

# Sustainability

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LaGuardia  
Community  
College



**CU  
NY** The City  
University  
of  
New York



# Senior Vice Chancellor's 2008 Sustainability Award Application

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# Sustainability Flourishes on Campus



For nearly three years, LaGuardia Community College has been at the forefront of sustainability. The college has actively participated in the Green Building Initiative, adopted by both the State and City of New York, and most recently the CUNY Sustainability Task Force.

Key accomplishments include:

- Recycling 15% of accumulated garbage
- Reducing non-flammable hazardous waste disposal by 37%
- Decreasing water usage by 4 million gallons
- Minimizing energy consumption by over 1.2 million kilowatt hours

With our campus footprint consisting of 4 buildings and 1.7 million gross square feet, the challenges are significant. Our efforts have grown from purchasing recycled office supplies and low VOC paint to installing photo-voltaic faucets in restrooms. We also installed an energy management system that conserves electricity and established a Sustainability Council.

Hopefully soon we will install 100 kilowatt solar panels on the Main building roof. Lastly, our curriculum features non-credit and credit courses/programs related to green design and sustainability, while green symposiums and panel discussions are held regularly on campus.



## Sustainability Begins with Recycling

Due to a proactive waste management program, LaGuardia Community College recycles 15% of its accumulated garbage. Beginning with paper, our recycling program has grown over the past two years to include cardboard, plastic bottles and cans. Of the 47 trash bins removed per week, 7 nine cubic-yard bins are filled with recycled items, compared to just 3 bins two years ago, an increase of over 100%.



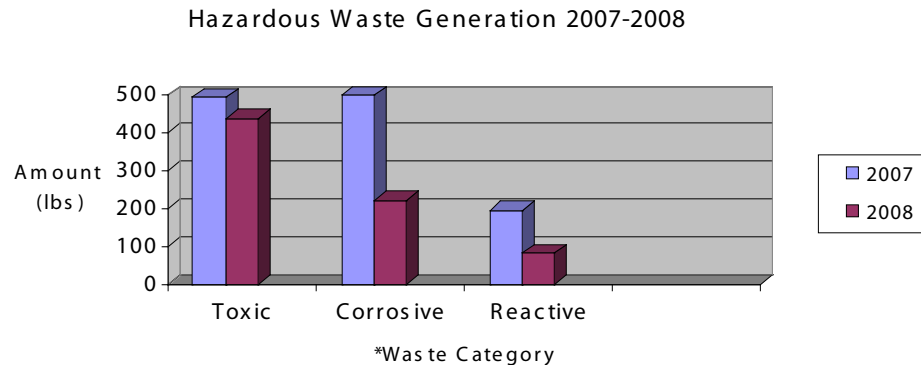
### LaGuardia uses reclaimed material:

New Carpeting has a recycling content of approximately 51%.

a) Once removed, the carpeting can be composted or recycled.



# Sustainability Means Health and Safety



Compared to last year, LaGuardia has reduced its non-flammable hazardous waste by 37%. Natural and Applied Science directed lab instructors to minimize the amount of hazardous chemicals like toxics used in laboratories - reducing waste disposal by 444 lbs



The college retains licensed contractors to dispose of items like light bulbs, batteries and hazardous waste - lessening our impact on the environment. More so, all our cleaning products are biodegradable and of low toxicity while Mondo steam cleaning machines, which are less harmful to the environment, are used to clean restrooms, elevator tracks and doors, staircases and furniture.



## Sustainability Means Water Savings

The installation of efficient hands-free faucets has reduced water usage by 2 million gallons a year since 2007. In all, 74 faucets were installed across campus, notably 23 photo-voltaic, or solar faucets. Collectively, the new faucets conserve water, reducing water flow from an industry average of 2.5 gpm to 0.5 gpm.



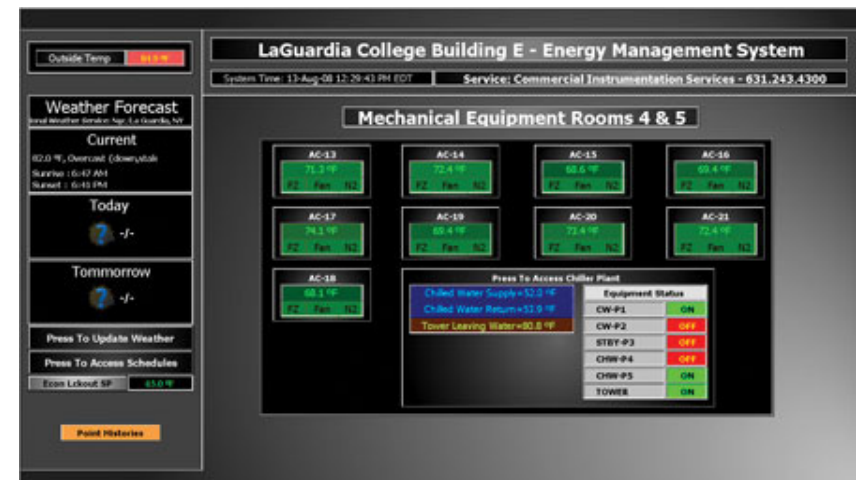
Located in six restrooms, the solar faucets utilize any available light, even artificial light – essentially transforming light into power. When compared to conventional hands-free faucets, solar faucet batteries, powered by light, are rechargeable and last longer, plus require no electrical wiring, further reducing LaGuardia’s carbon footprint.

Finally, 3 Zurn pint urinals were installed in a men’s restroom as a pilot program. Pint urinals consume 85% less water per flush than the regular 1 gallon per flush urinals. If proven effective, the program will be expanded.

