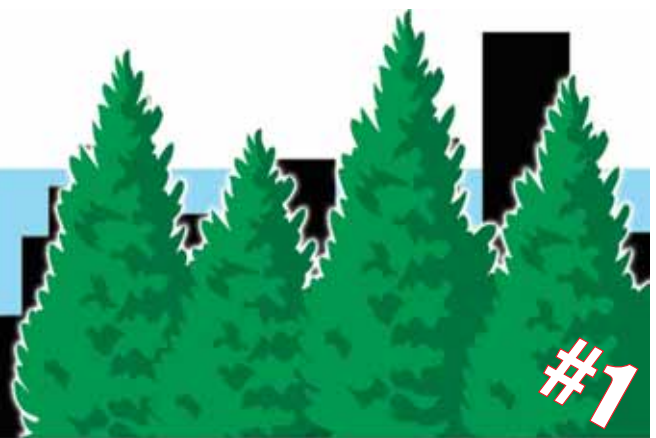




A Newsletter On Environmental Trends And Opportunities For Business



Bronx Borough President Adolfo Carrion, Jr.

Dear Business Leader,

I am pleased to announce that at my request, BOEDC has established the Bronx Initiative for Energy and the Environment (BIEE). This new and forward-looking initiative will address some of the serious environmental issues facing our borough. In the process, businesses will learn how energy efficiency translates into operational savings.

Hands-on assistance to Bronx businesses will include energy audits to help companies better assess their energy costs and potential savings; low-cost loans to help implement new technology; retrofitting commercial and residential boilers; jumpstarting the use of electric and hybrid vehicles; planting trees and creating green roofs.

Bronx businesses and residents alike share a love for our borough, and the BIEE programs will help us work together to become a more environmentally aware and progressive community. Please take a moment to review the information contained here, then call to have a BOEDC representative meet with you to customize a program that works for your company.

I wish you continued success.

Sincerely,
Adolfo Carrion, Jr.

Bronx Borough President



INTRODUCING THE BRONX INITIATIVE FOR ENERGY & THE ENVIRONMENT A New Funding Program From BOEDC

Bronx Borough President Adolfo Carrion, Jr. and the Bronx Overall Economic Development Corporation (BOEDC) have established the Bronx Initiative for Energy and the Environment (BIEE) to fund pilot and demonstration projects pro-

moting a greener Bronx. In addition to receiving funds for implementation costs, participating organizations will reap long-term energy savings from increased efficiency. Turn to page 4 in this insert to see how your organization can apply for funding

HAVE YOU SEEN THIS VEHICLE?

Think Neighbor is a state-of-the-art, zero-emissions vehicle you may have spotted on Bronx streets. Part of a demonstration project by the Office of the Bronx Borough President, the vehicle helps heighten awareness of this environmentally-friendly transportation option. The economical Think Neighbor is part of a new class of "low-speed vehicles" which are well suited to local street speed limits and which are gaining in popularity in communities across the country.



"HIGH VOLUME LOW PRESSURE" SPRAY GUNS AVAILABLE TO AUTO BODY SHOPS

BOEDC has partnered with the Department of Environmental Protection to provide funding to Bronx auto body shops to purchase "High Volume Low Pressure" spray guns. Spray guns are a significant pollutant of volatile organic compounds (VOC) and particulate emissions. The new spray guns use 25% less paint and emit about 50% less particulates than the conventional spray guns they replace. Using less paint per car reduces supply costs for Bronx businesses.

The program provides full reimbursement for new spray paint guns purchased

if the auto body shop turns in an old gun in exchange. Funds will be given directly to Bronx auto body shops, based on receipt and approval by the Department of Environmental Protection (DEP). DEP's Environmental Economic Development Assistance Unit (EEDA) will administer the program. The EEDA is dedicated to fostering cooperation towards our community's twin goals of economic development and environmental protection.

Businesses wishing to participate in the program should contact DEP EEDA's Director, Rose Marabetti at (718) 595-4541.

INFORMATION FIRST STEP IN ENERGY EFFICIENCY UPGRADES

Energy is one of our most important resources. And after payroll and employee benefits costs, it is also one of the biggest factors in business overhead expenses. Companies and organizations can intelligently trim their energy costs in a number of different ways.

