



ZERO BRINE

D10.1 Communication strategy

February 2022

FINAL



Deliverable 10.1	Communication strategy
Related Work Package	WP10 – Dissemination & Communication
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Grant Agreement Number	730390
Funding body	Horizon 2020 Framework Programme
Start date	1 Jun 2017
Project Duration	54 months
Type of Delivery (R, DEM, DEC, Other)¹	R = Report
Dissemination Level (PU, CO, CI)²	PU = Public
Date Last update	1 Feb 2022
Approved by	Roelof Moll, TU Delft
Website	www.zerobrine.eu

Revision no.	Date	Description	Author
0.1	20 Dec 17	M7 deliverable submitted	REVOLVE
0.2	28 Sep 18	M16 update to working draft	REVOLVE + All partners
0.3	10 Oct 20	M41 update to working draft	REVOLVE + WATER EUROPE
0.4	31 Mar 21	M46/51 updates to working draft	REVOLVE
1.0	31 Aug 21	M54 final	REVOLVE
1.1	1 Feb 22	Final review updates	REVOLVE



The ZERO BRINE project has received funding from the European Commission under the Horizon 2020 programme, Grant Agreement no. 730390. The opinions expressed in this document reflect only the author's view and do not reflect the European Commission's opinions. The European Commission is not responsible for any use that may be made of the information it contains.

¹ R=Document, report; DEM=Demonstrator, pilot, prototype; DEC=website, patent fillings, videos, etc.; OTHER=other

² PU=Public, CO=Confidential, only for members of the consortium (including the Commission Services), CI=Classified

Executive Summary

To fulfil Work Package 10 Dissemination and Communication objectives, a detailed communication and dissemination strategy was developed at the onset of ZERO BRINE (M3) to ensure the effective dissemination of the project's work and key findings through core communication tools to inform and engage key stakeholders. To achieve these aims throughout the project duration, the strategy is regularly updated to ensure optimal outreach and to elicit the active participation of all ZERO BRINE consortium partners in its implementation.

This document outlines the ZERO BRINE communication strategy, which is based on an in-depth stakeholder analysis and mapping exercise conducted at the project kick-off to identify the targeted stakeholders for the strategy. An update to this stakeholder analysis was conducted with the support of all project partners in M13 and a third revision in M40 with the support of Water Europe.

This deliverable was submitted in M3 with subsequent updated drafts reported throughout the course of the project. The final complete deliverable was submitted in M54 (November 2021).

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1. Overview of the project

ZERO BRINE aims to develop concepts, technological solutions and business models to redesign the value and supply chains of minerals (including magnesium) and water. Coordinated by TU Delft, the ZERO BRINE project advances circular economy 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 environmental impacts of production. The ZERO BRINE consortium includes 21 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. ZERO BRINE includes demonstration projects in Rotterdam Port, The Netherlands, and 3 other pilot projects in Spain, Poland and Turkey. ZERO BRINE is a 4-year Innovation Action (IA) project that provides massive potential to replicate and deploy circular economy solutions in the field of industrial wastewater treatment.

2. Objective of WP10 Communication and Dissemination

Communication and dissemination of the project outcomes is key to ensuring that the relevant stakeholders are effectively reached to highlight key results, showcase opportunities to support exploitation, and the uptake of policies for long-term impact. The objective of the ZERO BRINE communication strategy is to deliver the project outcomes to the right stakeholders through external communication, as well as enable optimal project results via internal communication. The ultimate goal of ZERO BRINE is to help raise awareness of the value of circular business models and thus to advance the circular economy concept for the project's replication in other industries and sectors, increasing Europe's competitiveness globally.

The communication and dissemination strategy provide a clear overview on how all communication channels, activities and tools work together to address the relevant stakeholder groups (process industries, mineral producers/distributors, end users, academia and research, innovative SMEs, authorities, policy makers, investors, environmental agencies, European Technology Platforms, SPIRE network, industrial clusters, and media). Work Package 10 is a horizontal work package, bridging in a cross-cutting way ZERO BRINE's activities, products and achievements. Although the content of this document relates directly to WP 10, the strategy will not succeed without the full cooperation of the coordinator and the work package leaders, all project partners' direct involvement, and support from the Advisory Board members.

The dissemination and communication strategy explains how and when WP10 will ensure ZERO BRINE is visible as a project to maximise its impact in research, policy, and practice.

The work will be divided into two areas:

1) The communication activities will support partners in implementation using different tools and methods.

2) The dissemination activities will target the external stakeholders and support the awareness raising and advocacy work in relation with ZERO BRINE products and results.

From the perspective of Communication activities, the overall aims of the strategy are:

- To contribute to networking and exchange of information and experiences between organisations and networks; to facilitate regular flows of information between project partners; and enable partners to receive regular process updates from the pilot projects and case study.
- To support partners in communicating and disseminating their work.
- To provide communication tools and a platform for effective dissemination and engagement based on a coherent strategy.
- To establish and maintain dialogue with and between relevant stakeholders.
- To facilitate regular flows of information between project partners and to ensure a constant exchange of information between research and policy developments.

From the perspective of dissemination activities, the overall aims of the strategy are:

- To inform and raise awareness about the work in ZERO BRINE; the innovation of the products and technologies used by disseminating the approaches; and results of the project among relevant stakeholders at the EU, national and regional levels.
- To disseminate widely and effectively ZERO BRINE's outputs through various channels to translate technical language and research findings into appropriate messages for **different audiences**.
- To **engage, influence and educate** relevant stakeholders with the aim of positively affecting technology uptake, research and legislative framework development.
- To organise at least three stakeholder consultation events.
- To perform field visits to the pilot demonstration projects for various target groups (journalists, politicians, students etc.) to understand the sustainable processes being implemented.
- To make stakeholders understand the aim of the project and appreciate its significance for their own organisation and clients.

3. Strategy & Implementation

a. Methodology

The above-mentioned aims will be achieved by the tasks and activities of WP10.

Representing and aligning with the respective milestones of the project, the deliverables are the actual products created by the partners. Deliverables allow the coordinator and work package leaders to make sure that progress and targets are being met in a timely and efficient manner.

The deliverables for the Dissemination and Communication of the ZERO BRINE project are:

D10.1	Communication Planning Strategy	M1-M3 (draft); final delivered M54	Nov-21
	Visual Identity Guidelines	M1-M3	Jun-17
D10.2	Website Development Launch	M4	Sep-17
D10.3	Policy Briefs/Reports	M24 (draft); final delivered M54	Nov-21
D10.4	Field Visits Reports	M24 (draft); final delivered M54	Nov-21
D10.5	Report on consultation events	M42	Nov-20
D10.6	Final conference proceedings	M54	Nov-21
D10.7	Report on capacity-building events	M54	Nov-21

REVOLVE is work package leader of WP10 Dissemination and Communication and coordinates the implementation of these activities. REVOLVE leads task 10.1, 'Develop a communication strategy including stakeholder analysis and core communication tools', task 10.3 'Policy briefs', task 10.4 'ZERO BRINE website', task 10.5 'Dissemination at high level conferences and events' and task 10.6 'Capacity building'. TU Delft, the coordinator, is specifically responsible for task 10.2 stakeholder consultation events and task 10.7 'Final ZERO BRINE Conference' with Water Europe. However, all partners will be involved in the activities undertaken in WP10 and responsible for the successful dissemination of ZERO BRINE.

This strategy will be available to all project partners for reference and guidance. It has been developed with reference to [*Communicating research for evidence-based policymaking. A practical guide for researchers in socio-economic sciences and humanities*](#) (European Commission, 2011) and [*Communicating EU Research & Innovation: A guide for project participants*](#) (European Commission, 2012).

The Dissemination and Communication strategy and plan represent the guide for partners towards the related activities and outline the appropriate channels and materials. The following key activities will be developed and undertaken:

1. Dissemination and communication strategy and plan
2. Stakeholder analysis and mapping process.
3. Logo and visual identity for the project.
4. Key messages and communication tools: Agreed and quality-controlled dissemination materials (leaflets, roll up, infographics, presentations, newsletters, posters, videos);
5. Develop and manage the ZERO BRINE website.
6. Social media (Twitter, LinkedIn, YouTube),
7. Media relations: Press releases issued and press conferences during ZERO BRINE 'peak' times; published project materials and publications in peer review scientific journals; press conferences.
8. Policy briefs for policy makers and experts and dissemination material.
9. Ensuring dissemination at high level conferences and events and networking with similar projects and international initiatives: presentations at conferences and events related to trans-disciplinary platforms in water, circular economy and sustainable development fields.
10. Capacity building activities – educational activities, site visits, training sessions – as a way of engaging and educating the relevant target groups and to advance dissemination and exploitation.

The activities of WP10 are to be discussed with partners on an on-going basis, to provide up-to-date information and ensure the access for all partners to project materials, and that all the dissemination messages are coherent and consistent. The aim is to support ZERO BRINE in achieving maximum impact on all identified target groups and all relevant policy areas.

Part of this work will entail rewriting, editing, and 'translating' academic or policy materials into more accessible materials. Such editing and redrafting will be carried out in close consultation with partners to ensure communications, dissemination and policy are consistent with the research conducted. The work undertaken in WP10 will contribute to ensuring the sustainability and transferability of ZERO BRINE's results. It includes the transfer of knowledge, raising awareness and supporting partners in other processes needed for transferability, future take-up, scale-up and follow-up.

According to the Article 29.1 of the Grant Agreement, each ZERO BRINE partner is required to disseminate the results that it has ownership of as soon as possible and to the best of their abilities to

the public by appropriate means, including scientific publications, newsletters, and media. Article 29.2 states all the partners have to ensure open access to all peer-reviewed scientific publications relating to its results. The aim of WP10 is to support dissemination activities of all partners. This is ensured by continuous interaction and exchange between REVOLVE and the respective WP leaders.

The language of this project is English. For purposes of consistency, we recommend adherence to British English spelling conventions where possible³. In order to avoid unnecessary editorial work at later stages, we recommend reading/scanning the guidelines in the [EC DG Translation English Language Style Guide](#).

b. Stakeholder analysis

The basis of the Dissemination and Communication strategy is an in-depth stakeholder analysis and mapping. It is important that ZERO BRINE’s findings are disseminated widely to its different target audiences. The aim of the stakeholder analysis is to identify how ZERO BRINE will affect or be effected by different groups of relevant stakeholders. It will sort them according to their impact on the project and the impact the action will have on them. This information will be used to target dissemination activities and prepare different advocacy steps. The stakeholder analysis will be used to assess how effectively we disseminate the project’s findings and recommendations and ascertain if targeted efforts are needed to reach certain stakeholders or audiences.

To ensure ZERO BRINE’s impact and influence and target communication and dissemination activities effectively, it is also important to consider the level of influence that stakeholders have, and to focus attention on reaching those stakeholders that are most likely to help ZERO BRINE achieve its objectives and have a strong impact. The figures below, by Mendelow⁴ can clarify the concept of influence:

Figure 1: Equation of Influence (Mendelow)

Power is the ability to achieve objectives (how much they can)

Interest is the stakeholder’s willingness (how much they care)

Influence = Power x Interest

Figure 2: Identifying Key Stakeholders (Mendelow)

Interest		
PO	Low	High

³ See for example Oxford English Dictionary at <http://oxforddictionaries.com/>
⁴ Mendelow's Power-interest grid (Aubrey L. Mendelow, Kent State University, Ohio 1991)

Low	Minimal effort	Keep informed
High	Keep satisfied	<u>KEY PLAYER</u>

The communication and dissemination plan is structured in a way to reflect the different roles that various stakeholders can play in the transition to circular economy. These stakeholders can be grouped into three broad categories: (a) **Enablers**; (b) **Leaders**; and (c) **Multipliers**.

The Stakeholders table (page 12) provides an overview of the stakeholders with specific tasks in the communication and dissemination plan that are planned to address and engage them.

i. Enablers

ZERO BRINE is enabling innovative technologies for SMEs, corporations, and industry at large. Five innovative, strategic technologies on brine management are included in the ZERO BRINE project, covering the whole spectrum of treatment steps (from ion separation to evaporation, crystallisation, and organics treatment) required to effectively treat virtually every possible industry brine stream. In ZERO BRINE, in addition to the innovative technologies being provided by consortium partners (SEALEAU, TYPASA, NTUA, TU DELFT, UNIPA, EURECAT, SUT), system integrators and engineering companies are also included (LENNTECH, WITTEVEEN+BOS, TYPASA, FACSA), providing a complete set of technology suppliers and integrators that can act as ZERO BRINE TASK FORCE during the project implementation, as well as in its aftermath.

Policy makers, such as authorities, environmental agencies, European institutions, and others can set out a policy framework that address possible EU (or/and national) regulatory barriers. In ZERO BRINE a number of tasks are foreseen to inform this group about the project results and thus allow them to develop practical lines of action to address these barriers. The environmental agency of the area where the large-scale demonstration will be developed (Botlek area, Netherlands) is called DCMR, and has already been contacted in the proposal preparation stage, expressing their interest to collaborate (especially for the Innovation Deal task).

Lastly, the **investment community** is also considered as a key stakeholder group, since follow-up investment will be needed to implement the solutions at full-scale, replicate the project results in other process industries, as well as to implement the business plan of the innovative SMEs (mainly start-ups). This additional or follow-up funding is addressed through either private investors (angel and institutional investors) or public funding.

ii. Leaders

The European Commission has stated that business is the driver of the transition to a circular economy. In response, ZERO BRINE recognises the process industries (the brine generators), the mineral producers/distributors and other end-users as the leaders of this transition. These stakeholders are

the main users of the project results with the interest to deliver a new product and/or service to the market. For ZERO BRINE, the industry stakeholders involved are EUROPIREN, EVIDES, IQE, PGG and ZORLU, with more lead users to be engaged throughout the project implementation. Taking this a step further, ZERO BRINE recognises the importance of changing behaviour and mindset within a short time frame and thus puts education at its core, creating the skill base to drive circular innovation. To design the dissemination and communication strategy for this group, the innovation questions and their needs were initially addressed. The main lead users are:

- **Salt producers:** European production of salt is estimated at 66Mt in 2012, representing 24% of the world total. Leading regional producers are Germany, Russia, the Netherlands, UK, Spain, Ukraine and Poland. In ZERO BRINE, stakeholders from all three salt production methods are involved either as partners (e.g. EUROPIREN) or as members of the Advisory Board (Akzo Nobel, Hellenic Saltworks).
- **Magnesium producers:** The production of magnesium hydroxide in EU had reached to 127,674 Tons in 2015 and is expected to grow at a Compound Annual Growth Rate (CAGR) of 2.62% from 2016 to 2021. The major production regions are mainly located in Netherlands, Austria, Russia and Germany, while the major manufacturers in EU are Russian Mining Chemical, RHI, J.M. Huber, Nabaltec, Kisuma Chemicals, Nedmag and Kaustik. EUROPIREN (partially owned by Russian Mining Chemical) is a partner of the ZERO BRINE consortium.
- **Coal mines:** Coal mining remains an important industry in the EU. Coal mines produce vast amount of wastewater, which generates the necessity of saline water utilisation. High salinity of coal mine waters occurs because the seams of the coalfield lie in predominantly sandstone strata in which waters within this aquifer gradually increase in salinity with increasing depth. In WP3, an industrial pilot demonstration will take place, coordinated by SUT at a PGG-owned coal-mine in Gliwice, Poland.
- **Brine generators:** Saline impaired effluent can be generated either due to salt consumption during the production process of an industrial activity or because of a desalination process to treat raw water into high quality industry water. Amongst brine generators are salt consumers, silica industries, textile industries (ZERO BRINE pilot project WP3 by Zorlu group) and industry water production.

