



Kragujevac

KEY INFORMATION ABOUT THE PROJECT

REGIONAL WASTE MANAGEMENT SYSTEM IN KRAGUJEVAC
(City of Kragujevac and the municipalities of Arandelovac, Knić and Rekovac)

PPF8/EuropeAid/137044/DH/SER/RS

Sector: Environmental protection/Waste management



The project includes the **City of Kragujevac** and **three municipalities: Arandelovac, Knić and Rekovac** in the Šumadija District, which sits in Serbia's central part. The total population in these four populated areas stands at around 273,263 of which 179,417 live in the City of Kragujevac.

The waste collection rates vary greatly across these municipalities, with the widest coverage in the city of Kragujevac at 94%, followed by Rekovac at 69%, Arandelovac at 68%, and Knić at 14%. Because there are no actual measured quantities, the total tonnage of solid waste is estimated at 97,000 tonnes annually, of which 68% is generated by the City of Kragujevac. According to the information on the composition of waste, around 72% of the collected waste is biodegradable.

This region uses no primary waste selection. It has no recycling yards (for obtaining recyclable components) nor municipal waste treatment infrastructure. Collected waste is usually transported to the existing unregulated landfills, where disposal takes place with no specific protective measures. The capacity of existing waste disposal sites will soon reach its maximum, and no procedure is in place to find other solutions.

The development of an environmentally sustainable waste management system with a view to reducing environmental pollution and degradation is crucial at both the regional and local levels for each populated area. The project's overall objective is the construction of an adequate municipal infrastructure for collecting, transporting, sorting, and recycling waste based on the principles of vicinity and self-sufficiency, as well as addressing the harmful negative effects of waste, in a systematic and organized way.

PROJECT OBJECTIVES

- » Environmental protection and raising the quality of living conditions in the Šumadija District;
- » Using waste for energy purposes for simultaneous energy, environmental, and economic benefits — eco-sustainability;
- » Improving the quality of soil and watercourses of Uglješnica, Lepenica, and Velika Morava;
- » Improving the sanitation and public health for the people of Kragujevac and the municipalities of Arandelovac, Knić, and Rekovac;
- » Improved management of resources for living and increased quantities of renewable secondary raw materials (glass, metals, plastics, paper, etc.), as well as selling them on the market;
- » Applying mechanical and biological treatment of waste for producing compost, biogas, and solid fuel;
- » Producing electricity by combusting of the resulting biogas, which would mean an important step towards Serbia's integrating in the EU energy market and ensure conditions for raising the quality of life;
- » Providing core technical solutions for the collection, transportation, and processing of municipal waste at the regional and local levels;
- » Investigating and establishing the spatial, environmental, commercial, and economic feasibility of the proposed technical solutions for the development of the regional waste management system;
- » Improving protection of the environment and environmental resources in line with the Waste Management Strategy on the territory of the Republic of Serbia;
- » Ensuring compliance with EU waste and landfill regulations in the project zone.

PROJECT DESCRIPTION

Within the EU PPF program, the EU PPF8 project unit's expert team will produce:

- » Feasibility Study with Cost-Benefit Analysis
- » Conceptual Design for the Regional Waste Management Centre in Kragujevac (MBT)
- » Preliminary Design for the Regional Waste Management Centre in Kragujevac (MBT)
- » Environmental Impact Assessment Study for RCUO
- » Conceptual Design for the Separation Plant and Transfer Station in Arandelovac
- » Building Permit Design for the Separation Plant and Transfer Station in Arandelovac
- » Detailed Design for works on the Separation Plant and Transfer Station in Arandelovac
- » Tender Documentation for the Regional Waste Management System in Kragujevac (MBT) in line with EU standards/norms and good engineering practices.

The preliminary activities — including support in the preparation of the Terms of Reference and Project Evaluation — are fully completed. The Cooperation Agreement on setting up the regional waste management system was made between the City of Kragujevac and the municipalities of Arandelovac, Knić, and Rekovac, which covered by this project.

The project is part of documented development strategies:

Spatial plans and general city plans for the local self-governments included in the project; Local Waste Management Plan of the city of Kragujevac, 2012; EU Waste Framework Directive, 2008, and EU Landfill Directive, 1999; National Priorities for International Assistance (NAD) 2014–2017; NEAP (National Environmental Action Plan); Environmental Approximation Strategy 2011–2019 (EAS); National Waste Management Strategy 2010–2019.