



European
Commission

EASME

Executive Agency for Small and Medium-sized Enterprises



Five years into the Horizon 2020 programme

promising activities and results in mineral exploration, mining and processing



Executive
Agency
for SMEs

Courtesy of the VAMOS project



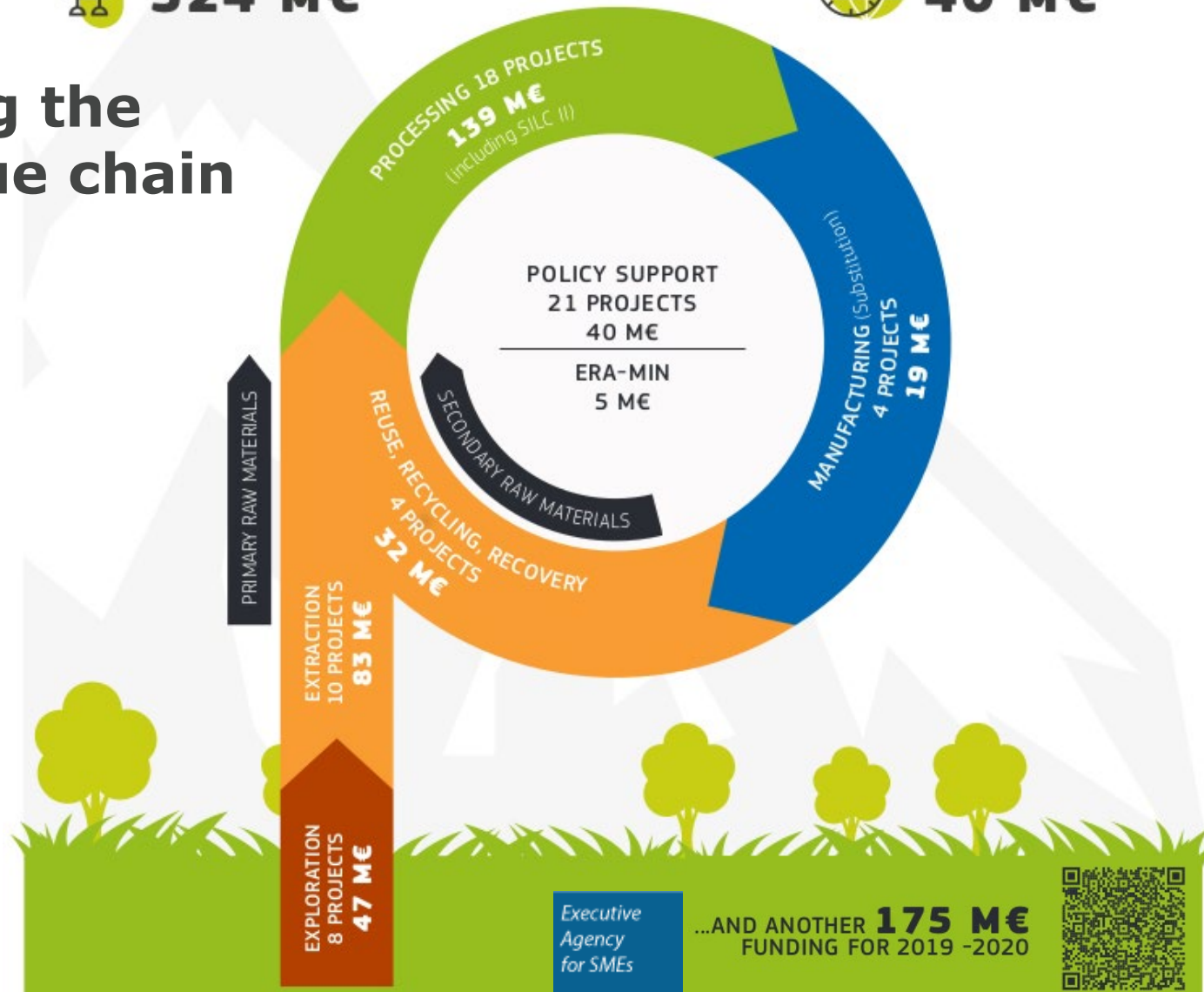
RESEARCH & INNOVATION
324 M€

European
Commission



POLICY SUPPORT
40 M€

Addressing the whole value chain



Executive
Agency
for SMEs

...AND ANOTHER **175 M€**
FUNDING FOR 2019 -2020

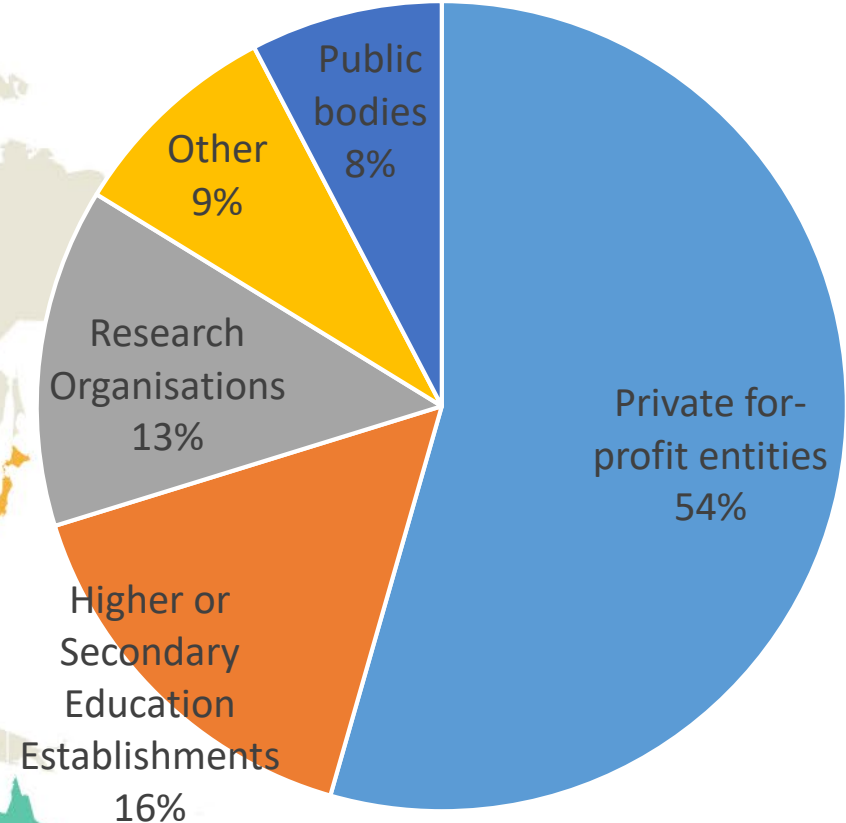


Open to the world

66 projects with 365 million € EU funding

1024 project participations by 665 organisations

A majority from the private sector



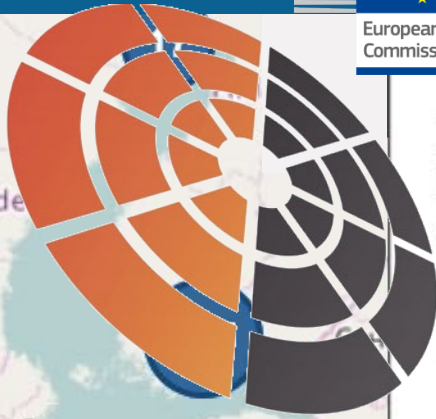
EU contribution in M€

- [0,00 ; 0,05 [
- [0,05 ; 0,15 [
- [0,15 ; 0,30 [
- [0,30 ; 0,80 [
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- [17,00 ; 30,00 [
- [30,00 ; 50,00]



Innovation Radar

www.innoradar.eu



Process for recovering Platinum Group Metals from material like ores, tailings and recyclates by selective chlorination and subsequent reduction into metals in a molten salt reaction media



Topic: Smart & Sustainable Society

Maturity: Optimisation ?

Innovator: SINTEF AS

Developed in project: PLATIRUS



[View Detail](#)

Executive Agency for SMEs

UNEXMIN

www.unexmin.eu

- Autonomous robot for mapping flooded deep mines tested in field trials
- Flooded open pit and underground tunnels in Kaatiala, Finland
- Flooded underground mine in Idrija, Slovenia