Furthermore, end-users of the ZERO BRINE technology are part of the leader group of stakeholders.

iii. Group Multipliers

This group serves for the broader dissemination of the project results, as well as for the replication in other industrial sectors. **European Technology Platforms** and **national water platforms**, including Water Europe, EURATEX, CEFIC, AEAS and PTEA, can play a key role in that, ensuring that industrial decision makers are properly involved. Water Europe is a partner to the project and will provide the link to other platforms as well. Apart from the platforms, **European Water Umbrella organisations** such as EurEau, European Water Association, European Water Partnership, EurAqua, Aqua Europa, NetworkH2O, the European Manufacturers of Water and Thermal energy meters, European Membrane Society etc., will also be engaged. **SPIRE community** can also act as a multiplier of the project results by leveraging the network with the process industry. ZERO BRINE involves ISPT as a project partner,

while the TU Delft Process Technology Institute (DPTI) has provided a Letter of Endorsement for the ZERO BRINE project (see also Section 4), supporting the project during its implementation, as well as promoting its results after its successful completion. World leading **engineering companies** will also play a role in multiplying the effect of the project results through their clients on a worldwide basis. WITTEVEEN+BOS and TYP SA are members of the project consortium. Finally, **universities and research institutes** will promote wide dissemination of the project results to the academic/scientific community, while **journalists and other media outlets will share results with** the general public.

Table 1: Stakeholders

Stakeholders		Task 10.1 Communication strategy	Task 10.2 Stakeholder consultation	Task 10.3 Policy briefs	Task 10.4 ZERO BRINE website	Task 10.5 Dissemination at conferences/events	Task 10.6 Capacity building	Task 10.7 Final conference
Enablers	Authorities							
	European Institutions							
	Innovative SMEs							
	Investors							
	Policy makers							
	Environmental agencies							
	Standardisation organisations							
Leaders	Process industries							
	Mineral producers/distributors							
	End users							
Multipliers	European Technology Platforms							
	SPIRE network							
	Universities and Research institutes							
	Engineering companies							
	Industrial clusters							
	Media							

c. Stakeholder mapping

The aim of the stakeholder mapping exercise is to identify and map the key organisations and professionals relevant for ZERO BRINE and to disseminate, communicate and exploit ZERO BRINE results.

The stakeholder mapping is not only key for the communication and outreach (WP10) of the project, but also the business plan/ exploitation (WP8), Brine Excellence Centres (WP5), Online Brine Platform

(WP6); Sustainability Performance (WP7); and Innovation deal/Policy review (WP9). Therefore, the stakeholder mapping is integrating inputs from all partners to contribute to the evaluation of the key aspects in the outreach to the stakeholder groups, as well as to the contact database.

The objective of the [online survey](#) for the external stakeholder mapping is to evaluate the stakeholder groups so as to target them effectively. The survey included topics such as the interest of the stakeholder groups in ZERO BRINE, their importance to the project's success, the interest of the stakeholder groups, the preference communication of the stakeholder groups and the capacity to disseminate the project. The online survey was conducted in June 2018 with a participation of 90% of the Zero Brine partners.

Figure 3: Interest of stakeholder groups in ZERO BRINE



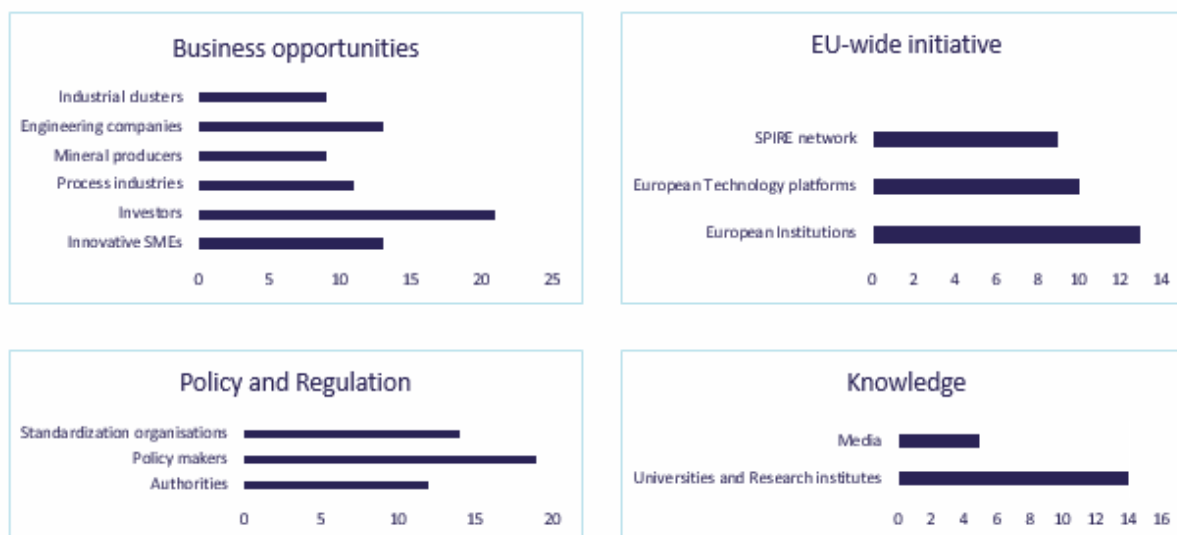
Stakeholder groups such as European institutions, innovative SMEs, mineral producers, process industries etc. are expected to be highly interested in ZERO BRINE, whereas authorities, policymakers, investors, media etc. are evaluated to be moderately interested in the project (see Figure 3).

Figure 4: Importance of stakeholder groups to ZERO BRINE's success



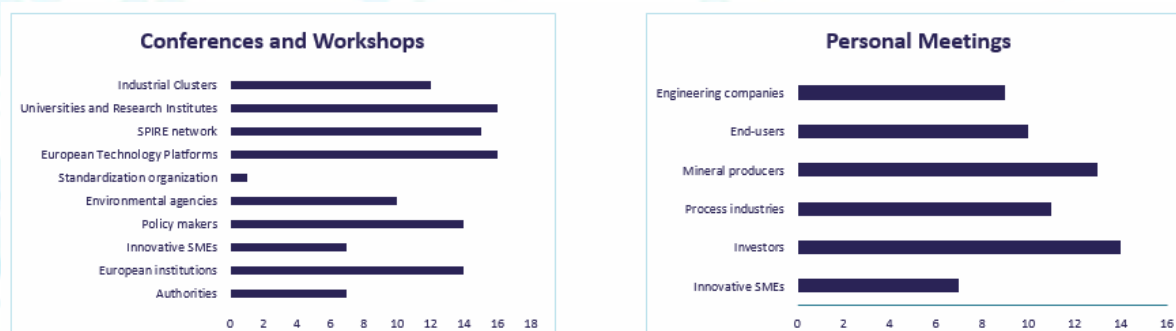
The survey shows that European institutions, innovative SMEs, process industries, end-users etc. are expected to be highly important to ZERO BRINE's success. Authorities, standardisation organisations, universities etc. are rated to be of media importance (see Figure 4).

Figure 5: What is the main interest of the stakeholder groups



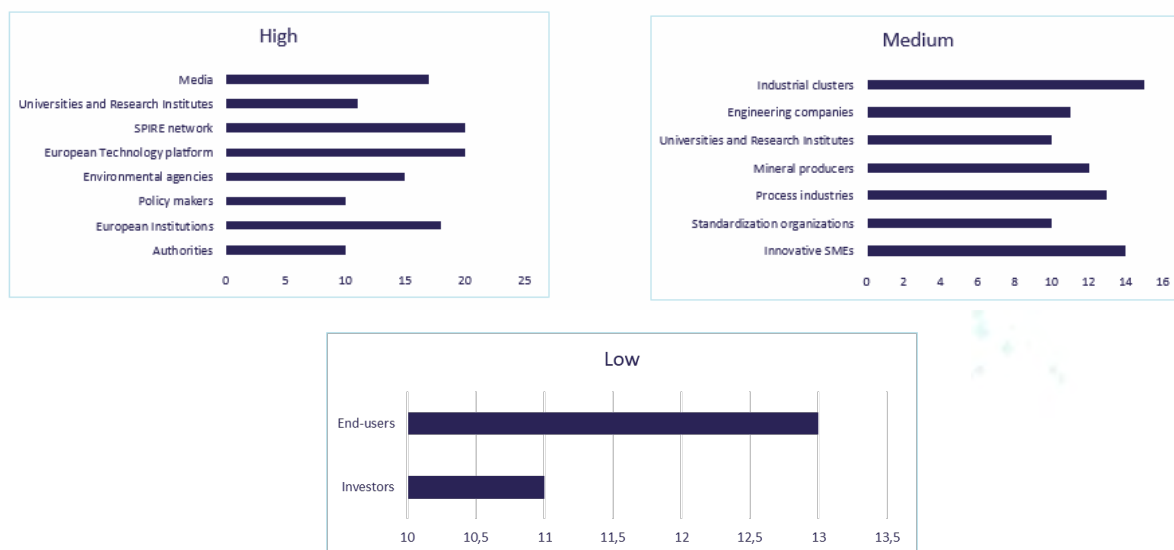
The main interest of stakeholders are business opportunities (industrial cluster, engineering companies, mineral producers etc.), EU-wide initiatives, policy and regulation and knowledge (see Figure 5).

Figure 6: Preferred communication of the stakeholder groups



The preferred communication of ZERO BRINE stakeholders are conferences and workshops as well as personal meetings (see Figure 6). Hence, personal communication is expected to be the most effective. Communication tools such as direct mailing, social media, newsletters etc. are part of the mix and lead to personal interaction.

Figure 7: Capacity to disseminate ZERO BRINE



Stakeholders such as media, universities, SPIRE network etc. are expected to have a high capacity in disseminating ZERO BRINE, whereas industrial clusters, engineering companies or mineral producers show medium capacity (see Figure 7).

In conclusion, we see a need in driving interest of moderately interested stakeholders that are of high importance for ZERO BRINE's success such as mineral producers, environmental agencies, European institutions, industrial clusters, European technology platforms. Effective communication campaigns will address business opportunities, policy, and EU-wide initiatives.

For engaging the ZERO BRINE stakeholder groups, a contact database is essential. The document will therefore list stakeholders by interest area. This information will be used to create a comprehensive mailing list (while adhering to any applicable EU data protection/privacy laws). The ZERO BRINE Privacy Policy shows that the database is in line with the GDPR regulation (see Annex).

All ZERO BRINE partners cover the entire spectrum of key stakeholder groups targeted by the project. ZERO BRINE is making use of their networks to create a contact database to ensure communication with all audiences. Between March 2018 and June 2018 ZERO BRINE partners identified key contacts of the respective stakeholder groups.

Table 2: Communication Matrix

Stakeholder	Example organisations	Main dissemination activities	communication channels addressing them	& +
ENABLERS				
Authorities	Key countries: Netherlands, United Kingdom, Spain, Greece, Germany, Poland, Sweden, Italy, France	Website Scientific publications Publications Video Conferences & events Specialised workshops Press releases Newsletters Social media Press conference Stakeholder consultation Policy briefs		
European Institutions	European Commission European Parliament European Council	Website Publications Video Conferences & events Press releases Newsletters Social media Press conference Policy briefs		
Innovative SMEs	SEALEAU LENNTECH	Website Scientific publications Publications Video Conferences & events Specialised workshops Press releases Newsletters Social media Press conference Stakeholder consultation		
Investors	Business angels Public funding	Website Publications Video Conferences & events Press releases Newsletters Social media Policy briefs		
Policy makers	European Institutions National Ministries Local Municipalities	Website Publications Video Conferences & events		

		Press releases Newsletters Social media Press conference Stakeholder consultation Policy briefs
Environmental agencies	DCMR EEA Greenpeace WWF	Website Scientific publications Publications Video Conferences & events Press releases Newsletters Social media Press conference Stakeholder consultation Policy briefs
Standardisation organisations	ELOT AENOR	Website Publications Video Specialised workshops Press releases Newsletters Social media Stakeholder consultation
LEADERS		
Process industries	HUNTSMAN EUROPIREN EVIDES IQE PGG ZORLU	Website Scientific publications Publications Video Conferences & events Specialised workshops Press releases Newsletters Social media Press conference Stakeholder consultation
Mineral producers/distributors	Salt producers: EUROPIREN, Akzo Nobel, Hellenic Saltworks Magnesium producers: Russian Mining Chemical, RHI, J.M. Huber, Nabaltec, Kisuma Chemicals, Nedmag and Kaustik	See process industries
End-users		See process industries
MULTIPLIERS		

European Platforms	Technology	Water Europe EURATEX CEFIC EurEau European Innovation Platform (EIP) for Water European Water Association European Water Partnership EurAqua Aqua Europa NetworkH2O European Manufacturers of Water and Thermal energy meters European Membrane Society	Website Scientific publications Publications Video Conferences & events Specialised workshops Press releases Newsletters Social media Press conference Stakeholder consultation Policy briefs
SPIRE network		ISPT TU Delft Process Technology Institute (DPTI)	Website Scientific publications Publications Conferences & events Specialised workshops Press releases Newsletters Stakeholder consultation
Universities		TU DELFT NTUA UNIPA UNIABDN	See SPIRE network
Engineering companies		WITTEVEN+BOS TYP SA	See process industries
Industrial clusters / Ports		European Desalination Association ICT4Water Water treatment cluster	See process industries
Media		Industrial Water World WaterBiz Water Digest W&WD Water Desalination reuse Water proof Worldwater reuse & desalination Waterspiegel EurActiv EnergyPost Revolve Magazine Politico Europe	Website Publications Video Press releases Newsletters Social media Press conference

d. Project Branding

i. Visual identity

A project brand comprises its different partners, the theme of the project, and the overall culture that the consortium is communicating. As part of an EU Horizon 2020 consortium, the project will be communicating a culture of the circular economy, recovering resources from industrial wastewater. The ZERO BRINE project is advancing the circular economy in industrial processes as part of its branding.

