

2019 University Sustainability Reports

School: Boston University

Population: 18,080

Primary Sustainability Mission(s): Reduce GHG Emissions, Improve Infrastructure, Carbon Neutral by 2040

Boston University's Current Methods

Boston University has made massive strides in recent years in regards to its sustainability efforts, in December 2017 the Board of Trustees approved a Climate Action Plan. The plan would dramatically cut greenhouse gas emissions across its campuses and fund broad infrastructure improvements in preparation for flooding or heat surges in the coming decades. The centerpiece of the plan is the reduction of carbon emissions on the campuses to zero by 2040 and many of the changes involve updating BU heating/cooling systems to make them more energy-efficient and reducing the cost of the University's electrical demand by purchasing power from renewable wind and solar sources.

Boston University's Sustainability Committee was established as part of President Brown's sustainability initiative and advises the University's Administration on sustainable strategies and programs to affect change on campus. From a student's perspective, the university's most active program on campus is Sustainability@BU, which provides day to day administration of the Sustainability Program. Sustainability@BU is aimed to "reduce the University's environmental footprint by affecting change on campus and integrating sustainability into existing programs in education, research, and operations." The department is primarily focused on Energy Conservation, Climate Action Planning, Green Building Design, Recycling and Waste Reduction, Communications and Outreach, Food, and Transportation. They have undergone major improvements in waste reduction and recycling in recent years, which can be attributed to tray-less dining, food waste diversion, and a grassroots effort by concerned faculty, staff and students across campus. To reduce water consumption, they have put in place strategies such as rain water harvesting to capture rainwater for landscape irrigation, drip irrigation systems in all planting beds spanning Commonwealth Avenue, self-charging, hands-free sink faucets and dual flush and sensor-based toilets.

Boston University's Plans for the Future

Many students already involved with fostering sustainability on campus hope to further spread the interest in sustainable practices on campus. The Environmental Leadership Network (ELN) at BU works with a broad range of student clubs from nature excursions, to education on reducing meat consumption, and socially responsible business networking events. The Citizens' Climate Lobby (CCL) is a nonprofit, nonpartisan, grassroots organization that

promotes federal legislation to address climate change. The CCL is currently taking actions towards BU's Energy Innovation and Carbon Dividend Act, and hopes other clubs and student's interested in sustainability will join in the efforts towards a sustainably - conscious community.

School: University of Connecticut

Population: 32,257

Primary Sustainability Mission(s): Carbon Neutral by 2050

UConn's Current Methods

The University of Connecticut (UConn) is internationally recognized as a leader in campus-wide sustainable development as their Office of Sustainability (OS) promotes the advancement of a greener campus by targeting their main initiatives surrounding energy, water, land, materials and movement. Implemented in 2015, the OS's Sustainability Framework Plan outlines their goals such as achieving carbon neutrality by 2050, increasing the proportion of reused and recycled products, and conserving potable water via their water reclamation facility. The framework also includes the incorporation of more environmentally-friendly transportation options, as they plan to use more electric and hybrid vehicles in the UConn light duty fleet, and increase passenger trips on the shuttle buses. As a leader in sustainable dining practices, the OS also lays out a goal of maintaining a Green Restaurant Certification for all eight UConn dining halls, and to recycle and reuse 100% of food waste by 2020. Aside from the OS, UConn has several student organizations such as EcoHusky and ECOalition to enable students to aid in achieving a greener campus. UConn's support in sustainability initiatives has led to some recent accomplishments such as ranking third in Sierra Club's annual "Cool School" rankings in 2018 and the joining of the University Climate Change Coalition in July 2018. This Coalition is an agreement made by a handful of north-american institutions pledging to foster a sustainable community while pursuing solutions for climate change.

School: Loyola University Maryland

Population: 6,050

Primary Sustainability Mission(s): Reduce Energy Consumption

Loyola's Current Methods

In order to reduce energy consumption, Loyola Facilities uses a system to monitor energy efficiency across campus which adjusts building temperatures, changes equipment settings, and solves problems if it detects inefficient energy usage in buildings throughout campus. Additionally, 15% of annual purchased electricity at Loyola is powered by national wind power. The university is also attempting to raise the percentage of renewable energy usage on campus by installing solar panels on the roof of the Sellinger School of Business. Within the Loyola dining system, more than 20% of the food that is distributed comes from local vendors. Although Loyola uses tray-less dining in order to decrease food waste, the plates, bowls, utensils, and

cups are not reusable. There is no dish-washing system at Loyola even though there are only two small-sized dining halls on campus. A dish-washing system would significantly reduce the amount of waste that is discarded in the dining halls. The main method of waste reduction at Loyola is the availability of single-stream recycling in all residential and administrative buildings. Waste management in the dining halls is separated into three different bins by signs: Compost, Landfill, and Recycling. There are images above each bin with a selection of about five photos that display what types of items are supposed to go in each bin, but students do not tend to spend much time trying to figure it out. Waste reduction is not being ignored at Loyola, but there are also ways in which the current system could be improved.

