



# **Item 5: Commercializing Industrial Decarbonization (2022 CID Program) – GFO-22-301**

September 13, 2023 Business Meeting

Michael Lozano, Sr. Mechanical Engineer  
Energy Research and Development Division  
Energy Efficiency Research Branch



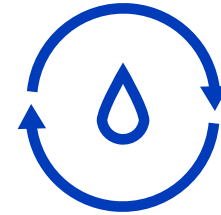
# Solicitation Overview

- GFO-22-301: Commercializing Industrial Decarbonization
  - Group 1: Low-Carbon, High-Temp Industrial Heating
  - Group 2: Energy Efficiency and Decarb of Concrete Manufacturing
  - Group 3: Energy Efficient Separation Process
- Project Funding:
  - 4 Projects
  - \$23.3M with \$9.35M in match



# Benefits to Californians

- Energy efficiency
- Electrification
- Water reuse/reclamation/savings
- Reduce GHGs, fossil fuels usage
- Reduce energy costs
- Contribute to meeting state decarbonization goals while maintaining competitiveness of California's industrial sector



Source: carollo Website



Source: EnergyMonitor.ai website



Source: Northmore Gordon website



# Item 5a: Porifera, Inc.

- Project Location:
  - Procter & Gamble facility in Oxnard
- Funding:
  - CEC: \$4,998,521
  - Match: \$5,048,662
- Project Focus:
  - Reclaim hard-to-treat pulp and paper wastewater for on-site reuse
  - 95% energy reduction



A view of the Procter & Gamble paper products plant in Oxnard, CA. Image courtesy of P&G

Oxnard Facility  
Source: Procter & Gamble



# Item 5b: Element 16 Technologies, Inc.

- Project Location:
  - Searles Valley Minerals facility in Trona
- Funding:
  - CEC: \$3,000,000
  - Match: \$661,000
- Project Focus:
  - Grid-tied/renewable energy sulfur thermal energy storage
  - Night-time discharge for industrial process heating



Source: Element 16 Technologies, Inc.

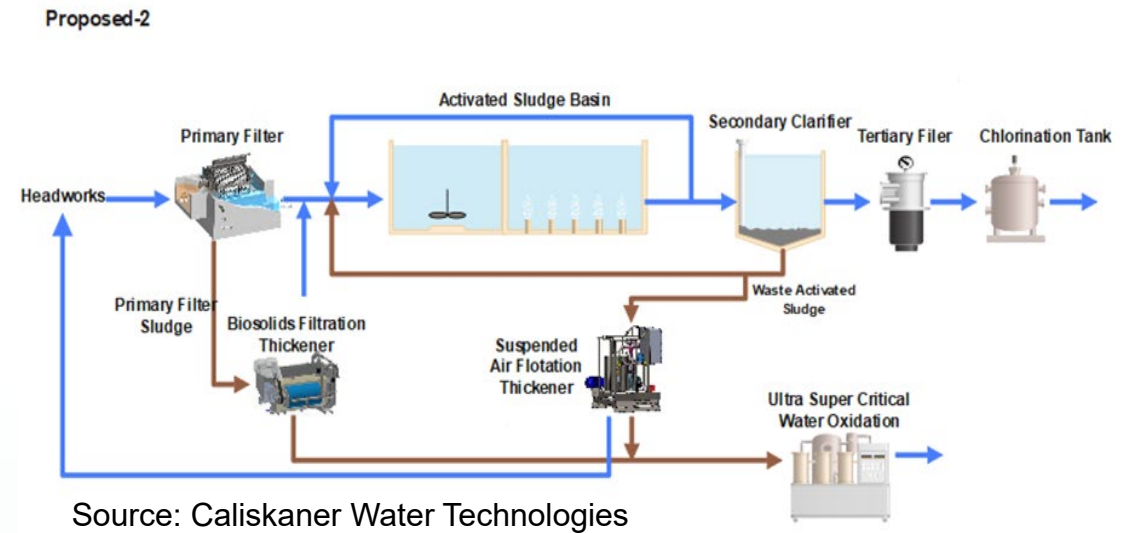


# Item 5c: Caliskaner Water Technologies, Inc.

- Project Location:
  - Linda County Water District's Wastewater facility in Olivehurst

- Funding:
  - CEC: \$7,190,593
  - Match: \$1,968,829

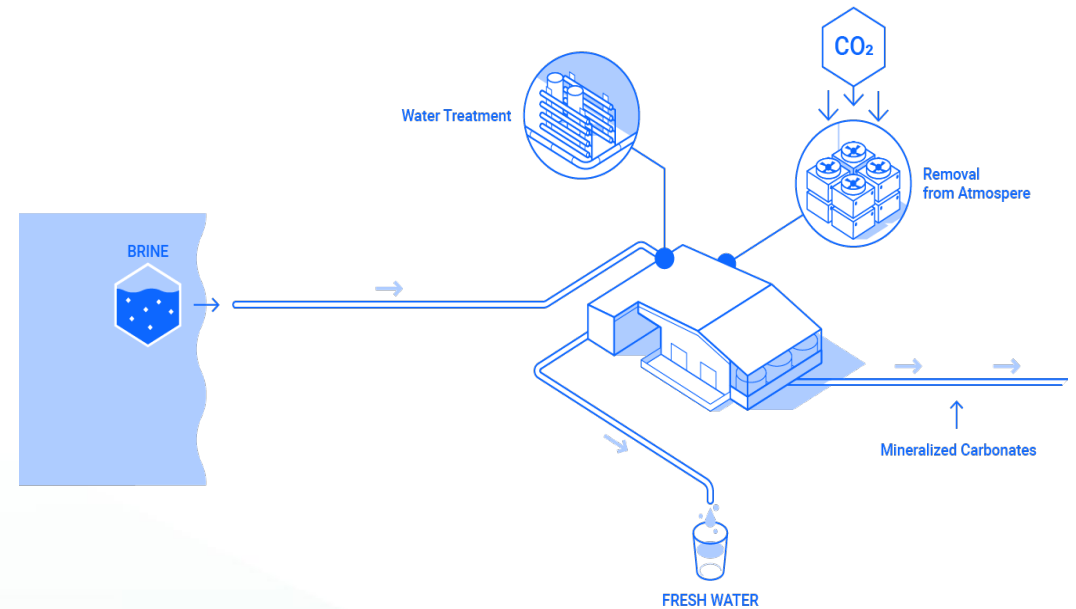
- Project Focus:
  - Advanced wastewater sludge separation and treatment
  - Reduce electricity use, GHG emissions and CapEx/OpEx





# Item 5d: Capture6 Corp.

- Project Location:
  - Pure Water Antelope Valley water project in Palmdale
- Funding:
  - CEC: \$8,153,623
  - Match: \$1,692,738
- Project Focus:
  - Direct air capture will turn water treatment brine into solvent for CO<sub>2</sub> capture and produce fresh water



Source: Capture6 Corp.



# Staff Recommendation

---

- Adopt staff's determination that these actions are exempt from CEQA
- Approve Item 5 for these four grant agreements