



POWERBRIDGE NY

**A Clean Technology
Proof-of-Concept Center**

www.powerbridgeny.com

Campus Representatives:

Brookhaven National Laboratory – Pat Looney (jlooney@bnl.gov)

City University of New York – John Blaho (jblaho@ccny.cuny.edu)

Columbia University – Donna See (dks26@columbia.edu)

Cornell University – Bethany Koi (ck574@cornell.edu)

NYU-Poly – Chris Snyder (Christopher.snyder@nyumc.org)

Stony Brook University – Ann-Marie Scheidt (annmarie.scheidt@stonybrook.edu)

PowerBridge NY: Collaborative Effort Across Downstate Institutions, with \$10M in Funding from NYSERDA



PowerBridge NY: Overview

Objective



- Cleantech innovations from academic research labs → more and stronger cleantech businesses in New York State

Awards



- Validation Phase
 - Up to \$150K for technical proof-of-concept
 - Additional \$ for business validation
 - Support from industry / entrepreneur coaches, external advisors, student teams
 - Milestone-based tranches
- Ignition Phase
 - \$50K for company launch & marketing

Eligibility Criteria



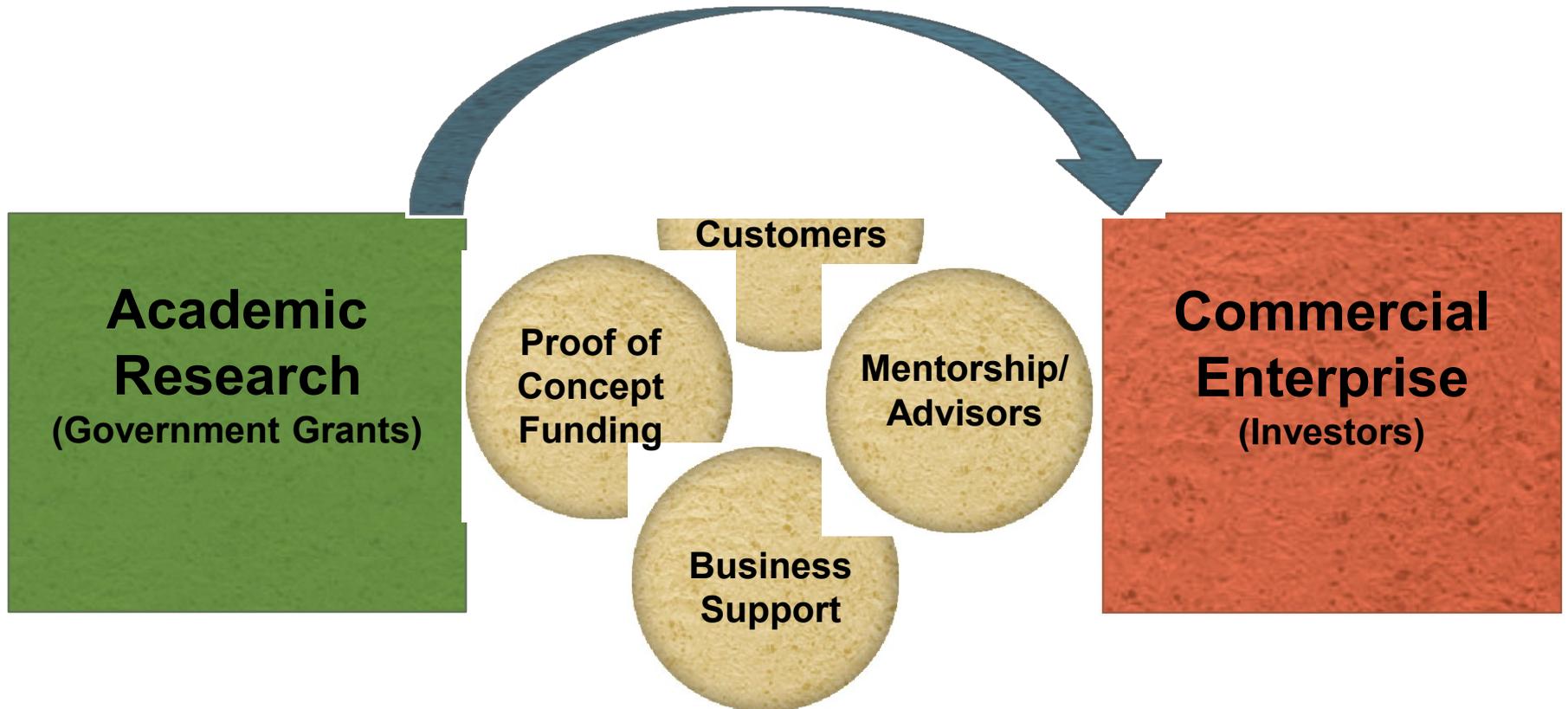
- Open to Researchers at participating institutions
- Within NYSERDA's "areas of interest" (see following slide)
- Based on University IP
- Not for "basic research"

