The Lawrenceville School Solar Farm consists of a nearly 30-acre, net metered, 6.1 megawatt solar facility and honey-producing bee hives, which ring the perimeter of the array. The nearly 900,000 resident honey bees are nourished by a special wildflower mixture planted among and around the solar panels.

**Technical Information**

**Construction started:** September 27, 2011  
**Construction completed:** March 16, 2012  
**Commercial Operations Estimated to Begin:** April 15, 2012  
**Owner and Operator:** KDC Solar TLS LLC (“KDC Solar TLS”), a wholly owned subsidiary of KDC Solar LLC, (Bedminster, N.J.). KDC Solar TLS will maintain the solar equipment.  
**Length of Power Purchase Agreement (PPA)/Lease:** 20 years  
**Location:** The Lawrenceville School campus, 2500 Main Street, Lawrenceville, N.J.  
**Size of Solar Farm:** Approximately 30 acres  
**Number of Panels:** 24,934  
**Type of Panels:** 245 watt high efficiency panels manufactured in the United States. The panels, instead of being fixed at one angle, are installed on a single axis tracker system provided by Array Technologies Inc. (Albuquerque, N.M.), allowing the panels to tilt and follow the sun.  
**Carbon Dioxide Emissions Offset:** 6,388 metric tons annually (equivalent of taking 1,253 cars off the road annually).  
**Solar Farm Designed By:** TurtleEnergy LLC (formerly a subsidiary of Turtle and Hughes, Inc.) (Linden, N.J.). KDC Solar TLS finalized the design following the company’s acquisition of the project from TurtleEnergy LLC in May 2011.  

**Construction Contractor:** J. Fletcher Creamer & Son, Inc. (Hackensack, N.J.) with Lighton Industries, Inc. (Lakewood, N.J.) as the electrical subcontractor  
**Amount of Power Produced (Peak):** 6.1 megawatts DC installed which will generate approximately 9,264,000 kilowatt hours of solar electricity per year and supply approximately 90 percent of the annual electric power needs for Lawrenceville School facilities. During the day, the array can produce nearly twice the amount of energy needed by the School. The excess will be exported to the local electrical utility, Public Service Electric & Gas (PSE&G), and credited to the School. The School will draw the excess energy and all other required energy from PSE&G after sundown.  
**Power Purchase Agreement (PPA):** The Lawrenceville School has leased the 30-acres upon which the Solar Farm is installed to KDC Solar TLS. KDC Solar TLS owns and maintains all of the solar energy producing equipment on the land. For its role in providing the land, the Lawrenceville School gets a low, fixed rate for electricity produced by the Farm.  
**Solar Renewable Energy Credit (SREC):** Producers of solar energy can receive SRECs from New Jersey for every 1,000 kilowatt hours produced. SRECs can then be sold to power companies, allowing them to harvest energy from independent solar fields to comply with New Jersey’s Clean Energy Standard, which requires state utilities to generate 20 percent of their power with alternative forms of energy by 2020. KDC Solar TLS earns the SRECs from solar energy being produced at the Lawrenceville School Solar Farm.
Environmental Information

How Was the Land Used Before the Solar Farm Was Installed? Soybean farming for use as a feedstock.

How Will the Land Be Used After the 20-Year Lease on the Solar Farm? Undecided. We currently anticipate that the useful life of the solar energy producing equipment will be approximately 30-40 years in total; however at the end of its useful economic life the solar energy producing equipment can be removed and the land returned to 100 percent agricultural use.

Percentage of Energy Offset to Lawrenceville School: Initially (and subject to expected annual degradation) 90 percent of the School’s current energy usage.

Type of Flowers: Pollinator mixture which supports most Northeastern USA pollinator species. Some of the flower species will not develop fully until the following year.

Amount of Flower Seed Used: Approximately 1,600 lbs.

Type of Honey Bees: The initial honey bee population installed on the land will be Apis Mellifera (Italian bee genetics), a type of honey bee first introduced in the United States in about 1856, and now in common use across the country. The honey bee is the New Jersey state insect.

Number of Honey Bees: The initial installation will be up to 15 colonies. The expected total bee population by summer 2012, under normal and successful conditions, is expected to be between 30-60,000 bees per hive, or an approximate maximum of 900,000 bees.

Beekeeper: Pier V. Guidi of Bamboo Hollow Apiaries and Honey Farms, LLC (Hillsborough, N.J.)

What Will Be Done with the Honey Produced by the Bees? Some will be sold locally; the remainder will be used in Lawrenceville School dining halls. First year honey production will be limited as the bees will be in a major honeycomb building and population growth period and will need most if not all the flower nectar (and pollen) they collect for themselves.

Why Does the Lawrenceville School Have a Solar Farm? The Lawrenceville School has become a national leader among secondary schools for its commitment to sustainability. This use of clean energy helps the Lawrenceville School fulfill its Green Campus Initiative, a holistic approach to campus sustainability, and it will benefit the broader community outside of the School. We are also looking forward to the many learning opportunities the Solar Farm will provide to our students and the local community. The School community will have access to a wealth of real-time monitoring information provided by KDC Solar TLS ranging from where the panels are currently positioned, to how much power is being generated, to how much energy a specific campus building is using, and much more. We are excited about the creative ways our teachers and students will use that data to help build a healthier, more sustainable world for future generations. It will also be exciting for us to welcome local school and community groups interested in learning more about alternative energy.

What is the Lawrenceville School Green Campus Initiative? The Lawrenceville School Green Campus Initiative takes a holistic approach to campus sustainability. The initiative focuses on campus energy, materials, land, and water use applying methods that promote ecological literacy, sustainability education, and involve the broader community outside of the School. The Lawrenceville School’s environment makes an aesthetic impression on those who come to campus while simultaneously presenting a pedagogical mission. The campus in particular, with the legacy of alumnus Aldo Leopold and foundational landscape design by Fredrick Law Olmsted, provides unique educational opportunities for students and the local community. As a result, students, faculty, staff, and citizens who work, learn, and live on and around our campus can gain a new dimension to their learning experience, and an increased appreciation of the natural world.