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Introduction

The Sustainability Advocate Program

When NYU announced the largest wind power purchase among US universities, it illustrated more than just a commitment to renewable energy—it embraced a philosophy of sustainability. We are working to implement sustainability as a core foundational principle of our enterprise, in much the same way that academic excellence and public service are key aspects of our mission. The prospects for a green NYU are tremendous given the talent, vision, passion and resources of our school. NYU is on its way to becoming a global leader in urban environmental scholarship and practice.

The Sustainability Advocate Program harnesses the effort, energy, and enthusiasm of employees to “green” their own departments and work spaces, while educating others and increasing awareness throughout the university. Advocates serve as a resource by identifying issues and opportunities for improvement at the “ground level,” and communicating this information back to sustainability staff.

As one of the first Sustainability Advocates, you will be pioneering a flagship program within the university’s overall green initiative. This is an exciting time to be an Advocate because you help to shape the process for future participants.

Purpose of this Handbook

We encourage you to use this Handbook in several ways. For one, it can serve as a refresher for much of the material covered in your first orientation and training workshop. The Handbook also includes some of the global and local context behind these sustainability issues, showing why your actions in the workplace matter. Finally, the Handbook highlights some additional resources that will help you answer questions and deal with issues as they arise.

Advocate Responsibilities

Your contributions to the Advocate Program fall under three categories: action, reporting, and education. These are manageable, meaningful tasks that will directly and indirectly reduce the harmful environmental impacts of university operations.

1) *Action* – Your activities will help to green your department and implement university-wide policies that apply to office operations. In order to focus and maximize the impact of these activities, the Program may regularly spotlight a particular area, such as lighting, computers, office supplies, or water fixtures. You may be asked to help determine how your department could improve efficiency or minimize environmental impacts in that area, and implement changes. Sustainability staff will also work with interested and motivated Advocates to go beyond these coordinated projects.

2) *Communication* – You are encouraged to report environmental issues directly to the appropriate areas of the university administration. Examples include excessive heating or cooling of office spaces, dripping faucets, or missing recycling bins. You’ll receive information about using appropriate work request forms and who to contact under what circumstances. Once per semester, you’ll be asked to report on your involvement, chronicling issues and challenges, and evaluating your department’s overall improvement in environmental footprint. Our systems of communication between Advocates and sustainability staff are still evolving—you can help us hone our communication techniques so that they are most effective for you.

3) *Education* – You will serve as an educational resource for your colleagues. As the go-to person in your department for information on workplace sustainability, you will be part of the vanguard that launches education and awareness-raising events and projects around particular issues.

What is Sustainability?

For better or worse, the term “sustainability” has entered the mainstream, gracing the covers of major newspapers and spicing up politicians’ speeches. Organizations from universities to corporations to cities have adopted the mantle of sustainability to describe a wide range of projects and initiatives.

There is no single definitive answer to the question “what is sustainability?” but it’s important to lay out a vision for how we have understood the word at NYU so far. This helps to clarify our goals in reducing environmental impacts, and also to avoid “greenwashing,” which is the practice of using the language of sustainability to cloak harmful or meaningless actions with regard to the environment.

Our definition of sustainability includes three key ideas which, when brought together, effectively sum up our efforts to date. These ideas are:

1. Meeting present needs should not compromise the ability of *future generations* to meet their own needs. In other words, our decisions should respect those alive today, our children, and our children’s children.
2. We must respect the *limits* of nature’s capacity, in terms of energy and resources, realizing that by embracing these limits we foster creativity and innovation.
3. We should strive for *social* and *environmental* as well as *economic* sustainability, all of which come together for a “Triple Bottom Line” that informs effective decision-making.

Everything we do, no matter how insignificant, has an impact on the planet. Unfortunately, right now that impact is more likely to be harmful than helpful. “Ecofootprinting” is a common way to measure environmental impact—the effect that a given activity has on the natural world—by estimating the amount of *land* necessary to sustain it indefinitely.

