

**DOCKETED**

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|-------------------------|---|
| <b>Docket Number:</b>   | 22-BUSMTG-01  |
| <b>Project Title:</b>   | Business Meeting Agendas, Transcripts, Minutes, and Public Comments |
| <b>TN #:</b>            | 243458  |
| <b>Document Title:</b>  | Presentation for Item 8   |
| <b>Description:</b>     | N/A   |
| <b>Filer:</b>           | Misa Werner   |
| <b>Organization:</b>    | California Energy Commission  |
| <b>Submitter Role:</b>  | Commission Staff  |
| <b>Submission Date:</b> | 6/7/2022 9:05:15 AM   |
| <b>Docketed Date:</b>   | 6/7/2022  |



# **Item 8: Bringing Rapid Innovation Development to Green Energy (BRIDGE) 2020 (GFO-20-301)**

June 8, 2022 Business Meeting

Misa Werner

Energy Deployment & Market Facilitation Office

Energy Research & Development Division



# Benefits to Californians

- Advances clean energy economy
  - Supports clean energy entrepreneurs
  - Speeds up transition to renewables
  - Improves high-performance batteries
  - Increased water and cost savings





# Overview

| 6 Applicants                  | Award Amounts      |
|-------------------------------|--------------------|
| Solid Energies Inc.           | \$3,000,000        |
| Enzinc Inc.                   | \$1,807,600        |
| LookIn Inc.                   | \$999,947          |
| Element 16 Technologies, Inc. | \$1,000,000        |
| Pyro-E, Inc.                  | \$1,548,602        |
| <b>Total Funding</b>          | <b>\$8,356,149</b> |



# Solid Energies, Inc.

## High-performance Solid-State Lithium Batteries with a Focus on Manufacturability

- Si-based anode to reduce anode cost and address dendrite formation
- Solid-state electrolyte with high conductivity that is compatible with roll-to-roll manufacturing



