sea4volt

seawater fed AEM electrolyser concept

PRESENTATION TITLE

Speaker’s name and Company

Co-funded by the European Union

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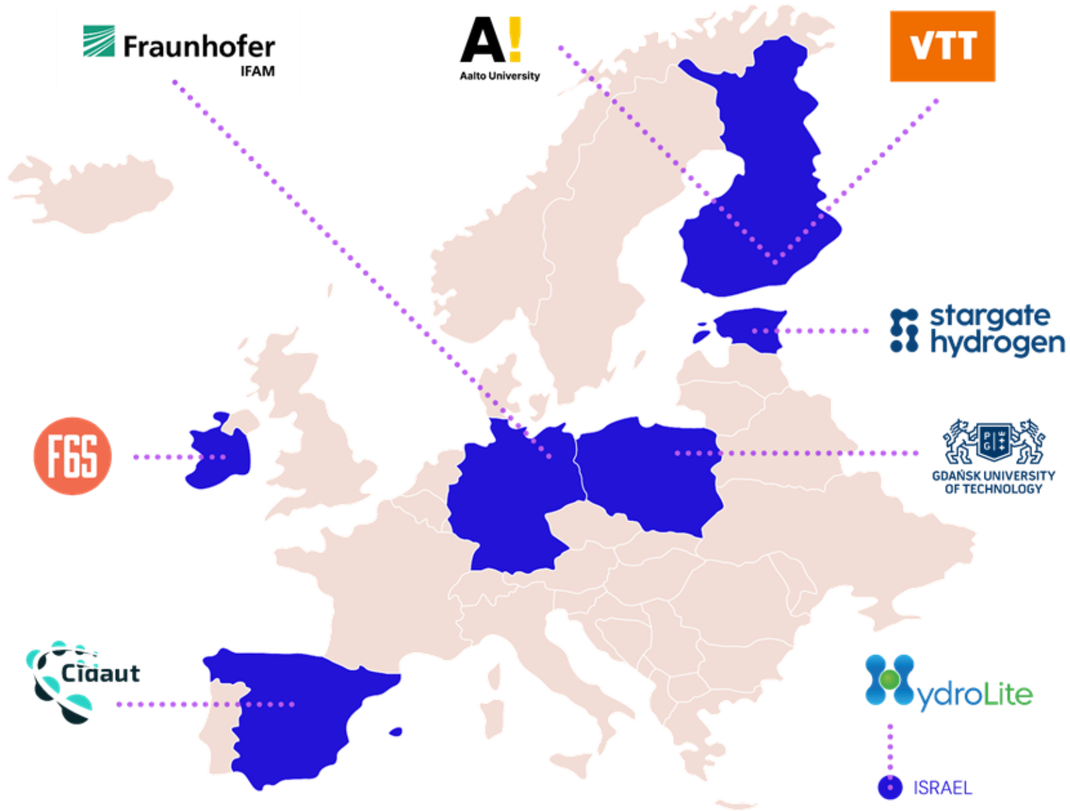
Clean Hydrogen Partnership

The project is supported by the Clean Hydrogen Partnership and its members.

Sea4Volt Project Overview

Category	Basic Info
Project number	101192235
Project name	Sea water Electrolysis by AEM technology For VariOus Liquid feeds without pre-Treatment
Project acronym	Sea4Volt
Call	HORIZON-JTI-CLEANH2-2024
Type of action	HORIZON JU Research and Innovation Actions
Starting date	1 September 2025
Duration	36 months
Budget	3 996 557.00 €
Partners	8 partners, 7 countries