There is an old saying that information used wisely is money. In dealing with energy use, this is also true. More to the point, good information will allow you to save money. So the first step to trimming your energy bill is to have an energy survey done of the work premises.

A survey gives an employer or building owner a basic idea of what types of incentive programs, exterior and interior building modifications (windows, etc.), lighting fixture upgrades, and heating, ventilation and air conditioning refurbishments are available for the structure.

It will also give you the approximate cost of these measures and the energy savings one could reasonably expect from them with today's energy costs, adjusted for inflation. A survey might take a couple of days or perhaps longer depending on how much cooperation and time the company doing the survey gets from the organization interested in cutting its energy bills.

BOEDC can put businesses in touch with an organization that will do an energy survey at no cost to businesses, provided they are located in the Bronx.

Once the survey is completed, the next step is to decide which improvements will give the business and/or building owners the biggest "bang for the buck." Lighting system improvements are usually the best way to cut energy costs because the savings are substantial over time when compared to the cost of installation.

After lighting, modifications to the building envelope (new windows or roof), the interior (zoned heating/air conditioning, ceiling fans) or perhaps upgrades to the HVAC system are usually areas where energy can be saved.

It is never too late to begin the process of saving energy. Call BOEDC today at (718)590-5262 and make an appointment to get your energy survey scheduled.

The author is a Communications Specialist with The New York Power Authority (NYPA), the nation's largest state-owned power organization.

Through its statewide network of generating plants and transmission facilities, the Power Authority provides lower-cost electricity to job-producing industries, government agencies, community-owned electric systems, private utilities for resale, without profit, to their customers, and to neighboring states, under federal requirements.

SAVE THROUGH THE ENERGY \$SMART AUDIT PROGRAM

Free Audits Available To Bronx Businesses For A Limited Time

The Energy \$mart Audit Program, sponsored by the New York State Energy & Research Development Authority (NYSERDA), is designed to assist facilities in reducing overhead costs by identifying capital improvements with immediate energy cost savings. NYSEDA selected EME GROUP, a professional engineering firm in NYC, to conduct low cost energy surveys for Bronx businesses.

The survey begins with a walk-through site visit to evaluate the customer's facility and identify energy-saving capital improvements. Funding opportunities from NYSEDA to offset implementation costs are also identified. The Energy \$mart Audit Program is available to small commercial and industrial facilities and non-profit organizations that are Con Edison customers with an annual electric bill of \$100,000 or less.

NYSERDA has offered this program for several years and requires that a business pay half of the audit cost (\$400 to \$1200).

For a limited time, Bronx businesses can take advantage of this program through the Free Bronx Energy Survey. The Free Bronx Energy Survey will cover the business' share of the cost.

By participating in the audit, customers receive expertise on how to cut energy costs and improve energy efficiency through upgrading energy intensive equipment. The list below is a sample of savings.

Funding opportunities for energy saving capital improvements exist through the NYSEDA Energy \$martsm Loan Fund as well as the Smart Equipment Choices

Program. NYSEDA Energy \$martsm Loan Fund buys down 4.0% interest of an approved loan that focuses on implementing energy saving measures. In addition, the Smart Equipment Choices Program allows businesses to apply for financial incentives when purchasing and installing energy efficient equipment.

Please visit www.nyserda.org/energyaudit.htm for more information or contact EME GROUP at 212-529-5969 with any questions or comments. Also, you can contact Mark Gundrum, NYSEDA Project Manager at 518-862-1090 x3256.

Description	Cost	Savings	Payback (Years)
Upgrade HVAC System	\$15,000	\$3,500	4.3
Upgrade Fluorescent Lighting	\$6,250	\$3,451	1.8
Install High Efficiency Motors	\$3,000	\$1,378	2.2
Install LED Exit Signs	\$400	\$103	3.8
Totals	\$24,650	\$8432	2.9

GREEN ROOFS: The Next Urban Frontier

Over the past 200 years, the steady destruction of trees and green areas resulting from the growth of cities has resulted in “urban heat islands,” a phenomenon in which the air in cities on warm summer days is 6-8 degrees hotter than in surrounding areas. Decreasing land space and concern for the health of its residents has spurred New York City to join a small group of municipalities which are exploring the so-called fifth façade of buildings—the roof—for solutions. Through the creation of “green roofs”, which are planted with living vegetation, nature is brought back into the city environment.

