

EU FRAMENORK PROGRAMME FOR R&I - INNOVATION FUND SYNERGES WORKSHOP

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Overview & Background of SaltPower

- Which EU R&I funding programme did the project benefit from?
 - The SaltPower project received funding from Horizon 2020, H2020-EIC-SMEInst-2018-2020-3, grant 954045
- What technological solution(s) were covered and developed?
 - SaltPower has developed a technology to produce CO₂ free osmotic energy from mixing salt and water
- What is the main output/achievement of the R&I project?
 - During the project, the technology was matured to commercial readiness and the first commercial 100 kW plant was constructed.
 Commissioning of the plant is 1st March 2023



Deployment Prospects

- SaltPower technology is ideally suited for creating underground hydrogen storages in salt formations. Also production of high purity salt can benefit from the technology
- The technique is called solution mining, and water is pumped to an underground salt formation and concentrated saltwater is returned to the surface leaching out a cavern in the process
- On a global scale, 100 million tons of salt is produced by this method
- The first plant is being commissioned 1st March 2023 and operating data from this installation will be used in discussions with future customers
- The technology has the potential to scale up to larger capacities and to roll out to the industry. However, further maturing the technology to TRL9 will require optimization of the technology and further development of the membranes





Deployment Prospects

- We have had a good experience with the cooperation under the Horizon 2020 project
- The next step in the technology development will go faster with funding, as it can lower the barrier for new customers
- The upscaling and industrialization of the technology will help to drive down costs and bring more CO₂ free energy to the market





Deployment Prospects

- SaltPower offers a unique technology which has remained unknown to large part of the industry. A main challenge is to demonstrate that this solution is robust and deliver the promised long-term performance and acceptable OPEX
- The optimal way to overcome this, is simply to demonstrate operation in large scale installations and reduce the CAPEX of the first new installations
- Osmotic energy is a new chapter in the history of energy production!





Thank you

