

TESTIMONY FOR NYCHA BOARD MEMBER MARGARITA LÓPEZ

NYCHA'S GREEN AGENDA AND ENERGY POLICY

CITY COUNCIL COMMITTEE ON PUBLIC HOUSING

THURSDAY, APRIL 15, 2010 – 10:00 AM

CITY COUNCIL HEARING ROOM, 250 BROADWAY, 14TH FLOOR

Chairwoman Rosie Mendez, distinguished members of the Public Housing Committee, and to all the members of the City Council — Good morning. I am Commissioner Margarita López, Member of the New York City Housing Authority's (NYCHA) Board. And joining me this morning are Cristiana Fragola, Deputy Director of Strategic Initiatives and Felix Lam, NYCHA's Chief Financial Officer.

It is my pleasure to be with you today to illustrate the progressive environmental path that NYCHA is forging. As a result, NYCHA is challenging communities within New York City and across the country to create a greener, more sustainable future for our communities.

Meeting the Mayor's Challenge

Three years ago, Mayor Michael R. Bloomberg launched a bold, innovative strategy for creating a more livable metropolis for all New Yorkers called PlanNYC 2030. Focusing on the five key dimensions of the City's environment—land, air, water, energy, and transportation—the Mayor's plan has become a model for cities in the 21st century.

As home to nearly half a million New Yorkers, representing an estimated five percent of the City's population, NYCHA is a critical partner in fulfilling the Mayor's long-term vision of developing sustainable environments, energy efficient homes and jobs for the emerging green economy.

In 2007—because of the Authority's critical role in implementing an integrated strategy to meet the City's environmental challenges—Mayor Bloomberg asked me to serve as NYCHA's Environmental Coordinator. As the Environmental Coordinator, I mobilized the Board in November 2007 to establish the Authority's Energy Management and Environmental Sustainability Committee ("Green Committee") in collaboration with NYCHA's senior management team. Since that time, we have developed and implemented a Green Agenda to reduce the Authority's carbon footprint, lower energy and utility consumption, conserve resources, engage residents in adopting low-carbon lifestyles, and help to preserve public housing for the future.

Much like the Mayor's PlaNYC, NYCHA's Green Agenda is an integrated initiative that focuses on creating sustainable communities from the ground up, working hand in hand with residents, public service partners and key stakeholders in the private sector. As Chairman John B. Rhea often says, at NYCHA we believe deeply in collaboration and the power of partnerships. To that end, we have an on-going strategic alliance with the Clinton Climate Initiative and with PlaNYC; we forge partnerships with key stakeholders in the environmental, development, and energy efficiency sectors on a project by project basis; and we stay in constant conversation with our chief stakeholder—NYCHA residents. We know that only by empowering NYCHA families

and bringing our partners across the City together in the “greening movement,” can we achieve the ambitious goals the Mayor has set for reducing New York City’s carbon footprint, fostering a long-term framework for energy efficient public housing, and creating needed jobs for New Yorkers, and particularly NYCHA residents, in the new Green Economy.

An Integrated Agenda

NYCHA’s Green Agenda is built on a six pillar foundation. Five of these pillars: 1) Energy; 2) Water; 3) Waste; 4) Green Space; and 5) Resilience/ Emergency Preparedness, link to the Green Agenda’s sixth and central pillar—Green Jobs and Empowerment.

At each step in the process, since we first established the Green Committee in 2007, we have remained focused on sustainable development, which means development that both conserves resources and generates revenue. Sustainable development is secure development—before we can improve our systems (for access to clean water, heat delivery, trash and waste removal, or lighting), we must first ensure those systems work properly. Before we can convince our residents to lead greener lives, we must make clear the personal and social benefits of “going green,” and we must understand that any efforts at environmental education are most able to take root and to succeed if the residents feel secure—if they have a job and are able to provide for their families; and if they know that NYCHA is working with them each and every step of the way.

Green planning is integrated planning and must be implemented at every level—carefully, systematically and consistently. Already, NYCHA has implemented several substantive energy conservation and efficiency measures. Our mission is to improve service to our residents, increase Authority-wide productivity, and boost long-term financial savings, ultimately reducing NYCHA’s carbon footprint and its negative impact on the environment.

NYCHA Goes Green: 2007 to Present

NYCHA manages a utility budget of more than half a billion dollars—finding ways to increase our efficiency, while also improving our service to residents is critical in achieving our Green Agenda goals. I would like to discuss several initiatives the Authority has implemented that, combined, make NYCHA a housing industry leader in environmentally-minded planning and development.

