Warsaw Energy
Use Sensibly!

SMART CITIES AND REGIONS: FORGING PARTNERSHIPS TO FACE ENVIRONMENTAL CHALLENGES

fall in love with Warsaw green

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City of Warsaw

The City of Warsaw

Main features of the capital city of Poland:

- administrative area: 517 km²
- inhabitants within this area: 1.7 million
- inhabitants within agglomeration: 3.3 million
- density of population: 3300 per km²
- registered enterprises: 360 000
- registered vehicles: 1.2 million
- budget expenditure for 2014: $ 4,73billion
- unemployment: 4.9%
- 78 universities and colleges
- 270 th. students

Climate change policy in Warsaw

Establishment of long-term goals and strategy to achieve them and indicators of progress toward attaining them

Implementation of planned actions
Monitoring of the implementation

Clear message for stakeholders on climate goals, ways to achieve them
Sharing best practices and knowledge

Climate Protection Team

- Established in July 2008, chaired by Mayor of Warsaw.
- The Team comprises Directors of competent city departments and representatives of NGO partners.
- Provides monitoring and coordination of all climate initiatives (e.g. actions to reduce energy consumption).

City of Warsaw
International cooperation

International cooperation with:

- C40
- EUROCITIES
- ICLEI

Cooperation with embassies of:
Austria, Czech Republic, Denmark, France, Japan, Germany, Norway, USA, Switzerland, Sweden, UK

Cooperation within EU co-funded projects, Norway Grants

Warsaw challenges

EU's 20-20-20 targets possible to achieve only with cities involvement

Covenant Of Mayors initiative

- Warsaw joined in 2009
- Key document: *Sustainable Energy Action Plan for Warsaw in the perspective of 2020*

City of Warsaw
Strategic documents

Sustainable Energy Action Plan

Main goals and overall strategy

Low-carbon Economy Action Plan

The transportation system of Warsaw: **Sustainable Development Strategy**

The long-term plan for housing resources management in the City of Warsaw for 2013-2017

Specific objectives and strategy, tasks to be performed

Sustainable Energy Action Plan

SEAP target – improvement of energy efficiency and reduction of GHG emissions - calculated as:

- 80% of CO_2 emission in 2020 comparing to the base year,
- 80% of energy consumption in 2020 comparing to the base year,
- at least 20% of energy will be produced from RES,
- information and promotion actions regarding energy management/conservation will be implemented.

SEAP target for 2020 compared to the base year 2007

Year	Energy consumption [MWh/year]	CO_2 emission [$MgCO_2$/year]
2007	28 394 431	12 952 984
2020	**22 715 545**	**10 362 387**

Sustainable projects - financing

- Municipality's own budget
- Municipal bonds
- City-owned infrastructural companies
- National Fund for Environmental Protection and Water Management (NFOŚiGW)
- Green Investment Scheme (GIS – international emissions trading)
- Public-private partnership

- Commercial credits
- International financial institutions
- Support from the European Union:

✓ „Infrastructure and Environment" Operational Programme

✓ Regional Operational Programme

✓European Regional Development Fund

✓7th Framework Programme

✓ Competitiveness and Innovation Framework Programme – CIP

Plans and present activities: Transport

Main activities:

- improvement of public transport network,
- replacement of vehicular and rolling stock

261 new trams capable of recovering braking energy

35 six-coach energy efficient underground sets

273 modern buses including hybrids

19 units for Rapid City Train

- construction of second metro line,
- setting bus-only lanes,
- development of P&R car park system,
- expansion of the bicycle paths system,
- development of low-emission bus fleet

10 electric buses in tender phase

35 CNG buses

Plans and present activities: Transport

- Launched in 2012 ,
- Almost **2 millions bikes rentals** in 2013,
- **1120 bikes available in 173 stations**,
- The number of users has doubled over two years - to about **150 thousands,**
- "Veturilo" has been recognized internationally – among 10 best public bike systems around the world.

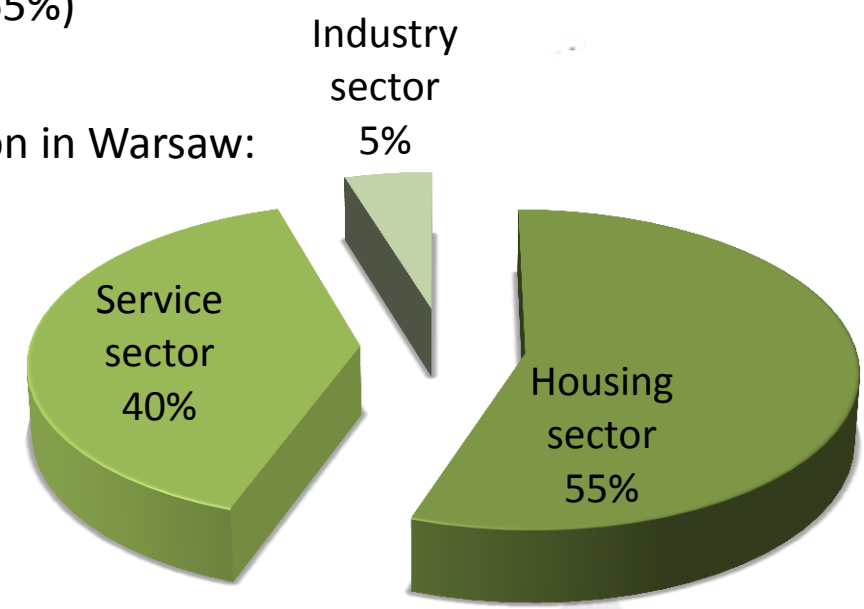
Plans and present activities: energy

Average consumption of heat in Warsaw annually: ~13 TWh

including housing sector: ~ 8,5 TWh (65%)

Potential of reducing heat consumption in Warsaw:

- housing sector ~ 2,09 TWh,
- service sector ~ 1,5 TWh,
- industry sector ~ 0,18 TWh,
- Warsaw **overall** ~ 3,77 TWh.

