

**DOCKETED**

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<b>Filer:</b>	Michael Ferreira
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# **Item 9: Realizing Accelerated Manufacturing and Production for Clean Energy Technologies (RAMP) - GFO-21-304**

May 10, 2023 Business Meeting

Michael Ferreira  
Energy Research & Development Division  
Energy Deployment & Market Facilitation Branch



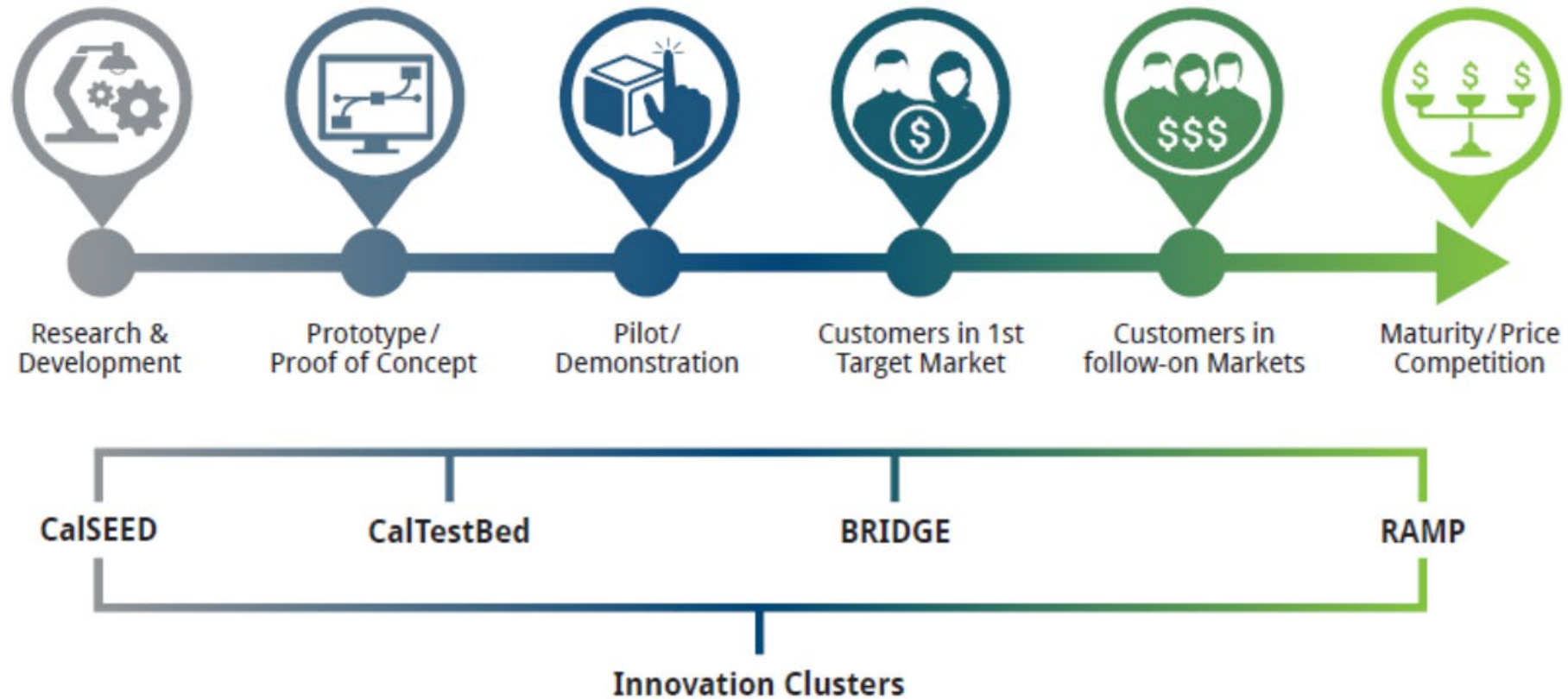
# Benefits to Californians

- Support for clean energy entrepreneurs
- Greater electricity service reliability
- Lower cost of EVs
- Job creation





# Clean Energy Innovation Ecosystem





# RAMP

- Challenges transitioning from prototype to production include:
  - Securing capital.
  - Unable to adjust emerging technology to fit established manufacturing processes.
  - Lack of manufacturing experience/knowledge.
- Low-rate Initial Production (LRIP) - Transition from highly customized hand-built prototypes to final mass-produced end product.





# American Lithium Energy (ALE) Corp

## Carlsbad, CA

### Advancing High Silicon Anode Prismatic Battery Production

- 30% higher energy density than conventional Li-ion cells = lower costs
- Wide operating range (-30°C to +60°C)
- Internal fuse detects unsafe conditions
- Increase production from 40 cells/day to 500 cells/day





# ElectricFish Energy, Inc.

## Build-out of a new dedicated assembly facility for Low Rate of Initial Production

- Battery enabled, extreme fast EV charging (350kW)
- Eliminates costly, time-intensive trenching and transformer upgrades
- Reduce assembly time from 3 months to 40 hours





# Staff Recommendation

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