Essex Junction, Vermont's two million gallons per day (MGD) clean water utility recently installed two-30 kilowatt methane-fueled micro-turbines to generate its own electricity from biosolids. In this combined heat and power (CHP) project, waste heat offsets the cost of fuel needed to heat its anaerobic digesters. This project provides a total energy savings of $33,000 per year, and reduces CO_2 emissions by 30 tons per year.

Detroit's Water and Sewerage Department, Michigan will provide the local electric power company 800,000 wet tons per day of biosolids, which will be dried and used in its Rouge River Power Plant in place of coal, helping meet the State of Michigan's mandate to secure 10% of its power from renewable sources.

Gloversville-Johnstown, New York's wastewater facility, serving 25,000 residents and 12 local industries, generates 90% of its energy needs in its anaerobic digester processing biosolids from the plant plus local dairy wastes. It saves $500,000 a year in energy costs and nets $750,000 a year in additional revenue from dairy waste acceptance fees.

The **State of Connecticut**, as part of its program to meet nitrogen load reductions to Long Island Sound, has established a successful nitrogen credit exchange/trading program. During the period 2002-2009, $46 million in nitrogen credits were bought and sold, providing a cost-effective alternative for 79 clean water agencies to meet their nitrogen waste load allocations as part of the total maximum daily load (TMDL) adopted for Long Island Sound. Compared to other alternatives, these facilities have saved between $300 and $400 million through trading.

The **New York City**'s Green Infrastructure Plan predicts that, "every fully vegetated acre of green infrastructure would provide total annual benefits of $8,522 in reduced energy demand, $166 in reduced CO_2 emissions, $1,044 in improved air quality, and $4,725 in increased property value."

The **City of Philadelphia, Pennsylvania**, signed a $2 billion agreement with the U.S. Environmental Protection Agency in 2012. The agreement allows the Agency to provide technical support and monitoring, including in school gardens and low-income neighborhood revitalization, through green design. The Agency will be working hand in hand with the City's 25-year Green City, Clean Waters plan, which aims to protect and enhance urban watersheds by managing stormwater through green infrastructure techniques.

D.C. Water's new Clean Rivers, Green District partnership with the U.S. Environmental Protection Agency uses green infrastructure to prevent pollution from coming into contact with rainwater, while also providing public health, livability, and economic benefits for the District of Columbia and its residents.

The **Hampton Roads Sanitation District (HRSD), Virginia** recovers and converts about 85 percent of phosphorus and 25 percent of ammonia from its dewatering process into a slow release fertilizer, Crystal Green™. Fertilizer revenues offset both capital and operating costs, effectively reducing discharge of nutrients at no cost to HRSD and, compared to alternatives, saves ratepayers money.

The **Camden County Municipal Utility Authority, New Jersey** has implemented a series of operating performance improvements, green infrastructure, solar energy, and currently underway, methane recovery from biosolids. Combined operating and capital costs are now lower than they were in 1996, effluent is cleaner, as are the tributaries to the Delaware River, and vendor-financed solar photovoltaic arrays save about $300,000 a year in energy costs.

WATER RESOURCES UTILITY OF THE FUTURE