

DOCKETED	
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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

5 Proposed Recipients	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
Total Funding	\$8,356,149



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



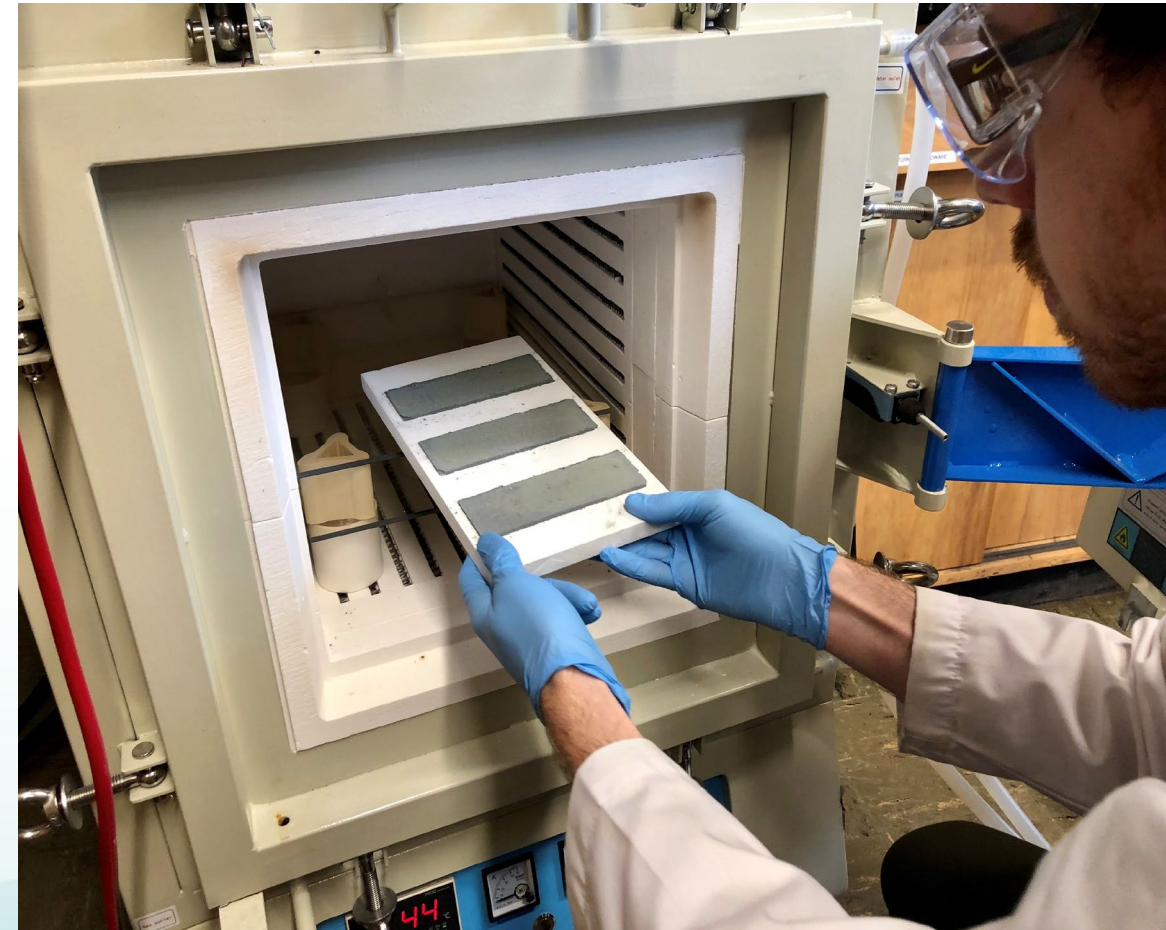


Enzinc Inc.

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

ENZINCTM

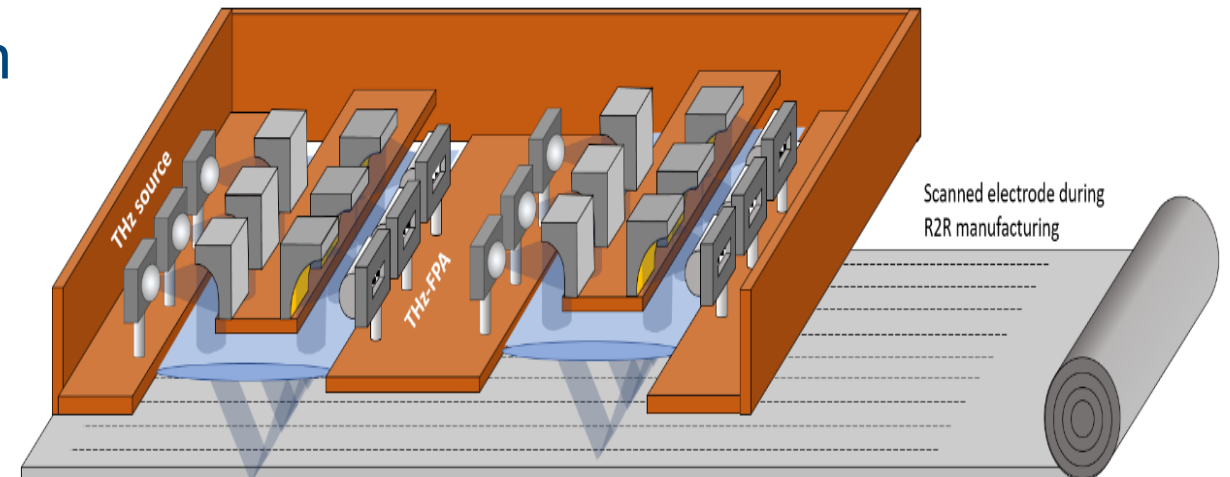
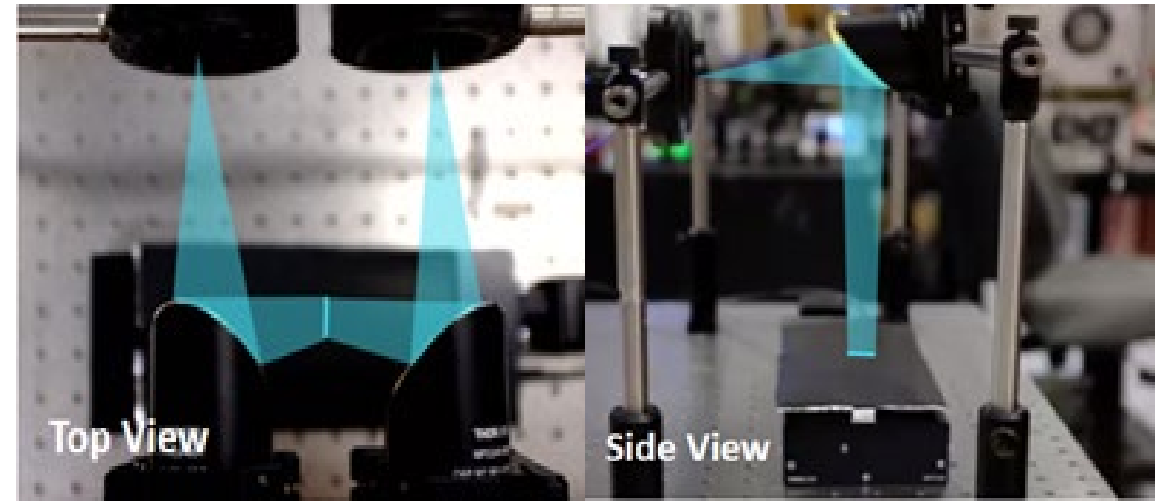