While it’s not a perfect measure, the ecological footprint makes it easy to conceptualize the degree of environmental impact that different lifestyles incur. The average American’s footprint is 24 acres (about 2.5 times the size of Washington Square Park), yet the world only contains 4.5 acres of biologically productive land per person. In other words, if everybody lived the way we did, we would need about five Earths to sustain us. According to a recent student-led environmental assessment, NYU’s estimated ecological footprint for our energy use, alone, is around 120 square miles. NYU’s total footprint could be as much as 500 square miles, larger than the physical area of New York City.

Given this startling picture, it is clear how important it is to reduce NYU’s ecological footprint. Sustainability means allocating resources so that they can be used for long (perhaps indefinite) periods of time without depleting them. Enacting sustainable practices is the best way to reduce an ecological footprint.

Energy

NYU's Energy Footprint

NYU uses enough energy to have a significant impact on New York City's ecological footprint; probably approximately 0.75% of NYC's greenhouse gas emissions come directly from NYU. Each year NYU purchases more than:

- 132,000,000 kWh of electricity
- 4,000,000 gallons of fuel oil
- 8,000,000 therms of natural gas
- 85,000,000 pounds of steam

Our usage totals almost \$50,000,000 annually. NYC rates are high (for example, electricity rates are 50-100% higher than in 2001), so reducing our consumption saves money as well as energy.

How NYU gets its energy

- Electricity: many suppliers bid for NYU's annual contract (for example, in FY08 we chose Pepco). This contract serves our largest accounts, about 90% of our total use; smaller accounts buy power directly from Con Ed. NYU also pays Con Ed a fee for "transmission and delivery (T&D)" since all our purchased electricity arrive over Con Ed's lines.
- Fuel oil: suppliers bid on contracts for #2, #4, and #6 fuel oil for NYU's largest accounts. The supplier's trucks bring deliveries as frequently as multiple times daily during peak periods. Small accounts contract directly with suppliers.
- Natural gas: NYU bids an annual contract for natural gas as well, primarily used by the Central Plant and a few other large buildings. Gas arrives via pipelines and we are billed for usage
- Steam: A few buildings use steam, purchased directly from Con Ed.

NYU uses electricity for air conditioning, lighting, and most building loads; fuel oil, natural gas, and steam are used for heating and air conditioning.

Additionally, through our cogeneration plant (currently undergoing a comprehensive expansion and upgrade), NYU makes more than 30,000,000 kWh of its own electricity from natural gas and fuel oil. The cogen plant also supplies hot and chilled water to nearby buildings.

How is energy used?

A table of energy use in office buildings (not for any specific NYU building):

- Lighting: about 50% of the building's energy use
- Heating, cooling, and ventilation: about 33%
- Office equipment: about 15%
- Everything else: about 3%

In general, lighting, HVAC, and office equipment are the biggest users of electricity. These are the areas where we should focus our efforts on saving energy.

Conservation vs. Efficiency

NYU uses the terms “conservation” and “efficiency” selectively, and there’s a subtle difference.

- “Conservation” means avoiding using energy unnecessarily. A good example would be turning off the lights when nobody is in the room. It’s generally the cheapest way of saving energy, but requires support from building occupants or other University staff (i.e., Public Safety).
- “Efficiency” means doing the same thing with less energy. For instance, replacing incandescent bulbs with CFLs gives the same light with 25% of the energy use.