A green roof, or ecoroof, is a lightweight, low-maintenance vegetated roof system used in place of a conventional roof. Green roofs can work on most types of commercial, multi-family and industrial structures, as well as single-family homes and garages, and they can be used for new construction or to re-roof an existing building. Green roofs have increasingly become part of the European landscape since the 1970's. There are over 100 million sq. ft. of planted roofs in Europe today, with Germany leading the way with a 40-year history and a proven track record in installation, performance, and life cycle. Other places utilizing the green roof technology are France, Canada and, in the U.S., Portland, OR, Seattle, WA, and Chicago, IL. The biggest green roof in the world, covering 454,000 sq. ft. is the Ford Motor Company's River Rouge Planted Roof, completed in September 2002 and pictured here.

Economic Benefits

Based on documented experience and studies, a green roof offers important economic benefits not found in conventional roofing:

- **Reduced energy costs:** When the outside air temperature reaches 95° F, rooftop surface temperatures can be as high as 175° F. These temperatures impact not only the temperature within the building, but also the amount of energy necessary to heat and cool the building. Due to their superior insulating properties, green roofs have been proven to reduce heating and cooling costs by up to 25 and 50% respectively, for the floor directly below the roof. They also significantly slow a building's heat gain and loss
- **Extended roof life:** Green roofs last twice as long as conventional roofs, saving replacement costs and materials. This is because the membranes are of good quality and the plants and growth medium protect

The Ford Motor Company's River Rouge Planted Roof



the membrane from weathering. Green roofs also have significantly lower maintenance costs than a conventional roof;

- **Creates market:** Green roof technology utilizes recycled materials such as compost, mulch, soil and other ecoroof components, increasing the market for these materials;
- **Job development:** Use of green roofs develops jobs in green roof installation, maintenance and supply. In Germany, 12,000 people are currently employed in the green roof industry.

Environmental Benefits

Green roofs also make our cities better places to live:

- **Air quality improvement:** Green roofs decrease air temperatures and reduce smog, thereby improving outside air quality.
- **Urban Heat Island:** A study by Environment Canada indicates that installing green roofs on only 6% of total available roof space could reduce urban summer temperatures by 25%. Models for New York City calculate a similar decrease.
- **Stormwater management:** In urban areas, 75% of rainwater can become surface runoff, often carrying contamination and pollution into water bodies and open water sources. Green roofs help alleviate this problem through natural absorption and recycling of rainwater; they capture and evaporate 10-100% of the precipitation that falls on it. They lower the temperature of stormwater runoff, helping to maintain the cool stream temperatures needed by fish. Green roofs also help prevent sewer overflows caused by heavy rains.
- **Noise abatement:** This is a proven green roof benefit and is especially effective in areas near airports or industrial sites. Extensive layers of vegetation can reduce

noise by 40 decibels in the building underneath, a consideration used to justify the green roof planned for the new visitor auditorium at the Queens Botanical Garden near both of NYC's major airports.

- **Aesthetic improvement:** Green roofs provide visual relief to city residents, helping to mitigate the stress and trauma of urban living. Studies have shown that patients recovering from illness or surgery heal faster when their view is of plants versus brick walls or asphalt roofs.

Green Roof Costs

There is a wide range of costs, depending on many factors. Installation of a green roof costs from \$10-\$25 per sq. ft., which includes materials, labor and structural upgrades. A conventional roof installation ranges from \$3 to \$20 per sq. ft. As the green market develops, costs may decrease.

Although green roofs initially cost more than conventional roofs, they are competitive on a life-cycle basis because of reduced maintenance and replacement costs. The typical lifespan for a green roof is about 40 years, significantly longer than a conventional roof.

More Information:

You can visit the following websites for more information on green roofs:

www.cleanrivers-pdx.org
www.greengridroofs.com

BOEDC is exploring providing a green roof for a manufacturer or multi-family building in the South Bronx. If you are interested in exploring this possibility, please contact Kate Shackford at (718) 590-7159.

