



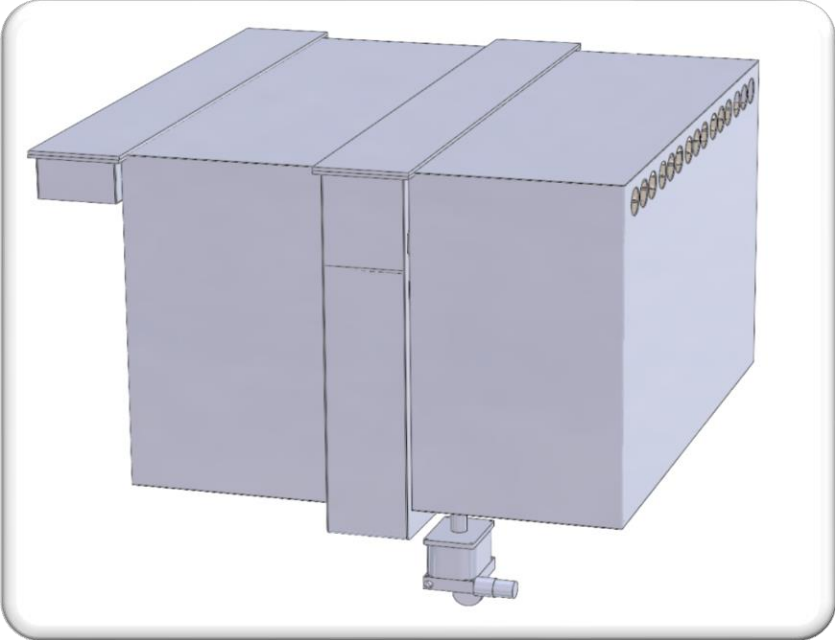
ZLD+ separation technology eliminates brine and produces water and separated salts, making zero waste desalination economically viable

Partners

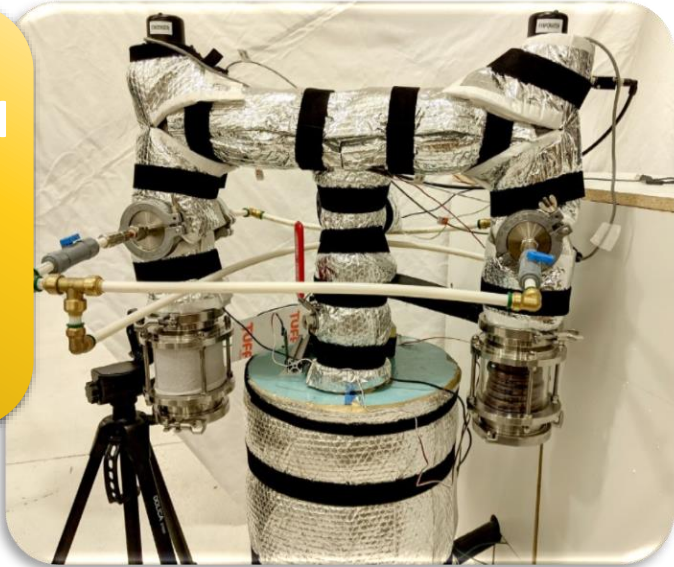


**VADER™ Adsorption Cycle**  
 (Vapor Adsorption Distillation w/ Energy Recycling)

- 1<sup>st</sup> multiple-effect adsorption cycle
- Improved energy/exergy efficiency
- 10x lower cost for ZLD brine disposal
- 10x higher revenue selling valorized NaCl, MgSO<sub>4</sub>, K<sub>2</sub>SO<sub>4</sub>, and MgCl<sub>2</sub>
- Seeded Crystallizing Ultrasonicated Evaporator/condenser (SCUE™)
- Patents covers material, method & device



Benchtop ZLD prototype separated saturated NaCl (26 wt%) and MgCl<sub>2</sub> brines (55 wt%) into distilled water (<0.2 ppm) and salt crystals



Patented high thermal conductivity, low-cost adsorbent



Modular ZLD+ crystallizer demo prototype pilot tests in 2022. Containerized commercial unit 2023

