

Expected Impact



MINE.IO project will be energy saving and production improvement, through electrification and proces automation.



Contribute to the creation of environmentally friendly, resource-efficient, and production-efficient sustainable mining practices.



Technologies and processes focused on making the production of raw materials more automated and digitalized.



The novel digital infrastructure will embrace the technologies, facilitating openness, sharing, and collaboration.



MINE.IO

A Holistic Digital Mine 4.0 Ecosystem

MINE.IO aims to provide solutions that will build a novel mining digital ecosystem and a systemic structure for the implementation of Industry 4.0 in mining industrial environments.



GFT



Contact us



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the European Union

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Partners

25



Duration

42 months



Budget

€ 14M



Demonstrations

7 Pilots



Workload
optimization



Application
marketplace



Waste reduction
and reuse



Digitization of all
mine procedures



Increase of energy
efficiency and production



Workflow
automation



Electrification of
underground trucks



Environmental
footprint reduction

Pilot sites

ML and AI tech optimize
flotation process control in
mineral plants



Ore Processing Plants,
KGHM Polska Miedź S.A.,
Polkowice, Poland

Gold mine - primary use
case for electrification and
automation



Björkdal gold mine,
Sweden



Underwater tech
validation for mines.
UX-1Neo robot maps
environments



Malaposta open pit site,
Urgeiriça mine,
Portugal



Digitalisation Drill
Operations and Advanced
Digital Mining Maintenance
& Digital Smelter



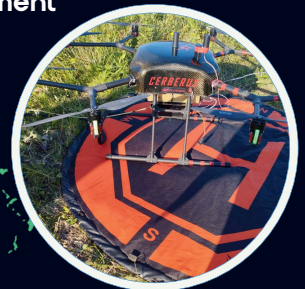
Research and Education Mine
"Reiche Zeche",
Freiberg, Germany



Digital waste solutions with
Muon Tech for mining
environmental
management



Lavrion Ancient Silver Mines,
Attica Region,
Greece



Fusing geophysical data for
tailings facilities monitoring
and management



Pyhäsalmi Mine,
North Ostrobothnia,
Finland