Efforts to save energy

Conservation

- Computers: should use energy-saving settings to hibernate or shut down at the end of the day. Remember, screensavers do not save any energy. Visit <http://www.nyu.edu/fcm/cesfaq.htm> for power savings settings instructions that could save NYU \$350,000/year!
- “Phantom loads”: many loads consume power even when they power switch is turned “off”. NYU spends about \$750,000/year on this needless consumption. By plugging hardware into a power strip with an on/off switch, your whole desktop setup can be turned off at once (make sure to power down inkjet printers before turning off the power—they need to seal their cartridges). Printers, scanners, and other peripherals that are only used occasionally can be unplugged until they’re needed.
- Lights: make sure they are turned off at night, including hallways and bathrooms. Occupancy sensors might be useful in some areas; talk to Facilities Management about options....
- Natural light: use daylighting and turn off unneeded lights where possible.
- Heating and air conditioning
 - If your space is too hot or too cold, call Client Services at x81001 to let them know about it.
 - If you have control over your office temperature, make sure you use “setbacks” at night and consider setting the temperature a degree or two higher in summer and lower in winter. Every 1°F NYU raises its summer air conditioning setpoint could save around \$500,000/year.
 - When possible, use fans instead of the air conditioning to keep cool.
 - Don’t use space heaters to warm up offices when it is too cold during the summer; try to work with the building manager to get your office cooled properly first.
 - Shades and blinds: in winter, open shades and blinds during daylight hours to help warm rooms. In summer, close ones exposed to direct sunlight to prevent the room from heating.
- Appliances: make sure they are turned off at nights and on weekends.
- Use the NYU “Office Power Savings Checklist” for an easy daily reminder of what should be shut off when the office is empty.

Efficiency

- Computers & appliances: when buying appliances or electronic equipment, be sure to purchase energy-efficient ENERGY STAR® labeled models. Consider a laptop, docking station with keyboard and mouse, and flat screen display instead of a desktop.
- Lights: get rid of incandescent bulbs and replace with low-mercury compact fluorescent bulbs. They use 3 to 4 times less energy, and last 8 to 10 times longer. Any 4’ lighting tubes that are “T12” (1.5” inches in diameter) should be retrofitted—talk to the F&CM Energy Department for help.

Workplace Waste

Waste management is one of the biggest issues we face. The average American produces more than 1600 pounds of waste directly each year—and that doesn't count the tons of waste created to extract, create, and transport the many things we actually discard ourselves.

Here at NYU, we throw away at least 7,000,000 pounds of trash per year—and that doesn't include the tons of recyclables that we divert away from landfills, nor the debris created through the construction or renovation of our buildings.

When trying to tackle the issue of waste, environmentalists often discuss the three R's: reduce, reuse, and recycle. The most visible of the three R's, recycling, often gets the lion's share of attention—but avoiding the need for recycling through waste reduction and reuse is the first and best option available to us.

What Happens to NYU's Waste?

Trash is taken to transfer stations in New Jersey or Brooklyn, then either incinerated, or sent all the way to Pennsylvania or Virginia landfills.

Recycling is taken to transfer stations in New Jersey or Brooklyn, then either reprocessed into new goods, or exported.

Currently trash and recycling is collected from 150+ buildings, and several different groups of maintenance staff may handle recyclables at some phase of their journey. For example, building and janitorial staff are generally responsible for taking recycled paper and trash in separate bins down to the basement or loading dock, where our hauling company picks it up on a regular schedule. Cans and bottles are generally picked up from bins by NYU Recycling Department staff.

Every building is a little different, so if you sense that something may be wrong with recycling in your department, work with your building manager and the Recycling Department to figure out the problem.

Disposing of trash costs about \$100/ton, so recycling saves resources, energy, and money!

Recycling

NYU recycles about 1/3 of its waste stream—higher than the NYC average, but with lots of room for improvement. This is an area in which Sustainability Advocates can play a key role. It is important to understand what can and cannot be recycled, and to monitor the functioning of the system that is in place to make sure it is working properly.

What does NYU Recycle?

- Mixed Paper
 - YES: White and colored paper, printer paper, junk mail, newspapers, magazines, cardboard boxes
 - NO: tissues or paper contaminated with food waste
- Cans and Bottles
 - YES: Aluminum/steel drink cans, glass, plastic bottles, milk jugs (#1 & #2 plastics)
 - NO: window glass, broken mirrors, ceramics, plastic bags, wrappers, etc.

