

# Desalination Using a Low energy and Cost Solution

## Challenge

Total dissolved solids in solution can be difficult to remove in highly concentrated solutions like saline. Technologies using reverse osmosis to clean dissolved salts are energy excessive because of the high osmotic potential.

## Solution

This invention provides a method and apparatus to economically reduce the total dissolved solids of a solution. Unlike methods that use reverse osmosis to clean dissolved solids, this invention is energy efficient because it relies on forward osmosis to clean dissolved salts.

## Benefits and Features

- High efficiency and requires low energy input
- Technology readiness level 6 (fully functional prototype).

## Market Potential / Applications

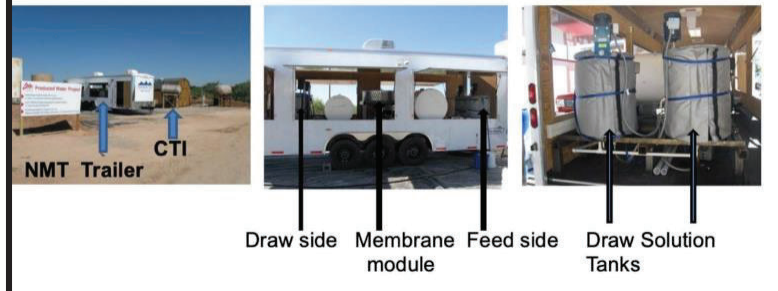
This invention has applications in water desalination, and chemical and industrial plants.

## Developments and Licensing Status

Status: Available

Commercial sponsor sought? Yes

## Field Demonstration – Jal, SE NM



## Patent Status

US Patent Issued US 9,370,747 B2 (Process)

US Patent Issued US 9,827,533 B2 (Apparatus)

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