

## Allied Converters Cogen Project

Installation and commissioning of a combined cooling heating and power system.

### BACKGROUND

Allied Converters, Inc. is a plastic wrap assembly and warehousing facility that is being renovated to accommodate the growth of the business. Previous energy efficiency measures have included replacing approximately 80 percent of the manufacturing motors with high efficiency motors and incorporating computer control systems on the equipment. The renovation will include high efficiency lighting and space conditioning systems.

### OBJECTIVE

The objective of this project is to install and commission a combined cooling, heating, and power (CCHP) system for the Allied Converters facility based on microturbine technology. Increase awareness of CCHP benefits for the city of New Rochelle and other commercial and industrial facilities in New York State.

### DESCRIPTION

The system will comprise a 60 kW natural gas-fired microturbine for generating electric power. The heat recovery system will capture microturbine exhaust gas thermal energy for space heating and cooling. Technology transfer includes presenting the energy, environmental, and economic data at the corporate websites of Advanced Power Systems and Allied Converters, Inc., and contacting building owners and facilities management personnel, and arranging tours of the Allied Converter CCHP system to demonstrate the system features.

### BENEFITS

This project will result in peak load reduction of 50 kW and reduce annual electricity usage by 130,000 kWh/year (a decrease in energy consumption of 11%). Approximately 68% of the rejected heat will be utilized, with over \$16,400 in net annual energy savings anticipated.

<b>Funding</b>	<b>Encumb to Date</b>	<b>Pending</b>	<b>Total Anticipated</b>
Advanced Power Systems	\$167,729.00	\$0.00	\$167,729.00
NYSERDA	\$167,729.00	\$0.00	\$167,729.00
<b>TOTALS</b>	<b>\$335,458.00</b>	<b>\$0.00</b>	<b>\$335,458.00</b>

**Manager** Borowiec, Joseph C.  
**Contracts** STD-6841  
**Contractors** Allied Converters, Inc  
**Technologies** Cogeneration  
**Cities** Mamaroneck, New Rochelle  
**Counties** Westchester