Ways to Improve Your Recycling System

Check that appropriate bins are placed in convenient locations at your workplace. Bins that are difficult to see, are not easily accessible, or improperly labeled are less likely to be used. If you plan to relocate a bin, this should be done in consultation with the Recycling Department and/or building manager, so that their staff will know where to find it!

- Make sure your colleagues know what can and cannot be recycled, and encourage them to recycle whenever possible.
- Make sure recycling bins are clean. If the smallest bit of trash makes its way into a recycling bin, everything in it may be contaminated and rendered unrecyclable. This is especially an issue with greasy food waste, which ruins paper for recycling.
- Make sure recycling bins are in good condition—all bins should be clean, with proper sticker labels on the top and sides. Stickers should be in good condition and affixed parallel to the bin. Believe it or not, studies show that small details like the angle of the sticker actually affect how much people recycle!
- One source of confusion in the past was regarding the appropriate way to use the small purple “desk-side” paper recycling bins that individual employees keep near their work areas or offices. In some buildings, building staff may have regularly emptied these bins into the central blue receptacles, but in most, employees did it themselves. At times, building staff (who are not contractually responsible for these bins) have emptied these bins into trash cans instead. All NYU employees are responsible for emptying their own purple recycling bins into the central receptacles in their work areas/departments.
- If recycling bins are absent or full, or if bins, stickers, and signage are in need of repair, call the NYU Recycling Shop at 212-995-3357, or call the FCM Help Desk at 212-998-1001.

NYU Recycling Services:

Website: <http://www.nyu.edu/fcm/recycling.htm>

Email: recycling@nyu.edu

Telephone: 212-995-3357

Fax: 212-995-4380

Address: 7 East 12th Street Room 115

New York, New York 10003

Hours: Monday - Friday 7:30 a.m. - 4 p.m.

Reduce

The most important way to tackle waste is simply to avoid making it. If you don't produce it, you don't have to dispose of it.

Easy ways to reduce waste:

- Think before you print. Use USB keys or other drives to save work you've generated on your computer, and utilize email to send documents and memos (colleagues are less likely to misplace them anyhow, and you'll have a record of sending them out).
- If you need to print, print and copy double-sided—many NYU office printers and copiers can “auto-duplex”. For tips on how to do this, visit <http://www.nyu.edu/fcm/autoduplex.htm>.
- Reduce your margin settings so that your printer uses less paper.
- To conserve even more ink, print in draft mode. It will generally lighten the shade, but you'll still be able to read your copy clearly.

- Download your software. More than 30 billion CDs are sold annually – enough to wrap around the earth. That’s 5 CDs produced each year for each person on the planet. With more than 1 billion unwanted computer disks being thrown away each year, that’s a huge amount of waste, not to mention the packing material—55 million boxes. Most software, including most mainstream “for-pay” productivity and office software, can be downloaded online.
- Bring a zero-waste lunch to work in a reusable container. This has a two-fold benefit: you cut down on waste from take-out, and reuse what you bring.
- Bring and keep mugs and silverware in the office to reduce use of plasticware and paper cups.

Reuse

Reuse is another way to avoid waste in the first place.

Easy ways to reuse:

- Keep a box of scrap paper available in the office for writing notes.
- Print draft or informal documents on the back of once-used paper instead of using a clean sheet.
- Bring dishware and silverware to the office to use in the break-room.
- Instead of throwing away old documents, shred them and reuse them as packing material.
- When you get shipments in, save your boxes so that you can use them again for shipments out.

Purchasing

One of the major Sustainability Task Force projects this year is the development of comprehensive purchasing guidelines for the university. Until that list is compiled, this will serve as a basic guide to green purchasing.

NYU Purchasing Services recently added an “Environmental Philosophy and Practices” segment to their Policies and Procedures Manual (page 23), which can be viewed at:
http://www.nyu.edu/purchasing.services/pdf/policy_Summer_07.pdf

Most NYU departmental purchasing is carried out through the online “i-Buy” system. Many of our i-Buy vendors, including most furniture suppliers and Stapleslink for office supplies, already feature environmentally preferable products.