The visual identity of the project will differentiate ZERO BRINE while making it memorable. It comprises the logo, icon, and slogan. The logo will be the visual messenger of the project and will be reflected in all the communication materials. The slogan (also known as the motto, strapline, or tagline) can be a generic 3-word formula or a short call to action representing the goal and culture of the project. The slogan does not need to be technical in orientation, as the project is quite technical, particularly when referring to research and innovation projects. REVOLVE therefore recommends using a broader, more common slogan to communicate the project. An advanced variation of the triple-word formula is used to communicate the goals of the ZERO BRINE project: **Industrial Wastewater | Resource Recovery | Circular Economy**. See the **Visual Identity Guidelines in the Annex** for more details.

The visual identity of the ZERO BRINE project consists of an infinity sign that is cut in two and turned vertically to imply the circular economy and refers to a continuous ribbon such as the Moebius Strip that is connected in unexpected circularity. The ribbon is also reminiscent of a drop that applies well to a project related to water and the crystals inside the ribbon are indicative of the brine from industrial wastewater, demonstrating the flow and movement of changing elements in the processing of reusing waste.

The visual identity was presented to TU Delft in M7.

ii. Templates

Based on the visual identity of the project, all template derivatives and dissemination materials were created. **Visual identity derivatives** include a PowerPoint presentation slides template, a deliverable template, a Word press releases template and a letterhead for all consortium partners to use when presenting or communicating the project's activities externally.

The communication package lead is available at all times to help the partner adjust or adapt a letter, presentation or press release. All templates are developed in accordance with the rules and regulations of communicating projects funded by the European Commission with the appropriate flag and disclaimer.

The visual identity and templates were presented to TU Delft by M7. The final version was delivered by M10.

e. External communication

External communication is the transmission of the ZERO BRINE project to stakeholders outside the project consortium. For optimal outreach to external stakeholders, communication tools will be provided. External communication tools and channels include the ZERO BRINE website, social media channels, media kits, policy briefs, newsletters, publications, and press articles. All external communications outputs will be disseminated digitally and print versions of the policy briefs are foreseen.

i. Website

A project-dedicated **website** (<https://zerobrine.eu/>) is the **main communication and dissemination** platform to allow stakeholders, end-users, and the media to have access to the project's development and results launched and developed in WP10. It also hosts all the dissemination deliverables, promoting relevant content (news, editorials, videos, infographics, events, etc.) for the key stakeholder groups, engaging them in the conversation. The website is a content generation tool where partners are involved in developing content and increasing the visibility of the project and maximising its impact.

The ZERO BRINE website will also be used to share the public results of the project; it will include downloadable PR material, including leaflets, pictures, and short movies of project results, explained appropriately for the general public. The website will be a repository for all documentation generated during the project and will provide a clear and open discussion of the potential and limitations of the system and to allow exposure of the system to market for future commercial purposes.

The key aims of the website are to:

- 1) **Become the primary source of information for ZERO BRINE** to explain the project's aims, provide the latest news updates, provide documents for download, and view social media activity related to the project.
- 2) **To act as a more general hub for research on issues relevant to ZERO BRINE** to provide important updates on external policy/research developments that have an impact or are of interest to ZERO BRINE. This helps frame the project within a dynamic policy environment.

This website contains the following sections and content:

- **Homepage**
 - a. **About ZERO BRINE**
 - b. **Latest outputs / results**
 - c. **Latest Photos + videos**
 - d. **Partner Scroller**
 - e. **Pilot projects**
 - f. **Follow-up projects**

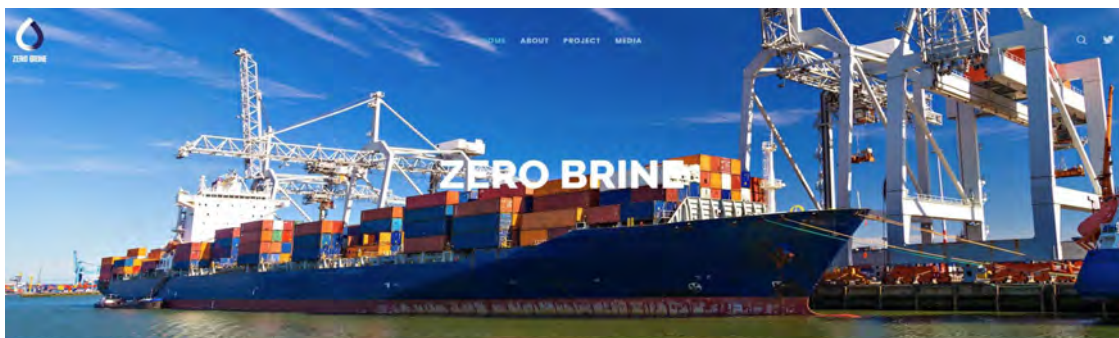
- **About**
 - a. **What is ZERO BRINE? What are its objectives?**
An overview presentation about the Zero Brine project and its objectives. It can include text, a list and a few embedded videos/images or animations.
 - b. **Advisory board**
 - c. **Partners**
 - **Partners (Logos + contact photo + bio)**
 - **Map of partner locations**
 - d. **Contact us**
- **Project**
 - a. **Our Work and Deliverables**
Description of ZERO BRINE project per work package with description of activities, WP leader, and links to public deliverables.

Pilot Plants
Map of the ZERO BRINE pilots with a simple infographic explaining industry + recovered element with dedicated pages to each pilot with a description.
 - b. **Brine Excellence Centres**
Hosts an overview of each of the 5 Brine Excellence Centres (BECs) with a description of the core research activities, a leaflet of the technologies, and a contact.
 - c. **Online Brine Platform**
Integration of the NTUA-developed Online Brine Platform and portal with promotional visuals to attract users.
 - d. **Brine simulation tools**
Explanation of the remote component environment open to industry stakeholders to simulate brine treatment chains. Includes resources for further reading and its use in replication studies.
 - e. **Digital Journey**
A digital journey was created for the Turkish pilot as a means to educate stakeholders, as a field visit was not feasible due to COVID-19.
- **Results**
 - a. **Policy briefs**
 - b. **Factsheets**
 - c. **Presentations**
 - d. **Publications**
 - e. **Newsletters**
- **Media**
 - a. **Media kits**
 - b. **Visual Identity**
 - c. **In the Press**
Overview of all press coverage with links to the original article.
 - d. **Photo Galleries**

- e. Videos
- Events
 - a. Project events
 - ZERO BRINE coordinated events.
 - b. External events
 - Other industry-relevant events

The website is GDPR-compliant, and all visitors have the chance to see the [privacy policy](#) easily with a pop-up when they enter.

The website was presented to TU Delft in early February 2018 and is continuously updated throughout the project and is monitored through Google Analytics.



ABOUT ZERO BRINE

Coordinated by TU Delft, ZERO BRINE – Re-designing the value and supply chain of water and minerals: A circular economy approach for the recovery of resources from brine generated by process industries' 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

ii. Newsletter

The [newsletter](#) ensures **communication and dissemination at EU and international levels** and keeps stakeholders up to date with the findings of the project. It also informs about other relevant events, publications, key policy developments and key messages of the project partners. A minimum of **6 e-newsletters are planned throughout the project duration**, with two additional mailings planned in M52 and M54 due to the 6-month granted extension and the high quantity of final activities and results to disseminate.

Objectives:

The aims of the newsletters are:

- 1) Informing project partners and stakeholders of the key findings of the project.
- 2) Providing information about relevant external events and publications.
- 3) Disseminating key messages from Work Package Leaders.
- 4) Ensuring project partners and key stakeholders are kept up-to-date on key policy developments at EU level.

The e-newsletter will be distributed to the Consortium, to ZERO BRINE newsletter subscribers, to new self-subscribed members via the website, and through the mailing list produced by the Stakeholder Mapping Exercise.

The identity and formatting of the newsletter will be in-line with the visual identity.

Each newsletter will incorporate a mix of the following elements as relevant:

1. Short opening editorial
2. Update on progress + results per pilot
3. Latest deliverables / publications
4. ZERO BRINE in Action – photo update on field work/ research
5. Project spotlight – latest highlight on event participation, awards, etc.
6. In the Press – media coverage
7. News & Events
8. Industry news + further reading

Newsletter Schedule:

Newsletter 1

- Content gathered by M11
- Newsletter 1 sent in M11

Newsletter 2

- Content gathered by M22
- Newsletter 2 sent in M22

Newsletter 3

- Content gathered by M29
- Newsletter 3 sent in M29

Newsletter 4

- Content gathered by M36
- Newsletter 4 sent in M36

Newsletter 5

- Content gathered by M42
- Newsletter 5 to be sent out in M42

Newsletter 6

- Content gathered by M48
- Newsletter 6 to be sent out by M48

Newsletter 7 – Final newsletter

- Content gathered by M54
- Newsletter 7 to be sent out by M54

All newsletters can be found here: <https://zerobrine.eu/newsletter/>

iii. Communication materials

ZERO BRINE communication materials such as leaflets, roll-ups, and posters (didactic and promotional) for branding the project at internal and external events were developed between M1 and M16, with any additional posters or design needs met by REVOLVE. For communicating ZERO BRINE on digital channels various banners and e-signatures were developed between M1 and M12.

The ZERO BRINE leaflet has been circulated to all partners for dissemination and promotion purposes at external conferences, meetings or seminars and is available to download from the website. The leaflet was presented to TU DELFT by 31/12/2017. The final leaflet has been developed by 31/1/2018.

Roll-ups were presented to TU DELFT by 31/4/2018. The final version was distributed by 31/5/2018.

iv. Video

ZERO BRINE is developing videos to increase the visibility of the project. These will be used on all the communication channels described in the communication strategy to make sure that all the key stakeholders are exposed to the respective messages.

In M12 the ZERO BRINE video [‘Discover ZERO BRINE solutions’](#) was developed. The aim is to introduce the project, introducing the concept of the ZERO BRINE technology, pilot projects and consortium partners. It is distributed via the website, social media and the newsletter and has 340 views in M16.

In M13 the video about the [ZERO BRINE Co-Design workshop](#) was developed with the objective to introduce ZERO BRINE key concepts and technologies. The video gives insights into the workshop as well as showing interviews with key stakeholders from various stakeholder groups. It has 133 views in M16.

In M26 the video [ZERO BRINE Field visit on 23 May, Rotterdam Port](#) was developed highlighting the field visit that took place in M25 to the Plant One Rotterdam in the Netherlands.

In M26 the video [ZERO BRINE – A Circular Economy Solution for Industrial Wastewater](#) was developed with the objective to contextualise the issue of industrial brines and the opportunity of ZERO BRINE to view wastewater as a resource.

In M29 the video [ZEROBRINE - General Assembly](#) highlighting the Barcelona General Assembly that included a visit to the BEC and preview of technologies. The second video in M29 was [Field visit to the ZERO BRINE pilot plant](#), Poland developed following the field visit to the PGG coal mine in Gliwice.

In M43 the video [ZERO BRINE Workshop, 11 December, Zaragoza, Spain](#) was developed highlighting ZERO BRINE’s participation to the EIP Water conference’s side event and stakeholder consultation.

In M40 the video [Online Brine Platform enabling industrial symbiosis](#) was developed to provide an overview of the platform and why companies should register their brine streams to further industrial symbiosis in industrial brines and secondary minerals.

Furthermore, technology videos have been developed throughout M41-M54 on the respective pilots to offer a context of the issue of industrial brines and how the ZERO BRINE solution is beneficial both environmentally and economically.

All ZERO BRINE videos are available on the ZERO BRINE website: <https://zerobrine.eu/videos/> and hosted on a dedicated [ZERO BRINE Youtube playlist](#).

v. Media relations

Media is crucial to help spread the word to the target audience and interested public, increasing awareness of the ZERO BRINE project but also its findings, results, and recommendations. As part of the communication strategy for this project, REVOLVE is engaging journalists and ensuring media coverage of the project throughout its course via [press conferences](#), social media content, news, and press releases. ZERO BRINE has also built an extensive media contacts database that is used for the facilitation of the communications team to liaise directly with representatives from various news portals, disseminate the projects results and establish short-term or long-term media partnerships depending on the occasion and the stage that the project is in. In preparation for the ZERO BRINE field visits, the communications team invited a number of journalists from the media contacts database and developed media partnerships. Also, for the occasion of the wider dissemination of the ZERO BRINE policy briefs, media contacts will be approached from the database with the aim to engage their interest in the learnings and recommendations of the project and their dissemination over news portals. The engagement of media contacts is very important as a news story that provides data and evidence-based facts is often one of the key sources of information for policy makers.

A comprehensive list of press coverage is available on the website: <https://zerobrine.eu/in-the-press/> and Annex.

vi. Social media

ZERO BRINE is active on [Twitter](#), [LinkedIn](#) and [YouTube](#). Twitter and LinkedIn are the two main social media channels, as all the relevant stakeholder groups are present there, allowing it to be used for effective, rapid news alerts and project updates. ZERO BRINE project results and processes are also expressed in infographics, GIFs, sharables, and other visuals that add value to how the project is transmitted to broader audiences that may not initially understand the complexities of recovering resources from industrial wastewater.

A content planning for the social channels helps increase visibility and engagement with not only project-specific communications such as the creation of shareables, but the sharing of relevant news articles to communicate on the main themes of the project. ZERO BRINE's focus areas – wastewater, circular economy, resource recovery, sustainability, water innovation, desalination, and process industry - represent the core topics addressed on the social media content calendar—providing a greater narrative to converse around the topic of water reuse and circular economy in addition to project results and outputs.

Additional categories related to the aforementioned themes that will be integrated into the content calendar and posted on a regular basis include:

- Updates/Information on ZERO BRINE

- Scientific Work – produced by ZERO BRINE and Partners
- Technologies
- Case studies
- Business models
- Policies
- Industry news
- Innovation
- Events / Seminars
- EC and EP News
- Inspirational / Multimedia
- Featured people – partners, key stakeholders

ZERO BRINE also has a presence on [LinkedIn](#), with a company page to share content, updates, and events. LinkedIn's primary use is to promote the project through weekly posts focusing on general communication and sharing materials such as videos, articles, pictures, and social media sharables. It will also be used to share events and trainings.