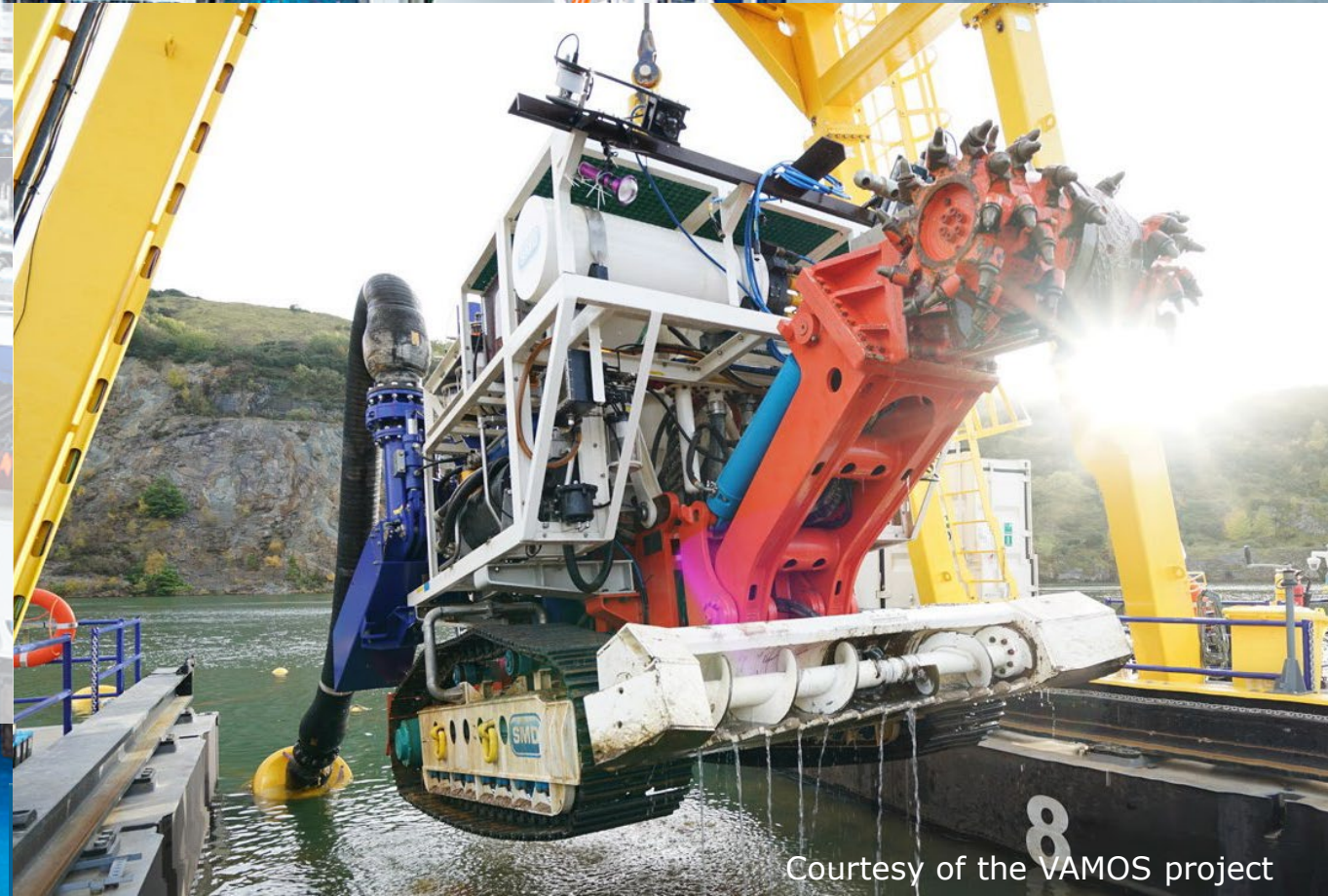
European
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VAMOS

