CalCharge: Moving technology to market



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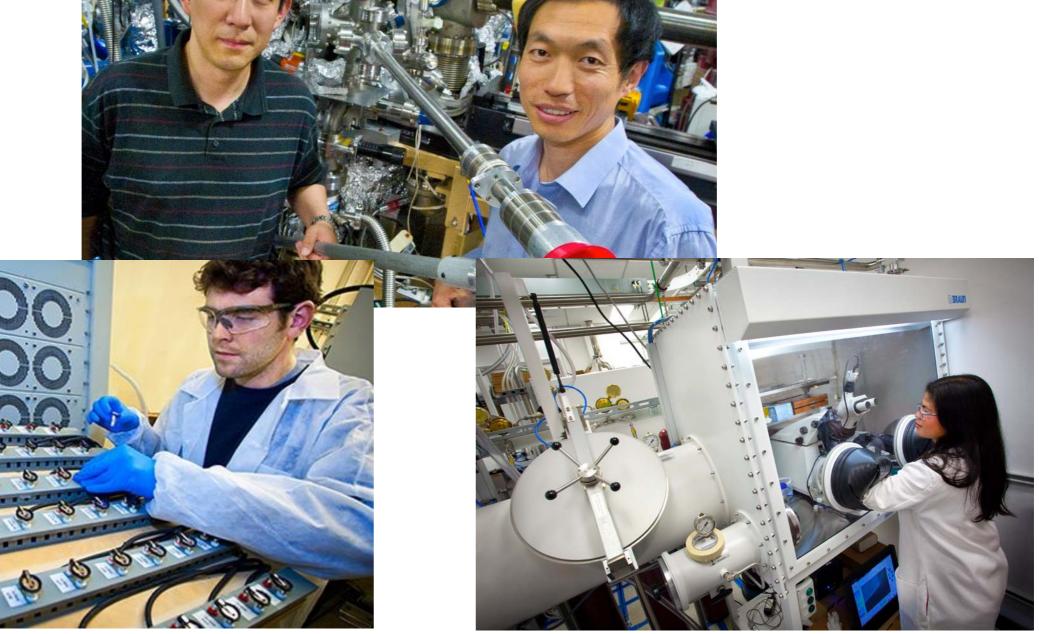
Outline



- The challenge of working with National Labs
- The California battery ecosystem
- CalCharge: A public-private partnership to accelerate technology development
- CalCharge program areas and impact
- Process to work with Berkeley Lab
- Bay Area Battery Summit: Bringing together thought leaders in industry and academia

National Lab assets: People and equipment





How can industry to take advantage of these assets? Fast?

Critical Mass and Global Impact

Arcata

Red Bluf

nico. Paradise



- California has one the largest and most dynamic concentrations of the energy storage sector in the world
- With an outsized impact on industry and market development globally

- More than 120 energy storage companies are located in California
 - But no "center of gravity"