For an effective and impactful presence of ZERO BRINE on social media, it is vital for partners to contribute content. Original content will lead to incremental reach and traffic for both social media channels, as well as the ZERO BRINE website. This will be done through the scheduling of a regular communication call with the communication ambassadors to provide updates on external events where ZERO BRINE could be presented, interview opportunities with partners in their respective fields of expertise, suggested media outlets in partner countries, pilot project communication coordination, and other points of interest in overall project promotion.

To help track the impact of the project on social channels, the utilisation of hashtags on social media posts are essential. Using the designated #ZeroBrine hashtag helps analyse the presence and activity of the project. This is done by the monitoring tool, Meltwater, which allows for a more in-depth breakdown of the project's outreach as well as those interacting with content to better track influencers and media for the promotion of ZERO BRINE.

The sharing of videos developed from site visits and other partner content will be promoted on the ZERO BRINE YouTube playlist for partners to share via their respective social media channels that can also be included on other relevant social accounts such as Facebook, LinkedIn, and Instagram, broadening the scope of outreach.

For an overview of social media impact, see Annex.

f. Events, conferences & field trips

Networks are created, consolidated, and grown by meeting other people. The most effective way to consolidate a network and to align a group's efforts in achieving a mutual goal is by internal meetings and events; whereas the best way to grow a network is by attending and participating in external events.

External events are defined as gatherings that are organised, commissioned, and carried out by parties that are outside the consortium. They are excellent channels in which to disseminate ZERO BRINE project results. ZERO BRINE will be presented in at least 10 events throughout the project duration.

In parallel, the communication lead will endeavour to coordinate the involvement of the ZERO BRINE consortium in related EU forums and brokerage events when considered appropriate. For an overview of events attended, please see Annex.

Internal events are defined as those that are organised by the coordinator and the respective working package leads when relevant to advance the implementation of the project goals. A steering committee meeting is clearly an internal event for giving direction and making decisions for a project. Internal events are also those that are organised by a consortium partner but not necessarily about the project. This second type of internal events needs to be communicated by the respective ambassador to the communication package lead to promote via the project channels and vice versa.

As a bridge between external and internal events are the **field trips** to pilot projects that enable the organisers to invite consortium partners to show their demonstration projects to other partners and to invite external media and research and policy participants to partake in learning about the respective visit.

The ZERO BRINE project coordinated [2 demonstration field visits](#) open to media and industry experts that correspond to a different industry sector for brine reuse in a different country:

- 1) Demineralised water plant in the Netherlands with EVIDES in Rotterdam Port (M24)
- 2) Coal mine in Poland owned by PGG (M29)

While a first field visit was carried out as part of the kick-off meeting at TU Delft in the Netherlands on 19-20 June 2017, the official field visit to the operational pilot was coordinated in M24 and gathered a total of 45 industry and media experts. The second field visit was carried out in Gliwice in M29 and saw over 40 industry and media participants. For confidentiality and safety concerns, a small private visit was held at the silica plant in Spain at IQE in Zaragoza, not open to public visitation. In lieu, a video was developed for educational purposes. A visit to the Turkish pilot was not feasible due to the outbreak of COVID-19. In lieu of an in-person visit, a [digital journey](#) was created so stakeholders could still learn about the pilot technologies and its contributions to circular economy.

All field trips included a press release sent to the ZERO BRINE subscribers and the production of press kits including a factsheet and photos to better inform of the pilot's aims and results.

To come full circle with the communication activities, the ZERO BRINE will maximise its outreach by organising its **final conference** within the context of Amsterdam International Water Week. As part of the events, ZERO BRINE was presented during a webinar on Reuse, Recycle and Recover on 30 April

2021, which was followed up with a virtual summit on 1-2 November and a spot at Aquatech from 3-5 November. ZERO BRINE organised its own conference as a side event of AIWW on 4 November.

See D10.6 Proceedings from final conference for more details.

g. Common dissemination and collaboration with related EU-projects

Collaboration and continuous exchange with EU-projects in the same field is essential to maximise the impact and outreach of the results.

In M28 ZERO BRINE became an official member of the ICT4WATER cluster. ZERO BRINE is part of working groups data sharing, business models and exchanging results at ICT4Water events and sessions. Furthermore, ZERO BRINE communicates project activities via the cluster newsletter and reaches a large audience of related EU innovation projects. It provides access to the Online Brine Platform for interested ICT4Water cluster members.

ZERO BRINE also participated to the Water Projects Europe Day, the first edition organised by Water Europe in the context of its Water Knowledge Europe 2020 event. The workshop focused on Industrial Water Reuse in the Circular Economy and presented four industrial water reuse projects funded by Horizon 2020 and one from EPA that will focus on their contributions to the EU Circular Economy Action Plan - one of the main blocks of the European Green Deal, Europe's new agenda for sustainable growth. Together with REWATCH, NEXTGEN, ULTIMATE, Industrial Water 4.0 Project, ZERO BRINE will present its contributions and will network with the other projects. This activity increased the outreach of ZERO BRINE in the field of industrial wastewater and strengthened its collaboration with other similar initiatives.

Project partners regularly exchanging on results and activities with the listed EU innovation projects during personal meetings, conferences and events. At the conference "Desalination for the environment: Clean Water and Energy" in September 2018 organised by the European Desalination Society INTEGROIL represented by Acciona Agua and ZERO BRINE, represented by REVOLVE, co-hosted a session.

Table 3: ZERO BRINE Project networking

PROJECTS	COORDINATOR
Water2REturn: REcovery and REcycling of nutrients TURNing wasteWATER into added-value products for a circular economy in agriculture	BIOAZUL - Spain
Incover - Innovative Eco-Technologies for Resource Recovery from Wastewater	ASOCIACION DE INVESTIGACION METALURGICA DEL NOROESTE
INTEGROIL – Technology for the treatment of produced water and refinery wastewater	ACCIONA AGUA

ECWRTI - ECOLORO: Reuse of Waste Water from the Textile Industry	STICHTING S-ISPT
Saltgae – Techno-economic feasibility of using algae to treat saline wastewater from the food industry	LOZANO (Tecnologías Avanzadas Inspiralia S.L.)
REMEB - Eco-friendly ceramic membrane bioreactor (MBR) based on recycled Agricultural and industrial Wastes for Waste Water Reuse	FACSA (SOCIEDAD DE FOMENTO AGRICOLA CASTELLONENSE, S.A.)
NextGEN - Towards a next generation of water systems and services for the circular economy	KWR WATER B.V.

Finally, in 2021, ZERO BRINE joined the AFTERLIFE Horizon Results Booster to find common aims of dissemination to affect policy and industry with similar EU-funded projects in the fields of industrial water, reuse, and circular economy.

h. Internal Communication

Internal communication is key to an efficient and smooth execution of the project whilst maximising the results. Internal communication tools are the ambassador concept, a common platform, regular newsletter updates and regular call with the communication package lead.

Each partner from the consortium assigned an ambassador to coordinate internal and external communication needs to maximise the impact and effectiveness of the project goals. Ambassadors play a vital role in making the project a success because they have the power to put the multiplier effect into practice, creating a cluster-and-ripple impact that can have bring great visibility, traction and outreach to the project depending on the size of the partner's network.

Regular calls with the communication package lead and ambassadors allows a better understanding of how the communication partner can reinforce and add value to the respective needs of the project and activities.

1. Dissemination and Impacts

To foster the uptake of the ZERO BRINE technologies, extrapolate the pilot results to full-scale, and to form the basis for replication studies and pilots, a set of software tools were developed and disseminated to stakeholders via communication channels and capacity building events. A match-making tool, or [Online Brine Platform](#) (OBP) was developed to match brine producers with end users, technology providers and waste heat providers to create synergies in industrial symbiosis. A practical implementation of the OBP was developed for the case of the Netherlands, where over 200 brine producers are registered as well as salt users from the 5 large industrial clusters. Matchmaking events dedicated to creating synergies gathered over 91 participants. Additional country specific trainings also

promoted the OBP, and promotional materials including videos on the [Benefits of the Online Brine Platform](#) and [How to register to the Online Brine Platform](#) aimed to inform and encourage potential users to sign up. As of M54, the OBP has over 2700 registered users.

Additionally, a dedicated page on the website is available for stakeholders to utilise the [Brine Simulator Tool](#) developed within WP5. For the replicability of case studies three business plans have been developed. An explanation of the tool is available along with information on its use in replication studies.

Five [Brine Excellence Centres](#) have been established around Europe, promoting sharing of technologies, replication projects and further technology development. Information on the available brine treatment technologies for pilot and bench scale were featured in respective leaflets hosted on the ZERO BRINE website, social media channels, and dedicated newsletters and mailings on project activities.

Two in-person field visits to the Netherlands Demi Water pilot-Botlek site I (M24) and the Poland Coal Mine (M29) gathered 45 and 40 industry experts, researchers, and media, while a digital journey to the textile pilot in Turkey gathered 44 participants as part of a media briefing organised by REVOLVE during EU Green Week. The training sessions in the Netherlands (73 pax), Spain (24 pax), Italy (42 pax), GR (33 pax), Turkey (200 pax) and social acceptance workshops (82 pax) organised within 10.6.2 altogether gathered close to 500 participants and reach even more with event recaps having over [700 cumulative views on YouTube](#) as of M54.

The analysis of stakeholder needs and objectives in relation to the prospective circular business model was done through several face-to-face and telephone discussions, interviews and collective stakeholder consultation events, which took place in the Netherlands, Greece and Spain. For the replicability of case studies, three business plans have been developed (See D10.5). The business plans will provide an important opportunity both for the end-users involved in the project (Evides, IQE as partners and Zorlu Textile and PGG through letters of intent) for potential expansion of their current business activities, as well as for the Brine Consortium Task Force to establish new projects. The framework agreement was fully signed in April 2020 between eight technology suppliers of both innovative and enabling technologies, with the aim to form a Brine Consortium Task Force (BCTF).

ZERO BRINE's activities have led to four successful follow-up projects being granted: [SEA4VALUE](#) (7M) [BRINE-MINING](#) (82k) [WATER-MINING](#) (19M), and [SEArcularMINE](#), (6 M) for a total of over 32 M EUR of funding.

Throughout the project duration, ZERO BRINE was represented at over 65 different conferences and event gatherings, reaching all stakeholders, and organised 23 of its own events, including the final conference (see D10.6) which put a spotlight on the results of the pilots, ZERO BRINE research, and impacts on industry and policy. In addition to the over 60 publications including articles, dissertations,

and conference proceedings reported on the EC portal, ZERO BRINE partnered with ELSEVIER to curate a ZERO BRINE Special Issue: <https://zerobrine.eu/wri-special-issue/>

ZERO BRINE has also had extensive press coverage throughout the project duration in the form of print and digital articles and featured on television programs and video interviews. According to Meltwater analytics, it can be inferred that news on ZERO BRINE has reached millions of stakeholders including industry experts and policymakers (see Annex).

The impact to circular economy of ZERO BRINE is based on the collection of technical evidence through practical examples in the industry water, coal mining, silica production and textile industries in four demonstration pilots, showcasing economic and environmental benefits, and developing the digital platforms to share and match this information, and working on stakeholder (industries, policy makers, technology providers) involvement throughout the project. The final results are available in the project media kits (on the factsheets) as well as the final respective pilot technology videos (see Annex).

For further breakdown of impacts, see Annex Impact Report.

References

[*Communicating research for evidence-based policymaking. A practical guide for researchers in socio-economic sciences and humanities.*](#) European Commission, 2011.

[Communicating EU Research & Innovation: A guide for project participants.](#) European Commission, 2012.

Annex

1. ZERO BRINE Pilot Videos (Links)

[Industrias Químicas del Ebro presents the pilot in Spain \(link\)](#)

[The technology behind our coal mine pilot in Poland \(link\)](#)

[The technology behind our textile pilot in Turkey \(link\)](#)

[The technology behind our demi water pilot in the Netherlands \(link\)](#)

[The technology behind our silica pilot in Spain \(link\)](#)

[Press briefing & Digital Journey: Reducing pollution from industrial wastewater \(link\)](#)

2. Visual Identity Guidelines (PDF)

3. Press tracking (PDF)

4. Impact Report (PDF)



ZERO BRINE

Visual Identity Guidelines
December 2017



The ZERO BRINE project (www.zerobrine.eu) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730390.

CONTENTS

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A large container ship is docked at a port, with several tall cranes visible in the background. The ship is loaded with colorful shipping containers. The sky is blue with some wispy clouds. The text "THE CONCEPT" is overlaid in large, white, bold letters. In the bottom left corner, there is a decorative graphic of white diamonds of various sizes.

THE CONCEPT

THE CONCEPT

Closing the loop

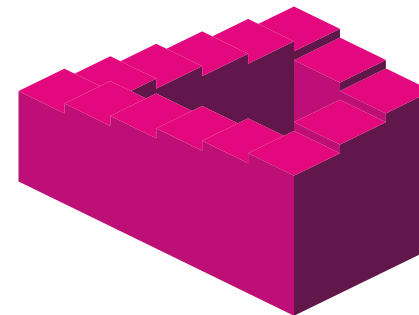
Every project requires a strong, evocative and memorable visual identity. By deconstructing the concept of the project we built up layers of meaning around the logo for a story to emerge.

Recovering the wastewater from industrial plants to reuse the minerals, salts and water in other industries, ZERO BRINE is closing the figurative loop and contributing concretely to the circular economy in Europe.

From the infinity sign to the Mobius Strip and M.C. Escher's Penrose stairs, we derived the feeling of strength, continuity and circularity from these forms to

create the half figure eight with an overlapping ribbon in the middle, implying a work in progress to work in progress to advance 'closing the loop'.

The salty crystals served as inspiration for filling the ZERO BRINE icon ribbon and we chose a typographic font that would be easily recognizable with the slight curl to the 'R' that echoes the feeling of re-starting the circular process.