## Sustainability Means Energy Savings

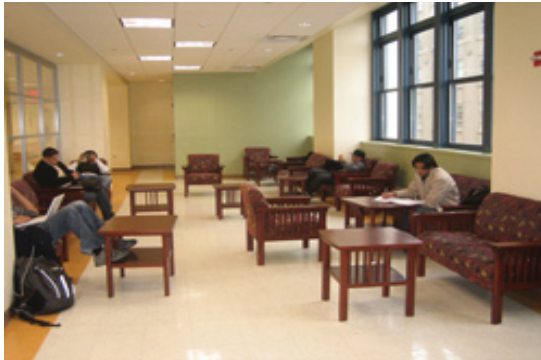
As a result of the new automated E building energy management system, LaGuardia Community College saves over 1.2 million kilowatt hours of electricity per year.

Utilizing the energy management system’s scheduling option, air conditioning and heating is provided only when an area is in use. By reducing the running time of our 21 units by 8 hours, the college saves 600 kilowatts hours of electricity per day or 151,200 kilowatts hours per year.



The system also allows the college to minimize chiller usage, resulting in greater utilization of cool, natural air when warranted. According to the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHARE), space can use cool, natural air, instead of air-conditioning 75% of the time between the months of April and October. Within those months, chillers would operate for only 630 out of the 2,520 hrs in which the college is occupied, with the remaining 1,890 hrs supported by cool, natural air – saving 1,096,200 kilowatt hours a year.

The college participates in the New York Power Authority's Peak Load and Emergency Demand Load Reduction programs, saving a total of 16,992 kilowatt hours of electricity since 2007. On the ground level, the college continues to replace incandescent light bulbs with energy saving, high efficient and/or low-mercury fluorescent bulbs.



Occupancy sensors are also mounted in offices, classrooms and bathrooms to save energy. New classrooms in Center 3 are fitted with windows to transmit hallway light and student lounges are adjacent to windows to utilize natural light.

## Future Energy Solutions:

A new daylight savings panel, which automatically adjusts and turns off light fixtures according to the amount of natural daylight, is being installed by the Skylight Area in the M building. Meanwhile, preparations are underway to situate solar panels on the Main building roof which will generate 100 kilowatts of electricity.

More so, 3 solar street lights will be positioned along the outdoor parking lot. The solar lighting will improve visibility and save 2,160 kilowatt hours of electricity per year.

Contrary to typical street lights that draw electricity from a power source, solar street lights are powered by photovoltaic batteries. The photovoltaic batteries obtain their energy from solar panels located atop the street lights.



# Sustainability Council Makes an Impact

In January 2008, LaGuardia Community College created a Sustainability Council made up of faculty, staff and students. The council has spearheaded a number of programs, big and small, to reduce the campus's carbon footprint.

Some accomplishments include:

- Green Solutions Student Contest
- Implementation of a resource recovery program (converting used cooking oil to biodiesel in the cafeteria)
- Elimination of Styrofoam coffee cups in the cafeteria
- Distribution of 500 coffee travel mugs to students free of charge
- Installation of bike racks along the outdoor parking garage
- Introduction of ebooks in the campus bookstore
- Visit by LaGuardia students, faculty and administrators to the Queens Botanical Garden's new "green" Visitor and Administration Center in June



**Green Solutions Student Contest**

Do you have an idea to help make LaGuardia a **GREENER** campus?

**GREEN** ideas may include:

- Physical changes to the campus
- Ad campaigns
- Curriculum changes
- Individual initiatives

Entries may be in the form of an essay, formal proposal, video, poem, music, art, etc.

Winners can present their **GREEN** ideas at LaGuardia's 2nd Annual Earth Day Celebration on May 8th. (Location TBA)

Please send entries to [EHS\\_services@lagcc.cuny.edu](mailto:EHS_services@lagcc.cuny.edu) by or before **April 28th**.

**Disclaimer**

- Only one prize per submission
- Plagiarized entries will not be tolerated. Sources must be cited.

**TOP 3 Prizes:**

-  Laptop
-  80GB iPod
-  \$200 Visa Gift Card

**\*\* Early Bird Special \*\***  
*First 10 entries submitted  
 meeting the criteria will receive  
 a 2GB Flash Drive.*

*Sponsored by LaGuardia's Sustainability Council*

  
 Green + Smart



# Sustainability Means Curriculum & Forums

Through the curriculum and forums on campus, LaGuardia, too has been able to advance sustainability and environmental consciousness.

Green design and sustainability are offered in both non-credit and credit courses:

## NY Design courses:

[How to Design and Sell Greener Products](#)  
[Principles of Sustainable Design](#)  
[Intro to Photovoltaics and PV Installation](#)  
[Green Product Design](#)  
[Green Materials for Fashion, Products and Buildings](#)

## Math Courses:

MAT 095 & 120 – Involves thematic context of the environment and global warming

Outside the classroom, sustainability has been a major emphasis:

### NY Designs

Green Design Bootcamp Forum  
Sept. 2008

### 2008-2009 Opening Sessions

Math Basic Skills: Growing and Nurturing  
Future Green Leadership

### Urban Studies Program

Green Urbanism Symposium  
April 2008

### Earth Day

Environmental Awareness & Action Forum  
May 2008

### 2007-2008 Opening Sessions Theme

Going Green: Responding to the Ecological  
Crisis

### 2007-2008 Common Reading

An Inconvenient Truth by Al Gore

### 2007-2008 Common Reading

Save the Earth! Film and Discussion Series



## Outside the classroom, sustainability has been a major emphasis, cont.

- A student Environmental Club has been established.
- A Grants Sustainability Web site has been launched.

As you can see, LaGuardia, through various initiatives advanced by staff, faculty and students, remains committed to lessening its impact on the environment, doing its part all the while to promote environmental conservation off campus.



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