#### KINGSBOROUGH COMMUNITY COLLEGE



SUSTAINABILITY NEWSLETTER

SPRING 2017 ISSUE



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#### Introduction

We are pleased to present the 2nd edition of Kingsborough's Dream Green Sustainability Newsletter. In this issue, you will learn about new technologies KBCC has implemented to save energy and college events that create conservation awareness. These technologies include Real-time Energy Monitoring, and participation in the Demand Response Programs for New York City. Awareness programs include participating in Daylight Hour 2017, CUNY's Student Competition and KBCC's annual Eco-Festival. Your participation in these efforts is crucial to our success. Please help us create a more sustainable environment to preserve the future for ourselves, students and families.

For more information, please visit:

#### PlaNYC:

http://www.nyc.gov/html/planyc/html/about/about.shtml

#### Campus Sustainability 10-Year Plan:

http://www.kingsborough.edu/subadministration/sustainability/Pages/history.aspx



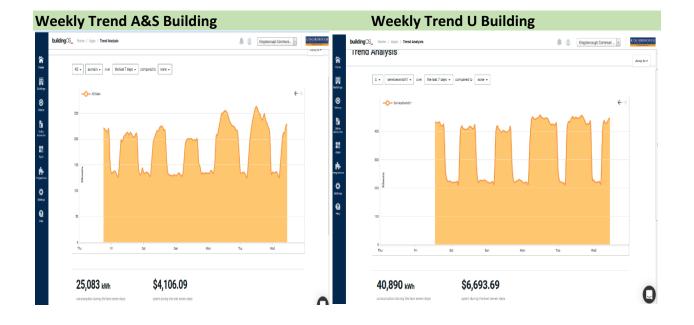
## Real-time Energy Monitoring Coming to KCC

Conserving energy continues to be a top priority at Kingsborough. That is why we're excited about a new purchase – Lucid Technologies' *BuildingOS* software – which will allow us to track our actual energy consumption, make adjustments accordingly, and share the information online via the Internet. We've projected that, by using this platform, KCC may be able to reduce energy use by up to 30%.

KCC building operators will be able to monitor building performance to identify where and how energy is being used on our campus, track problems that may be resulting in excess energy usage, and make adjustments to conserve energy.

We'll also be able to track energy savings from sustainability projects, like the re-lamping program that replaces older lighting fixtures with newer, more sustainable lamps.

And, during the summer months, when higher than normal energy use threatens the electrical grid, real time data will allow us to reduce our load on the grid to help prevent blackouts and brownouts city-wide.





We look forward to using the real-time energy dashboard to provide tangible evidence that taking part in such energy-saving measures like our Daylight Hours program can have a real impact on conserving energy. Participants will be able to immediately see how much energy was saved in that one hour, as compared to previous days of normal operations.

Another interesting component of the software is the Competitions App, which makes it easy for departments, buildings, and other teams to compete to see who can reduce the most. We envision sponsoring energy-saving competitions; learning how they did it; and including what we've learned in *curricula*, offering students — our future energy consumers — a broad range of energy-saving skills. (We hope to eventually be able to view energy consumption of other CUNY schools and compete with them as well.)

These are just some of the features *BuildingOS* offers. We expect the dashboard to be online by the end of September 2017 and encourage you to explore it and help Kingsborough become a more energy-sustainable community.

Our goal is to set the energy conservation bar high as a model for the Manhattan Beach community, and inspire others to follow. We believe this initiative will help to encourage the college community to be environmental stewards — a lesson that will have a meaningful and lasting impact on the future of our planet.

## Controlling the Power

## KCC Excels in Demand Response Programs

The NYC Department of Citywide Administrative Services (DCAS) Division of Energy Management (DEM) has been working with New York's power suppliers to meet the growing demand for electricity, especially during summer months.

To avoid brownouts and blackouts – as well as the expense of building new substations – they created "Demand Response" incentive programs that pay large city-government energy users to cut back on energy use when needed.



Kingsborough is one of 18 colleges that signed on to CUNY Conserves - a program which facilitates the demand response plans and actions for the colleges. When a demand response day is called – usually with less than 24-hours' notice – the colleges enact their agreed-upon plan to reduce energy, by turning off high-energy equipment and lighting, and turning down the thermostat.

"Demand Response" offers an additional benefit to the environment: Reducing electrical demand at times of high demand also helps to limit the use of the dirtiest power plants, which are only fired up during peak demand periods.

As a result, in 2016, CUNY was the top conserver for all NYC agencies. Collectively CUNY's colleges over-performed, achieving 200% of the university's commitment during each event, shedding **approximately 45 megawatts of power (45,000 kW).** (By comparison, an average household uses 1-3 kW of power on a daily basis.)

Kingsborough, which participates in three demand response programs, was a top CUNY performer, achieving over 100% of its commitment each time we were called on. We are actively taking steps to reduce energy use, energy costs, and greenhouse gases at CUNY.