LOGO

Zero Brine



LOGO

Slogan



ZERO BRINE

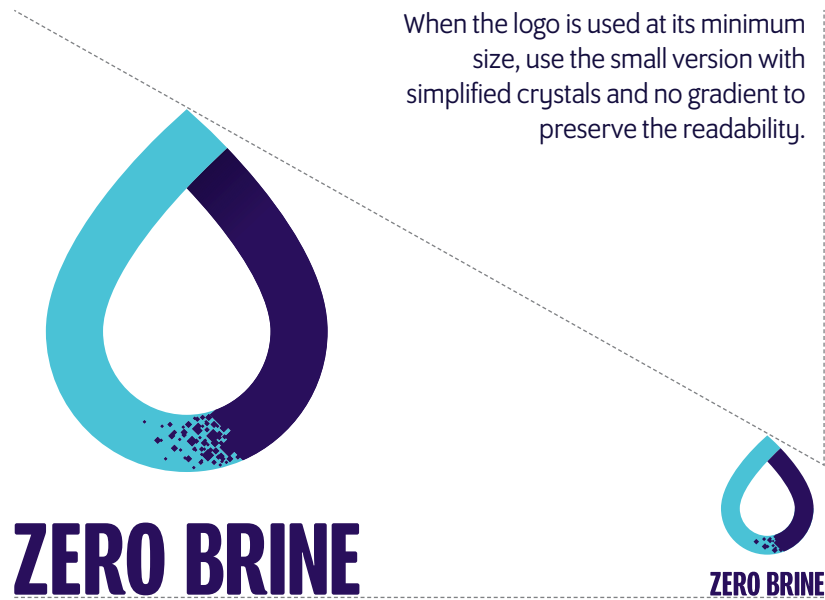
Industrial
Wastewater

Resource
Recovery

Circular
Economy

LOGO

How to use the logo



LOGO

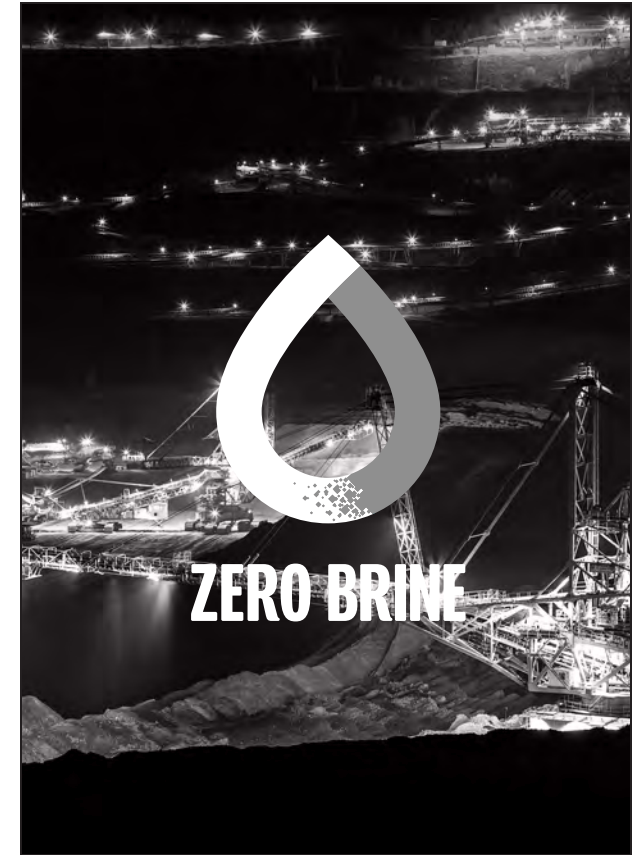
How to use the logo



Original version on light background



Negative version on an image background



Black & white version on monochrome background

LOGO

Use & Misuse

The integrity of ZERO BRINE logo should be respected at all times. Please do not stretch, condense, augment or distort its form. Changing any graphic element of the logo will weaken its impact and detract from the consistent image we seek to project.

Here are some examples of inappropriate uses of the logo.

SCALE



Do not change the proportions of the logos in any way.

EFFECTS



Do not add any kind of effects to the logo.

PROPORTIONS



Do not change proportions of the logo.

TYPEFACE



Do not change the typography used in the logo.

ORIENTATION



Do not change the orientation of the logo by rotating it any way.

COLORS



Do not change the colors of the logo.



COLORS

COLORS

Main colors

Main Color 1

Medium Blue

HEX: #4AC2D7

CMYK: 65 / 0 / 20 / 0

RGB: 75 / 194 / 215

Main Color 2

Dark Purple

HEX: #2A105B

CMYK: 100 / 100 / 32 / 26

RGB: 42 / 16 / 91

Additional Color

Magenta

HEX: #E6007E

CMYK: 0 / 100 / 0 / 0

RGB: 230 / 0 / 126

COLORS

Secondary Colors

Medium Blue

HEX: #005880
CMJN: 95 / 60 / 30 / 10
RVB: 2 / 86 / 129

HEX: #0093138
CMJN: 80 / 25 / 20 / 0
RVB: 21 / 148 / 181

HEX: #95D3E6
CMJN: 45 / 0 / 10 / 0
RVB: 147 / 210 / 227

Dark Purple

HEX: #201A3D
CMJN: 100 / 100 / 40 / 50
RVB: 24 / 8 / 63

HEX: #4C3C90
CMJN: 85 / 85 / 0 / 0
RVB: 82 / 57 / 150

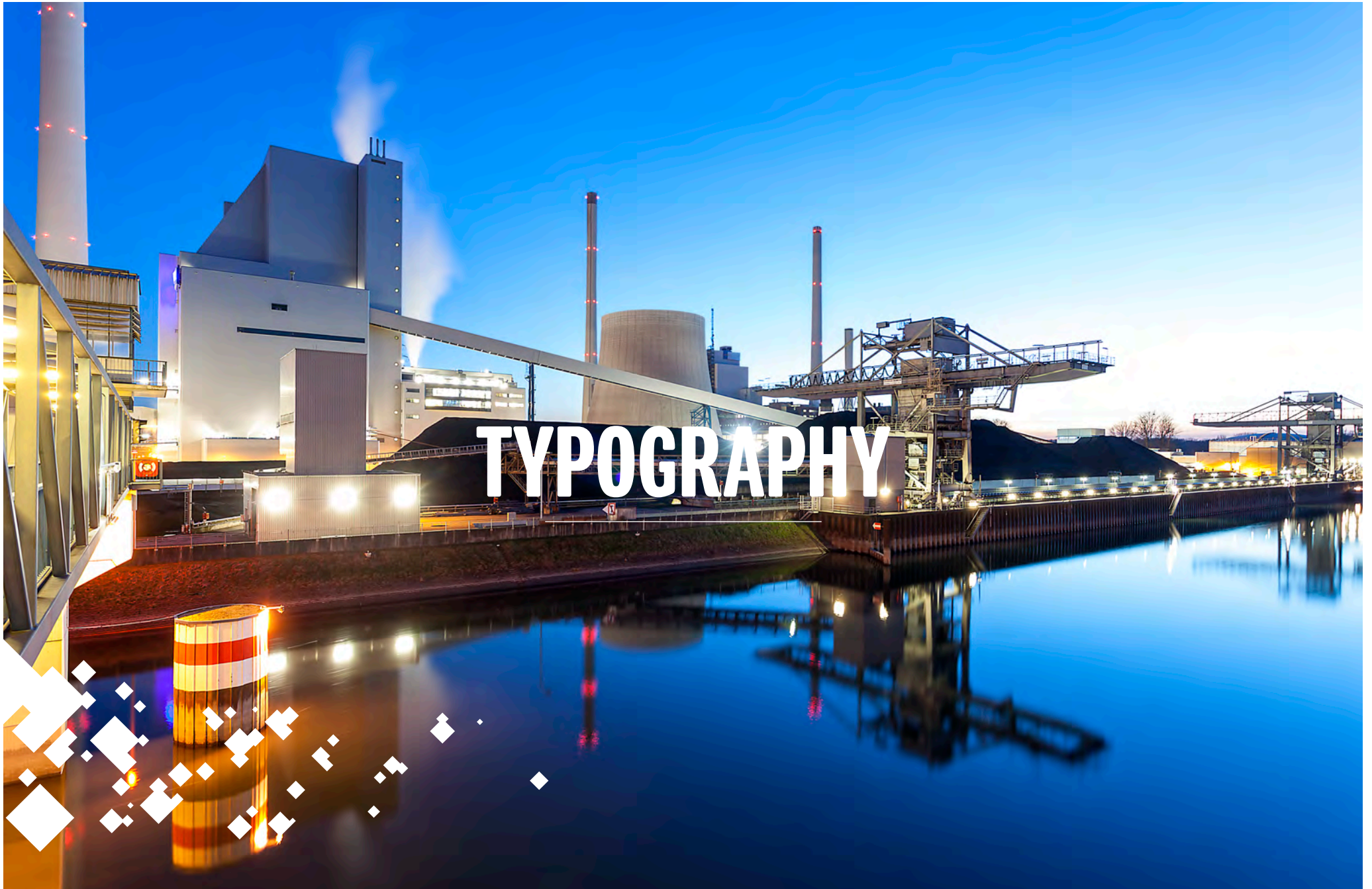
HEX: #7263A9
CMJN: 65 / 65 / 0 / 0
RVB: 120 / 94 / 183

Magenta

HEX: #641649
CMJN: 55 / 100 / 30 / 40
RVB: 100 / 22 / 73

HEX: #921760
CMJN: 40 / 100 / 23 / 17
RVB: 146 / 23 / 96

HEX: #C82686
CMJN: 20 / 94 / 0 / 0
RVB: 200 / 38 / 134



TYPOGRAPHY

Program

The primary typeface is Program (Program Nar OT Medium & Program OT Book).

Use these fonts for all ZERO BRINE communication where possible.

When use of Program fonts are not possible, use Calibri instead.

Example of using the Program Font

THIS IS A TITLE

PLUS A SUBTITLE

Edigent quiatur sequam ad eligenis con perupta alit endia quodigent que de pel moste plamus que veliae veratib eratumq uoditibus sinctora sunt latus quis ut et dias rem quam resto omnimin citiam, quost laborat magnis incitibusa vendaec tionsendit exeri dunt occus, occus que se ligenis aut quamet ventinctotat audam dolumquam, conse verescient, voluptatur re offic tem sit, ut velitem dest exeratist, ute pliquat labo. Exersperi debitatis doluptat ea quiaturit quodit re doluptae. Ullibuscit fuga. Tam, quae modi dolore. Oris coreratem nis et miliatem. Et eiunt audant ationse quaque ipsamet velique niet et optat.

Program Nar OT Medium

Title

ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789

Program OT Book

Sub-head

ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789

Program OT Book

Body

Edigent quiatur sequam ad eligenis con perupta alit endia quodigent que de pel moste plamus que veliae veratib eratumq uoditibus sinctora sunt latus quis ut et dias rem quam resto omnimin citiam, quost laborat magnis incitibusa vendaec tionsendit exeri dunt occus, occus que se ligenis aut quamet ventinctotat audam dolumquam, conse verescient, voluptatur re offic tem sit, ut velitem dest exeratist, ute pliquat labo.



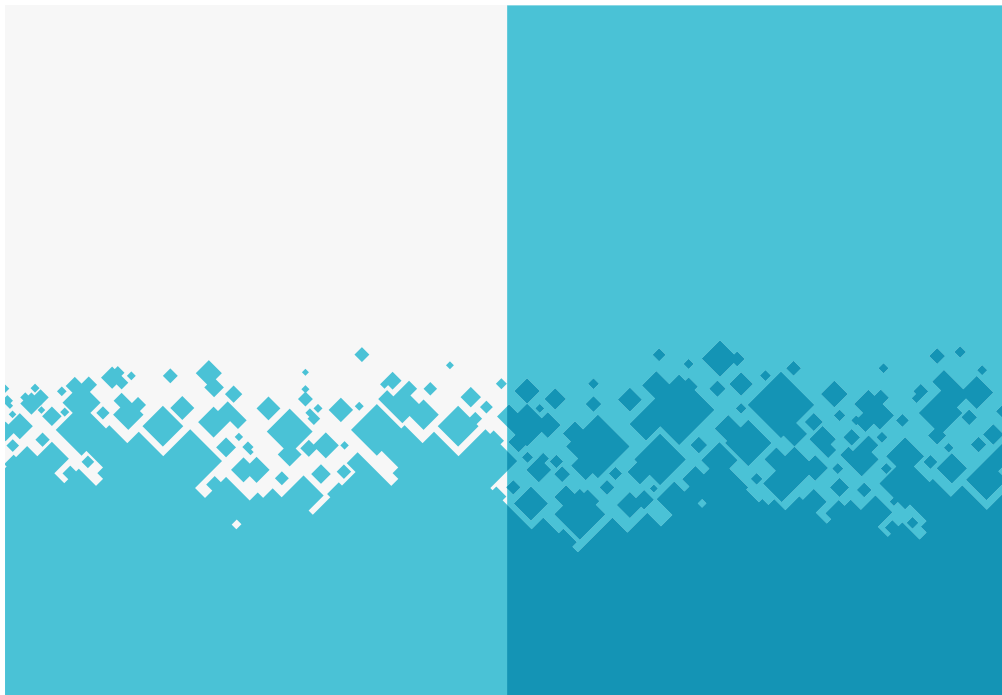
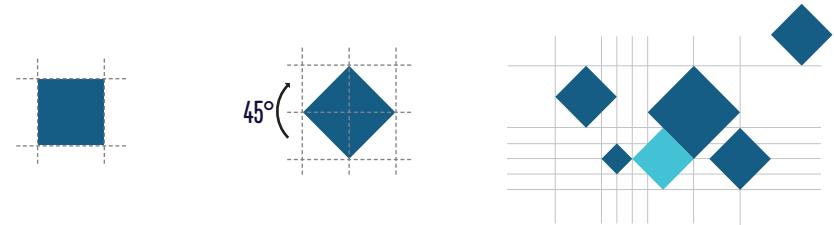
GRAPHIC ELEMENTS

GRAPHIC ELEMENTS

How it works

Inspired by the shape of salt crystals, These graphic elements enhance the ZERO BRINE identity, adding tools that can be used to visually represent the project while staying consistent with the logo.

Salt patterns are created following a principle of square shapes rotated at 45° and assembled on a grid structure.



