



# EBRD grants to implement sustainable transport system

Arad, Romania

## IN A NUTSHELL

After large investments in the rehabilitation of the tram infrastructure network, the local administration has started renewing the tram fleet by acquiring six energy-efficient trams. The city also began modernising the main depot and the first steps towards implementing an e-ticketing system and outsourcing the county bus transportation services.

### A city committed to sustainable mobility

Located on one of the main Pan-European road and rail corridors, the city of Arad is one of the most dynamic Romanian cities, gifted with a rich architectural heritage and a generous natural environment, mainly due to the Mureş river.

Arad has traditionally been a city of trams, with the largest network in Romania, after Bucharest (171 km), notable for its coverage and accessibility. Arad also recently became a city of bicycles, with the longest urban network of cycle lanes in the country (135 km) and the highest rate of bicycle use nationally (8.2%).

In the past years, the local administration developed a series of environment-oriented strategies and a Sustainable Urban Mobility Plan. Arad has committed to reducing its carbon emissions by 23% by 2020 and plans to sign up in the near future to the Covenant 2030 targets of reducing CO<sub>2</sub>/GHG emissions by at least 40%.

Between 2005 and 2014, 23.24 km of tramways were revamped under different programmes financed from refundable and non-refundable foreign funds, as well as from the local budget.

### The Arad Urban Transport Project

The Arad Urban Transport Project is a large tram infrastructure revamping project, implemented in two stages between 2006 and 2013. A long tradition of tramways and an extended existing infrastructure convinced the municipality to invest in trams rather than other transport systems. It was financed from two loans granted by the European Bank for Reconstruction and Development (EBRD), guarantor of the compliance with the environmental standards, through its strategic goal to promote projects with significant social and environmental benefits.



An energy efficient tram -Imperio- in Arad

## ARAD



Population:  
172,827

Area:  
46.18 km<sup>2</sup>

Signatory  
to the Covenant  
of Mayors since:  
2010

CO<sub>2</sub> emission  
reduction target:  
-23% by 2020  
compared to 2008

Following the successful implementation of the first two stages of the project, which targeted the renovation of the infrastructure, the Municipality of Arad and EBRD started a third stage in 2012 focused on the procurement of new tramcars, revamping of the tram depot, implementation of an e-ticketing system, and the improvement of bus transportation on the inter-urban bus routes.

## A new transport system to shape new habits

Six new energy efficient trams were procured in 2014, which are operating on one of the longest urban lines, line no. 3. Their electricity consumption is approximately 1.6 kW per kilometer, while the tender requirement was 1.8 or below. The municipality hopes that the benefits of this project will radically change the attitude of the population towards the role of trams within the transportation system.

As new trams with improved access are added to the existing tram fleet, and by implementing a ticketing system designed to optimise routes and timetables, public transportation is expected to be used widely in Arad. This will have positive effects on the environment which will be closely monitored in the months to come. Ticket prices were not impacted by the modernisation thanks to subsidies granted by the local council. By improving the service rather than increasing travel fares, the municipality expects a greater number of people to use public transportation and ensure the return on investment.

The contract for the modernisation of the tram depot was signed on 14 September, 2017.

The local administration also continues to support investments by the local transport operator in other efficient means of transportation. The objective of these projects is to improve passenger comfort and safety and provide easy access for people with reduced mobility. For instance, the municipality has launched the following operations:

- Procurement of electric rolling stock (10 new trams) – 2018-2020.
- Procurement of high-capacity ecological buses (30 buses) – 2018-2020.
- Procurement of low-capacity ecological buses (up to the amount of €3,000,000) – 2017-2023.
- Procurement of electric buses (5 buses) – 2017-2018.

Another investment has been initiated to modernise 20 GT6 and GT8 trams so that they may be adapted for people with reduced mobility.



23 km of tramways revamped between 2006 and 2013

6 new trams procured in 2014

10,603 t CO<sub>2</sub> eq./a of reduction achieved thanks to the project as in 2015 (source: benchmark of excellence)



## FINANCING THE PROJECT

- + **Financing source(s):**  
Phase III (2012)
  - Loan from the EBRD: €7,248,101
  - Local budget: €1,739,544
- + **Total amount:**  
€8,144,445
- + **Payback period:**  
All loans are reimbursed through the local budget. The loan for Phase I has already been reimbursed, the other two are being reimbursed.

## USEFUL LINKS

- ▶ Covenant of Mayors profile of Arad: <http://bit.ly/2BGEkU0>
- ▶ Arad Urban Transport System (EBRD): <http://bit.ly/2qig4Dx>
- ▶ Arad Sustainable Urban Mobility Plan 2010-2020 (Romanian): <http://bit.ly/2EfsCS6>



## CONTACT

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