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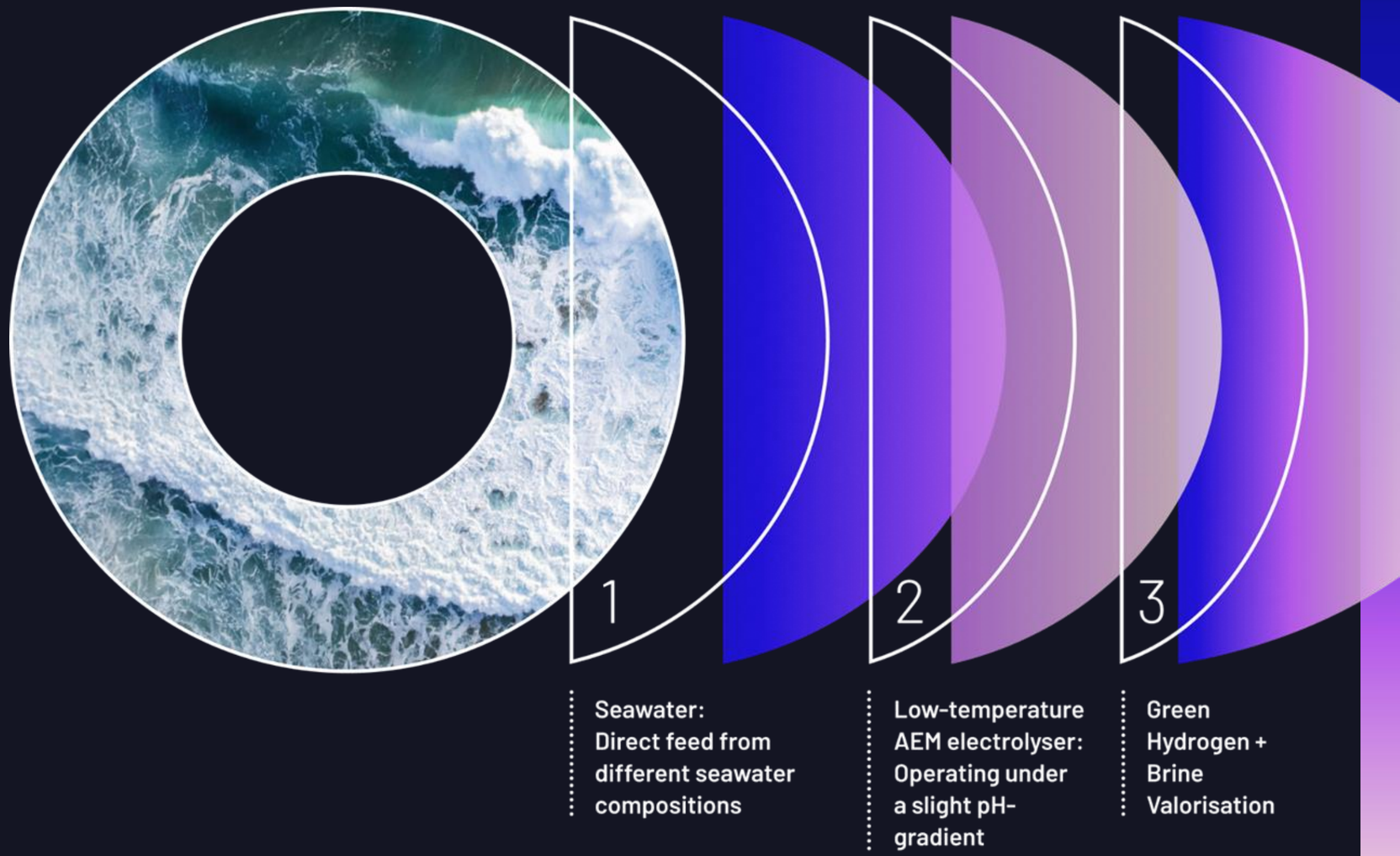
WHAT DO WE DO?

Co-funded by the European Union and Clean Hydrogen Partnership, Sea4Volt project aims to develop novel low temperature Anion Exchange Membrane (AEM) electrolyser concept, able to operate efficiently, selectively, and durably with a direct seawater feed under a slight pH-gradient.



