

Zagreb, Croatia

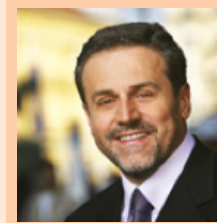
Zagreb is a key economic and transport hub in the heart of Eastern Europe. Winner of European Mobility Week 2012, it has overcome years of neglect and under-investment to become a city which is committed to a sustainable low-carbon future. Recent initiatives include refurbishment of 87 public buildings and modernization of 3000 public lighting bodies, cutting energy use by 30 million kWh each year. The city has also invested heavily in public transport, upgrading its tram and bus fleets as well as extending its network of cycle paths. Public transport is completely free in the city centre and in outlying areas tram and bus tickets can be purchased easily via mobile phone.



- **Low carbon vision**

Zagreb's vision focuses on a rational energy use by monitoring energy savings of city administration buildings; an optimization of energy allocation; creating and updating a CO₂ inventory and implementing further energy saving measures, i.e. using renewable energy and environmentally friendly fuels.

- **Area:** 641.35 km²
- **Population:** 828,621
- **Population annual growth rate:** 0.08%
- **Final energy consumption in the community (GJ/year):** 47,194,000 GJ
- **GHG emissions from the community (tCO₂e/year):** 3,177,000 tCO₂ (2011)
- **Main economic activity:** Gas and Water distribution, Energy consumption, Industry, Waste Management, Transport, Agriculture and forestry, Trading, Entrepreneurship, Utility Services, etc.
- **Main priority sectors for Low Emission Urban Development:** Buildings, transport and public lighting sectors



“We want to achieve direct energy and financial savings, reduce the harmful impact on the environment, implement a proactive energy policy and raise the level of responsibility and consciousness of employees and citizens of Zagreb in the process of global warming and climate change. Sustainable Energy Action Plan of the City of Zagreb is a key document that, based on collected data of energy consumption, identifies and provides precise and clear guidelines for the implementation of energy efficiency, renewable energy sources and environmentally friendly fuels projects at the city level, which will result in reducing CO₂ emissions by more than 20% by 2020”.

Milan Bandić, Mayor



- **Commitments:**

As an active member of the Covenant of Mayors, the City is committed to achieve direct energy and financial savings, reduce harmful impact on the environment, implement a proactive energy policy and raise the level of responsibility and consciousness of employees and citizens.

- **Actions:**

- The Sustainable Energy Action Plan of the City of Zagreb (SEAP) as key document that (based on collected data of energy consumption) identifies and provides precise and clear guidelines for the implementation of energy efficiency, renewable energy sources and environmentally friendly fuels projects at the city level which will result in reducing CO₂ emissions by more than 20% by 2020.
- Through three main sectors of energy consumption in the City of Zagreb (sectors of building, transport and public lighting) entail 51 priority measures and activities for the reduction of greenhouse gases by 21% by 2020. (Presented in the SEAP of the City of Zagreb. Some of these measures and activities are:
 - Education and awareness campaigns for users of city-owned buildings and citizens
 - Building Sector: energy audits and energy certification; introduction and installation of solar panels and photovoltaic systems in institutions (e.g. The photovoltaic power plant located on roof of the City Administration); remote energy consumption monitoring equipment; modernisation of boiler rooms in buildings, energy balance and GHG emissions monitoring; modernisation of lighting in 1000 school classrooms; modernisation of heating oil boiler rooms (replacement with pellet and gas boilers); thermal isolation of facades and roofs; subsidising the installation of renewable energy sources for individuals and legal entities in the city's area;
 - Transport Sector: Training of ecologically conscious driving; promoting the use of alternative fuels; Campaign "One day a week without a car"; development and improvement of the public transportation network; replacement of the existing public buses with hybrid and alternative ecologically acceptable fuels; establishment of a bicycle-rent network equipped with IT theft protection;
 - Public Lighting Sector: Replacement of the out-dated lighting bodies with more energy-efficient and ecologically acceptable lighting bodies and management and regulation of the public lighting system, etc. Zagreb has a proven track record of implementing energy efficiency projects on the local level and EU level (e.g. ZagEE - Zagreb Energy Efficient city; TRACE - Transnational cooperation for the improvement of buildings energy performance and efficiency; EnVision; LEAP - The Leadership for Energy Action and Planning; Energy for Mayors; NiCE - Networking intelligent Cities for Energy Efficiency; Green Digital Charter; i-SCOPE - Interoperable Smart City services through Open Platform for urban Ecosystems; PassREg - Passive House and Renewable Energy Regions; E2STORMED; Ele.C.Tra - Electric Transport in Cities; EURONET 50/50max.)

