

## North Carolina Biotechnology Center Taps Federal Grant to Reduce Energy Costs

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RALEIGH, N.C. – Linc Services, LLC has completed a multi-faceted energy-improvement installation for the North Carolina Biotechnology Center, projecting a 34 percent reduction in energy consumption. Linc's energy-saving solutions for the newly expanded facility include installation of a 32 kW photovoltaic solar array, an HVAC system upgrade, lighting retrofits and the addition of a state-of-the-art control system to reduce energy costs while improving the facility's comfort and lighting levels.

The Biotechnology Center, aided by Linc and the N.C. Department of Commerce's State Energy Office, was able to complete the project with the additional funding from the American Recovery & Reinvestment Act (ARRA), also known as the federal economic stimulus program. ARRA, enacted by Congress last year, includes a number of options for domestic spending in education, health care and infrastructure, including the energy sector.

"It was a challenging project for us as the project budget was well short of what was needed to address all the client's needs. By using all of the funding sources encouraged in the federal Recovery Act program we were able to fund the solar array system which is a key highlight of the project for the North Carolina Biotechnology Center," said Dan Dowell, Linc Network's Director of Energy Solutions for the Mid-Atlantic Region. "The addition of the solar array will provide the center with increased energy savings as well as help reduce their carbon footprint."

"We believe it's important for the Biotechnology Center to provide leadership not only in job creation across North Carolina, but also in the stewardship of the state's natural and economic resources," said E. Norris Tolson, president and CEO of the Center.

The recently completed improvements include:

- 32 kW Photovoltaic Solar Array: The 32 kW photovoltaic solar array rooftop system, which is south facing to optimize energy production, was installed using non-penetrating roof-mount hardware. The core components of each solar unit are solar panels and three-phase grid-tied inverters. All electricity produced by the solar array will be used to supplement the energy consumption of the facility.

- Direct Digital Control System: To increase efficiencies and optimize performance of the system, the previous control system was replaced with a modern control package that uses a web-based platform with a graphical based user interface. Users can access the control system from the Internet to monitor system operations and make changes to temperature set-points and schedules. The system also has the ability to send out alarm e-mails or text messages, allowing service personnel to address issues in a timely fashion.

- Lighting: Linc Lighting & Electrical, a division of Linc Service, upgraded the entire lighting system with a number of new high-efficient products, including new FO28-841 lamps to replace florescent lamps and new electronic ballasts; motion sensors in offices; and high output compact fluorescents in the lobby. The

lighting upgrades will help improve light levels and visual clarity as well as provide less maintenance expenses and maximum energy savings.

- Rooftop Heating Ventilation and Air Conditioning System: High efficiency gas heat rooftop units replaced outdated units. These new high efficient roof top HVAC systems will help reduce the amount of energy consumed by the building.

“We are very happy Linc Services was able to assist the Biotechnology Center with their building improvements,” said Rick Overholt, Linc Services’ Vice President of Sales – North Carolina. “Linc’s high performance facility solutions program enabled the Center to effectively use the ARRA grant money. The Center will reap the benefits of the energy savings they are forecasted to save with these improvements for many years.”