



# City Profile

# Timisoara

## Introduction

Timișoara is the largest city in western Romania. It is the capital of Timis County with a sphere of influence across 5,000 square kilometres. At the end of 2012, the city had a stable population of 340,441.

Economically speaking, Timișoara is among the most important cities in Romania, influencing the whole region. Located near the borders of Serbia and Hungary, it has always been an economical and cultural bridge between the neighbouring countries. This potential was amplified in 1994, when the DKTM (Danube, Kris, Mureș, Tisza) Euro region was created, Timișoara being this region's biggest city.



Timișoara Municipality signed the Covenant of Mayors in 2010 and started developing the climate change strategy and action plan for fighting, mitigating and adaptation to climate change in the city of Timișoara - a Sustainable Energy Action Plan (SEAP) in 2009.

The SEAP was approved at a local level by the Local Council in 2010 and was implemented by all the departments of the City Hall, through a steering team with competences for mainstreaming energy efficiency and climate change policies, coordinated by the mayor. The actions and measures are funded by the local budget, as well as national and European funds.

The SEAP includes targets, objectives, measures and actions for eight relevant sectors: transport, energy, residential, institutions, waste, agriculture and green areas, water and industry.

In order for the Timișoara municipality to attain the global objective of reducing CO<sub>2</sub> emissions by 20% by the year 2020, the realistic local targets have been set for each sector in accordance with each sector's CO<sub>2</sub> emission reduction potential.

The SEAP aims to promote environmental technologies to reduce pressure on natural resources and improve the quality of the environment and life, also taking into consideration the promotion of economic growth. The plan contains priority measures and action to be undertaken by the municipality, the industry and other stakeholders to promote large-scale development and use of environmental technologies, clean technologies for products and processes and new eco-efficient technologies for waste management. The plan also promotes scientific and technological support for the conservation, reconstruction and strengthening of biological and ecological diversity and sustainable territorial development planning in order to provide active support for integrated and coherent economic and social development.

## Energy-Efficient Buildings and Districts

In the field of energy-efficient buildings and districts, Timișoara City Hall has identified three major goals concerning the SEAP: (1) Renovation work to transform existing buildings into energy-efficient buildings, (2) Energy-efficient districts and (3) Neutral or energy-positive new buildings.

Timișoara is divided into 13 districts, with a total of 23,223 residential buildings,

both individual and multi-dwelling building types. Approximately 14,500 of these buildings were built before 1940, mostly connected to the local heating system.

The Timișoara municipality has joined the national programme for energy efficiency of residential houses, subsidised partially by the Romanian Government (50%), with a contribution from the City Hall (30%) and each beneficiary (20%). Under the framework of this programme, 64 apartment buildings have already been renovated, yielding a total of 2,256 flats.

In 2013, we plan to access funds of €8 million allocated to the western development region under the framework of the Regional Operational Plan Priority Axis I 'Support to sustainable development of cities - urban growth poles', under field of intervention 1.2. 'Support investment in energy efficiency of residential buildings'. These funds, after projects are approved, will provide for the thermal modernisation of approximately 100 apartment buildings, especially those built during the period 1950-1990. The objective of this area of intervention is pursued in accordance with the objectives of the Europe 2020 Strategy.

The municipality also supports citizens' initiatives. Improving energy efficiency in homes and encouraging low-carbon 'micro-generation' (small-scale generation of power and hot water by individuals) is supported by the municipality through the provision of fiscal incentives established by decisions of the Local Council.

## Renewable Energy Sources and Distributed Generation

The contribution of renewables to energy supply and electricity generation remains low, both in absolute terms and relative to other countries. Fossil fuels continue to account for the majority of the supply. At the local level, no major projects regarding renewable energy sources (RES) have been implemented, mainly due to the financial constraints of the local budget. Nevertheless, in recent years, efforts have been made in the development of technical documentation and preparation of RES projects.

The largest project in the field of energy, which is in the final phase of implementation, involves upgrading the central heating system in the city of Timișoara in order to comply with environmental regulations regarding air emissions and increase efficiency in urban heat supply and is financed under the Operational Programme 'Environment', financed by the European Regional Development Fund (ERDF). Measures under this project include the creation of a desulphurisation unit and the retrofitting of eight pumps and boilers.

At the local level, legal instruments for accessing household funds are used by the environment protection agency Timis to assign 120 projects involving solar systems for domestic hot water generation to the municipality of Timișoara to be then implemented by the citizens. Besides these, several smaller household investments in solar thermal systems were made in the last three years. Smaller-scale investments were also made in public lighting, especially in parks and green areas, in the form of standalone solar lights with photovoltaic (PV) panels, and in solar panel systems for generating hot water in schools.





In perspective, the plan is to promote local investment to generate heat and power through the incineration of municipal solid waste. An important project in this field will start this year and will centre on energy recovery from municipal solid waste by designing an appropriate installation and integration into CET South Timișoara (one of Timișoara's combined heat and power plants). The CET company that has the Local Council as a shareholder will be an independent producer in the cogeneration of power and heat. The project is worth approximately €85 million.