Much of the above information was extracted from “Rooftops: The Fifth Façade As Urban Frontier” by Karen S. Kaplan, Lehman College, The City University of New York, 2003.

Bronx Initiative for Energy & the Environment

Environmental Grants Program

Request for Proposals - Due March 15, May 14 and September 15, 2004

The Bronx Initiative for Energy & the Environment (BIEE), a program of the Bronx Overall Economic Development Corporation, announces the establishment of the Environmental Grants Program. The Environmental Grants Program challenges non-profit organizations and small businesses to utilize new technologies to achieve energy efficiency and implement mitigation strategies in the Bronx.

Up to \$1.15 million in funding is available for eligible projects that increase energy efficiency and/or reduce pollution. Eligible projects include: weatherization technology; lighting upgrades; solar/wind technology; green building components; boiler retrofits; and new energy technology. Additional projects meeting program priorities will be considered. Priority will be given to projects that:

- Result in the greatest pollution reduction or energy savings per program dollar;
- Leverage private and public cost-sharing for project development;
- Represent a planned approach to new technology use or development;
- Offer unique and innovative partnerships and approaches to meeting critical needs and priorities.

Eligible applicants: Non-profit organizations and small businesses operating in the Bronx.

Proposal Format: Project Summary should not exceed 1 page, with the total project narrative not exceeding ten (10) pages.

Five (5) copies must be clearly labeled and submitted to:

**Kate Shackford, Director
Bronx Initiative for Energy and the Environment
Bronx Overall Economic Development Corporation
198 East 161st Street, Suite 201
Bronx, New York 10451**

Proposal Deadline: Proposals will be reviewed on a quarterly basis and should be received by March 15, May 14, and September 15, 2004.

Program questions can be directed to Kate Shackford at (718) 590-7159 or kate@boedc.org

Bronx Environmental Revolving Loan Fund

For-profit entities, which includes service, retail and manufacturing businesses operating in the Bronx; non-profit organizations located in the Bronx; and housing corporations are eligible to apply for loans under the BOEDC's new Bronx Initiative for Energy & the Environment.

Eligible Uses:

Implementation of energy efficient measures, including:

- electric/alternative fuel machinery and equipment;
- boiler retrofit;
- new technology to reduce air pollution and/or cause energy savings, e.g.:
 - > green roofs and other greening measures;
 - > solar technology;
 - > wind technology;
- customized energy survey.

Size of Loan: Minimum: \$10,000; Maximum: \$500,000

Term of Loan: Up to 10 years, contingent upon amount of loan.

Origination Fees: 2% based upon amount of loan.

Business Owner's Equity Participation: 10% for existing businesses;
25% for start-ups.

Underlying Criteria: Clean credit history.

Collateral: Will vary depending upon project.

Guarantees: Principals, Corporations, etc.

Fees: Application Fee: \$250 (non-refundable).

For more information, contact Kate Shackford at (718)590-7159 or email her at kate@boedc.org

Bronx Initiative for Energy & the Environment

Electric Transportation Grants Program

Request for Proposals - Due March 15, May 14 and September 15, 2004

The Bronx Initiative for Energy & the Environment (BIEE), a program of the Bronx Overall Economic Development Corporation, announces the establishment of the Electric Transportation Grants Program. The grants program challenges non-profit organizations and small businesses to utilize electric and electric hybrid technologies to achieve energy efficiency and implement mitigation strategies in the Bronx.

Up to \$1.5 million in funding is available for eligible projects that increase energy efficiency and/or reduce emissions. Eligible projects include: all-electric or hybrid electric vehicles; electric forklifts; other electric equipment; and new electric transportation technology. Additional projects meeting program priorities will be considered. Priority will be given to projects that:

- Result in the greatest emissions reduction per program dollar;
- Offset the greatest amount of petroleum fuel;
- Leverage private and public cost-sharing for infrastructure development and vehicle acquisition;
- Offer unique and innovative partnerships and approaches to meeting critical needs and priorities.

Eligible applicants: Non-profit organizations and small businesses operating in the Bronx.

Proposal Format: Project Summary should not exceed 1 page, with the total project narrative not exceeding ten (10) pages.

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