LookIn, Inc.

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

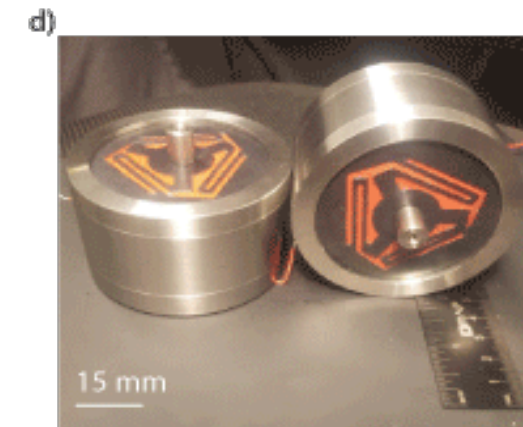
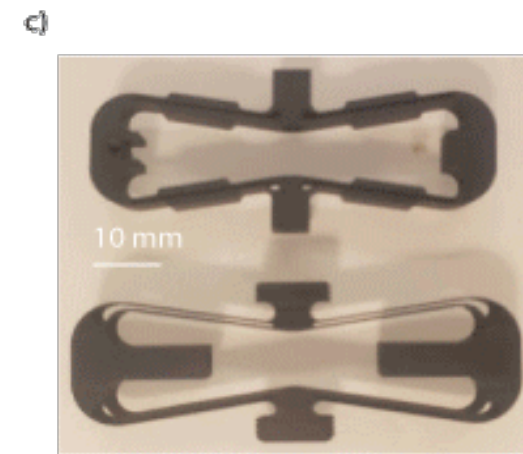
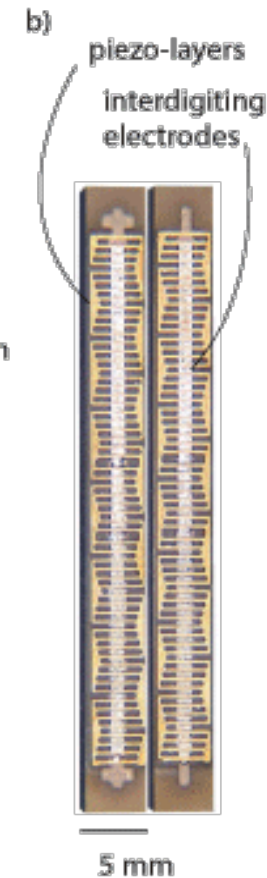
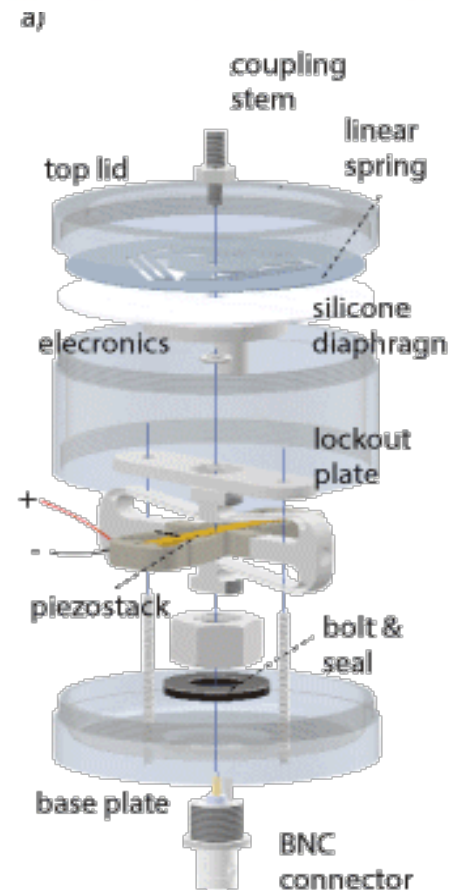




Pyro-E, Inc.

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

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