<http://vamos-project.eu>

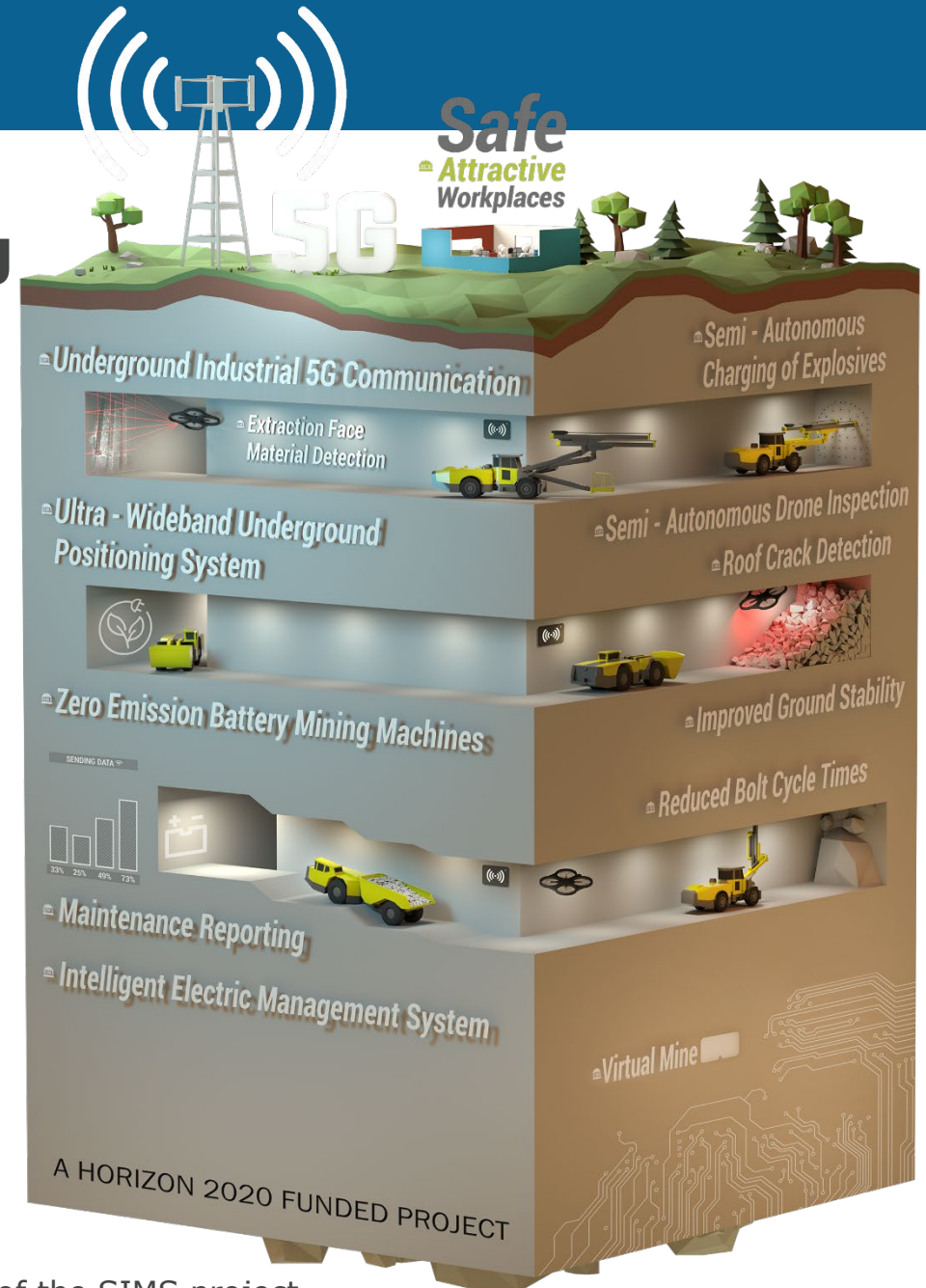
- Prototype of an underwater remote-controlled mining machine
- Tested in Lee Moor, Devon, UK, and Silvermines, Ireland
- The Economist: "A new robot system will reopen abandoned, flooded mines"

<https://www.economist.com/science-and-technology/2018/11/08/a-new-robot-system-will-reopen-abandoned-flooded-mines>



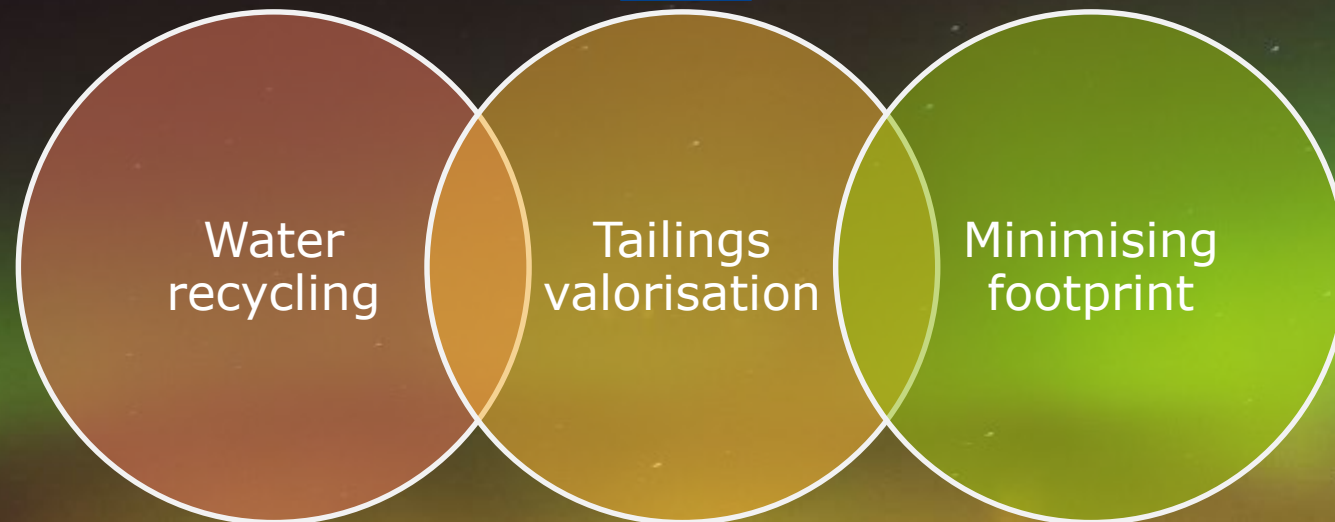
SIMS - Sustainable Intelligent Mining Systems www.simsmining.eu