NYU has already implemented many green purchasing policies:

- About half of all departments and NYU schools are already purchasing recycled paper
- Stapleslink lists 10,000 green products, particularly recycled-paper and -steel products
- Purchasing Department contacts departments not purchasing recycled paper and encourages them to switch
- Facilities and Construction staff use only low-VOC (volatile organic compound) paints
- The NYU Landscaping Department uses organic fertilizers and sustainable ground care
- About half of all university office furniture is from Steelcase, noted for environmental efficiency and for its Cradle to Cradle-standard certified products
- Dining Services buys Fair Trade coffee, recycled napkins and plates, and Aramark now offers an organic catering option to departments
- The NYU Bookstore encourages the use of reusable bags.

Environmental Purchasing Criteria

Some things to consider when purchasing goods for your department:

- Resource Use (recycled, recyclable, reusable, local, less packaging)
- Energy Use (recycled, recyclable, reusable, local, less packaging, efficient)
- Toxics/Human Health (non-toxic)
- Waste Management (recycled, recyclable, reusable, biodegradable, less packaging)
- Biodiversity/Animal Welfare (organic, Endangered Species-safe, no animal testing, etc.)
- Social Justice (Fair Trade, Union, local)

A purchasing/procurement web resource list is available at:

<http://www.nyu.edu/about/sustainability/advocates/resources.html>

Today, most recycled paper is of very high quality, and looks and feels like conventional virgin paper. However, some brands and types may work better than others with specific equipment, or for specific tasks. If you need assistance selecting recycled paper, or if you have issues with your recycled paper supply (e.g. printer jams), please contact Scott Lewis in Purchasing Services:

Scott Lewis

Administrator, Supply Central: (212) 998-1201 or scott.lewis@nyu.edu

Current NYU Sustainability Initiatives

In June 2007, the Sustainability Task Force released its **Annual Report**, which included thirty recommendations covering topics from energy efficiency and recycling to purchasing and transportation. Sustainability staff are working to implement these recommendations. Progress can be tracked at <http://www.nyu.edu/about/sustainability/progressrecs.html>.

This semester, Executive Vice President Michael Alfano acted on the Task Force's report by announcing five major new initiatives, including the **Sustainability Advocate Program**. The other four were the development of **Purchasing Standards and Guidelines**; a **Student Outreach Initiative**; the **Energy Reduction Strategy**; and a **Comprehensive Environmental Assessment** process.

Last year, the Sustainability Task Force launched the "**Green Grants**," with \$115,000 in funding awarded through a competitive process to support fifteen student-, faculty- and staff-sponsored campus greening projects. Green Grants support projects that directly reduce NYU's adverse environmental impacts, educate and engage the university community, demonstrate the viability of best practices and technologies, and further applied research or educational goals. This winter, this process will once again be open to all NYU students, faculty and staff. Check our website in December for more information on how to apply.

Resources

Contact Sheet

Jeremy Friedman, Project Administrator,
Sustainability Task Force, URPA
jeremy.friedman@nyu.edu
(212) 998-1073

Sharon Chavez, Manager, Learning and
Development, HR
sharon.chavez@nyu.edu
(212) 998-1285

Cecil Scheib, Director, Energy and
Sustainability, F&CM
cecil@nyu.edu
(212) 992-8263

Katherine Fritz, Outreach Assistant,
Sustainability Task Force
kf633@nyu.edu

Dianne Anderson, Manager, Sustainable
Resources, F&CM
dianne.anderson@nyu.edu
(212) 992-8577

Evrin Sahin, Outreach Assistant, Sustainability
Task Force
evrim@email.com

NYU Websites

NYU Sustainability Website:

<http://www.nyu.edu/sustainability>

Here you'll find this handbook and other Advocate resources, Sustainability Task Force reports, information on our energy strategy and recycling program, links to student clubs and related university departments, progress on Task Force recommendations, and more!