Selection Process



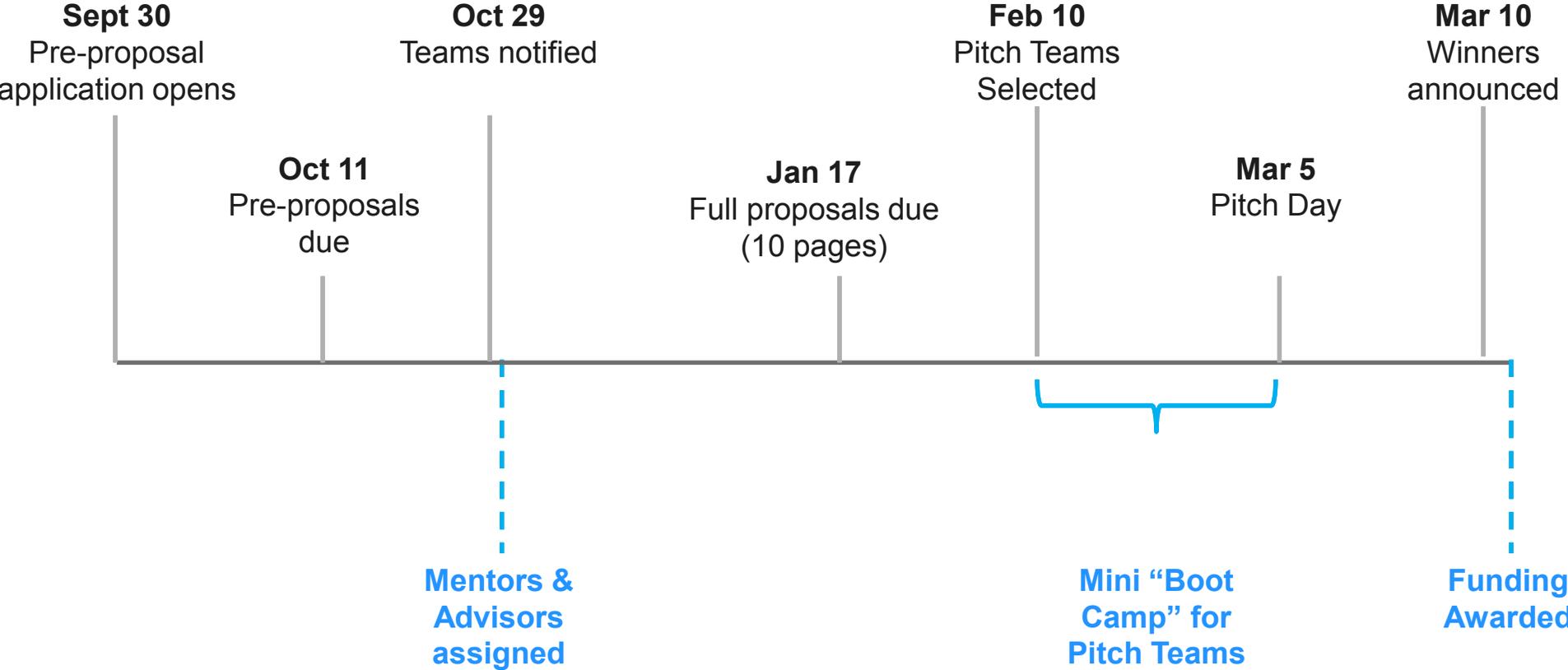
- First cycle: Oct 2013
- Pre-proposal → full proposal → pitch day
- External judging committee (VCs, industry, entrepreneurs)
- Based on commercial potential

How we PowerBridge the Gap



Overcome Technology and Market Risk

Validation Award Cycle Timing



Sample Evaluation Criteria Will Include...

Technical feasibility and benefits

- Energy savings or amount of renewable energy produced
- Demonstrated early-stage proof of principle
- Ability to execute within available budget (indirect cost rate included)
- Qualifications of the team

Commercial potential

- Market need and size
- Competitive landscape
- Innovativeness of the proposed solution
- Strength of intellectual property
- Feedback from mentor