- Virtual Reality assisted Process control
- Battery powered semi-autonomous equipment
- Robotisation of charging machine
- Communication & positioning
- Increased bolting efficiency
- Demonstrations in Sweden (LKAB & Boliden), Finland (Agnico Eagle), Poland (KGHM) and Germany (K+S)



ITERAMS

www.iterams.eu



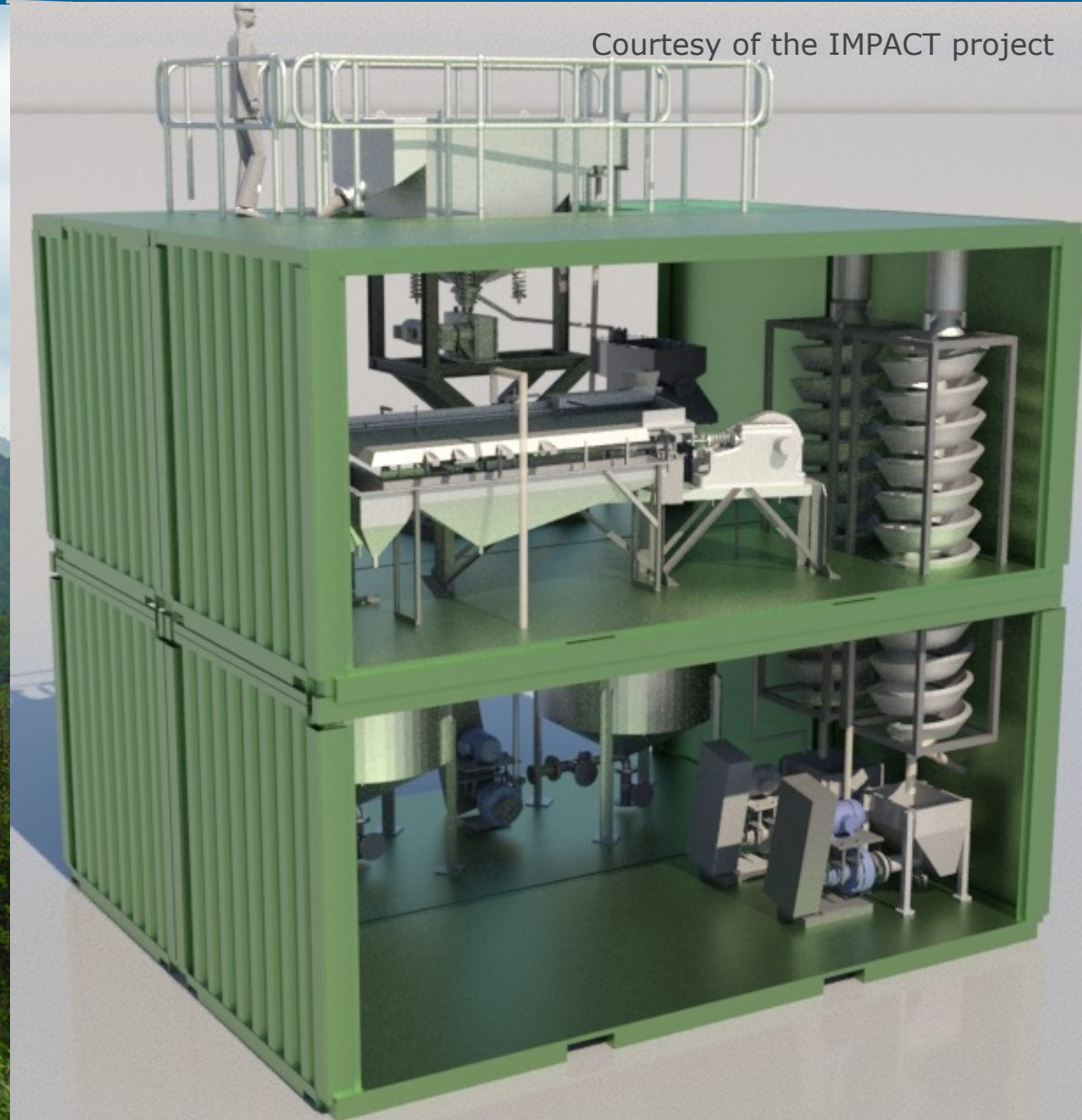
- Protocol for closing water loops
- On-line water quality monitoring system
- Water accounting
- Geopolymer parameter estimation for covering mine tailings

