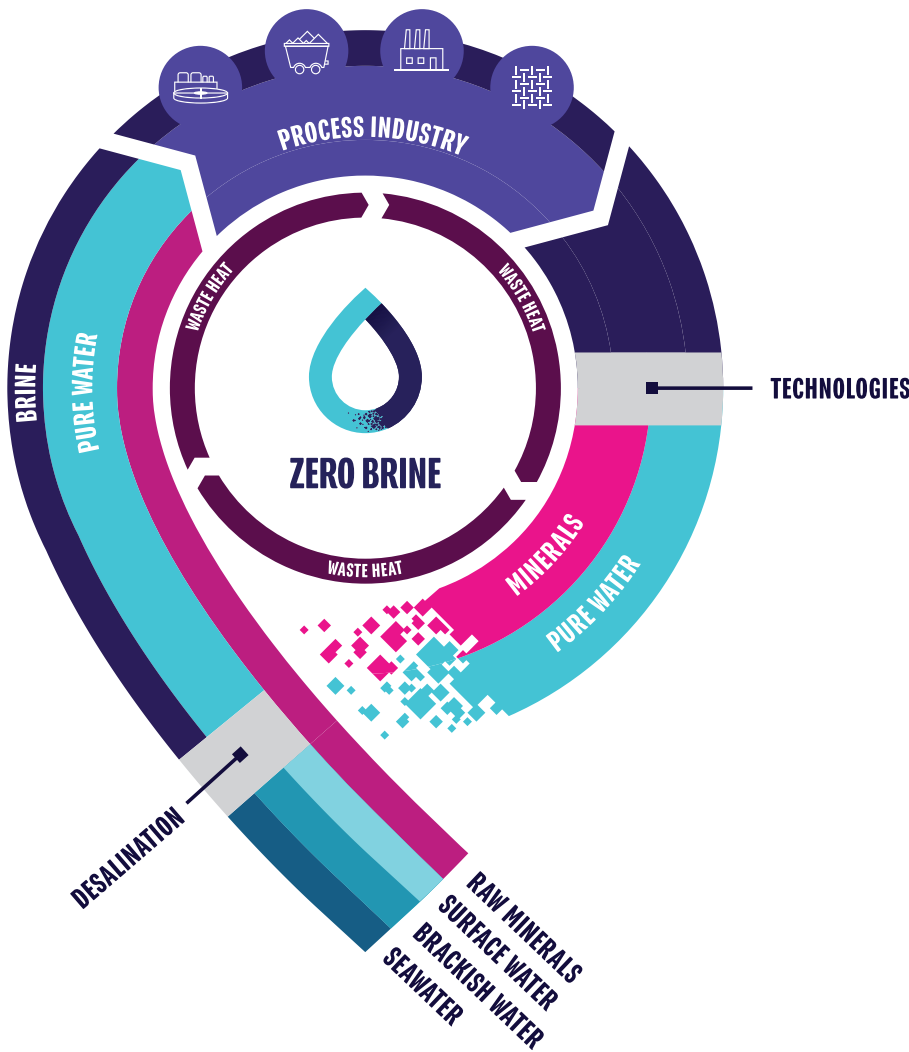


ZERO BRINE & THE ONLINE BRINE PLATFORM: REDESIGNING THE VALUE AND SUPPLY CHAIN OF WATER AND MINERALS



Overview of ZERO BRINE

The ZERO BRINE project aims to facilitate the implementation of the Circular Economy package and the SPIRE roadmap in various process industries by developing necessary concepts, technological solutions and business models to redesign the value and supply chains of minerals and water while dealing with present organic compounds in a way that allows their subsequent recovery.

These resources will be recovered from saline impaired effluents (brines) generated by the process industry while eliminating wastewater discharges and minimizing the environmental impacts of industrial operations through brines (ZERO BRINE). To facilitate this, an active web service, the Online Brine Platform (OBP) for promoting and practically implementing Industrial Symbiosis was developed by the National Technical University of Athens (NTUA).

