22 Consortium Partners from 10 Countries

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Cover image: Port of Rotterdam, the Netherlands.

ABOUT

Coordinated by TU Delft, **ZERO BRINE** advances circular economy business model solutions to reduce industrial saline wastewater streams by recovering and reusing the minerals and water from the brine in other industries, thus 'closing the loop' and improving the environmental impacts of production.

ZERO BRINE includes 22 partners from research institutes, SMEs, construction companies, and end-users from 10 countries. **ZERO BRINE integrates innovative technologies to recover water and minerals of sufficient purity and quality for good market value.**

With a demonstration project near Rotterdam Port, Netherlands, and 3 other pilot projects in Spain, Poland and Turkey, **ZERO BRINE** is a 4-year Innovation Action (IA) that provides massive potential to replicate and deploy circular economy solutions in the field of industrial wastewater treatment.

INDUSTRIAL WASTEWATER

↓

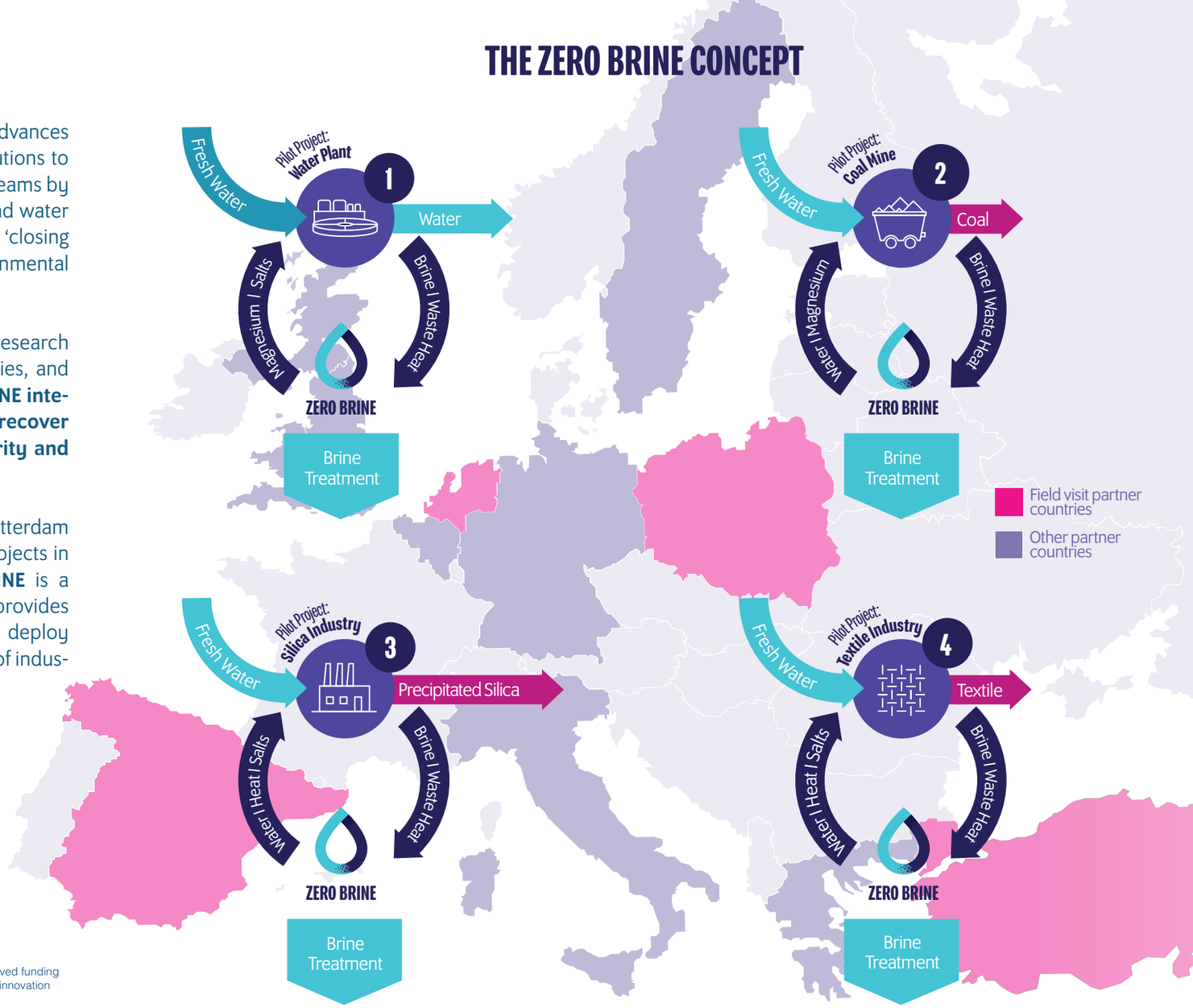
RESOURCE RECOVERY

↓

CIRCULAR ECONOMY

The ZERO BRINE project (www.zerobrine.eu) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Number 730390.

THE ZERO BRINE CONCEPT



PILOT PROJECTS

1 WATER PLANT (NETHERLANDS)

The Demonstration Water Plant in the Botlek area uses ion exchange, membrane technology, nanofiltration, evaporation and crystallization to recover magnesium, NaCl solution and sulphate salts.

2 COAL MINE (POLAND)

Coal mine water in Laziska Górne will be treated using nanofiltration, reverse osmosis and electrodialysis to recuperate highly valuable raw materials like magnesium.

3 SILICA INDUSTRY (SPAIN)

Recovering water, sodium sulphate, waste heat and alkalis by using nanofiltration, eutectic freeze crystallization and forward feed evaporation technologies.

4 TEXTILE INDUSTRY (TURKEY)

Recovering concentrated salt solutions to be used in the textile dyeing process baths using nanofiltration, oxidation and ion exchange technologies.