IMPACT

<http://blogs.exeter.ac.uk/impactmine>

- SOSO mining concept for small, high-grade ore deposits
- Modular plant for mining and processing
- Field testing in Olovo and Gorazde in Bosnia-Herzegovina

Courtesy of the IMPACT project



Minfuture



Find out more

EASME data hub: <https://sc5.easme-web.eu/?theme=green> (filter "raw materials")

Horizon Dashboard: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard>

Societal Challenge 5 on the EASME website: <https://ec.europa.eu/easme/en/horizon-2020-societal-challenge-climate-action-environment-resource-efficiency-and-raw-materials>

 Coordinator  Participant  Demo site



EASME on Twitter

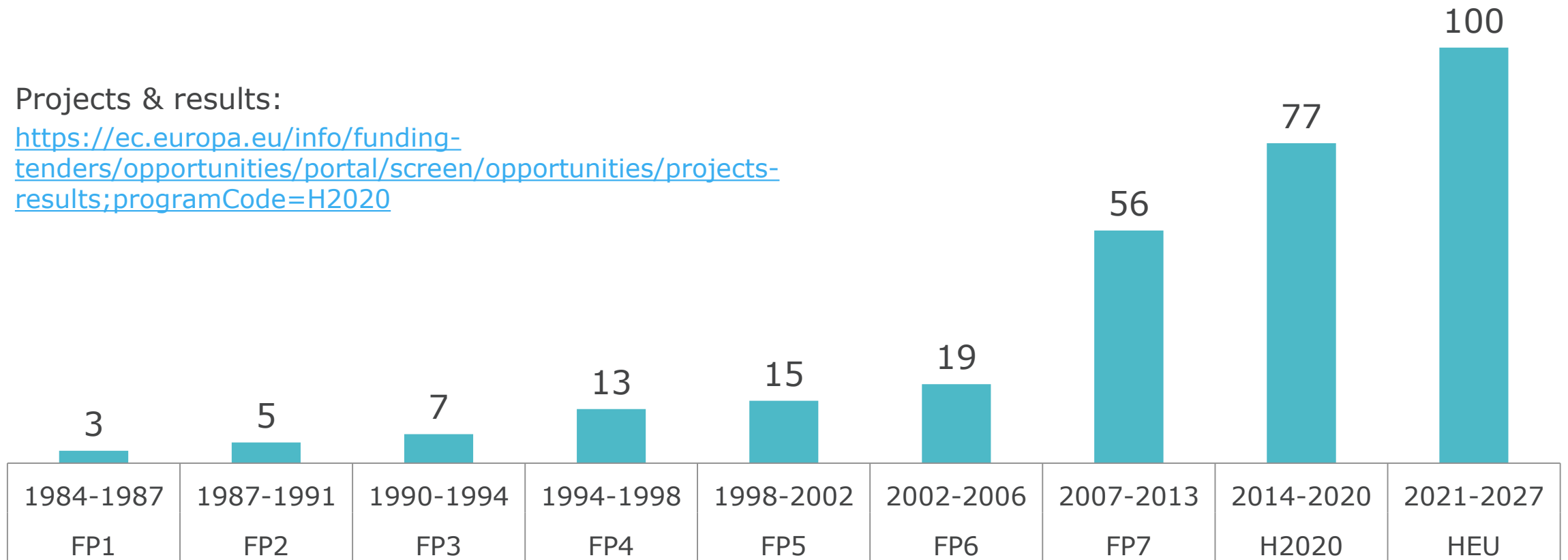


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EU Research & Innovation 1984-2027

Projects & results:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-results;programCode=H2020>



Evolution of investment in EU R&I (billion € current prices)