First, our heating system: few services that NYCHA provides are more discussed—by residents, by resident leaders, and by public servants than our heating system. NYCHA has 210 central heating plants that are managed using the Computerized Heating Automated System (CHAS), a powerful supervisory tool that enables housing managers and executives to monitor and control heating at the development from any internet-equipped computer, also known as “manage by exception.” Most importantly, CHAS allows NYCHA to optimize the output of our heating facilities, contain energy costs and curtail carbon emissions.

We are also changing the way we heat the Authority’s water. Water is one of nature’s most precious resources. It is also one of the most expensive—to store, to transfer and to heat.

Fortunately, new technology is allowing NYCHA to cut our water management costs and improve our service to residents. We have installed 644 instantaneous hot water heaters that have brought the Authority a nine percent reduction in our water heating expenses. At Castle Hill Houses, we have installed six 500 horsepower-four pass energy efficient boilers—the first such boilers installed in the New York City region. At Rutgers Houses, we converted an inefficient and costly high pressure steam heating system with five individual boiler rooms at the five

buildings, thereby reducing energy waste by having condensate returned and reused rather than being shunted to the City's sewer system. And NYCHA has installed one four pass energy efficient boiler at Brooklyn's Sheepshead Houses, and we plan to install four such boiler systems at Elliott Houses in Manhattan.

And we are changing the way we light the developments. Since 2007 NYCHA, in collaboration with Con Edison, has replaced 178,000 standard light bulbs with compact fluorescent energy saving lamps (CFLs) in 30,000 apartments saving the Authority 10 million watts of energy per year, or \$3.9 million. For our efforts, NYCHA was honored by the U. S. Environmental Protection Agency (EPA) and the Department of Energy (DOE) with the ENERGY STAR Award for Excellence in Affordable Housing. The EPA and DOE cited NYCHA's "invaluable commitment and dedication to the ENERGY STAR program and providing energy efficient, affordable housing to an underserved population of the American public."

To date, NYCHA has installed Energy Star refrigerators in all of its developments and 900 Energy Star computers in its offices. And the Authority's procurement standard for apartments dictates that all new electric appliances are Energy Star rated and new plumbing materials have an EPA WaterSense rating.

Finally, we remain committed to creating and fostering Green Spaces. Since 2007, NYCHA has created 124 new gardens and planted 11,195 trees, in partnership with the Mayor's MillionTreesNYC initiative.

The Green Agenda: 2010 and Beyond

One of the next key phases of our Green Agenda focuses on energy, efficiency and conservation. NYCHA has recently submitted to the Department of Housing and Urban Development (HUD) an Energy Performance Contract (EPC) for final approval; and we will submit additional EPCs moving forward. By implementing in larger scale the energy conservation and efficiency measures we piloted since 2007, we estimate that this EPC will generate \$29 million annually in savings and create at least 200 green collar jobs for NYCHA residents.

Just last year as part of our Green Agenda, NYCHA launched a Green Lecture series, where environmental experts—from scientists to advocates—came to discuss key topics with NYCHA's residents and staff.

Furthermore, as part of our resident engagement strategy, NYCHA is emphasizing environmental awareness in the developments by creating and mobilizing volunteer-based resident Green Committees. In less than seven months, with the help of eight *Volunteers in Service to America* (VISTAs), provided by NYC Service, we have created 32 Green Committees currently serving in approximately 10 percent of our developments. Each committee member signs a pledge committing to embrace a responsible, low-carbon lifestyle by switching to CFLs in their home, recycling, conserving water and taking care of newly planted trees. To date, more than 800 residents have signed a Green Pledge.

And later this year, on April 22—as part of our Earth Day Celebration and round two of the Green Lecture Series—NYCHA will distribute to all Resident Green Committee members a user-friendly Green Guide with 40 “green tips” and a tool to help calculate their personal “green score.” The Green Guide was developed in response to the Green Committee's interest in learning more about eco-friendly lifestyles.

The Big Picture

As I will demonstrate in my presentation, NYCHA's Green Agenda is a comprehensive, systemic program designed to not only reduce the Authority's greenhouse gas emissions and lower operating costs, but also and more importantly, to preserve public housing and the planet for future generations.

It is about leading the way, not only in New York City but also nationwide, on the path to creating sustainable, environmentally friendly homes and communities for low and moderate income families. It is about modern high efficiency boilers and instantaneous hot water heaters that improve our service to residents and save the Authority \$7.5 million annually. It is about new, energy efficient lighting and appliances that save an additional \$5.7 million a year. It is about reducing NYCHA's current carbon footprint of 1.4 million metric tons of greenhouse gases (GHGs) by taking measures to assist with the City's goal of achieving a 30 percent reduction in New York City's annual greenhouse gas emissions below 2005 levels by 2030.