ZERO BRINE is designing the circular business model for the value chain of water and minerals, through industry brines. Key strategic technologies developed during EU-funded projects join hands to enable the transition from linear to circular economy, while participating end-users ensure the market exploitation of the project results.

INITIATING THE ZERO BRINE PROJECT THROUGH THE ONLINE BRINE PLATFORM

Online Brine Platform

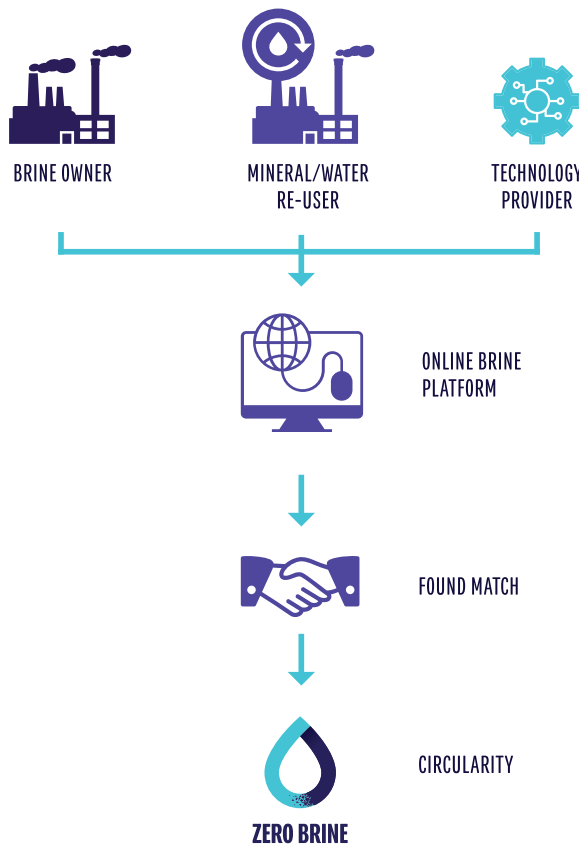
The Online Brine Platform is an active web service that aims to promote the flow of secondary raw materials by linking Brine Owners with the Mineral/Water Users and the Technology Providers. The providers of waste heat are also of a high importance on the OBP. The service allows new entries to register according to their role, and let the users search information and establish links with relevant parties. Hence, a network of interested stakeholders will be created to facilitate the transition towards Circular Economy within the process industry. In addition to the OBP, where the matching between relevant parties occur, a web portal was created to access specific information in the domain of saline waste water management.

What's in it for the industry?

Users registered to the platform will be able to access information with respect to the available quantities and qualities of saline wastewater, recovered materials and resources needed by the end users as well as, to the location and proximity of the industrial sites. Thus, industries will be able to make informed decisions regarding the management of their own resources. The OBP reduces the transaction costs (e.g. search and information costs) by proposing possible matches to the registered users. The matching will be based on the required and available materials as well as on the available quantities, on the proximity and on the required qualities. Browsing the portal will be free for all visitors and full access to all data is reserved for registered users.

Workshops about the Online Brine Platform

This online service will be supplemented by the organization of workshops and meetings which will be organized at industrial sites in Delfzijl, Emmen, Chemelot, Amsterdam, and Zeeland. The ISPT will also speak today about the ZERO BRINE and the Online Brine Platform adjacent to it at The mission – Sustainable water use in industrial processes workshop (at 15:10, Round 1). If you have any question regarding this project, please, come to the workshop or do not hesitate to approach us personally during the whole ISPT day. For any follow-up question, please contact: john.harinck@ispt.eu



Each actor can register to the OBP after uploading their respective information. The Brine Owners can upload their characteristics of brine, whilst the Mineral/Water users can contact industries with the desired material already on the OBP, or upload their proposal and wait for a potential match.

The OBP can automatically generate potential matches based on the users' input or the users can browse themselves for possible matches on the OBP. After the match-making process, it is up to the industries to finalize the match in order to participate in achieving Circularity in the Process Industry.

CONSORTIUM PARTNERS



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