DEVELOPMENT OF RESOURCE-EFFICIENT AND ADVANCED UNDERGROUND TECHNOLOGIES

PROJECT OBJECTIVES

The DRAGON project aims to increase the amount of excavated material from underground infrastructure projects that can be used in the industrial minerals sector, reducing landfill and replacing the need for primary mineral resources.

METHODOLOGY

Technologically the DRAGON project will develop automated analysis and processing units installed directly on tunnel boring machines, which will be a real breakthrough in the underground construction sector.

The use of excavation material for various purposes is designed to save natural primary resources while also providing a high economic value.

Life Cycle Assessment (LCA) and Mass Flow Analysis techniques will be used to compare different scenarios of use and disposal of the excavation material.

The key environmental benefits include a substantial reduction in environmental pollution, CO₂ emissions and land use for the disposal of excavation material thus approaching the aim of achieving zero waste from underground construction.