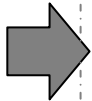
Applied research and development for decentralized, smart energy supply systems in an organizationally and topically integrated approach – creation of „EnergieCampus Nürnberg – EnCN“ - initial investment 50 Mio € (provided by the the Free State of Bavaria)

Refurbishment and technical renovation of a housing area („Parkwohnanlage - PWA“) as a smart housing complex

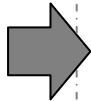


Implementation of e-mobility along the spatial axis  
**Munich – Ingolstadt – Nürnberg**  
 following a stepwise regional concept based on the German and the Bavarian e-mobility strategy

**First step:**  
 Implementation of e-velos, trikes and others



**Second step:**  
 Feasibility studies for further measures



**Third step:**  
 Broad implementation



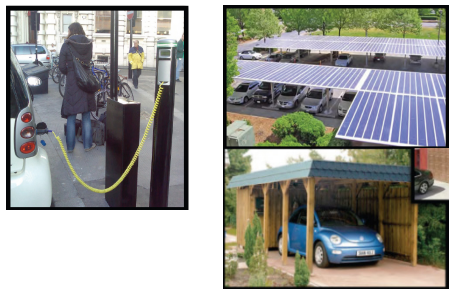
2008 / 2009

Focus:  
 Implementation of sustainable technologies in the traffic sector



2010 / 2011

Focus:  
 Focusing on the best strategy



Starting 2015

Focus:  
 Improving the air quality in the city and reducing CO2-emissions





### 3. Creation of an intercity partnership on ICT and Energy Efficiency

Intercity partnership on European level: the cities of  
**Nürnberg – Gothenburg – Genova**

are under way to form a consortium in close cooperation with partners from science and industry to apply for a project in the framework of the European ICT initiative (background: cooperation between Nürnberg and Gothenburg has started with a joint event during the Open Days in Brussels 2009; cooperation between Genova and Gothenburg is based on both their role as major port cities)

Intercity partnership on regional level in the **European Metropolitan Region** of Nürnberg by forming a joint committee for climate protection and sustainable development in this region.

About 20 authorities (cities, towns, counties) have formed three operative units to promote and strengthen

- energy efficiency in industry and commerce
- energy efficiency in the building sector (both housing and commercial buildings)
- development of renewable energies and innovative energy systems.

The committee is at present working on a regional agenda defining targets and measurements to convert the regional energy supply system and to set a common target for mitigation of and adaptation to climate change – results to be presented in a conference on April 19/20, 2012 in Nürnberg



# Smart City Nürnberg

