

EXHIBIT Q SUSTAINABILITY AT GEORGETOWN

History

Georgetown has historically programmed buildings for multiple uses, typically combining academic, administrative, and other activities within a building. In more recent history, Georgetown has been able to combine interior and exterior uses within structures.

Georgetown's solar array on the roof of the Bunn Intercultural Center (ICC), installed in 1984, is currently the longest running installation of its scale in the country and has produced over 5.8 million KWH of electricity. The Leavey Center, completed in 1988, sits atop a chilled water storage tank. Water is chilled overnight when energy costs and demand are lower and is stored and used during higher demand times, thus reducing cost and demand on the power grid. Recycling was made a high priority in 1989 with the hiring of a full-time Recycling Manager. GU currently sends less than 15% of its solid waste, including construction waste, to landfills. Waste is either recycled or burned to generate energy. GUTS buses run on bio-fuel and all food waste from the student dining hall is recycled or composted. These and other initiatives have shaped Georgetown's sustainability efforts.

Initiatives

In the Spring of 2007 the Energy and Environmental Sustainability Advisory Committee was formed at Georgetown. This Advisory Committee works to understand the underlying mechanisms which might positively affect climate through potential changes in behaviors and processes emerging from interaction among those interested in alternate energy systems, the environment, and social dimensions of sustainability. The committee includes senior administrators, faculty, staff, undergraduate, and graduate students and advises the Vice President in developing a plan that will lead to a reduction in Georgetown's environmental footprint. Georgetown's carbon footprint has been reduced by more than 19.83% since 2006. The University's goal is to reduce our footprint by 50% by 2020.

Switch It Off Competition: Energy conservation is promoted through competitions among the residence halls. One first-year hall has already reduced their energy consumption by almost 12% during the 2009-2010 academic year. Monitors in each residence hall lobby provide facts about sustainability, what Georgetown University is doing toward sustainability, and a comparison of residence halls with respect to energy use reduction.

Sustainability initiatives at Georgetown benefit the entire Georgetown community through:

Georgetown University 2010-2017 Campus Plan

Carbon Footprint Reduction

During 2008, Georgetown University completed its first Greenhouse Gas inventory and emissions estimate. Known as a carbon footprint, these estimates provide the crucial, initial baseline for tracking our progress over the next several years. All future efforts and progress, can be evaluated against this baseline.

Georgetown University's total carbon footprint for all campuses activities in fiscal year 2010 was 91,250 MTCDE or 14.65 MTCDE/1000 sq. ft. Georgetown's emissions per square foot have fallen by 19.83% since 2006. This long term trend is due to a variety of factors, including:

- Improved efficiency at the central heating and cooling plant
- Energy conservation initiatives and education
- Changes in the mix of energy used
- Changes in the emissions related to purchased electricity as local energy companies begin to make greater use of "clean" sources of energy
- Participation in the Demand Response program as the largest load reduction participant in DC

Over 98% of greenhouse gas emissions for Georgetown are from electricity and natural gas. While reduction efforts will be made in all areas, these areas, used mainly for cooling and heating, will be the focus for further reductions.

Campus Operations

Georgetown has full-time employees who address sustainability issues as part of their work, including a Manager for Solid Waste and Recycling, a Utility Analyst, the Director of Utilities and Energy Programs, an Energy Management Engineer, and five Energy Systems Engineers. Facilities and Student Housing staff have participated in LEED training to enhance their understanding and appreciation for building certification.

Green certified cleaning products and methods are used in all facilities and custodial staff have been trained in the proper use of the products. Dining Services uses an Active Ion Pro cleaning method, which converts tap water into a powerful cleaner and removes 99.9% of harmful bacteria. A "grease-eating" enzyme is used in kitchen grease traps to convert the grease into water.

New Facilities and Building Construction

As of FY 2007, all new construction and major renovation projects on campus utilize the US Green Building Council LEED and Labs 21 Certification programs. LEED Silver certification is the minimum standard for new construction and major renovations and has been incorporated into design and construction standards. These include installation of lighting occupancy sensors, T8 or T5 lighting fixtures, energy management controls and metering devices, Energy Star equipment and appliances, dual flush low flow plumbing fixtures and pint or waterless urinals, pervious surfaces and natural habitat vegetation, and renewable interior finishes. All construction waste will be recycled.