Environmental Studies Program:

<http://environment.as.nyu.edu/page/home>

Email: environment.studies@nyu.edu

The new Environmental Studies department website. All inquiries can be directed to environment.studies@nyu.edu. Faculty and interested professionals should contact amandaanjum@nyu.edu to join a listserv related to Environmental Studies events of interest.

NYU Recycling Services:

<http://www.nyu.edu/fcm/recycling.htm>

Telephone: (212) 995-3357

Fax: (212) 995-4380

7 East 12th Street Room 115

Normal Hours

Monday - Friday

7:30 a.m. - 4 p.m.

FCM (Facilities and Construction Management):

<http://www.nyu.edu/fcm/index.htm>

Telephone: (212) 998-1001

Email: fcm.helpdesk@nyu.edu

Normal Hours

Monday - Friday

8 a.m. - 8 p.m.

Call (212) 998 - 1001

After Hours Emergency Only

After 8 p.m. (weekdays) and on the weekend

Call: (212) 995 - 3344

Facilities Work Request Form:

<http://www.nyu.edu/fcm/workrequestform.htm>

NYU Bookstore Green Initiative:

<http://www.bookstores.nyu.edu/green.html>

NYU Sustainable Dining Initiative:

<http://www.campusdish.com/NR/rdonlyres/5CDF5BDE-7D48-494D-B16F-935D60699051/0/sustainabilitybrochure.pdf>

NYU Landscaping and Grounds:

<http://www.nyu.edu/fcm/gardenshop.htm>

Environmental Health and Safety:

<http://www.nyu.edu/environmental.services/>
(212) 998-1450

Copy Central

(for recycled paper questions, etc.)

Scott Lewis

(212) 998-1201

scott.lewis@nyu.edu

Reports and Environmental Assessment

2006-07 Sustainability Task Force Year End Report and Recommendations:

http://www.nyu.edu/about/earth.week/stf_annual_report_07.pdf

Details NYU's progress toward sustainability and outlines the future goals for the Task Force. This year's Task Force will issue a new report by the end of the 2007-08 academic year.

2005-06 Greening the Urban Campus, A Sustainability Assessment of NYU:

<http://www.nyu.edu/about/sustainability/images/gallatinassessment.pdf>

This report was compiled by five Gallatin students over the 2005-2006 school year. It is a comprehensive assessment of NYU's environmental impacts, across categories including energy, buildings and grounds, purchasing and asset management, waste management, transportation, food systems, academics, and awareness.

New York City Environmental Links

New York City Recycling Information and Services:

<http://www.nyc.gov/html/nycwasteless/html/home/home.shtml>

City government tips for business reducing, reusing, and recycling:

http://www.nyc.gov/html/nycwasteless/html/in_business/in_business.shtml#reduce

Guides to Green Living

(a sampling of the wealth of resources that await you on the web)

Colby College Green Purchasing and Living Guide

<http://www.colby.edu/envIRON/glpG.html>

National Resources Defense Council Guide to Green Living

<http://www.nrdc.org/cities/living/gover.asp>

Greenpeace Guide to Greening Work

<http://www.greenpeace.org/usa/news/green-living-guide/at-work>

** Gallatin senior Julio Alvarez is currently writing the NYU Guide to Green Living as a 2007 Green Grant project from the Sustainability Task Force. We will make this guide available to advocates as soon as it is complete.*

Internet, Blogs and Other

The Wild Green Yonder

<http://wildgreenyonder.wordpress.com/>

This amazing site is run and updated daily by two student members of the Sustainability Task Force. NYC- and even NYU-specific news, musings, and tips abound.

Grist Magazine: Environmental News and Humor

<http://www.grist.org/>

Treehugger: Environmental News and Green Design

<http://www.treehugger.com/>

Guide to Green Living Blog

<http://guidetogreenliving.blogspot.com/>