GRAPHIC ELEMENTS

With images





IMAGERY



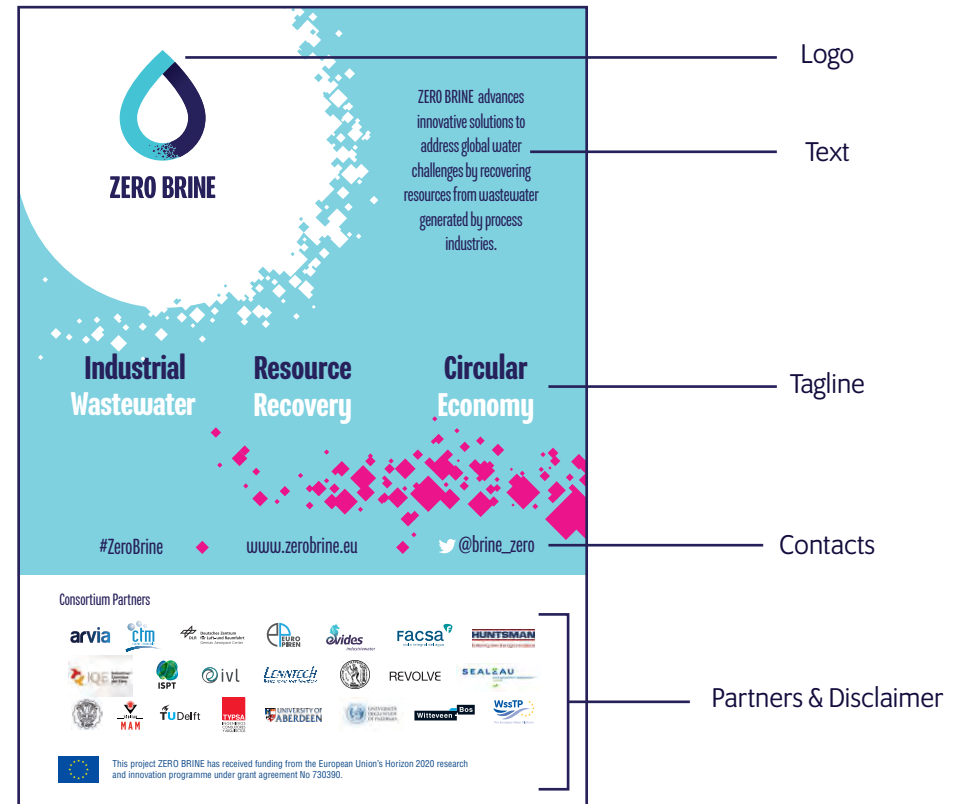
A high-contrast, blue-toned photograph of an industrial machine, likely a lathe or mill, in operation. Bright sparks are being ejected from the cutting area, creating a dynamic, energetic scene. The machine's complex structure, including various gears, levers, and a large circular opening, is visible. The overall aesthetic is industrial and modern.

LAYOUT SYSTEM

LAYOUT SYSTEM

Structure

The ZERO BRINE visual identity is represented on all communication tools in order to ensure the consistent representation of the project, recognition value and by that raising awareness and attention. The layout system shows how the visual identity is used on all communication materials including logo usage, graphical elements, typography and images use.

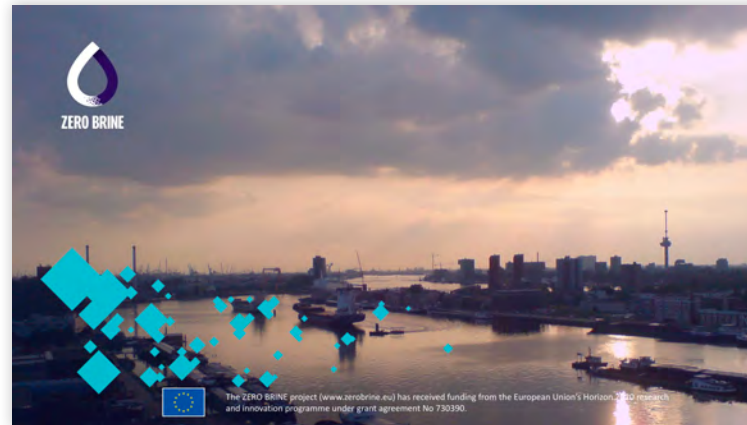


LAYOUT SYSTEM

With background image



Report



PowerPoint presentation



Poster

LAYOUT SYSTEM

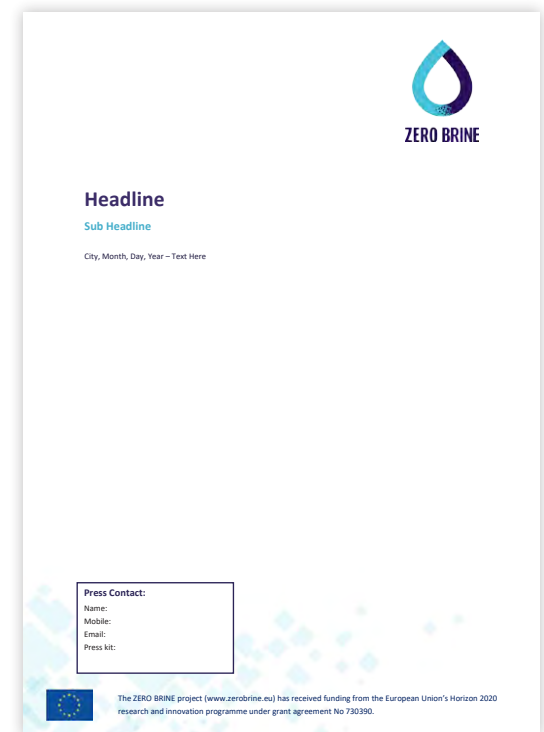
Without background image



Report



PowerPoint presentation



Press release

CONTACT

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REVOLVE

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B-1040 Brussels, Belgium
T: +32 (0)2 318 3984
E: info@revolve.media

Eurecat-CTM investiga cómo reducir el impacto ambiental de efluentes industriales salinos - Industria del agua

Interempresas
Mon Dec 11, 2017

a través de estrategias de economía circular". El proyecto, llamado *Zero Brine* y financiado por el programa marco H2020 de la Comisión...

Tone: Neutral

Recuperación de productos de alto valor añadido a partir de efluentes industriales de elevada salinidad

Retema.es
Tue Dec 5, 2017

a través de estrategias de economía circular". El proyecto, llamado *ZERO BRINE* y financiado por el programa marco H2020 de la Comisión...

Tone: Neutral

La gestión eficiente del agua como arma en la lucha contra el cambio climático

Química - Interempresas
Tue Dec 5, 2017

la estrategia de innovación de la firma a través de proyectos como *Zerobrine*, basado en la economía circular; Aquality para la eliminación...

Tone: Neutral

I

[La gestión eficiente del agua como arma en la lucha contra el cambio climático](#)

Interempresas
Tue Dec 5, 2017

la estrategia de innovación de la firma a través de proyectos como *Zerobrine*, basado en la economía circular; Aquality para la eliminación...

Tone: Neutral

I

[La gestión eficiente del agua como arma en la lucha contra el cambio climático - Industria del agua](#)

Interempresas
Tue Dec 5, 2017

la estrategia de innovación de la firma a través de proyectos como *Zerobrine*, basado en la economía circular; Aquality para la eliminación...

Tone: Neutral

E

[Medio ambiente, agua y energía en de Feria Valencia](#)

ECOticias.com
Thu Nov 30, 2017

la estrategia de innovación de la firma a través de proyectos como *Zerobrine* basado en la economía circular, Aquality para la eliminación de...

Tone: Neutral

L

[Facsa expone en Efiagua su modelo de innovación abierta en el ciclo integral del agua](#)

Levante Emv
Wed Nov 29, 2017

de la innovación a la gestión del agua a través de tres proyectos: *Zero Brine*, que aporta al sector un nuevo enfoque de economía circular...

Tone: Neutral

[La gestión eficiente del agua, arma para la acción climática](#)

Retema.es

Wed Nov 29, 2017

la estrategia de innovación de la firma a través de proyectos como *Zerobrine* basado en la economía circular, Aquality para la eliminación de...

Tone: Neutral

[Efiaqua se convierte en centro del conocimiento innovador sobre la gestión del agua](#)

Economía3

Wed Nov 29, 2017

la estrategia de innovación de la firma a través de proyectos como *Zero Brine* basado en la economía circular mediante la recuperación de...

Tone: Neutral

[El director general de Economía de la Generalitat Valenciana inaugurará la jornada sobre innovación de Facsa en Efiaqua](#)

Interempresas

Mon Nov 27, 2017

de la innovación a la gestión del agua a través de tres proyectos: *Zero Brine*, que aporta al sector un nuevo enfoque de economía circular...

Tone: Neutral

I

[El director general de Economía de la Generalitat Valenciana inaugurará la jornada sobre innovación de Facsa en Efiagua - Industria del agua](#)

Interempresas
Mon Nov 27, 2017

de la innovación a la gestión del agua a través de tres proyectos: *Zero Brine*, que aporta al sector un nuevo enfoque de economía circular...

Tone: Neutral

E

[Facsa celebrará una jornada sobre innovación y gestión del agua en la feria Efiagua](#)

Economía3
Thu Nov 23, 2017

de la innovación a la gestión del agua a través de tres proyectos: *Zero Brine*, que aporta al sector un nuevo enfoque de economía circular...

Tone: Neutral

G

[TÜBİTAK MAM ÇTÜE HOLLANDA'DA](#)

Günaydın Kocaeli
Sun Jul 23, 2017

...

Tone: Not Rated

T

[ZERO BRINE Projesi Açılış Toplantısı](#)

TÜBİTAK Marmara
Wed Jul 19, 2017

...

Tone: Not Rated
Reach: 20.3k
Desktop Reach 10.9k
Mobile Reach 9.45k

δ

[Στην Τήνο το βραβείο για το περιβάλλον](#)

δημοκρατία
Wed Jun 7, 2017

που βρίσκεται στον Αγιο Φωκά της Τήνου θα χρησιμοποιηθεί στο πλαίσιο του «Zero Brine», ενός διεθνούς έργου με σκοπό την ανάκτηση πόρων από...

Tone: Not Rated

E

[ZERO BRINE](#)

EASME
Thu Jun 1, 2017

...

Tone: Not Rated
Reach: 2.41k
Desktop Reach 1.58k
Mobile Reach 827

E

[€ 184 million of Horizon 2020 funding for 23 environment projects](#)

European Commission - EASME
Wed May 10, 2017

for a circular economy in agriculture € 5.87 mln BIOAZUL - Spain ZERO BRINE: Re-designing the value and supply chain of water and minerals:...

Tone: Neutral

C

[Eurecat presenta en Iwater sus soluciones de mejora de la gestión de agua y economía circular](#)

Contruible.es
Fri Nov 16, 2018

a cabo un trabajo de investigación dentro del proyecto europeo *ZERO BRINE*, analizando tecnologías innovadoras como la nanofiltración con...

Tone: Neutral

R

[Eurecat presenta en Iwater un videojuego que acerca a la sociedad los resultados de las políticas medioambientales](#)

Retema.es
Wed Nov 14, 2018

el trabajo que ha llevado a cabo dentro del proyecto europeo *ZERO BRINE*, que ha evaluado tecnologías innovadoras como la nanofiltración con...

Tone: Neutral

W

[ZERO BRINE-project constructs demo plant in the Netherlands](#)

Water News Europe
Mon Oct 8, 2018

...

Tone: Neutral
Reach: 795
Desktop Reach 253
Mobile Reach 542

W

[Bouw proefinstallatie ZERO BRINE-project start in januari in Plant One](#)

Waterforum

Thu Sep 27, 2018

De bouw van de Nederlandse proefinstallatie voor het Europese *ZERO BRINE*-project start in januari 2019 in Plant One in de Botlek. Opvallend...

Tone: Neutral

W

[Industrial water in a circular economy](#)

Water Technology Online

Fri Aug 10, 2018

visits to the *ZERO BRINE* demonstration plants. Adding value is a key element to more sustainable water cycles. *ZERO BRINE* technological...

Tone: Neutral

P

[Zout uit afvalwater van de procesindustrie](#)

POMP NL

Mon Jun 18, 2018

Bij het Europese project *Zero Brine* wordt onderzocht hoe zout uit procesafvalwater geschikt is te maken voor hergebruik. Afvalwater Het...

Tone: Neutral

I

[IQE joins the European project ZERO BRINE](#)

INDUSTRIAS QUÍMICAS DEL EBRO

Thu Feb 15, 2018

...

Tone: Neutral

Reach: 213

Desktop Reach 198

Mobile Reach 15

I

[El proyecto Zero Brine expone cómo obtener recursos de las salmueras en la EIP Water - Agua](#)

Interempresas
Thu Dec 19, 2019

para dar a conocer los avances del proyecto *Zero Brine*. Coordinado por TU DELFT, el proyecto *Zero Brine* incluye 22.....

Tone: Neutral
Reach: 2.57k
Desktop Reach 961
Mobile Reach 1.6k

i

[El proyecto Zero Brine expone cómo obtener recursos de las salmueras](#)

iAgua
Thu Dec 19, 2019

...

Tone: Neutral
Reach: 283k
Desktop Reach 148k
Mobile Reach 135k

F

[El proyecto Zero Brine expone cómo obtener recursos de las salmueras en la European Innovation Partnership on Water \(EIP Water\) Conference](#)

FACSA
Wed Dec 18, 2019

...

Tone: Neutral
Reach: 17k
Desktop Reach 8.78k
Mobile Reach 8.2k

A

[El proyecto Zero Brine expone cómo obtener recursos de las salmueras en la EIP Water Conference](#)

AGUASRESIDUALES.INFO

Wed Dec 18, 2019

...

Tone: Neutral

Reach: 10.2k

Desktop Reach 6.32k

Mobile Reach 3.9k

i

[El proyecto Zero Brine organiza una jornada en la European Water Innovation Conference](#)

iAgua

Tue Dec 10, 2019

...

Tone: Neutral

Reach: 283k

Desktop Reach 148k

Mobile Reach 135k

I

[El proyecto Zero Brine organiza una jornada en la European Water Innovation Conference para exponer sus avances - Agua](#)

Interempresas

Mon Dec 9, 2019

objetivo de dar a conocer los principales avances del proyecto europeo *Zero Brine*, que persigue minimizar el vertido de salmueras.....

Tone: Neutral

Reach: 2.71k

Desktop Reach 1.1k

Mobile Reach 1.61k

[Zero Brine launches first pilot in Rotterdam](#)

Filtration + Separation

Thu Dec 5, 2019

The EU-funded *Zero Brine* project, which aims to reduce industrial saline wastewater streams by recovering and reusing minerals and.....

Tone: Neutral

Reach: 7.37k

Desktop Reach 6.51k

Mobile Reach 860

[El proyecto Zero Brine organiza una jornada en la European Water Innovation Conference para exponer sus avances](#)

Facsa

Thu Dec 5, 2019

...

Tone: Neutral

Reach: 17k

Desktop Reach 8.78k

Mobile Reach 8.2k

[Waste brine aids circular economy.](#)

Filtration + Separation

Wed Nov 20, 2019

industries create waste brine, threatening marine life. The *Zero Brine* project aims to reduce industrial saline wastewater streams.....

Tone: Neutral

Reach: 4.35k

Desktop Reach 3.53k

Mobile Reach 813

[Nieuwe industriële waterzuivering in Botlekgebied](#)

De Ingenieur
Tue Nov 19, 2019

is? Dat is de centrale vraag waarop het internationale samenwerkingsverband *Zero Brine* de komende jaren een antwoord probeert te.....