It is about educating and empowering our residents to lead greener lives in their homes and preparing them to fill the jobs of the green economy.

Conclusion

This is an exciting time. We have enthusiastic leadership from Mayor Bloomberg and from Chairman Rhea. We have experienced partners willing and ready to collaborate with us in the City Council and at our sister Agencies. From our partners in the private sector, we have their dedication to help us empower NYCHA families so that they can seize the opportunities of the new Green Economy. And we have renewed environmental leadership at the Department of Housing and Urban Development and in the Obama White House to make these ambitious goals a reality.

I will walk you through the initiatives of the Green Agenda and the energy policies of NYCHA's plan—what it is; what it means to the families we serve; the steps we have taken and the accomplishments we have made to date in this large scale plan; and NYCHA's vision for a greener, more sustainable future for public housing and for all of New York City.

Thank you.

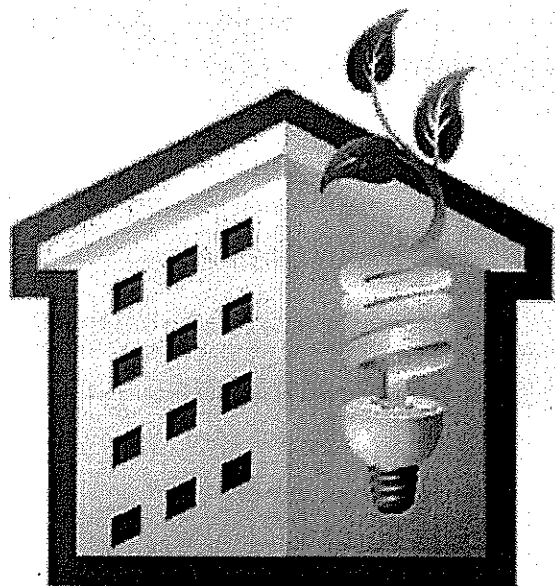


DRAFT not for Distribution

Vision: A Sustainable NYCHA in a Sustainable World

Preserving NYCHA for 75 More years, Balancing the Budget

Protecting the Environment & Empowering Residents



**NEW YORK CITY
HOUSING
AUTHORITY**

The
Power
is in
Your
Hands!

The Sustainability Sweet Spot

Minimize

Waste
Fossil Fuel Energy
Water Consumption
GHGs emissions
Negative Publicity
Environmental Liabilities
Operating Costs

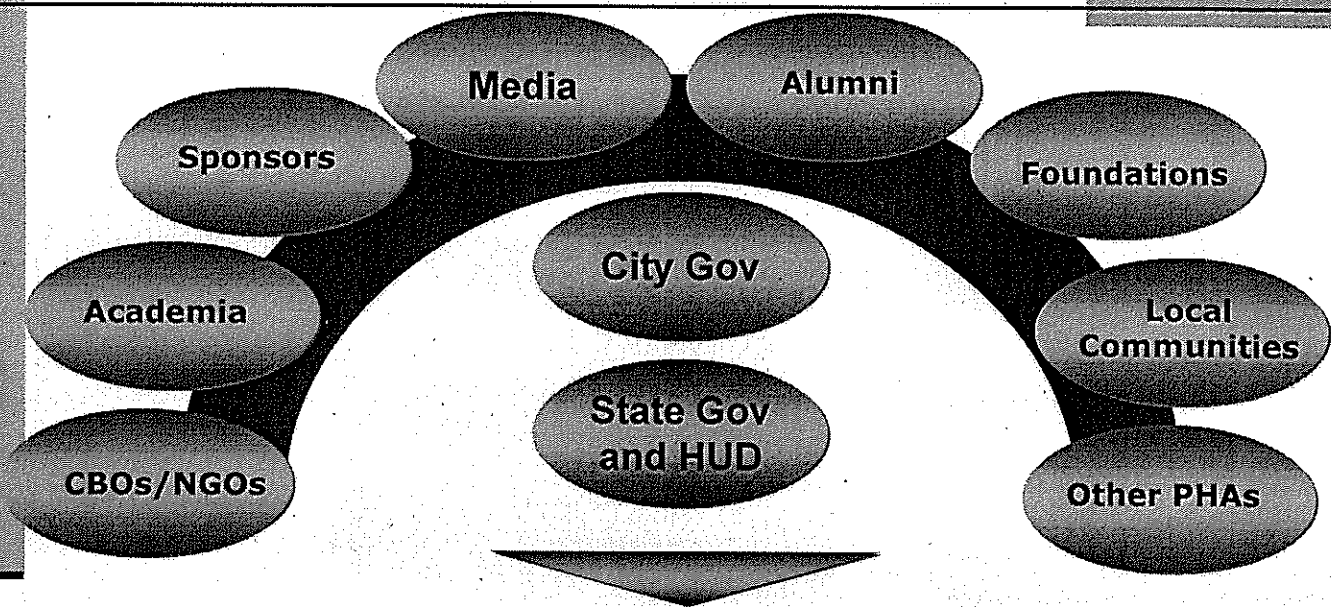
Maximize

Energy Efficiency
Revenue streams
Residents' Satisfaction
Proactive management
Long Term Sustainability
Employees' Contribution
Community Engagement

