NYSERDA awards $700,000 for clean energy power systems

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The New York State Energy Research and Development Authority (NYSERDA) is investing a total of $700,000 in two companies that are developing environmentally-friendly technologies that generate electricity while reducing fossil fuel use and greenhouse gas emissions.

The projects are part of a $7 million statewide incentive program for clean energy power systems that awarded funding to 17 companies around the state. Funded projects include fuel cells, solar panels, wind turbines, energy storage systems, waste-heat-to-electric facilities, biogas systems and hydropower. To qualify for this competitive funding, applicants needed to show how the new products improved on existing technology. Nearly 40 companies applied for funding in this competitive solicitation.

"By investing in clean energy power technologies, we are not only helping to improve power reliability and reduce electricity costs, but we are also helping to grow the state's clean-energy economy," said Francis Murray Jr., president and CEO of NYSERDA. "These promising projects can lead to new technologies that produce important economic and environmental benefits."

NYSERDA awarded $500,000 to ENrG Inc. to explore increasing the company's manufacturing capacity and improving the performance of the ceramic components it produces for fuel cells and other products. ENrG is providing an additional $770,000 toward the project.

ENrG also shares in a $200,000 NYSERDA award to TAM Ceramics of Niagara Falls on a separate project to improve the performance of a high-tech ceramic material that can be used to turn waste heat (such as exhaust from an engine or from manufacturing) into electricity.

"These investments in research and development are creating jobs today and the cutting-edge products and technologies of tomorrow," said congressman Brian Higgins. "ENrG and TAM Ceramics are to be applauded for their initiative, demonstrating once again the great role of Western New York companies in leading the way in global innovation."

"I'm excited about NYSERDA's investment into these two companies," said state senator George Maziarz. "That two WNY companies were chosen in this competitive application process shows that this area has a strong economic story to tell - both in the Buffalo area and in Niagara Falls. As chairman of the Senate Energy Committee, I couldn't be happier."

"I am very pleased that NYSERDA will be investing $500,000 with ENrG Inc. to increase the company's capacity to develop environmentally-friendly electricity technology while reducing the amount of greenhouse gas emissions," said assemblyman Robin Schimminger, chairman of the Assembly Committee on Economic Development. "This is part of a $700,000 clean energy investment in Western New York. These investments facilitate our pursuit of new renewable energy material technologies, making Western New York competitive in the clean-energy global market."

Created nine years ago, ENrG began developing ceramic components for fuel cells using technology licensed from Corning Incorporated. Today, it has 14 employees in three locations in the

Buffalo area.
ENrG's main product now is an ultra thin ceramic substrate for use by solid-oxide fuel cell manufacturers. The dense ceramic layer works as a membrane, keeping materials separate and facilitating electrochemical energy conversion during the power-generation process in fuel cells and other technologies. In addition to fuel cells, ENrG's product has a variety of military and commercial applications, including superconductors, sensors, solar heaters and other uses.
"ENrG's typical customer knows they need a flexible thin ceramic membrane but face many challenges in acquiring it because of performance issues, cost and amount of time it takes to secure the product. These two NYSERDA awards will permit ENrG to address all of these issues for our Thin E-Strate(r) product and significantly grow this business," said John A. Olenick, president and CEO of ENrG Incorporated.

TAM Ceramics is developing a high-performing ceramic powder that can be used in a process to create power from high-temperature waste heat produced by generators, vehicles or industrial processes. The process works through a thermo-electric effect, which creates electricity at hot temperatures. TAM and ENrG are working together to test the feasibility of using TAM's material in porous ceramic structures produced by ENrG to eventually manufacture heat-to-electricity components.

"The award from NYSERDA complements TAM Ceramics' pursuit of new renewable energy material technologies based on its successful history of advanced material developments. TAM Ceramics is able to take on this new project as we are able to leverage our installed ceramic processing equipment capacity to manufacture these materials in large volumes," stated George Bilkey, President and Managing Partner, TAM Ceramics.

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About NYSERDA:
NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce their reliance on fossil fuels. NYSERDA professionals work to protect our environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975.
About ENrG Inc.:
ENrG Incorporated is a developer and manufacturer of critical ceramic components for clean energy applications. ENrG sells its components to product development groups working to design and manufacture clean energy systems. ENrG personnel are specialists in flexible dense or porous ceramic membrane technologies. ENrG is expanding its ceramic membrane based technologies into many market segments. The company is currently working on ceramic technologies for fuel cells, gas separation membranes, battery charging, and flexible heaters. ENrG has three locations in Western New York, and is a member of New Energy New York, NY-BEST, and the Great Lakes Fuel Cell Education Partnership.

About TAM Ceramics:

TAM Ceramics was founded in 1906 in Niagara Falls, and manufactures Zirconia, Titanate, and Zircon powders used in applications such as high temperature furnace linings, brake pads, protective coatings for molten metal casting, and welding consumables. Its advanced materials business provides processing services for companies who utilize its broad powder synthesis and processing capabilities.