



Item 7: Commercializing Industrial Decarbonization (2022 CID Program) – GFO-22-301

October 3, 2024 Business Meeting

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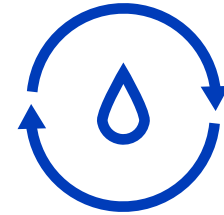
Solicitation Overview

- GFO-22-301: Commercializing Industrial Decarbonization (Round 2)
 - Group 1: Low-Carbon Industrial Heating
 - Group 2: Energy Efficiency and Decarb of Concrete Manufacturing
 - Group 3: Energy Efficient Separation Process
- Project Funding:
 - 2 Projects
 - \$12.9M with \$5.2M 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

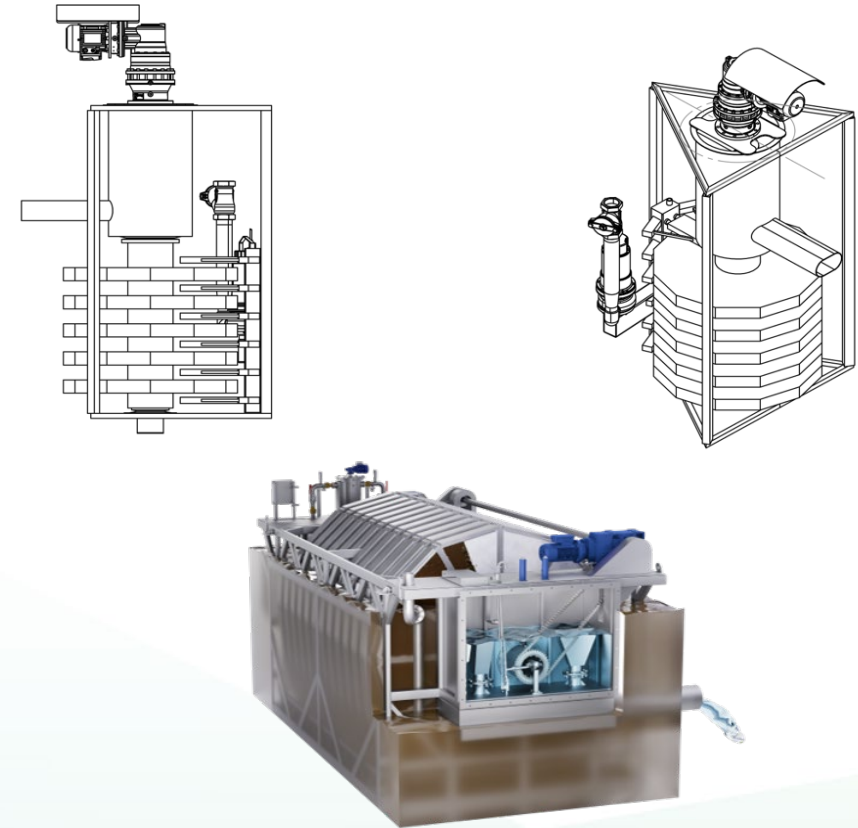


Source: Northmore Gordon website



Item 7a: Caliskaner Water Technologies, Inc.

- Location:
 - Linda County Water District's Wastewater facility in Olivehurst
- Funding:
 - CEC: \$4,492,887
 - Match: \$1,841,740
- Project Focus:
 - Advanced wastewater reclamation technologies for production of potable and non-potable water
 - Reduce electricity use, GHG emissions and CapEx/OpEx

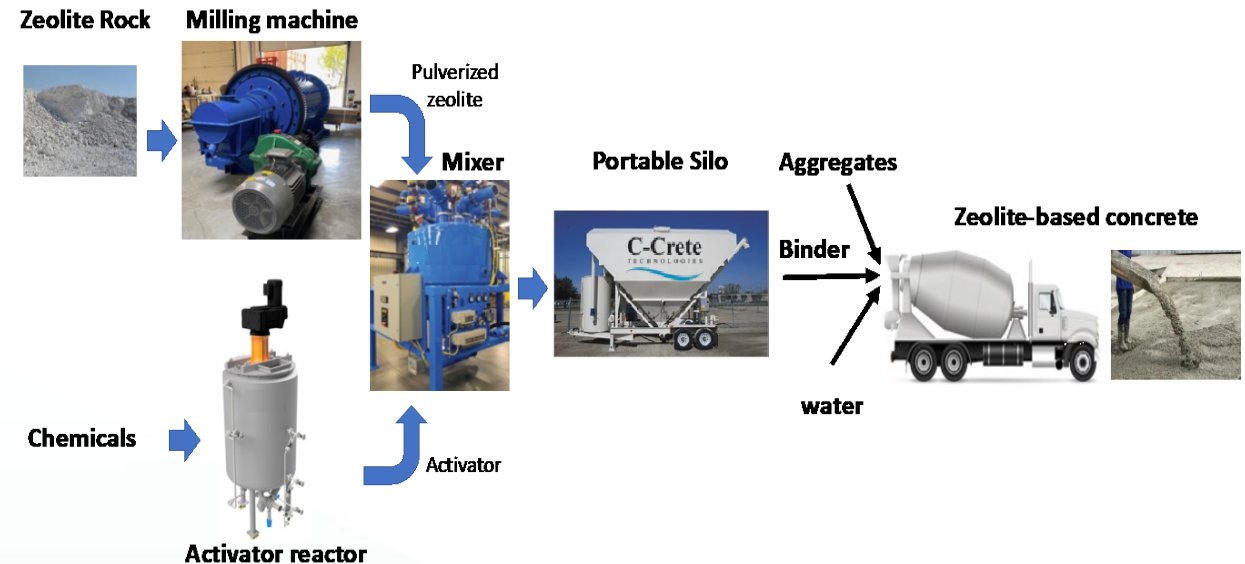


Source: Caliskaner Water Technologies



Item 7b: C-Crete Technologies LLC

- Location:
 - C-Crete's facility in San Leandro
- Funding:
 - CEC: \$8,500,000
 - Match: \$3,400,000
- Project Focus:
 - Electrically convert naturally occurring non-carbonate rocks into 100% drop-in replacement for cement
 - 95% CO2 savings vs. conventional cement production



Source: C-Crete Technologies



Technology Potential

Wastewater Reclamation

- 4 billion gal/day average daily flow
- At 20% market penetration
 - 20GWh annual savings
 - 7000 metric tons of CO2 savings

C-Crete deployed at scale

- California produces ~10 million metric tons of cement (from 7 plants)
- Emits 8 million tons of CO2 annually which is 2% of total CA emissions
- Millions in tons of CO2 savings (1.1 ton per ton of C-Crete binder)



Staff Recommendation

- Adopt staff's determination that these actions are exempt from CEQA
- Approve the two grant agreements