

# SMART DECISION TOOLS FOR REDUCING HAZARDS TO OUR ENVIRONMENT AND WATER RESOURCES BY REHABILITATING OPEN DUMPS-



## PROJECT PROMOTER

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(Turkey)

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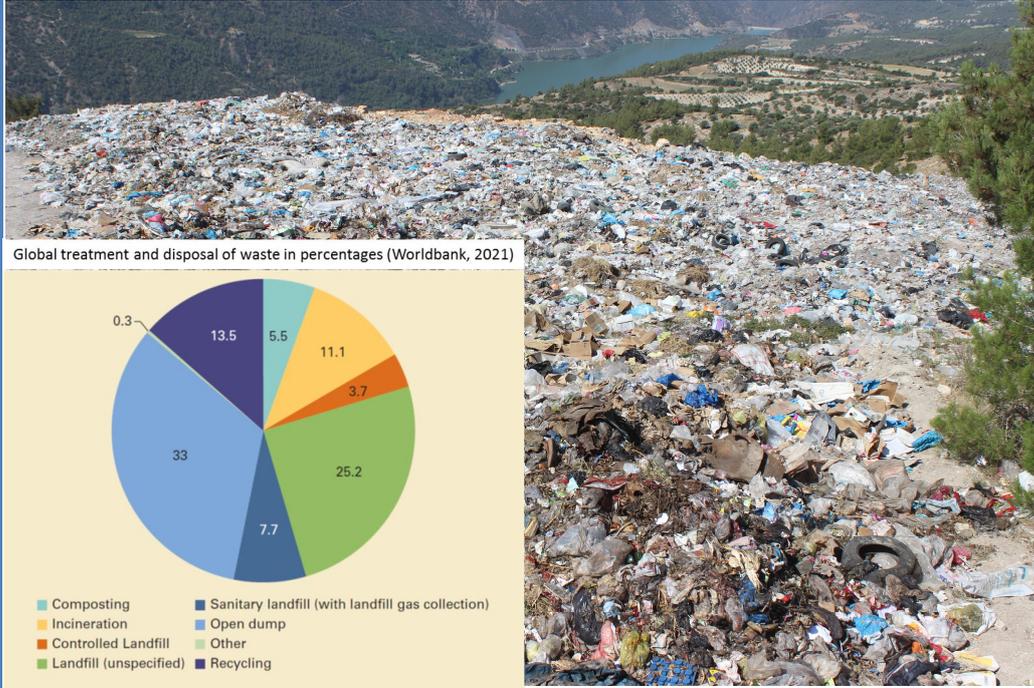
Research and Development  
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Petroleum-Gas University of  
Ploiesti (Romania)

Training 2000 (Italy)

Denizli Metropolitan  
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Comune Di Fano (Italy)



-Open dumps is still being used in many countries as a way for municipal solid waste disposal. Even in the countries which started to use the landfill method, abandoned open dump sites continue to endanger the environment and human health.

-The main environmental impacts include visual concerns, air contamination, odors and green-house gasses (GHG) emission, sources of diseases, surface water and groundwater pollution.

-Open dump sites that are no longer in use need to be rehabilitated and the existing ones should be improved.

-**SMARTENVI** project seeks to develop, pilot and test smart digital tools, training methods, and materials for reducing hazards to the environment and water resources by rehabilitating open dumps.

-The results of the project consider the current environmental footprint and the impact of rehabilitation options, including impacts resulting from emission to air, emission to waters (leachates), structural stability including slope failures, waste, use of resources, land occupation, relevance to circular economy concept.

KA226- PARTNERSHIPS FOR  
DIGITAL EDUCATION READINESS  
2020-1-TR01-KA226-VET-098150

PROJECT PERIOD: 2021-2023

PROJECT WEB PAGES

<https://smart-envi.gtu.edu.tr>

<https://ec.europa.eu/programmes/erasmus-plus/projects/eplu-project-details/#project/2020-1-TR01-KA226-VET-098150>





Open dump site before and after rehabilitation (Cameli, Denizli, Turkey)

## SMARTEnvi INTELLECTUAL OUTPUTS\*

### I01- Decision Tool for Rehabilitation of Open Dumps

This smart decision tool aims at supporting the users in the rehabilitation process management of open dumps; in fact is designed to guide users interactively through this process that includes a first evaluation step within the rehabilitation mechanism of the open dump. This evaluation will help the users to take risk based optimum decision. The tool incorporates the algorithm and methodology developed with available input from the user to provide the best decision for the rehabilitation. The tool functions in web platform and smart devices.

### I02- Multilingual e-learning-platform

The multilingual e-learning platform hosts learning material for open dump rehabilitation. It provides up to date open source online training material based on learning outcomes defined according to EQF and ECVET standards in partner countries. The learning modules can be adapted to the trainees needs and pace.

### I03- Competence Tool

The Competence tool will specify and describe the learning outcomes and the training units of the SMARTEnvi learning path. The tool will allow the users to analyse prior learning on the topic and create personalized training paths for specific professional competences.

### I04- Learning Modules

The 8 modules and 8 case studies produced in this output cover the fundamental basics, developments, and technologies related to rehabilitation of open dumps. The users will be able to learn and apply up to date information by using the tools produced in the project.

### I05- Smart Guidance Manual

The manual provides guidance to the use of the SMARTEnvi results linking to the needs of the trainees and satisfaction of the training requirements.

\* All intellectual outputs of this project will be freely available to beneficiaries that include decision makers, engineers, technicians, teachers, vocational trainers, and students along with all interested institutions, companies, and organizations.

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