Georgetown University 2010-2017 Campus Plan

Staff have the opportunity to become LEED accredited, raising awareness and design capability for construction and maintenance projects. One of the University architects is currently LEED accredited and two others are preparing to take the exam.

Recycling

In the 2008-2009 Academic Year, the Main and Medical campuses recycled waste, including about 20 tons of metal. Construction waste is regularly recycled, including 85% of the waste from construction of the Rafik B. Hariri Building. All waste from construction of the Science Center is being recycled. In 2009-2010 over 45% of all waste from campus was recycled. The goal has been raised to 50% for 2010-2011, with the remainder going to an Energy from Waste plant. Georgetown has participated in Recyclemania, a nationwide competition among colleges and universities to educate and encourage higher levels of recycling, and finished in 37th place out of 267 schools overall in 2010.

Energy Programs

ICC 300KW Photovoltaic Rooftop Array: The Bunn Intercultural Center (ICC) solar array is the longest running installation of its scale in the country. The seven-story, south facing roof structure has generated 5.8 million KWH during its lifespan and now produces about 180 KW peak and 200,000 KWH per year.

Thermal Storage Tank: Under the lowest level of the Leavey Center's parking garage lies a storage reservoir about 200' long, 60' wide, and 24' deep holding approximately 2.2 million gallons of chilled water. The water is chilled during non-peak hours and used during peak hours when the plant is short on capacity and to reduce demand from the energy grid.

Toyota Plug-in Hybrid Electric Vehicles and Car Charging

Georgetown is test-driving a pre-market model of Toyota's first generation of Prius plug-in hybrid electric vehicle (PHV) to gather data for an international research initiative. The U.S. Department of Energy's Clean Cities Program is managing a long-term evaluation of the vehicles, which use both electric and hybrid technologies. Two cars were loaned to the university. Georgetown employees will have an opportunity to participate directly in the testing of the vehicles for three-month test periods.

Georgetown has installed two dedicated, 220V charging stations in the garage of the Hariri Building.

Green Roofs

Green roofs – vegetated roof covers – are present in a few forms. In 1972, the Preclinical Science building opened with a roof that holds planted spaces and pervious material. The roof of the Leavey Center is a popular outdoor space on campus with grass and other natural materials. In 2003, the Southwest Quad Garage opened in concert with new residence halls, a dining facility, and the Jesuit residence. This garage is located under

those buildings, but also lies below the well-used green space in the Quad. These spaces provide recreation space for all campus users along with the benefits of reduced runoff and temperature moderation for the buildings below.

Dining Services

Georgetown Dining maintains a strong focus in sustainability and successfully gained headway in 2009 by focusing efforts on multiple facets of the dining program in search of reducing the University's carbon footprint. This effort continued to be a main focus in 2010 and will be moving forward. During 2009, the primary initiative included establishing the groundwork for sustainability: vendor searches, contract initiation, and benchmarking made up the core efforts throughout the year.

Recent accomplishments include recycling, composting solid waste/landfill diversion, organic food sources, and trayless dining. One hundred percent of fryer oil is diverted to be collected and used in local bio-fuel vehicles. Georgetown Dining is proud to be first in the DC marketplace for composting food waste. All discarded food items sent to the dish room and food scraps from kitchen prep-work are discarded in green trash cans, lined with biodegradable green trash bags; the color distinction eliminates confusion during daily procedures. Discarded food items are picked up daily and transported to a composting facility in Maryland. This state-of-the art facility manages the food waste as it breaks down into soil, which soil is intended to make a full circle and to be used at a later date for landscaping on Georgetown's campus (top soil, mulch, etc.).

In addition to composting food waste, Georgetown Dining is nearly land-fill free. Waste accumulated at the Dining Hall is converted into energy through the Energy from Waste (EfW) facility located in Alexandria, Virginia. Energy generated allows the plant to be self sustainable and is used to power area homes and businesses. This relationship enables Dining Services to positively impact the environment while supporting a positive cause and helping to sustain new jobs.

In the Dining Hall, cost-effective organic food sources are increasingly the choice. From July 2008 to June 2009, use of local and organic food products increased from 4% to 7% of total products purchased. To conserve water used in the dish room, trays in Leo O'Donovan Hall were removed in April 2008. Student feedback was positive and water usage has been significantly reduced. Plastic bags for carry-out have been replaced with reusable bags.