## **M-Cycle Industries**

## Renewable Innovative Green Affordable Water 4 All

## Vicious circle:

Power production takes Water (2,600 L per 1 MWh), Industry takes Power (33% of total U.S. energy consumption), people need Water (300 L daily), Water production takes Power (5 kWh per 1 m3)

Value Proposition: 100% Affordability & Disruption Air and Water verticals UN SDGs #6 Clean Water 10X Less Energy, Cost, Carbon M-Cycle:

thermodynamic process captures energy from air utilizes psychrometric energy recuperates the latent heat evaporates water

combines heat transfer & evaporative cooling approaches dew point temperature.

cooling capacity increases ! when the temperature increases

Water to Reuse



Discharge

Pump



**Project:** Integrated Industrial Wastewater Reuse Via The Maisotsenko Cycle Heat Recovery Process

## **Tech:** US Patent No 8,613,839 "Water Distillation Method and Apparatus"

Results: in ( ) data for Reverses Osmosis Water recovery, % 90-95 (40-50) Concentrate discharge, % 1-5 (50-60) Electricity consumed, kWh/m3 water 0.1-0.5 (1-5) Operating cost, \$/m3 0.24 (0.77) Mcyclecorp.com ure increases Mcyclecooling.com