Loyola's Plans for the Future

The Loyola Maryland Climate Action Plan developed by the Sustainability Committee offers strategies and goals that aim to reduce Loyola's carbon footprint. It lays out future goals for improving buildings, encouraging renewable energy and energy engagement, traveling sustainably, and encouraging all levels of the university to take part in sustainability efforts. Loyola plans to make its buildings more sustainable by auditing and tracking high energy consuming buildings on campus to implement impactful energy savings projects. It aims to promote sustainable practices on campus by integrating renewable infrastructure into new construction and by investing in both on campus and off campus renewables. Additionally, Loyola plans to promote public transit in Baltimore for students as a whole. An important goal for Loyola Sustainability is to encourage video conferences to ensure minimal exhaust from transportation. In order to engage all levels of the university in future plans for sustainability, new ways to incorporate sustainable ideas into people's everyday lives are needed. In academic life, Loyola plans to establish a sustainability course requirement as part of the core and they plan to expand the environmental sustainability studies minor into a major. They aim to inspire environmental stewardship by enhancing the visibility of the Loyola Arboretum and promoting it throughout campus. Another priority of theirs is to plan to investigate advanced storm water management techniques so that runoff is reduced.

School: Newcastle University, United Kingdom

Population: 23,864

Primary Sustainability Mission(s): Student Involvement in Sustainability

Newcastle's Current Methods

The Sustainability Team at Newcastle University oversees all matters regarding environmental sustainability issues that are concerned with energy, waste management, and travel planning. The university has recently begun a campus LED project, which involves lights being replaced with energy-efficient LEDs in an effort to decrease emissions and save the university money. In order to minimize electricity usage throughout campus, the university holds competitions throughout the school year, called 'Student Switch Off'. The on-campus dorm building that uses

the least amount of electricity wins free Ben & Jerry's ice cream at the end of the semester. The university works to provide incentives so that students remain conscious about the energy they are using. Bicycling is highly encouraged and large racks for bicycles are placed outside almost every building on campus. In order to get students involved in sustainability in a more direct way, the university hosts Sustainability Week in mid-March each year. The week consists of a number of events students can get involved in, such as rooftop gardening, tree planting, and prizes to win in return for environmental volunteering. The week also consists of a water-bottle-filling competition, where students and staff submit pictures of themselves filling up their reusable water bottles on campus. Newcastle University turns towards methods that get students involved with sustainability as much as possible. In the UK, the People & Planet Green League is a group of universities ranked according to their environmental performance. Newcastle has received a First Class Honors award from the network each year since 2012, and is currently ranked as number 20 out of 150 total universities.

Newcastle's Plans for the Future

Newcastle University has pledged a 30% reduction in emissions by July 2021, and they plan to achieve that goal through the recently implemented campus LED project. The university has a few goals that will result from effective energy management, which include meeting their carbon targets and maintaining financial sustainability. The LED project consists of replacing all old halogen and compact florescent lights with new LED replacements, towards which the university is putting 2.4 million GBP. To go along with these lights, they are planning to replace all manual light switches with automatic ones to reduce how many times lights are mistakenly left on. In terms of conserving water, the university is developing a goal to reduce water use to 13 cubic meters per staff and student. On the university website, under the 'Sustainable Campus' tab, there are numerous tips for students to follow in order to be more conscious about the environment, and so that the goals the university has set for itself are met. The Sustainability Team plans to extend Sustainability week by making incentives for students to last throughout the semester, rather than just one week. By making information readily available to students regarding the state of environmental sustainability at the university, they are hoping to inspire a greater urgency within the student body to remain vigilant about the resources they use on a daily basis.

School: Villanova University

Population: 10,983

Primary Sustainability Mission(s): 100% Carbon Neutral by 2050, Improve Infrastructure

Villanova's Current Methods

In 2017, Father Peter Donohue of Villanova University, vowed that Villanova would achieve carbon neutrality by 2050. The Villanova Sustainable Leadership Council (SLC), the committee in charge of coordinating sustainable practices and policies, consists of faculty, staff, and

students. In order to meet the carbon neutrality goal by 2050, the SLC has implemented a Climate Action Plan and a Greenhouse Gas Report conducted every two years. During the past five years, greenhouse gas emissions have decreased at Villanova because of the switch from coal to natural gas. Within those past years, Villanova also established two LEED (Leadership in Energy and Environmental Design) certified buildings, meaning the new buildings aim at proving performance in energy conservation, saving water, and reducing CO2 emissions.

While the Environmental Science Department at Villanova pushes its students to run experiments with new recycling methods or conduct air quality tests, there are a handful of extra curricular clubs at the university that also advocate for sustainability. Villanova Sustainability Club carries out its own projects each year to make Villanova a more eco-friendly campus. In May 2019 a compost garden was finally completed, paired with the planting of several trees.

Villanova's Future Plans

The Villanova Sustainability Club in particular continues to promote collective action, lifestyle changes, and more talk about sustainability, in efforts to stop climate change. Villanova Sustainability is looking to hold farmers' markets and organize other activities, such as clothing swaps, that encourage sustainable lifestyle practices.

Fairfield University

Population: 3,955

Current Methods

Fairfield University proactively strives for sustainable development through many different aspects throughout the university. In order to promote energy efficiency throughout campus, the university has decided to replace the street and sidewalk lights with LED lighting, change heat and cooling systems, add buildings to the central control system, supply power strips because they use less energy than one outlet, educate students on energy efficiency, install electric charging stations for vehicles, and replace campus vehicles with hybrid vehicles. The university only builds green projects including efficient energy in new resident building and Jesuit residence, green roofs, low flow toilets and shower heads, and permeable pavement. However, the waste management system needs improvement.