

EDU-CLIC: EDUCATION FOR SUSTAINABLE MUNICIPAL SOLID WASTE MANAGEMENT

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INTRODUCTION

Landfills are significant contributors to the national carbon footprint worldwide, as they are considered the third largest anthropogenic source of methane emissions, responsible for 11% of all global methane emissions. The landfilling, either in sanitary landfills with gas collection systems or in unsanitary landfills or dumps, is still the most widespread municipal waste disposal system globally. The development of sustainable waste management technologies has been driven by the fact that natural material and energy resources are not unlimited. In addition to prevention/reduction of waste generation, modern waste management systems include recycling and composting, as well as reuse of transformed materials and energy recovery wherever possible (Fig. 1).

In order to make municipal solid waste (MSW) management more sustainable, environmental education and waste management education are crucial, as they raise public awareness and enable the implementation of efficient and sustainable modern waste management systems, which not only depend on the implementation of appropriate technical and economic strategies, but cannot function without the contribution of people (both qualified professionals and citizens in general).

EDU-CLIC

The educational-professional project "**EDUcation for CLimate Change mitigation in the municipal solid waste sector**" is a part of the European Climate Initiative (EUKI) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK).

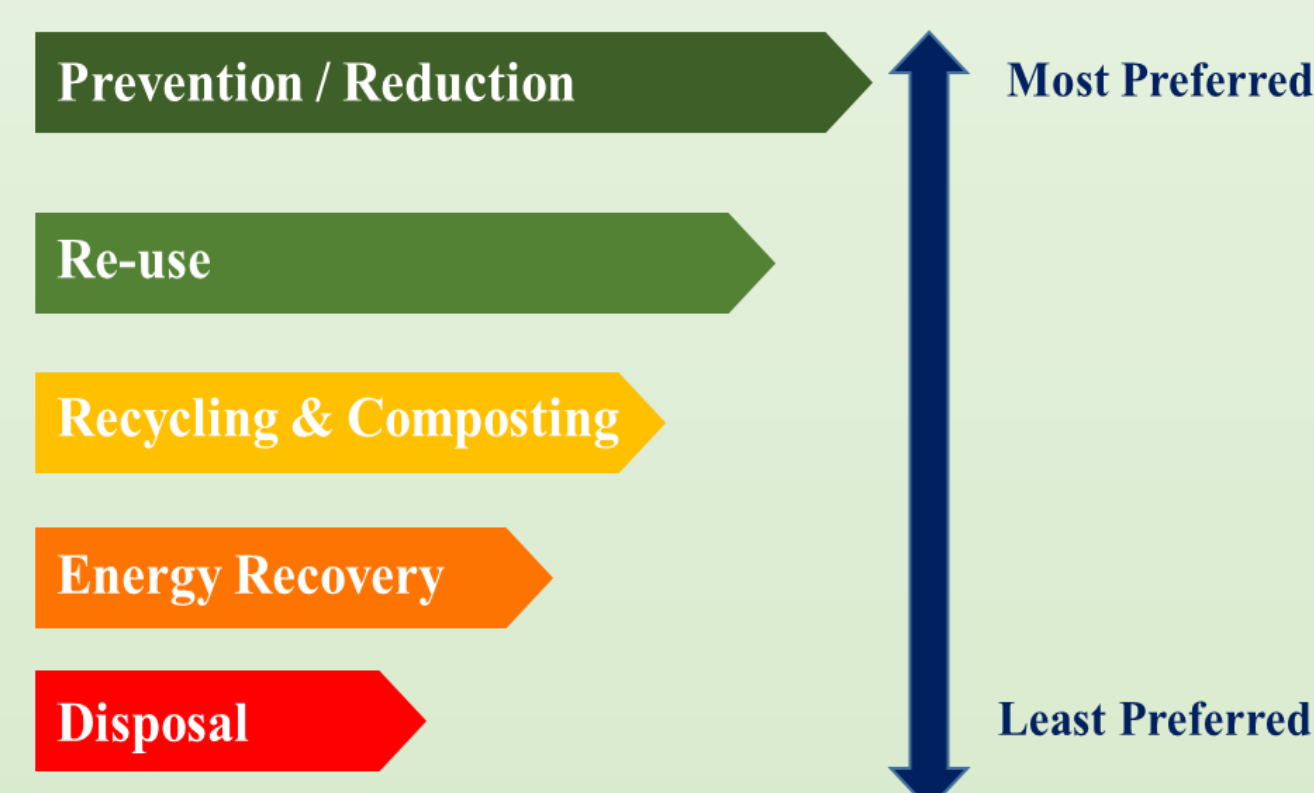
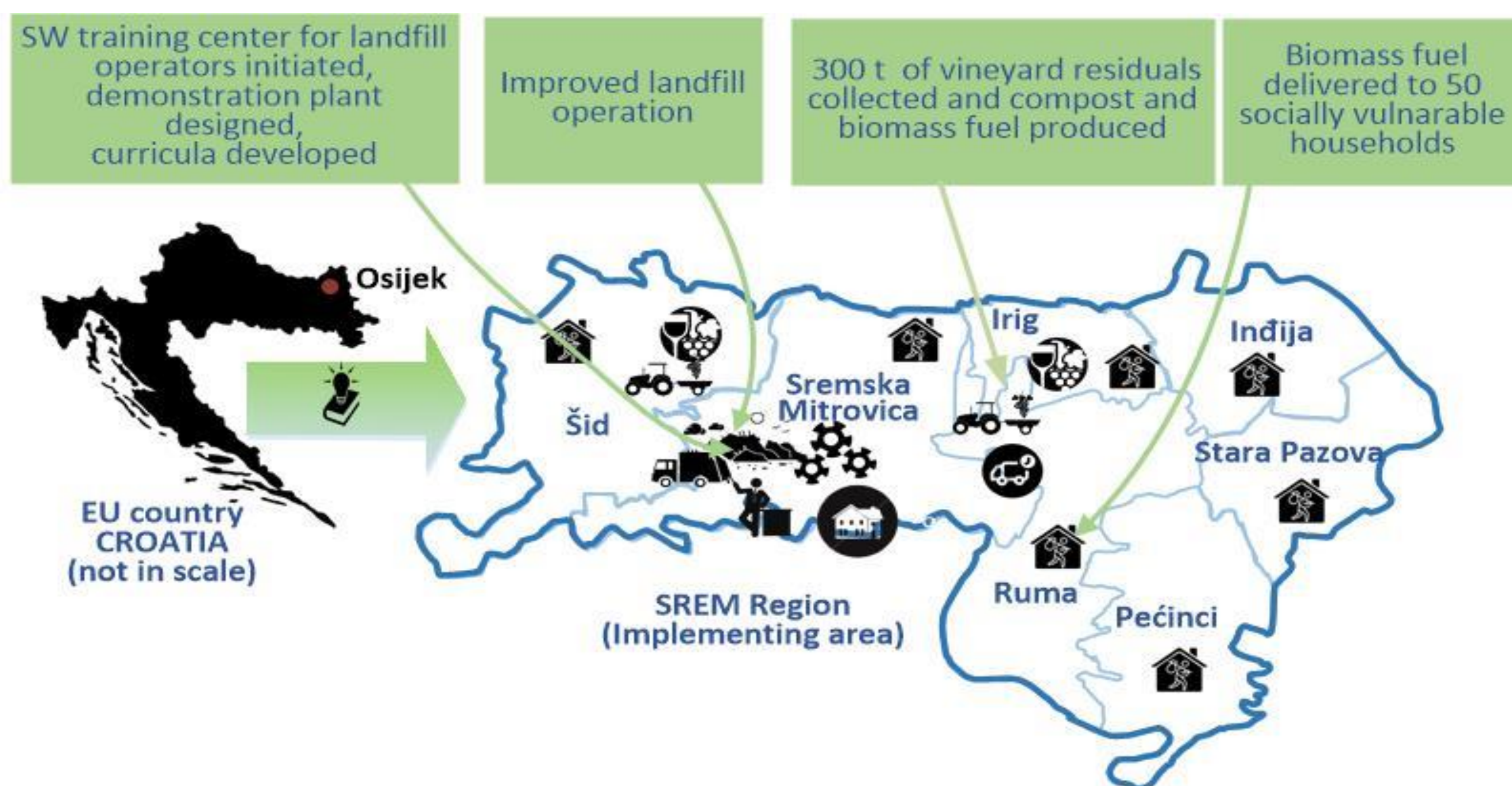


Figure 1 Schematic presentation of the waste hierarchy

GOALS OF EDU-CLIC PROJECT

The project EDU-CLIC aims to improve waste management infrastructure and practical education (training) of personnel involved in MSW management, especially landfill operators. Within the project activities the infrastructure for a training centre for landfill operators will be created and curriculum to train operators in sustainable MSW management will be developed. In addition, the project aims to upgrade an existing landfill in Sremska Mitrovica, Serbia (the country of project implementation), which will serve as both a demonstration/training centre and a blueprint for future modern MSW centres in the region. In order to make the management of MSW at the Sremska Mitrovica Regional Landfill more sustainable, activities/strategies are also planned to reduce methane emissions by 16.65 tons per year. Agricultural waste (biomass) will be collected in the region and used for the production of compost and firewood briquettes that will be delivered as fuel for vulnerable groups, thus realizing the principles of the circular economy and the three pillars of sustainability: economic viability, social justice and environmental protection.



LONG TERM GOAL

Reducing greenhouse gas emissions from landfills and thereby mitigating the negative environmental impacts of landfills.