SOLID ENERGIES INC



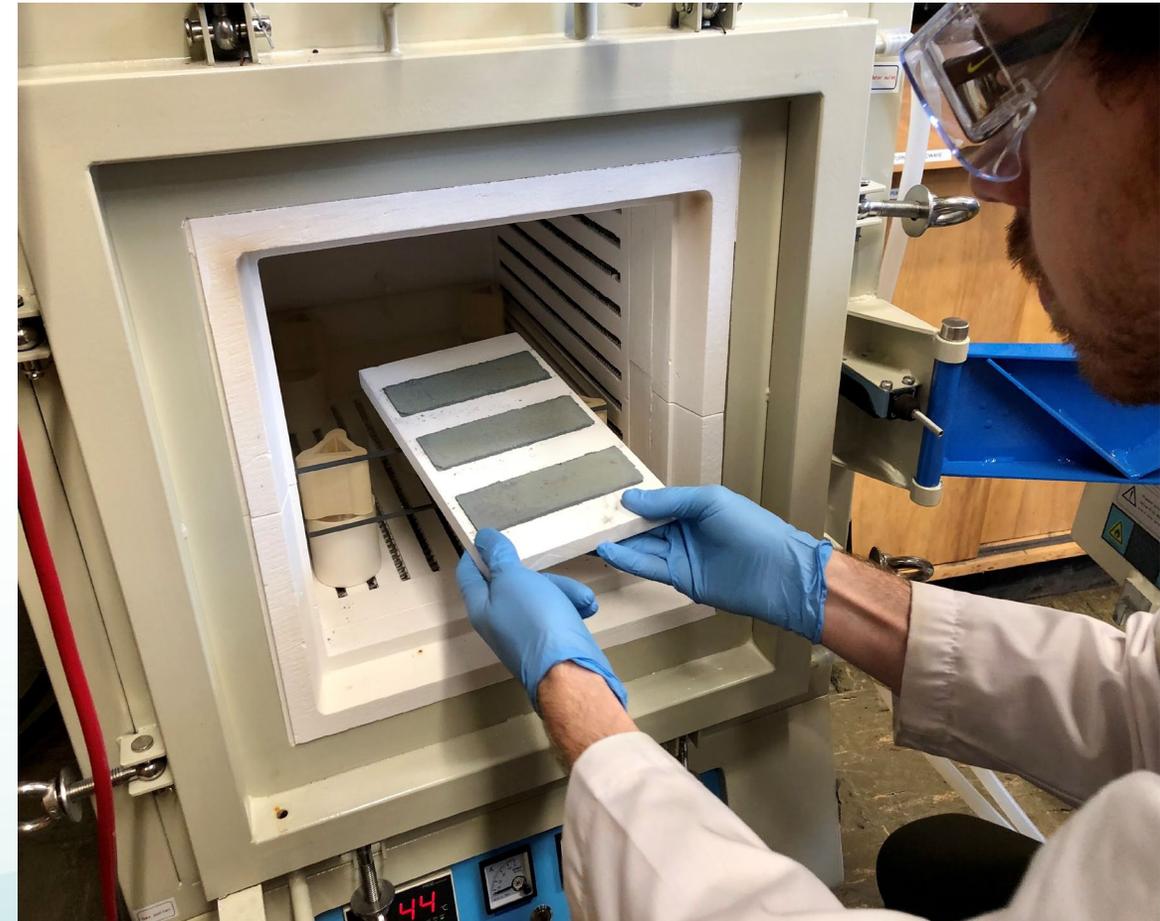


# Enzinc Inc.

## Zinc based battery for stationary storage applications

- Zinc metal sponge anode
- Performance of lithium-ion batteries at cost of lead-acid batteries
- Project will scale manufacturing of anode and test performance at cell and pack level

ENZINC<sup>TM</sup>

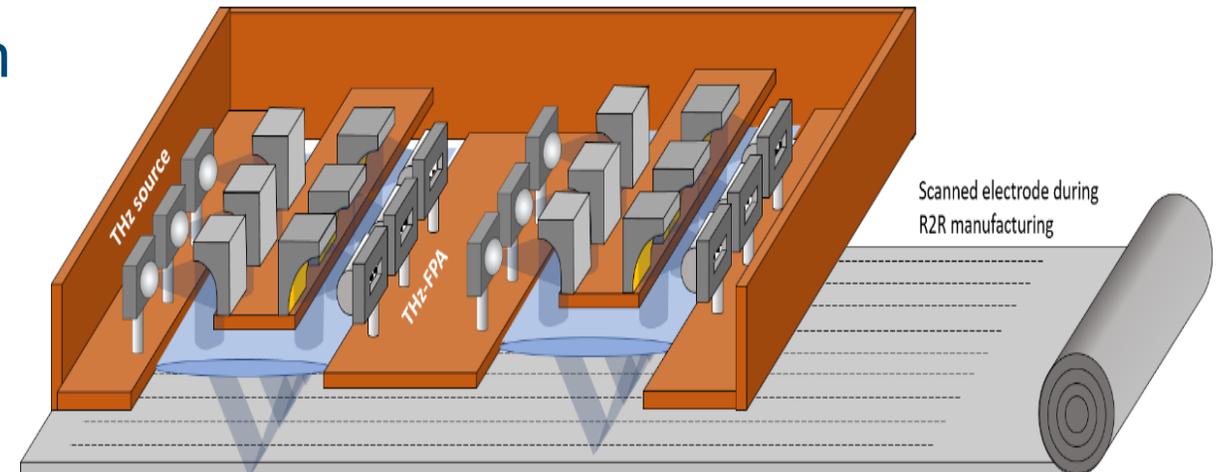
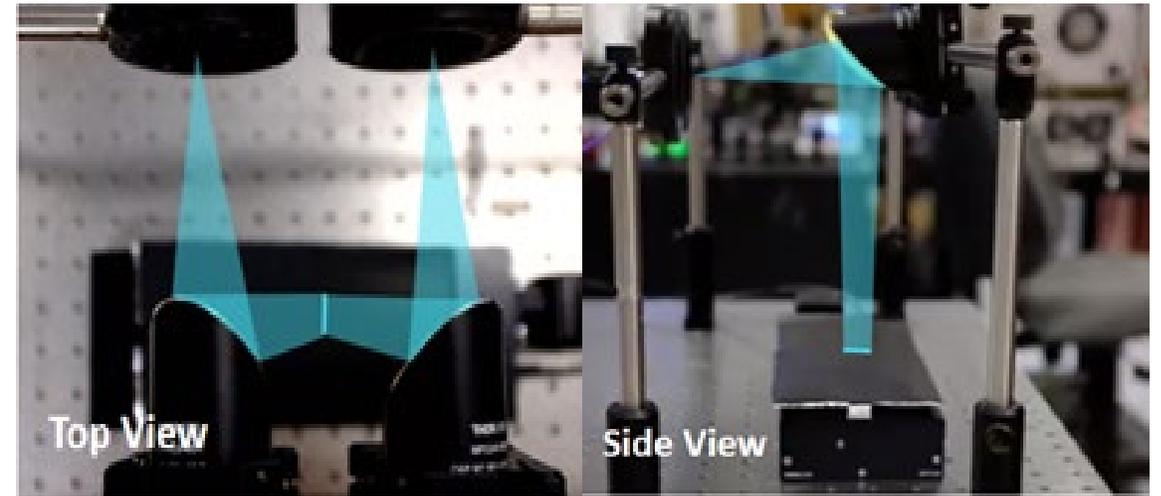




