

# PROJECT PROFILE



## VEOLIA HICKORY MEADOWS LANDFILL GAS-TO-ENERGY FACILITY (LGTEF) HILBERT, WI

**38%** water use reduction

**95%** waste diverted from landfill

**100%** wood is FSC certified

### LEED® Facts

**Veolia Hickory Meadows Landfill  
Gas-To-Energy (LGTE)  
Hilbert, WI**

LEED certification under the LEED-NC 2009  
Certification November 2011

**Silver 54/110\***

**Sustainable Sites 9/26**

**Water Efficiency 8/10**

**Energy & Atmosphere 16/35**

**Materials & Resources 4/14**

**Indoor Environmental Quality 10/15**

**Innovation & Design 5/6**

**Regional Priorities 2/4**

\*Out of a possible 110 points

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.



# PROJECT PROFILE

## VEOLIA HICKORY MEADOWS GAS-TO-ENERGY FACILITY

### PROJECT BACKGROUND

The Hickory Meadows Landfill Gas-To-Energy (LGTEF) project located in Hilbert, Wisconsin is the first developed by Veolia Energy North America. The 4.8-megawatt (MW) electrical generation facility has the capacity to generate 42,000 megawatt hours (MWh) of electricity per year, enough to power 2,800 homes. The facility includes three landfill reciprocating engine generator sets with a capacity of 1.6 MW each, fueled exclusively by the landfill gas. Landfill gas, which is normally burned off, is captured and sent via the landfill's existing gas collection system to the LGTE facility, where it will be transformed into electricity and then sold to Wisconsin Public Service (WPS), the primary electricity and gas provider for northeastern Wisconsin residents. Upon completion, WPS will purchase all of the power generated by the plant, along with the Renewable Energy Credits associated with the energy output. According to the U.S. Environmental Protection Agency (EPA) and its emission reductions and environmental benefits calculator, a 4.8 MW landfill gas-to-energy plant such as this is expected to achieve carbon dioxide emission reductions of over 25,000 tons per year, or the equivalent of removing 37,550 automobiles from the road each year.

### STRATEGIES AND RESULTS

The Hickory Meadows facility's high efficiency building envelope, energy-efficient lighting and controls system and mechanical system is 38.2% more efficient than a code-compliant facility, yielding a total annual energy savings of \$43,000. The mechanical ventilation system is filtered by MERV 8 filtration media to enhance the indoor air quality for the building occupants. Low-emitting adhesives, sealants, paints, coatings, furniture & seating, and flooring systems were selected that contain low or no Volatile Organic Compounds (VOC) and 100% of the composite wood products are free of added urea-formaldehyde and is FSC certified. To further enhance air quality, a green cleaning program has been established. The facility will continue to tell the story of Veolia's commitment to responsible waste management by requiring staff and visitors to recycle their waste. Nearly 59% of the materials were extracted, harvested and manufactured locally. Throughout the construction process, the on-site team implemented a construction indoor air quality management plan as well as a construction waste management plan, which resulted in diverting 95% (45.78 tons) of waste from the landfill. Low-flow plumbing fixtures will yield a 38% reduction in potable (drinkable) water. The site is landscaped with low-mow grasses and adaptive vegetation, which reduces maintenance as well as the need for irrigation, and portions have been restored with native plantings. The on-site wet detention pond is utilized to enhance water quality by removing 92% of the Total Suspended Solids. The hardscape surfaces on the site are paved with white concrete to avoid the heat island effect surrounding the facility. Site lighting was designed to avoid night sky pollution. Preferred parking spaces are dedicated to car-pooling and low-emitting & fuel-efficient vehicles and includes a bicycle rack and showering facilities to promote a healthy life style choices in addition to encouraging alternative transportation.

### ABOUT VEOLIA ENERGY NORTH AMERICA

 Based in Boston, MA, Veolia Energy North America is a leading U.S. operator and developer of energy efficient solutions. The company is part of the Veolia Environnement companies in North America, with 30,000 North American employees. Visit the company's Web sites at [www.veoliaenergyna.com](http://www.veoliaenergyna.com) and [www.veolianorthamerica.com](http://www.veolianorthamerica.com). Around the world, Veolia Energy manages more than 2,600 MW of alternative and renewable energy facilities. As a result of Veolia Energy's efforts to optimize energy and utilize renewable resources across the globe, the company reduced worldwide greenhouse gas emissions in 2010 by 7.1 million metric tons.

### ABOUT MIRON CONSTRUCTION CO., INC.

 Miron Construction Co., Inc., headquartered in Neenah, Wisconsin, with regional offices in Madison, Wausau and Milwaukee, Wisconsin, and Cedar Rapids, Iowa, has been providing professional construction services to clients throughout the Midwest (with an expanded geographical reach across the U.S.) for the past ninety years. Miron Construction Co., Inc., is currently listed 94th among all general contractors in the United States (based on sales and revenue figures for 2010) by Engineering News Record. For more information, visit [miron-construction.com](http://miron-construction.com).

"We are proud to partner with our Veolia sister company on our first renewable energy facility in North America. This is a significant project for our company and we are excited to see the plant in operation," said Cyrille du Peloux, president and chief executive officer of Veolia Energy North America. "Not only will this innovative landfill gas-to-energy project further diversify our company's mix of efficient energy assets, it will significantly reduce the carbon footprint of the region."

Cyrille du Peloux  
President and Chief Executive Officer



**Owner:** Veolia Energy North America  
**LEED® Project Admin:** Miron Construction Co., Inc.  
**Commissioning Agent:** Sustainable Engineers  
**Architect:** Cornerstone Environmental Group  
**Construction Mngr:** Miron Construction Co., Inc.  
**MEP Engineering Firm:** KJWW  
**Project Size:** 5,001 square feet  
**Project Budget:** \$3,200,000  
**Photography:** Munroe Studios Inc.

### ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operation of high-performance green buildings. Visit the U.S. Green Building Council's web site at [usgbc.org](http://usgbc.org) to learn more about LEED® and green building.

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