## Energy in Urban Transport

Energy-efficient transport can be described as 'performing the necessary transport with the minimum of energy' and is divided into three factors:

- travel efficiency
- system efficiency
- vehicle efficiency

The focus therefore lies on establishing a new, non-polluting vehicle fleet; installing solar systems for the energy supply of public transport-related activities; expanding and modernising public transport, road lighting and power supply networks; renovating the underground pipeline system and the traffic lighting system; developing a sustainable urban and traffic policy for the city and the surrounding areas; identifying and preparing key measures for sustainable urban and transport development; and also raising awareness of metropolitan development and marketing. Additionally, cycling paths could be developed to link cycle lanes.

The main priority for the municipality of Timișoara is to improve traffic and mobility in the city, particularly public transport, both on a local and a peri-urban level, by increasing the trade speed, reliability and quality of existing public transport systems and to create new public transport services. For this to happen, the Municipality has framed and approved the Study 'Timișoara - Vision 2030', a strategic concept for sustainable development of the city that concerns interconnected fields of railway, public transportation, airport, roads and which together offer a coherent view of the way in which the transport system can develop, not only at the municipal level but also in peri-urban regions.

In 2008, Timișoara was assigned as the growth pole for the western region of Romania, including its urban centre (Timișoara) and area of influence (14 territorial-administrative units). The strategic planning tool for metropolitan development is the 'Integrated Plan of Development for the Timișoara Growth

Pole', which correlates sectoral politics (economic, social, transport, environmental etc.) with territorial politics, and submits a portfolio of priority investment projects. The main objectives of this project are to modernise road transport networks, promote green transport, and enhance the promenade and relaxation areas for residents.

The municipality of Timișoara is the local public authority responsible for the administration of the city, and it has distinctive departments in charge of urban planning, environmental protection, public transport and strategic development etc., which employ specialists with good skills and professional experience as well as experience in preparing and implementing EU-funded projects. The Local Council of the Timișoara municipality is the sole shareholder of the local public transport company, which operates trams, buses and trolley buses.

## Financing

The SEAP established the development measures and projects for transport infrastructure, energy and climate issues for the short, medium and long term. In general, recent years were marked by the financial constraints of the local budget. However, the municipality of Timișoara has made a series of investments in infrastructure development, energy efficiency and building modernisation.

The local budget for 2013 dedicates significant funding to investment projects, such as the extension of trolley lines, implementation of adaptive traffic management, modernisation of tram lines, and road modernisation in order to improve traffic flow and safety. The source of financing for these projects is the local budget, the national budget and EU funds of around €34 million.

Also, the thermal modernisation of around 100 apartment buildings in total involves investments of over €13 million, financed from EU funds (60%) and local and private funds (40%).

The overall local budget for transport sector, energy and climate-related projects in Timișoara exceeds €25 million in fiscal year 2013.

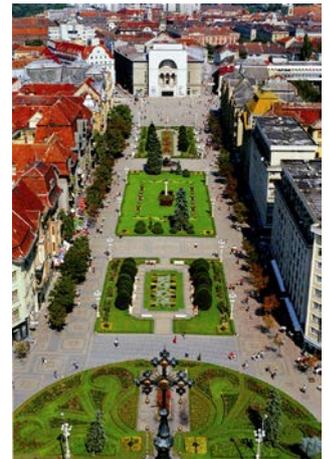
## Future Visions and Expectations

The current climate change strategy and action plan for fighting, mitigating and adaptation to climate change in the city of Timișoara' - the Sustainable Energy Action Plan (SEAP) elaborated in 2009 - will be continuously readapted to new challenges, and the new adapted vision and mission will be structured towards achieving 2050 EU goals.

Climate change policy in Timișoara should increasingly consider adaptation in addition to mitigation.

In the future, adapting priorities will be proposed, including a strategic approach to land-use planning, provision of local infrastructure, design and renovation of buildings, management of natural resource sustainability, and effective emergency planning.

Mainstreaming climate change adaptation into all relevant areas of public policy is



a priority. It is a long-term process including awareness-raising, integration into sectoral planning and implementation of specific adaptation options. Integrating climate change risks requires more flexible, preventive and forward-looking approaches and will involve legal, institutional and policy changes.



In the future, the risk of serious climate change impacts suggests that immediate actions are needed to significantly reduce GHG emissions in the coming decades. This will require greater policy attention to accelerate the uptake of existing green technologies and practices, such as policies to encourage greater energy efficiency. R&D programmes, regulations (e.g. building codes), and information instruments can help to overcome some of the market and information failures that slow the development and diffusion of climate-friendly technologies.

Another objective apart from mitigating climate change is promoting renewable sources in order to achieve lower local pollution and greater energy security.

In the energy sector, promoting clean renewable energy integration into climate change and energy policy objectives is particularly important as today's investments will lock in the infrastructure, fuel and technologies to be used for decades to come. Similarly, the buildings and transport infrastructure put in place today will be in use for decades or centuries.

Therefore, greater attention must be paid to the energy efficiency requirements in building codes and long-term public transport planning.

The Timișoara municipality's expectations are related to improving a few key areas: maximising energy efficiency as well as increasing the use of renewable energy, thus also contributing to climate change mitigation. Improving policymakers' and the local community's knowledge of the problems and consequences of climate change, particularly in view of integrating these issues into sustainable development strategies, is also important.

Last but not least, Timișoara expects to strengthen regional and European cooperation related to climate change, as well as exchange experiences and best practices with other cities that have defined strategies in this regard.





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