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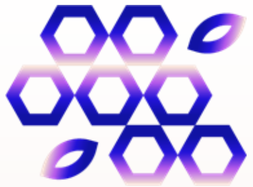
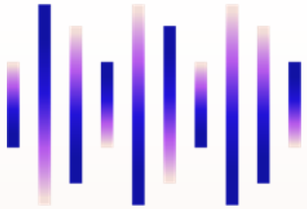
Our Mission

Understand seawater–material interactions via experimental and machine-learning tools

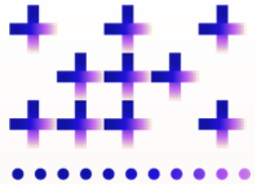


Develop PFAS-free membranes and durable low-PGM cathodes for seawater use



Design and build an AEM single cell and multi-cell stack for direct seawater electrolysis

Define performance and durability testing protocols for seawater-fed electrolysers



Design an integrated flowsheet for a Net Zero Liquid Discharge approach to brine valorisation

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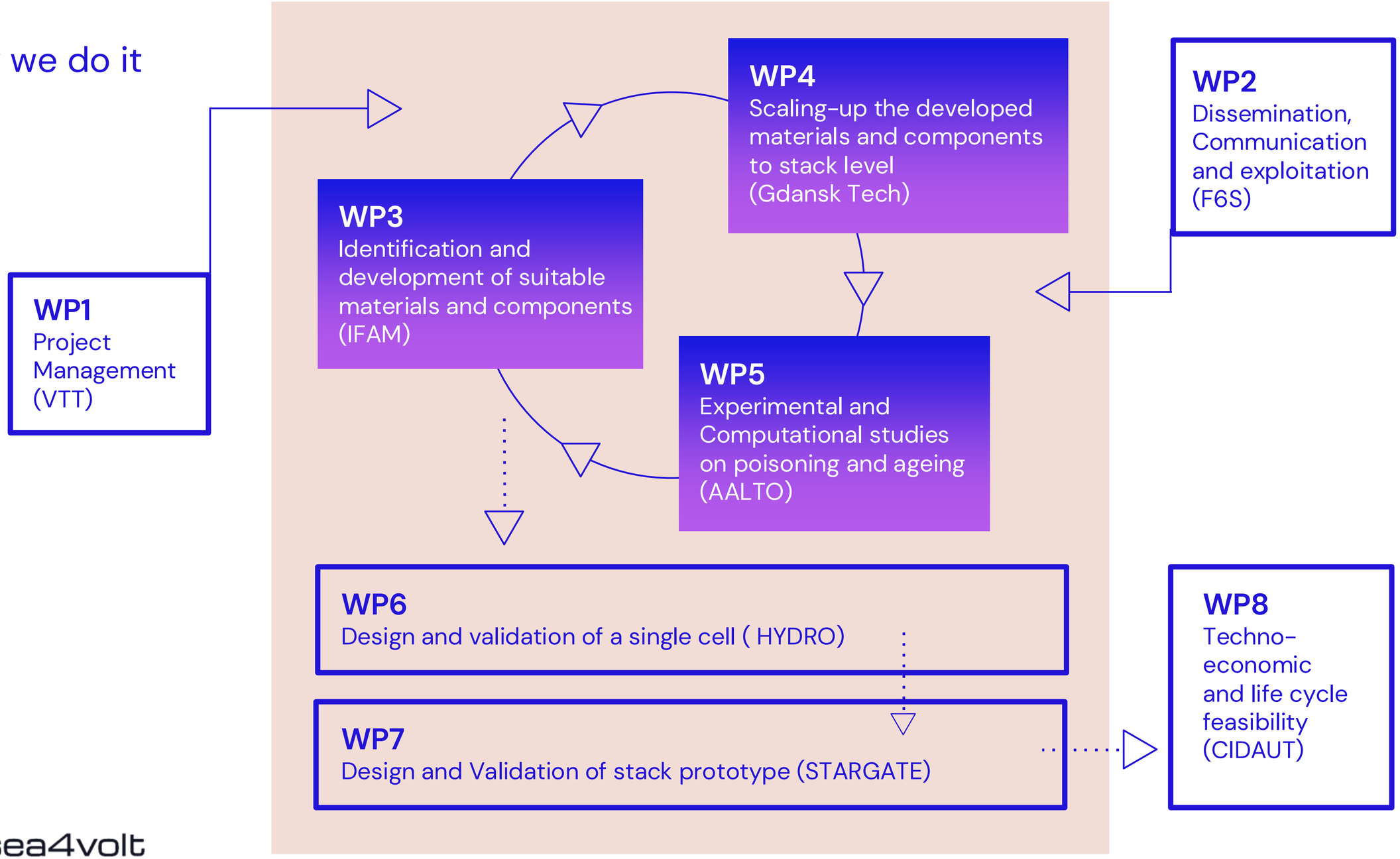
How we do it