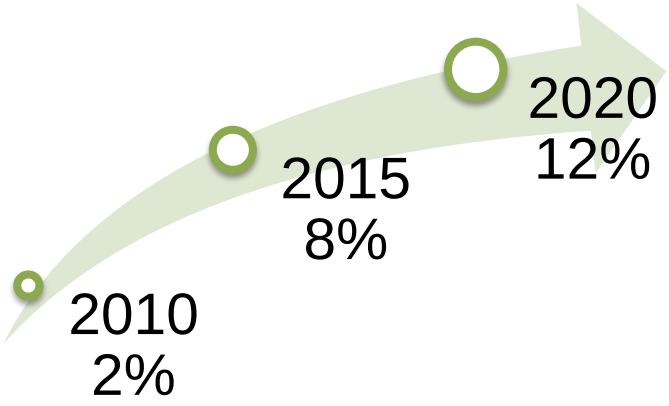


Development of smart grids and smart metering

Smart consumers

Plans and present activities: biomass, waste-to-energy

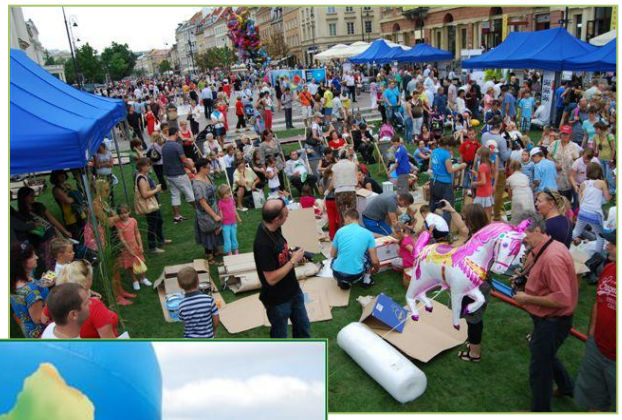
Biomass combustion in power plants in Warsaw:



Waste-to-energy:

- extension and modernisation of ZUSOK Solid Waste Incineration Plant,
- construction of another incineration plant,
- planned share of energy from waste increased from 1% in 2010 to 8% around 2020.

Partnership for Climate



- since 2008
- 41 Partners

embassies

NGOs

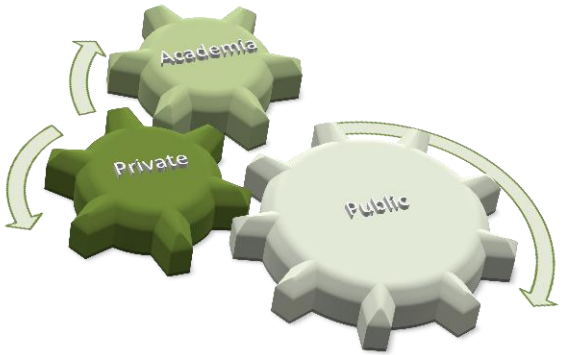
private companies

associations

- awareness raising activities
- annual event: Picnic for climate

Partnerstwo dla Klimatu

„E-Mobil” Cluster



The „E-Mobil” Cluster:

- ✓ formally created on 4 July 2011
- ✓ cooperation between 18 stakeholders working in the Warsaw area
- ✓ based on voluntary agreement
- ✓ 18 Partners

Main goals of the Cluster :

✓ initiating mentoring programs dedicated to E&HEVs technology and the related necessary infrastructure

✓ disseminating the implementation by the demonstration program of EV fleet

✓ developing new business relations among Warsaw City Hall, car companies and electricity and natural gas power companies

✓ promoting new E&HEVs and other ecological technology (eg. CNG, biofuels)

✓ facilitating access to finance, including applying for funds from the EU and operational programs

Warsaw Dialogue on Scaling-Up Local and Subnational Climate Action

- Conference organized by the City of Warsaw and The Ministry of the Environment in close collaboration with the global cities network ICLEI and supported by the UNFCCC Secretariat,
- Day before first official „Cities day" during COP19,
- An open exchange on addressing climate change on various levels, sharing experience and best practices,
- It offered various perspectives on cities role in climate change mitigation and adaptation – from mayors of world cities, through local organizations (ICLEI, C40, EUROCITIES) to representatives of governments and scientists,
- The results of works during Warsaw Dialogue, including suggestions for national level, challenges and best practices to replicate, are presented in OUTCOMES OF WARSAW DIALOGUES on Scaling-Up Local and Subnational Climate Action

Suggestions for national level:

(1) allow flexibility and creativity and leadership at urban level

(2) training and spreading of expertise, and knowledge platforms

(3) financial support

(4) remove counter-productive incentives

(5) provide long-term certainty in terms of direction of national policies

The voice of the cities during COP19

Cities and Sub-national Dialogue

- First time in history during COP conference „Cities day” took place,
- High level segment – Mayoral and Ministerial level,
- The goal was to create a link between the high level, national governments and regions,
- It can be considered as the direct and immediate implementation of the Nantes Declaration of Mayors and Sub-national Leaders on Climate Change adopted in September 2013,
- The discussion focused on enhancing adaptation and resilience in regions and on enhancing global mitigation efforts through acting at the local level. Participants shared their ideas and experiences that can be used in global struggle with climate change.

UNITED NATIONS
CLIMATE CHANGE CONFERENCE
COP19/CMP9
WARSAW 2013

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Thank you!