Draft Guidelines on “Eligible Technologies” Within NYSERDA’s Areas of Interest

| Transportation | Fuel Production | Fuel Delivery | Buildings | Industry & Agriculture | Electricity Generation | Electricity Delivery and Management | Currently <u>Not</u> Eligible |
|---|--|--|---|--|---|--|--|
| <ul style="list-style-type: none"> ➤ Population systems ➤ Vehicle Design and Materials ➤ Freight Logistics ➤ Land-Use and Infrastructure Design | <ul style="list-style-type: none"> ➤ Ethanol and Butanol ➤ Biodiesel ➤ Biogas ➤ Synthetic Diesel and Gasoline ➤ Bio-oil ➤ Hydrogen | <ul style="list-style-type: none"> ➤ Fueling Stations ➤ Fuel Transportation Infrastructure | <ul style="list-style-type: none"> ➤ Building Design ➤ Building Envelop ➤ HVAC ➤ District Energy, Combined Heat and Power (CHP), and Combined Cooling Heating and Power (CCHP) ➤ Green Roofs ➤ Water Heating ➤ Lighting ➤ Appliances and Electronic Equipment | <ul style="list-style-type: none"> ➤ Energy Efficient of Manufacturing Machinery and Process Equipment ➤ Individual Combined Heat and Power ➤ Sustainable Agriculture | <ul style="list-style-type: none"> ➤ Hydropower ➤ Gas Turbines ➤ Solar ➤ Wind ➤ Geothermal ➤ Marine ➤ Waste ➤ Biomass ➤ Other Distributed Generation | <ul style="list-style-type: none"> ➤ Transmission ➤ Distribution ➤ Advanced Meeting Infrastructure ➤ Microgrids ➤ Smart Grids ➤ Electric Vehicle Charging Infrastructure ➤ Energy Storage | <ul style="list-style-type: none"> ➤ Nuclear ➤ Compressed Natural Gas and Liquefied Natural Gas ➤ Hydrofracking ➤ Clean coal |

Enabling IT & Modeling

Mutual Expectations for Winning “Validation Award” Teams

| | Technical | Business |
|---------------------------------------|--|--|
| What we expect from you... | <ul style="list-style-type: none"> • Develop initial prototype • Jugular experiment to de-risk the technology • Conduct in-field testing | <ul style="list-style-type: none"> • Market assessment • Competitive landscaping • Customer interviews • Business plan development • Develop commercial “pitch” • Talk to potential investors • SBIR/STTR application (if relevant) • Identify potential e’ship team |
| What you can expect from us... | <ul style="list-style-type: none"> • Mentors & coaches • Funding for tech development • Access as needed to: <ul style="list-style-type: none"> ○ Student teams for design & prototyping ○ Technical project managers ○ Built environments for testing prototypes • Funding for: <ul style="list-style-type: none"> ○ Conference travel & fees ○ SBIR/STTR assistance | <ul style="list-style-type: none"> • Mentors & coaches • Financial support in addition to Project Funds for business and external assistance • Access as needed to: <ul style="list-style-type: none"> ○ Student teams for business & marketing support ○ Educational panels & boot camps ○ Networking w/ VCs, industry, entrepreneurs ○ Subsidized tax, law, accounting |

Note: all funding will be released based on successful interim tech & business project milestones

FAQ

- **What do I have to do to apply?**
 - File an invention report with your home institution's tech transfer office
 - Complete the 2-page pre-proposal (available in early October)
- **Is there a bias towards short-term vs. long-term projects?**
 - No preference, as long as milestones are met
- **What does PowerBridge NY expect in return for funding?**
 - No equity stake nor revenue share for PowerBridge NY
 - No impact on the intellectual property ownership
- **Are there any restrictions on the use of funds?**
 - Validation grants given only to universities to use as they see fit to achieve proof-of-concept
 - Labor: grad student / post-doc labor plus ICR & fringe can be included; Faculty salaries cannot
 - Can be used for subcontract work
 - Can be used for facility fees and services
 - PBNY working on subsidizing part of this fee – stay tuned for more info!
 - Not intended for capex equipment >\$20K
 - Ignition grants only given to NYS companies – not for proof-of-concept activities
- **What if a project is not selected as one of the final awardees? Can the team reapply?**
 - Yes, if feedback is addressed
- **Can a team apply if the IP has mixed ownership (two institutions; institution /company)?**
 - Yes, but only if the joint ownership wouldn't make it impossible to commercialize the idea

Stay tuned for Fall 2013 launch!

Sign up to receive updates by emailing your Campus Representative

| Institution | Campus Rep | Campus Rep Email | Tech Transfer Website |
|--------------------------------|-------------------|--|---|
| Brookhaven National Laboratory | Pat Looney | jlooney@bnl.gov | www.bnl.gov/techtansfer |
| City University of New York | John Blaho | jblaho@ccny.cuny.edu | www.cuny.edu/research/ovcr/tco.html |
| Columbia University | Donna See | dks26@columbia.edu | www.techventures.columbia.edu/ |
| Cornell University | Bethany Koi | ck574@cornell.edu | http://www.cctec.cornell.edu/ |
| NYU-Poly | Chris Snyder | Christopher.snyder@nyu-mc.org | oil.med.nyu.edu/faculty-students |
| Stony Brook University | Ann-Marie Scheidt | annmarie.scheidt@stonybrook.edu | http://www.stonybrook.edu/research/otlir/ |