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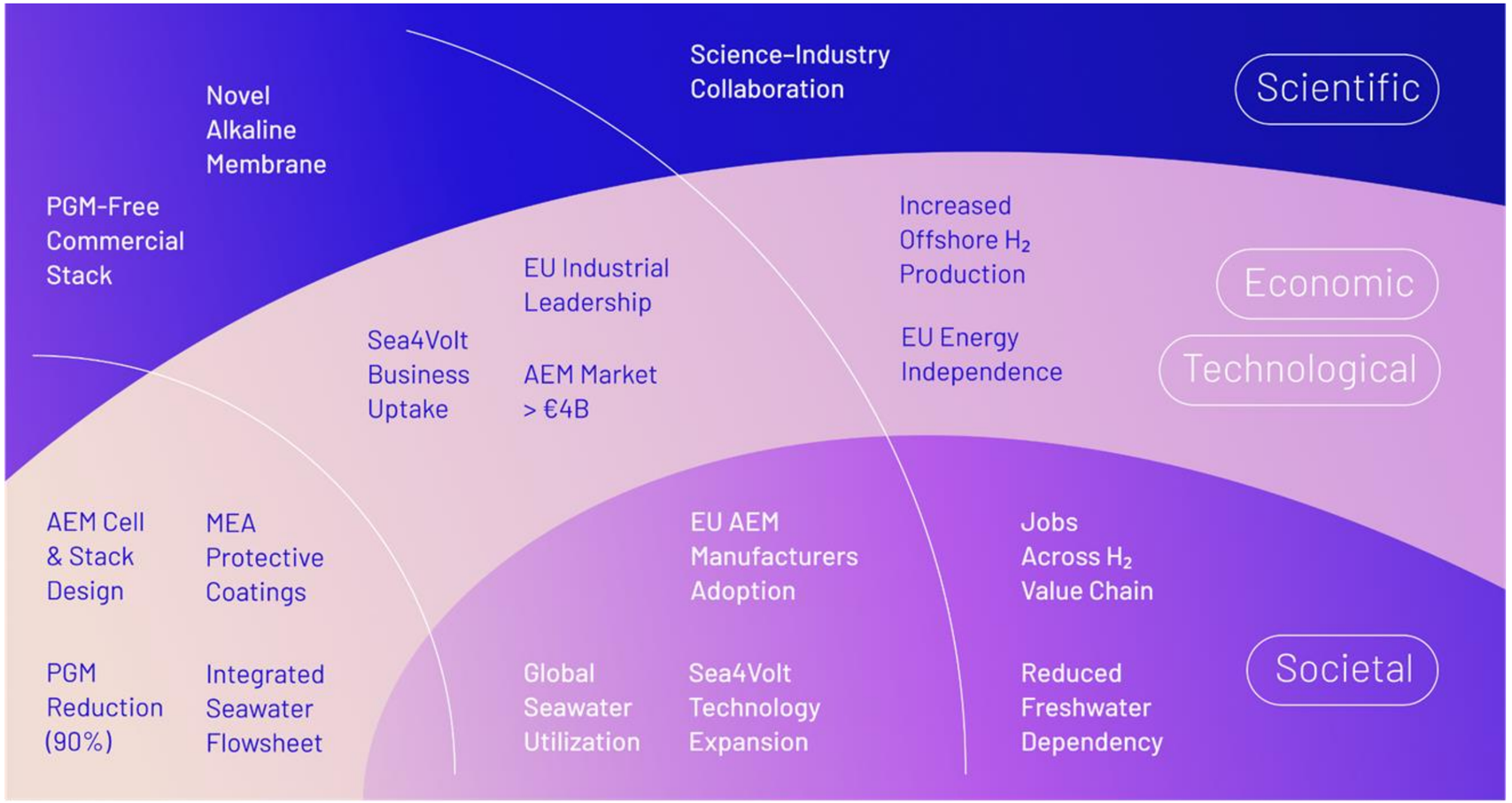
Our Impact (The ripple effect of Sea4Volt)



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Thank you for your attention!

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