Tone: Neutral
Reach: 49.4k
Desktop Reach 21.1k
Mobile Reach 28.4k

[Kickstarting industrial circularity in the Port of Rotterdam](#)

PRpro [EN]
Tue Nov 19, 2019

for 94% of all magnesium supplied to the EU. The *ZERO BRINE* project is facilitating the implementation of the EU Circular Economy.....

Tone: Neutral
Reach: 1.22k
Desktop Reach 1.14k
Mobile Reach 82

[Circular economy: A path to eco-friendly business](#)

Daily Sabah
Tue Nov 19, 2019

Funded by the European Union's Horizon 2020 research and innovation program, *Zero Brine* already has three other pilot projects,.....

Tone: Neutral
Reach: 1.05M
Desktop Reach 316k
Mobile Reach 738k

[Kickstarting Industrial Circularity In The Port Of Rotterdam](#)

Water Online
Tue Nov 19, 2019

to take place in 2020. ABOUT *ZERO BRINE* Coordinated by TU DELFT, the innovation project *ZERO BRINE* advances circular.....

Tone: Neutral
Reach: 54.8k
Desktop Reach 39.4k
Mobile Reach 15.4k

[Circular economy: A path to eco-friendly business](#)

World News Monitor
Tue Nov 19, 2019

Funded by the European Union's Horizon 2020 research and innovation program, *Zero Brine* already has three other pilot projects,.....

Tone: Negative
Reach: 35.4k
Desktop Reach 7.01k
Mobile Reach 28.4k

[PGG zamierza przestać zrzucić solankę do rzek. Obiecujący pilotaż w kopalni Bolesław Śmiały.](#)

Śląski Biznes
Thu Nov 14, 2019

konsorcjum 22 europejskich jednostek naukowo-technologicznych. Koordynacją „Zero Brine” (który oprócz polskiej instalacji w.....

Tone: Not Rated
Reach: 42.2k
Desktop Reach 24.4k
Mobile Reach 17.8k

D

[Proef in Polen met zuiveren zout mijnwater](#)

De Ingenieur
Mon Nov 11, 2019

. Het zijn de zeecontainers waarin de proef loopt voor het project *Zero Brine*. Hier wordt gewerkt aan het schoner maken van de Poolse...

Tone: Neutral
Reach: 49.4k
Desktop Reach 21.1k
Mobile Reach 28.4k

T

[Kombinacja kilku technik zapewni wydajny odzysk surowców z solanki](#)

Teraz Środowisko
Wed Nov 6, 2019

. śląskie), w kopalni „Bolesław Śmiały” podczas wizyty studyjnej projektu *ZERO BRINE* (ang. brine – solanka). Wykorzystywana obecnie metoda...

Tone: Not Rated
Reach: 28k
Desktop Reach 19.7k
Mobile Reach 8.29k

W

[Poland: Pilot recovers salt and clean water from coal mine wastewater](#)

Water News Europe
Tue Oct 29, 2019

...

Tone: Positive
Reach: 0
Desktop Reach 439
Mobile Reach 0

[Polish Coal Mine Recovers Valuable Resources from Wastewater](#)

Water Active

Mon Oct 28, 2019

Posted: Monday 28 th October 2019 The *ZERO BRINE* project is seeking to change this by recovering water, salts, magnesium and other...

Tone: Neutral

Reach: 489

Desktop Reach 228

Mobile Reach 261

[On coal and water in Poland](#)

REVOLVE

Tue Oct 22, 2019

...

Tone: Neutral

Reach: 563

Desktop Reach 305

Mobile Reach 258

[Prezes PGG w Komisji Europejskiej: łańcuchy wartości spółek górniczych potrzebują ochrony](#)

Śląski Biznes

Mon Oct 21, 2019

Europie, unikatowa instalacja odsalania wód kopalnianych w projekcie „Zero Brine” z udziałem 22 polskich i zagranicznych placówek naukowych;...

Tone: Not Rated

Reach: 51k

Desktop Reach 20.6k

Mobile Reach 30.5k

F

[Polish coal mine recovers valuable resources from wastewater](#)

Futur ENVIRO
Tue Oct 15, 2019

industrial-scale desalination plant serves as the benchmark for the *Zero Brine* solution. This technology is energy intensive with limited...

Tone: Neutral
Reach: 164
Desktop Reach 48
Mobile Reach 116

F

[Una mina de carbón polaca recupera valiosos recursos de las aguas residuales](#)

FuturENVIRO [ES]
Tue Oct 15, 2019

El proyecto *Zero Brine*, Salmuera Cero en español, busca cambiar esta situación mediante la recuperación de agua, sales, magnesio y otros...

Tone: Neutral
Reach: 744
Desktop Reach 280
Mobile Reach 464

P

[Coal mine treats its wastewater protecting environment](#)

Polandin.com
Fri Oct 11, 2019

Silesian University of Technology and is part of the EU-founded *Zero Brine* project. According to scientists, the coal mine wastewater is...

Tone: Neutral
Reach: 34.1k
Desktop Reach 12.2k
Mobile Reach 21.8k

S

[The new mining - Polish coal mine recovers valuable resources from wastewater](#)

Smart Water Magazine
Fri Oct 11, 2019

. – Professor Marian Turek, Silesian University of Technology The *ZERO BRINE* project aims to facilitate the implementation of the EU...

Tone: Neutral
Reach: 6.24k
Desktop Reach 3.6k
Mobile Reach 2.65k

T

[Coal mine in Poland desalinates wastewater to protect environment](#)

TVN24
Wed Oct 9, 2019

...

Tone: Neutral
Reach: 9.13M
Desktop Reach 3.05M
Mobile Reach 6.08M

T

[Przemysł cyrkularny w praktyce? Zgłoszenia na wyjazd studyjny do kopalni węgla Bolesław Śmiały tylko do jutra](#)

Teraz Środowisko
Thu Sep 26, 2019

, ścieki i gospodarka o obiegu zamkniętym. Organizatorem wydarzenia jest *ZERO BRINE*. Termin zgłoszeń mija 27 września br. Więcej informacji...

Tone: Not Rated
Reach: 46.2k
Desktop Reach 31.5k
Mobile Reach 14.7k

E

[ZERO BRINE](#)

Eurecat
Tue Sep 17, 2019

...

Tone: Not Rated
Reach: 173
Desktop Reach 74
Mobile Reach 99

워

[\[네덜란드\] ZERO BRINE 워크숍, 물공급 문제 논의](#)

워터저널
Fri Aug 2, 2019

네덜란드] *ZERO BRINE* 워크숍, 물공급 문제 논의 2차 원료와 물 재이용을 촉진하기 위해 염수(브라인) 생산자와 광물 및 용수 사용자 및 기술제공업체를 연결하는 최초의 *ZERO BRINE* 워크숍이 네덜란드에서.....

Tone: Neutral
Reach: 4.25k
Desktop Reach 2.37k
Mobile Reach 1.88k

F

[ZERO BRINE workshops explore water supply issues](#)

Filtration + Separation
Thu Aug 1, 2019

, took place in July in the Netherlands. Part of the *ZERO BRINE* project and organised by the Netherlands' Institute for.....

Tone: Neutral
Reach: 7.79k
Desktop Reach 5.2k
Mobile Reach 2.58k

[Closing the loop for process industries](#)

EREK

Mon Jul 1, 2019

...

Tone: Neutral

Reach: 0

Desktop Reach 53

Mobile Reach 0

[ISPT organiseert regionale workshops om brijnproducenten en afnemers te koppelen](#)

Waterforum

Thu Jun 20, 2019

industriële zoutwater-afvalstromen te verminderen door mineralen en schoon *water* terug te winnen en te hergebruiken. Volgens woordvoerder...

Tone: Neutral

Reach: 2.85k

Desktop Reach 1.62k

Mobile Reach 1.22k

[\[네덜란드\] Evides, 산업폐수 정화로 순환경제 실현](#)

워터저널

Thu Jun 20, 2019

인더스트리워터(Evides Industriewater)는 최근 *ZERO BRINE* 프로젝트의 일환으로 순환경제를 발전시키는 데 있어 그것의 역할을 제시했다. 유럽연합(EU)이 자금을 제공하는 *ZERO BRINE* 프로젝트는 산업폐수에서 미네랄, 물 및...

Tone: Positive

Reach: 4.25k

Desktop Reach 2.37k

Mobile Reach 1.88k

F

[Evides demonstrates circular economy.](#)

Filtration + Separation
Tue Jun 18, 2019

...

Tone: Neutral
Reach: 6.33k
Desktop Reach 4k
Mobile Reach 2.33k

W

[Zero Brine: Kick-off innovative brine treatment in Port of Rotterdam](#)

Water News Europe
Thu May 30, 2019

...

Tone: Neutral
Reach: 0
Desktop Reach 439
Mobile Reach 0

H

[ZERO BRINE – From industrial saline waste water to clean water and minerals](#)

Holland Circular Hotspot
Fri May 24, 2019

ZERO BRINE – From industrial saline waste water to clean water and minerals ZERO BRINE advances circular economy business model...

Tone: Neutral
Reach: 0
Desktop Reach 349
Mobile Reach 0

[Demin Water Pilot Advances Industrial Circularity & Critical Raw Material Recovery](#)

Water Online

Thu May 23, 2019

, *ZERO BRINE* encourages industrial circularity for a new generation of innovative, resource-efficient European businesses. About *ZERO BRINE*...

Tone: Neutral

Reach: 77.4k

Desktop Reach 63k

Mobile Reach 14.4k

[Previous Next Online Brine Platform \(2019\)](#)

ceowatermandate.org

Thu Feb 28, 2019

providers to promote the reuse of secondary raw materials and water. The *Online Brine Platform* (OBP) is an active web service that aims to...

Tone: Neutral

[ZERO BRINE – From industrial saline waste water to clean water and minerals](#)

hollandcircularhotspot.nl

Wed Feb 27, 2019

and *water* from the brine used in other industries. Thus; ‘closing the loop’ and improving the environmental impacts of production. *Water* and...

Tone: Positive

[Online brine platform promotes circular economy](#)

Filtration + Separation

Thu Feb 21, 2019

brine owners with mineral and *water* users and technology providers to promote the *reuse* of secondary raw materials and *water*. The project...

Tone: Neutral

Reach: 8.55k

Desktop Reach 5.8k

Mobile Reach 2.75k

[\[네덜란드\] 온라인 염수 플랫폼, 공정산업 위한 순환경제 솔루션 강화](#)

워터저널

Thu Feb 7, 2019

brine owners with mineral and *water* users and technology providers to promote the *reuse* of secondary raw materials and *water*. Through the...

Tone: Neutral

Reach: 1.6k

Desktop Reach 1.09k

Mobile Reach 503

[Online Brine platform boosts circular economy solutions for process industries](#)

Climate Control Middle East

Sun Feb 3, 2019

brine owners with mineral and *water* users and technology providers to promote the *reuse* of secondary raw materials and *water*, the communiqué...

Tone: Neutral

Reach: 2.12k

Desktop Reach 851

Mobile Reach 1.27k

F

[Online Brine Platform Boosts Circular Economy Solutions for Process Industries](#)

Futur ENVIRO
Fri Feb 1, 2019

to matchmake with stakeholders on a platform such as the ZERO BRINE *Online Brine Platform*.“–John Harinck, Program Manager,

Tone: Neutral
Reach: 221
Desktop Reach 181
Mobile Reach 40

E

[Online Brine Platform Boosts Circular Economy Solutions for Process Industries](#)

Energy Post
Thu Jan 31, 2019

...

Tone: Positive
Reach: 84.8k
Desktop Reach 33k
Mobile Reach 51.9k

E

[Online brine platform aims to boost circular economy solutions for process industries](#) | [Envirotec](#)

Envirotec Magazine
Thu Jan 31, 2019

the *reuse* of secondary raw materials and *water*. Through the OBP, brine effluents are mapped alongside raw materials (minerals), *water*...

Tone: Neutral

W

[Online Brine Platform Boosts Circular Economy Solutions For Process Industries](#)

Water Online

Thu Jan 31, 2019

the *reuse* of secondary raw materials and *water*. Through the OBP, brine effluents are mapped alongside raw materials (minerals), *water*...

Tone: Neutral

Reach: 54.2k

Desktop Reach 39.2k

Mobile Reach 15k

F

[Desalination & Water Reuse Market Growth](#)

Filtration Products

Mon Jan 14, 2019

solutions to *water* scarcity by supporting the development of the *desalination* and *water reuse* industry to secure sustainable *water* and...

Tone: Positive

Reach: 376

Desktop Reach 218

Mobile Reach 158

E

[Industriële kringloop in de Rotterdamse haven](#)

Engineersonline.nl

Mon Jan 14, 2019

waardeketen Inmiddels is TU Delft coördinator van het project onder de naam *Zero Brine*. Het startte in 2017 en duurt tot 2021. Hierin...

Tone: Neutral

Reach: 17.8k

Desktop Reach 10.9k

Mobile Reach 6.89k

Unieke kringloop in de Rotterdamse haven

Rijksdienst voor Ondernemend Nederland

Fri Jan 11, 2019

Nieuwe waardeketen Inmiddels is TU Delft coördinator van het project onder de naam *ZERO BRINE*. Het startte in 2017 en duurt tot 2021. Hierin...

Tone: Neutral

Reach: 245k

Desktop Reach 170k

Mobile Reach 74.5k

S

[ZERO BRINE project heads into the final year](#)

Smart Water Magazine
Wed Dec 30, 2020

The *ZERO BRINE* project entered its forth and last year thus results are well underway. Coordinated by TU Delft, the project's goal is to re-...

Tone: Positive
Reach: 25k
Desktop Reach 13k
Mobile Reach 12k

W

[ZERO BRINE project heads into the final year](#)

Water Europe
Tue Dec 29, 2020

...

Tone: Neutral
Reach: 9.08k
Desktop Reach 1.44k
Mobile Reach 7.64k

W

[ZERO BRINE project heads into the final year](#)

Water Europe
Tue Dec 29, 2020

...

Tone: Neutral
Reach: 9.08k
Desktop Reach 1.44k
Mobile Reach 7.64k

M

[A Novel Ionic Exchange Membrane Crystallizer to Recover Magnesium Hydroxide from Seawater and Industrial Brines](#)

Multidisciplinary Digital Publishing Institute
Mon Dec 28, 2020

of the manuscript. Funding: This work was funded by the *ZERO BRINE* project (*ZERO BRINE*—Industrial Desalination — Resource Recovery—Circular...