CalCharge: A public-private partnership

















Working Together to Energize a Sustainable California





























CalCharge Program Areas



Accelerating from innovation to installation

Technology Acceleration

- CRADA (Berkeley Lab, SLAC)
 - Streamlined
 - Proprietary research

Pre-Commercialization Support

Advanced Manufacturing
Roadmap

Professional Development

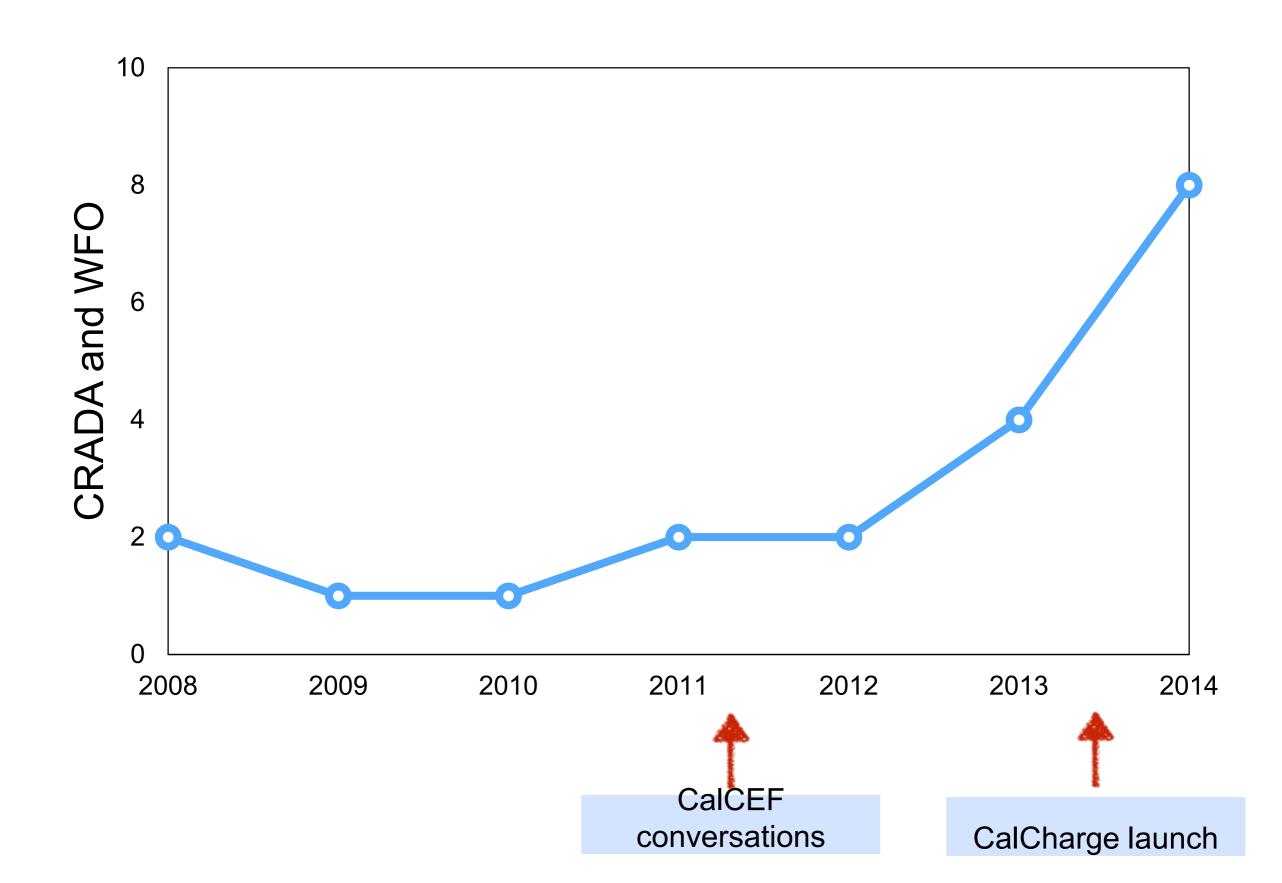
 First MSE in Batteries with SJSU

Ecosystem Facilitation

 IBEW-NECA Energy Storage Standard and Certification Development

We are expanding our industry engagement





Some examples of CalCharge engagement



Funded research





"Embed" researcher





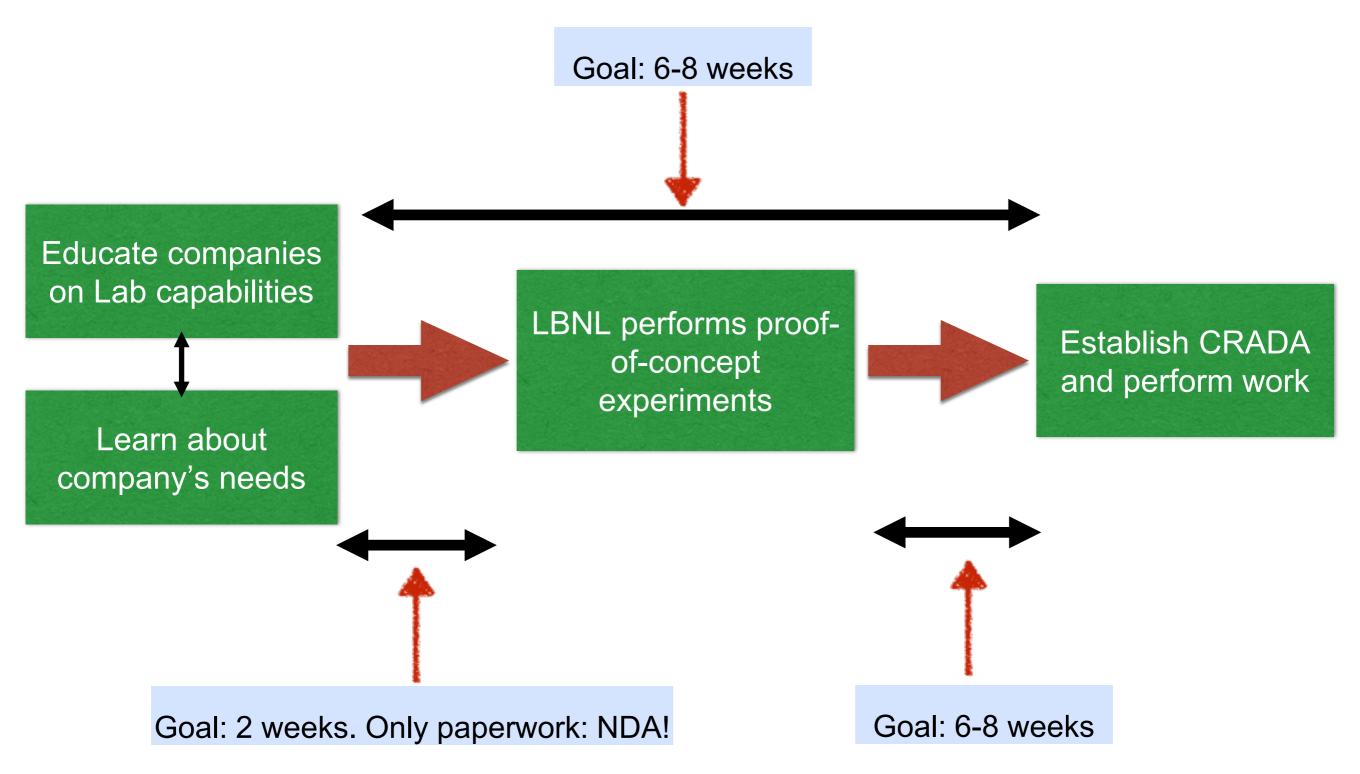
Joint proposals





Process to work with Berkeley Lab





We have accelerated access to Berkeley Lab

2015 Bay Area Battery Summit

The Energy Storage Landscape: Challenges and Opportunities

November 3, 2015



- A total of 232 attendees
 - 140 industry attendees
- Talks and panels addressing the intersection of technology, markets, and policy
- Poster and networking session
- Outcome: White paper summarize state of the art and key recommendations

Organized by:











2015 Bay Area Battery Summit

Transforming the energy infrastructure:

Eight recommendations for widespread deployment of batteries in vehicles and the grid



Danny Kennedy



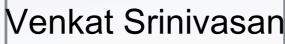
Julie Blunden



Ted Ko



Venkat Srinive





Bart Riley

To learn more visit: http://www.energystorage.lbl.gov





Research. Innovation. Collaboration. Ecosystem.

Energy storage is a cornerstone of the global transition to a clean energy economy. Our mission is to increase the frequency and intensity of impactful collaborations and to accelerate innovative research between Berkeley Lab and companies working in the energy storage space.

Research



Innovation