For more information about CUNYs sustainability initiatives go to this link: http://www1.cuny.edu/mu/sustainable-news/category/article/

			Est. NYISO SCR	Est. ConEd CSRP	Est. ConEd DLRP
Agency	Enrollments	Enrolled kW	Performance (%)	Performance (%)	Performance (%)
CUNY	21	6,885	235	208	256
DCLA	6	1,200	168	204	255
DCAS	24	3,230	212	241	217
DEP	14	16,600	145	127	169
DOC	10	5,250	112	138	123
DOE	240	18,755	196	134	144
DOT	4	260	62		
DSNY	5	1,625	103		
FDNY	2	100	466		
H+H	8	3,000	92	108	132
NYPD	3	800	72		
OCME	1	515	145	156	171
SUNY	1	400	363	173	119
Total:	339	58,620	170	140	174

\*Raw performance results are provided by NuEnergen based on available data as of 11/14/2016; see payment reports for final capability period metrics.



# Daylight Hour 2017

ONE HOUR WHEN WE ASK YOU TO TURN LIGHTS.

After participating in very successful Daylight Hour events during the past two summers, KCC will again participate on June 16, 2017. <a href="http://www.daylighthour.org/participants-1">http://www.daylighthour.org/participants-1</a> In addition, this year we will roll out a plan to host a similar campus-wide event on a monthly basis.

Daylight Hour is an annual social media campaign created by the Building Energy Exchange (BEEx) to raise awareness about using natural daylight in lieu of electric lighting in offices. Launched in 2014, this simple campaign asks participating offices to turn off their lights in daylit spaces for one hour, from noon to 1pm, on the Friday before the summer solstice.

Timing is critical: The times when daylight is most available (workday afternoons) coincides with peak demand — the time when businesses demand the most energy from the grid. This peak energy period is the most expensive, and typically the dirtiest and most harmful to our global climate because the oldest, least efficient plants are brought online to meet this need.

In 2016, more than 650 state, city and private sector offices in over 20 countries turned their lights off for one hour in 81 million square feet of office space, saving enough energy to power 7,600 homes for a day.

## **CUNY Launches Student Competition**

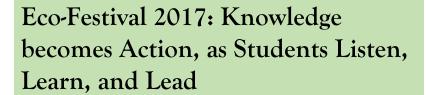
CUNY has invited students from any academic discipline, in partnership with faculty mentors, to develop projects to advance the sustainability efforts of the City University of New York in geographic information systems (GIS); communication and social media; or waste and recycling.

Six students or student teams will be granted \$2,500 each during the spring 2017 semester, while the idea is "incubated" and an implementation plan is developed.



At the end of the semester, two students or student teams, along with their faculty mentors, will be awarded support from Student Affairs and Sustainable CUNY for project development and implementation, to be used during fall 2017.

Students will receive up to \$5,000 (for an individual or to be shared by a team). Faculty mentors will receive an additional \$1,000 in reimbursable research funds for their use. Awardees will have up to one year to substantially complete their projects.



With the ambitious goal of inspiring a new generation of ecowarriors, the 11th annual Eco-Festival features a series of events that will not only enlighten attendees, but empower them to fight pessimism, polarity, and party politics.

The 3-day event, which was founded to bring together students, faculty and staff to engage in an open dialogue about pressing environmental issues, and to take action to help remedy a few, this year takes place on April 26, 27 and 28, mainly in the MAC Lighthouse.

Highlights of this year's Eco-Festival include:

- two keynote speakers:
  - Climate change expert **Dr. Jason E. Smerdon** from Columbia University's Lamont Doherty Earth Observatory, one of the world's leading climate research facilities, who has used



In the words of Eco-Festival co-coordinators Dr. Christina Colon (biological sciences) and Dr. Jacob Mey (physical sciences): As members of the Eco-Festival Planning Committee, we know our impact, no matter how small or how fleeting, contributes to the progression of students in their educational journey and through their development as a fully engaged citizen. Each student comes to Eco-Festival with their own set of ideas, goals and agenda.

paleoclimate data and climate models to piece together Earth's climate over the past two thousand years.

- American journalist Chris Mooney, who has captured the nation's attention by speaking out on the science of climate denial. He is the author of the New York Times 2006 bestseller, The Republican War on Science and the controversial The Republican Brain, books which have created a compelling narrative about the brain chemistry and genetics of conservative vs liberal ideals, and the pro vs anti science mindsets that seem to be on the verge of irrevocably dividing our nation.
- a documentary called Saving Jamaica Bay, created by local filmmaker Dan Hendricks. The film shows how concerned citizens are working to restore the natural balance of Jamaica Bay and restore the human communities that surround this wildlife sanctuary, many of which were devastated by the impacts of Super Storm Sandy.
- local environmental hero, Paul L. Sieswerda, founder and executive director of Gotham Whale, a New York City-based whale research and advocacy organization
- educator Merryl Kafka (yes, she is related to that Kafka), highlighting the ecology of some amazing local marine animals
- the hard-hitting documentary Cowspiracy, which uncovers the hidden climate impact of animal agribusiness, followed by an expert panel discussion. Both examine the complex and controversial reasons why so many major environmental groups remain largely silent on this issue.
- student and faculty-run panels, debates and presentations based on the "Inspiring Change" theme, and touching on key issues, things that need to change, and important strategies for each of us to be part of that change
- o perennial favorites Camp PERT, with outdoor activities ranging from camping tips, to games, to a sing-along; the Plumb Beach clean-up; and Eco-Café Night, where students will take the stage with performance art inspired by nature.



We are proud of the agenda we have created, and we are confident that our speakers, panels, films, experts, performances, activities and discussions will reverberate through the halls of Kingsborough Community College for weeks and months to come.