Tone: Neutral
Reach: 4.48M
Desktop Reach 3.36M
Mobile Reach 1.12M

a

[El Proyecto Zero Brine sobre depuración industrial pone en marcha el segundo pilotaje en el puerto de Rotterdam](#)

aguasresiduales
Tue Nov 10, 2020

Revista Noticias El Proyecto *Zero Brine* sobre depuración industrial... Noticias La actualidad del sector del...

Tone: Neutral
Reach: 75.4k
Desktop Reach 54.8k
Mobile Reach 20.6k

F

[El Proyecto Zero Brine pone en marcha el segundo pilotaje en el puerto de Rotterdam, Países Bajos](#)

Facsa
Mon Nov 2, 2020

...

Tone: Neutral
Reach: 17k
Desktop Reach 8.78k
Mobile Reach 8.2k

[Brine elimination pilot progresses](#)

Envirotec Magazine
Wed Sep 9, 2020

Rotterdam, one of the largest petrochemical clusters in Europe, the *Zero Brine* project – coordinated by Delft University of

Tone: Neutral
Reach: 2.86k
Desktop Reach 2.45k
Mobile Reach 413

[Cooling down brine to recover minerals from water treatment](#)

Dutch Water Sector
Mon Sep 7, 2020

of Technology in the context of the *Zero Brine* project. Impression of a field visit by members of the *Zero Brine* project

Tone: Neutral
Reach: 5.57k
Desktop Reach 3.23k
Mobile Reach 2.35k

[Zero Brine launches second pilot in Rotterdam Port](#)

Filtration + Separation
Tue Sep 1, 2020

streams to eliminate brine effluent (*zero brine* discharge) in the production of demineralised water. The *Zero Brine*

Tone: Neutral
Reach: 5.43k
Desktop Reach 4.15k
Mobile Reach 1.28k

[Zero Brine start tweede proeflocatie in Botlek](#)

Vakblad H2O
Mon Aug 31, 2020

Zero Brine is een Europees onderzoeksproject dat moet leiden tot het sluiten van de water- en mineralenkringloop in de industrie.....

Tone: Neutral
Reach: 14.1k
Desktop Reach 7.46k
Mobile Reach 6.67k

[Zero Brine's site II pilot launches in Rotterdam Port](#)

Smart Water Magazine
Thu Aug 27, 2020

Delft University of Technology in the context of the *ZERO BRINE* project. The *ZERO BRINE* project is facilitating the

Tone: Neutral
Reach: 16.4k
Desktop Reach 13.5k
Mobile Reach 2.88k

[Desalination in Mining](#)

Environmental Expert.com
Wed Aug 26, 2020

brine discharge causes \$100-250 million in damage annually. The new *Zero Brine* pilot plant at the Polish Bolesław Śmiały coal mine.....

Tone: Neutral
Reach: 175k
Desktop Reach 91k
Mobile Reach 83.7k

[ZERO BRINE's Site II pilot launches in Rotterdam Port](#)

The Middle East North Africa Financial Network
Sat Aug 22, 2020

University of Technology in the context of the *ZERO BRINE* project. The *ZERO BRINE* project is facilitating the

Tone: Neutral

Reach: 305k

Desktop Reach 127k

Mobile Reach 178k

[Recuperación de recursos de aguas residuales industriales para reducir el impacto medioambiental](#)

aguasresiduales
Fri Jul 3, 2020

hacia el recinto». Otras plantas piloto El proyecto en curso *ZERO BRINE* (Re-designing the value and supply chain of

Tone: Neutral

Reach: 47.5k

Desktop Reach 29.1k

Mobile Reach 18.4k

[Recuperación de recursos de aguas residuales industriales para reducir el impacto medioambiental](#)

Retema.es
Fri Jul 3, 2020

la idea que se propone desarrollar el proyecto financiado con fondos europeos *ZERO BRINE*, el cual utiliza un enfoque de economía

Tone: Neutral

Reach: 29.6k

Desktop Reach 15.6k

Mobile Reach 14k

I

Récupérer les ressources des eaux usées industrielles

Infogreen

Thu Jul 2, 2020

marchande. » Pour plus d'informations, veuillez consulter : site web du projet *ZERO BRINE* Source : CORDIS Photo : © manine99,

Tone: Neutral

Reach: 7.06k

Desktop Reach 2.62k

Mobile Reach 4.43k

C

Odzysk surowców ze ścieków przemysłowych ograniczy wpływ na środowisko

CORDIS

Mon Jun 29, 2020

...

Tone: Not Rated

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

Recuperare risorse dalle acque reflue industriali per ridurre al minimo l'impatto ambientale

CORDIS

Mon Jun 29, 2020

...

Tone: Neutral

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

Récupérer les ressources des eaux usées industrielles pour minimiser l'impact environnemental

CORDIS

Mon Jun 29, 2020

...

Tone: Neutral

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

Recuperación de recursos de aguas residuales industriales para reducir el impacto medioambiental

CORDIS

Mon Jun 29, 2020

...

Tone: Negative

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

Recovering resources from industrial wastewater to minimise environmental impact

CORDIS

Mon Jun 29, 2020

...

Tone: Neutral

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

Rückgewinnung von Ressourcen aus Industrieabwässern zur Minimierung der Auswirkungen auf die Umwelt

CORDIS

Mon Jun 29, 2020

...

Tone: Neutral

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

Recovering resources from industrial wastewater to minimise environmental impact

CORDIS

Fri Jun 19, 2020

...

Tone: Neutral

Reach: 55.6k

Desktop Reach 42.4k

Mobile Reach 13.2k

T

ZERO BRINE PROJESİ İLE SU KAYNAKLARININ KULLANIMI AZALACAK

Temiz Mekan

Tue May 12, 2020

...

Tone: Not Rated

Reach: 500

Desktop Reach 384

Mobile Reach 116

BASIN BÜLTENİ-Zorluteks, kazanım yönetimi ile çevresel etkileri en aza indirecek projeler geliştirmeyi hedefliyor

Yapı Kredi

Mon May 11, 2020

Araştırma Merkezi (MAM) Çevre ve Temiz Üretim Enstitüsü'nün yürüttüğü “*Zero Brine*: Re-Designing the Value and Supply Chain of

Tone: Not Rated

Reach: 2.63M

Desktop Reach 1.01M

Mobile Reach 1.62M

M

[Bipolar Membrane Electrodialysis for Sulfate Recycling in the Metallurgical Industries](#)

MDPI

Sat Sep 18, 2021

der Westhuizen, L.; Rossouw, S. Sodium sulfate splitting as *zero brine* process in a base metal refinery: Screening and optimization in batch...

Tone: Neutral

Reach: 4.9M

Desktop Reach 3.6M

Mobile Reach 1.3M

M

[Insights of Digital Transformation Processes in Industrial Symbiosis from the Viable Systems Approach \(vSa\)](#)

MDPI

Sun Aug 29, 2021

for Industrial Sustainability, University of Cambridge, within the MAESTRI *project*, "Energy and resource management systems for better..."

Tone: Neutral

Reach: 4.65M

Desktop Reach 3.38M

Mobile Reach 1.27M

O

[ZERO BRINE: Extracting Value From Europe's Industrial Wastewater Four Projects Seek To Reduce Water Pollution Through Circular Transition](#)

OOSKA News

Wed May 26, 2021

...

Tone: Positive

Reach: 2.88k

Desktop Reach 1.15k

Mobile Reach 1.72k

S

[Advancing circular economy in silica production](#)

Smart Water Magazine
Tue Mar 23, 2021

producers, Industrias Químicas del Ebro (IQE), the *ZERO BRINE project* has demonstrated circular economy through the recovery of resources...

Tone: Neutral
Reach: 23.8k
Desktop Reach 11.5k
Mobile Reach 12.3k

T

[Advancing Circular Economy in Silica Production](#)

The Middle East North Africa Financial Network
Sat Mar 20, 2021

) – *ZERO BRINE* is recovering valuable resources and supporting resource efficiency. *ZERO BRINE* pilot at IQE. Photo: *ZERO BRINE*...

Tone: Neutral
Reach: 443k
Desktop Reach 116k
Mobile Reach 328k

P

[ZERO BRINE: Advancing Circular Economy in Silica Production](#)

Press Club
Fri Mar 19, 2021

...

Tone: Neutral
Reach: 0
Desktop Reach 63
Mobile Reach 0

R

[Chipre contará con un agua potable más respetuosa con el medio ambiente](#)

Retema.es

Fri Feb 12, 2021

impaired effluent (brine) generated by process industries). El proyecto *ZERO BRINE* finalizará en mayo de 2021. WATER-MINING empezó en 2020 y...

Tone: Neutral

Reach: 27.3k

Desktop Reach 18k

Mobile Reach 9.31k

S

[Striving for more environmentally friendly drinking water in Cyprus](#)

Smart Water Magazine

Wed Feb 10, 2021

saline impaired effluent (brine) generated by process industries). The *ZERO BRINE project* ends in May 2021. WATER-MINING began in 2020 and...

Tone: Neutral

Reach: 25.2k

Desktop Reach 12.4k

Mobile Reach 12.8k

C

[Impegno per un'acqua potabile più ecocompatibile sull'isola di Cipro](#)

CORDIS

Tue Feb 9, 2021

...

Tone: Positive

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

[Dążenie ku bardziej ekologicznemu systemowi pozyskiwania wody pitnej na Cyprze](#)

CORDIS

Tue Feb 9, 2021

...

Tone: Not Rated

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

[Esfuerzos para un agua potable más respetuosa con el medio ambiente en Chipre](#)

CORDIS

Tue Feb 9, 2021

...

Tone: Positive

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

[Des efforts pour une eau potable plus respectueuse de l'environnement à Chypre](#)

CORDIS

Tue Feb 9, 2021

...

Tone: Neutral

Reach: 70.2k

Desktop Reach 51.6k

Mobile Reach 18.6k

C

[Bemühungen um umweltfreundlicheres Trinkwasser auf Zypern](#)

CORDIS
Tue Feb 9, 2021

...

Tone: Negative
Reach: 70.2k
Desktop Reach 51.6k
Mobile Reach 18.6k

C

[Striving for more environmentally friendly drinking water on Cyprus](#)

CORDIS
Tue Feb 9, 2021

...

Tone: Positive
Reach: 55.6k
Desktop Reach 42.4k
Mobile Reach 13.2k

C

[Paying a heavy price for water](#)

Cyprus Mail
Sun Jan 31, 2021

Mining *project* started on September 1, 2020 and lasts for four years until August 31, 2024. With a total budget of €19.1 million the *project*...

Tone: Neutral
Reach: 507k
Desktop Reach 75.3k
Mobile Reach 431k



ZERO BRINE

Impact Reporting



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 893924.





INTRODUCTION

This Impact Report summarises the outreach activities and their impact through each of the reporting periods of the project.



This project has been co-funded by
the Horizon 2020 Programme.



IMPACT OVERVIEW – WEBSITE

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

USERS

3,032

7,675

29,032

PAGE VIEWS

17,231

43,300

56,315



This project has been co-funded by
the Horizon 2020 Programme.



IMPACT OVERVIEW – SOCIAL MEDIA

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

TWITTER

FOLLOWERS

359

724

1,001

IMPRESSIONS

305k

291k

132k

LINKEDIN

FOLLOWERS

NA

NA

509

IMPRESSIONS

NA

NA

16.6k



This project has been co-funded by the Horizon 2020 Programme.



IMPACT OVERVIEW - NEWSLETTER

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

TOTAL SUBSCRIBERS

824

1,301

1,660



ZERO BRINE

Advancing Circular Economy in Silica Production

ZARAGOZA, 19 MARCH 2021 — At one of Europe's largest silica producers, Industrias Químicas del Ebro (IQE), the ZERO BRINE project has demonstrated circular economy through the recovery of resources from industrial waste brine.

The production of silica is highly water-intensive, resulting in brine discharge containing a high concentration of sodium sulphate. Through pre-treatment of the effluent and the application of [two membrane processes](#) – pressure-driven filtration with regenerated membranes and electrodialysis with bipolar membranes (EDBP) – ZERO BRINE is recovering valuable resources and supporting resource efficiency.



This project has been co-funded by the Horizon 2020 Programme.



IMPACT OVERVIEW - VIDEO

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

VIDEOS

2

5

25

VIEWS

617

166

3,174



This project has been co-funded by the Horizon 2020 Programme.

IMPACT OVERVIEW – MEDIA RELATIONS

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

PRESS ARTICLES

20

82

37

LANGUAGES

5

7

6



This project has been co-funded by the Horizon 2020 Programme.



IMPACT OVERVIEW – MEDIA RELATIONS

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

PRESS ARTICLES

20

82

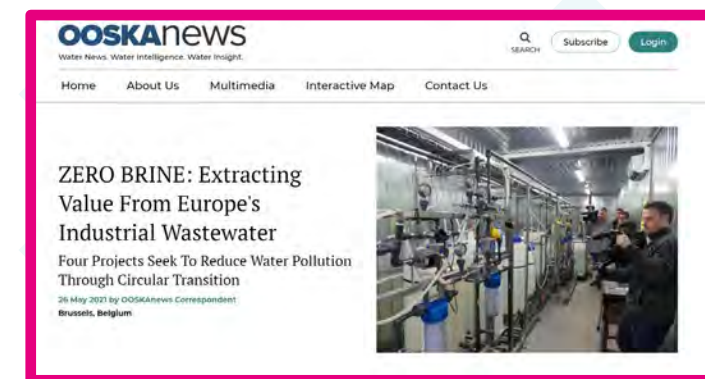
37

LANGUAGES

5

7

6



This project has been co-funded by the Horizon 2020 Programme.



IMPACT OVERVIEW – OUTREACH

PRESS ARTICLES

139

COUNTRIES

15

LANGUAGES

11

ESTIMATED REACH

45,000,000



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the Horizon 2020 Programme.



IMPACT OVERVIEW - EVENT PARTICIPATION

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

ZERO BRINE EVENTS

1

9

12

PARTICIPATION TO OTHER EVENTS

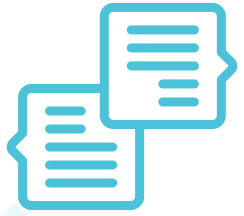
21

53

22



This project has been co-funded by the Horizon 2020 Programme.



IMPACT OVERVIEW – ONLINE BRINE PLATFORM

REPORTING PERIOD

JUN 2017 – NOV 2018

DEC 2018 – MAY 2020

JUN 2020 – NOV 2021

USERS

NA

1,199

2,742



ZERO BRINE

ONLINE
BRINE
PLATFORM (OBP)



This project has been co-funded by
the Horizon 2020 Programme.