



STATE OF NEW YORK | EXECUTIVE CHAMBER

ANDREW M. CUOMO | GOVERNOR

**For Immediate Release:** March 5, 2014

## **GOVERNOR CUOMO AWARDS FUNDING TO NY-BEST COMPANIES TO DEVELOP ADVANCED ENERGY STORAGE TECHNOLOGIES**

*Goal is to Develop Working Prototypes for New Technologies That Will Help Add Resiliency and Efficiency, Reduce Cost and Promote Renewable Energy*

Governor Andrew M. Cuomo today announced that \$1.4 million has been awarded to six companies working on new technologies in battery and energy storage, which will help develop working prototypes that demonstrate the ability of these advanced energy storage systems to harden the state's electric grid and diversify transportation fuels. Funding will help leverage a total private investment of \$2 million.

The funding will help to transition new energy storage technologies with proven technical feasibility to a working prototype. A working prototype is an essential step along the product commercialization path and increases a company's opportunity to attract additional investment.

"Investing in New York's cleantech economy will revolutionize the way we store and transfer energy while creating jobs and supporting our state's clean energy businesses," Governor Cuomo said. "This funding will help to create new opportunities for manufacturers and researchers around the state to commercialize their products, help the environment by reducing energy use, and ultimately continue to grow our state's green economy."

Funding is provided through the New York State Energy Research and Development Authority (NYSERDA) and New York Battery and Energy Storage Technology (NY-BEST) Consortium Bench-to-Prototype solicitation.

NYSERDA President and CEO John B. Rhodes said, "Continued technology advances in energy storage play an important role in the clean energy economy, from the smallest electronic devices to the largest wind turbine and solar power projects. These projects will help promote innovation at all levels, further meeting Governor Cuomo's goal of growing cleantech jobs in New York State as well as adding resiliency and enabling more clean energy."

NY-BEST Executive Director Dr. William Acker said, "NY-BEST congratulates these companies and organizations on their successful applications and the advancements they are making. Once again, these awards demonstrate that NY-BEST member companies are

developing and commercializing energy storage technologies that are transforming the way the world uses energy. We applaud New York State and NYSERDA for supporting this important work and recognizing the key role energy storage plays in driving clean energy solutions and growing our economy right here in New York.”

Eligible technologies include energy storage technologies that utilize electrical or electrochemical processes and include batteries, ultracapacitors, fuel cells and related components that integrate these technologies into complete systems. This is the third of six rounds of NYSERDA funding to help members of NY-BEST move promising technologies toward commercialization.

NY-BEST is an industry-focused coalition working to establish New York as a global leader in energy storage technology for heavy-duty transportation, electric grid and other storage applications. NY-BEST was created in 2010 with a \$25 million grant from State government to position New York State as a global leader in energy storage technology, including applications in grid storage and heavy-duty transportation.

Governor Cuomo's NYS 2100 Commission, which was tasked with finding ways to improve the resilience and strength of the state's infrastructure in the face of natural disasters and other emergencies, also calls for the increased use of energy storage technology to improve energy resiliency. These awards will help transition promising new energy storage technologies with the potential to help harden the electric grid, allow onsite power systems to work independently of the grid during a grid outage and increase alternatives to fossil fuels for transportation.

Recipients were awarded \$250,000 unless otherwise noted:

**Mohawk Valley** -- Custom Electronics will work with Binghamton University to develop a new electric capacitor for power conditioning applications to enable a smoother, consistent voltage for sensitive electronic devices. This new capacitor will incorporate a flexible manufacturing process and is expected to provide energy density and greater tolerance to temperature.

**Central New York** -- Cornell University will develop and demonstrate a regenerative fuel cell energy storage system, using a Cornell-designed membrane, to produce hydrogen. This project will seek to address a key obstacle in renewable hydrogen production – reducing the cost – which could reduce fossil fuel dependence by transitioning to hydrogen-powered vehicles.

**Central New York** -- Widetronix will work with the Cornell Nanoscale Facility to enhance the power density of the Widetronix betavoltaic platform. Betavoltaics are millimeter-scale semiconductor chips that convert electrons emitted from an embedded isotope layer into electric power enabling decades of power. Widetronix is targeting applications in defense, industrial, and medical implant sectors where the technologies' longevity, high power density, and robustness in harsh environmental conditions are important characteristics for critical monitoring needs.

**New York City** -- Columbia University seeks to scale-up electrochemical reactor technology developed at the school using a system that converts electricity into energy stored in a liquid fuel. The technology, if successful, would have significant environmental benefits by providing a

new method for storing energy.

**Capital Region** -- Rensselaer Polytechnic Institute in Troy was awarded \$122,000 and will work with Finch Paper of Glens Falls and JNC of Rye to develop high-energy density cathode materials for lithium-sulfur batteries using a low-cost byproduct generated by the paper industry. This project could result in lower-cost lithium batteries for transportation and stationary storage applications and enable some paper mills in New York to convert a low-value byproduct stream into a high-value cathode material.

**New York City and Finger Lakes** -- Con Edison and the Battery and Energy Storage Testing and Commercialization Center of Rochester will work with Ambri Inc. to develop and test a working prototype of Ambri's novel Liquid Metal Battery for grid-scale electricity storage applications. With success, the technology will help customers reduce their electricity bills and will enable utilities to offset expensive infrastructure investment while ensuring a more reliable, safe and secure electricity system.

For more information on the next funding round, with proposals due April 7, please click [here](#).

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