# LookIn, Inc.

## In-Line Quality Control of Lithium-Ion Battery (LIB) Electrodes through Terahertz Scanning

- High throughput terahertz scanning for LIB quality control
- Project will reduce scrap rates through non-destructive evaluation
- Lowers price of LIBs





# Element 16 Technologies, Inc.

## Electrification of Industrial Processes with Sulfur Electric Thermal Storage (SETS)

- PV-assisted molten sulfur thermal energy storage
- Industrial applications: heating, cooling, and electricity generation
- Pilot-test and demonstrate value to end users and ratepayers

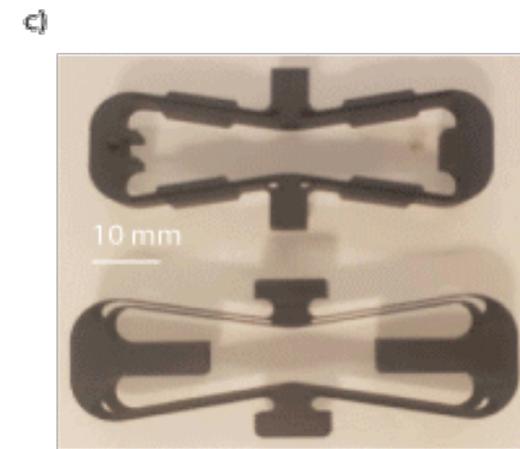
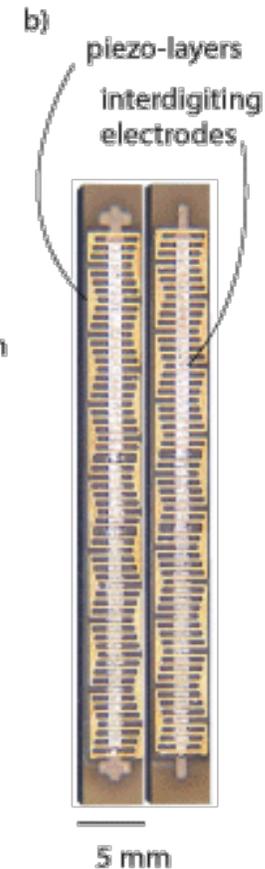
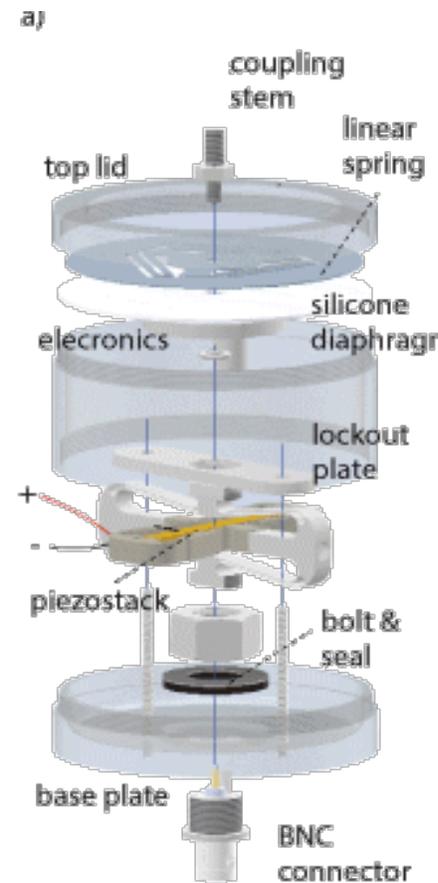




# Pyro-E, Inc.

## Auto-Modulating Power Source (AMPS) for Smart Water Metering

- Powers wireless data sensors indefinitely by harnessing energy from water pressure
- Reduced maintenance, manual processes
- Demonstrate up to 34% bill savings in disadvantaged community
- Savings from reduced water waste and avoided LIBs scalable to >2/3 of CA households





# Staff Recommendation

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- Approve 5 grant agreements.
- Adopt staff's findings that these projects are exempt from CEQA.