

BrineZero - Brine Concentration with Managed Salt Precipitation



- ❖ Three advanced technologies dramatically reduce LCOW
 - A thermal separation process that achieves very high efficiency by recovering heat released by condensing water vapor to preheat the brine feed
 - A solar collector with low hardware and installation costs that directly converts sunlight into low pressure steam
 - A polymer heat exchanger that matches the performance of costly heat exchangers made from titanium or cupronickel alloys
- ❖ The Team (principal members)
 - AIL Research: technology leader with in-field experience demonstrating large thermally-driven solar technologies
 - Global Water Innovations: a project developer focused on renewably powered desalination projects for inland agriculture
 - SolarUS: a project developer providing PV and solar thermal arrays to industry
 - Bell Ranch: a 250 acre avocado/citrus grower experiencing declining crop yields because its water supply is increasing in salinity
- ❖ Target Market and Key Metrics
 - Demonstrate solar brine concentration at under \$4.00 per cubic meter
 - Addressable market for inland desal in California is over \$2B