Savings
Green Jobs
Carbon Credits
Sponsorships
Eco-Business

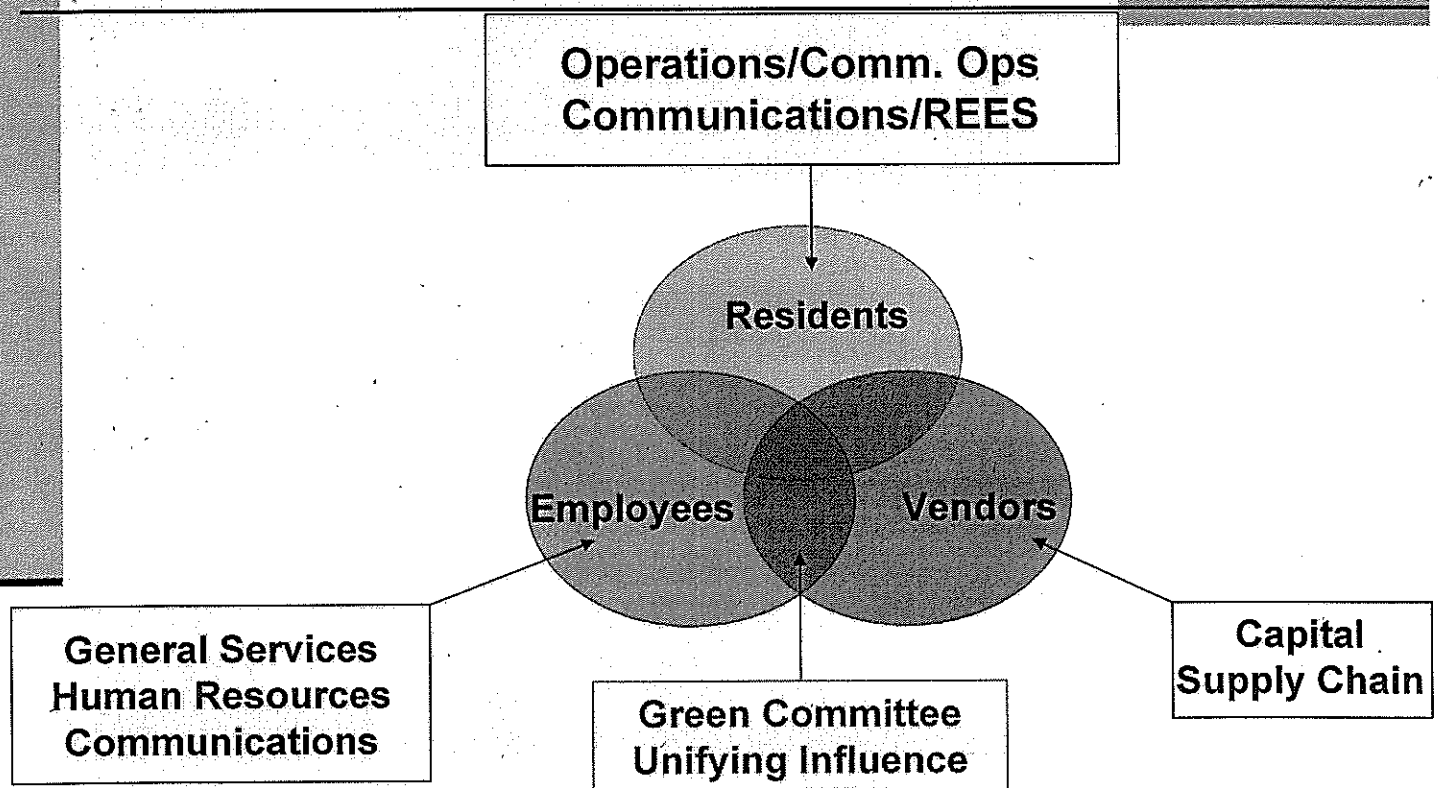
New Revenue Opportunities

NYCHA's Broader Sphere of Influence

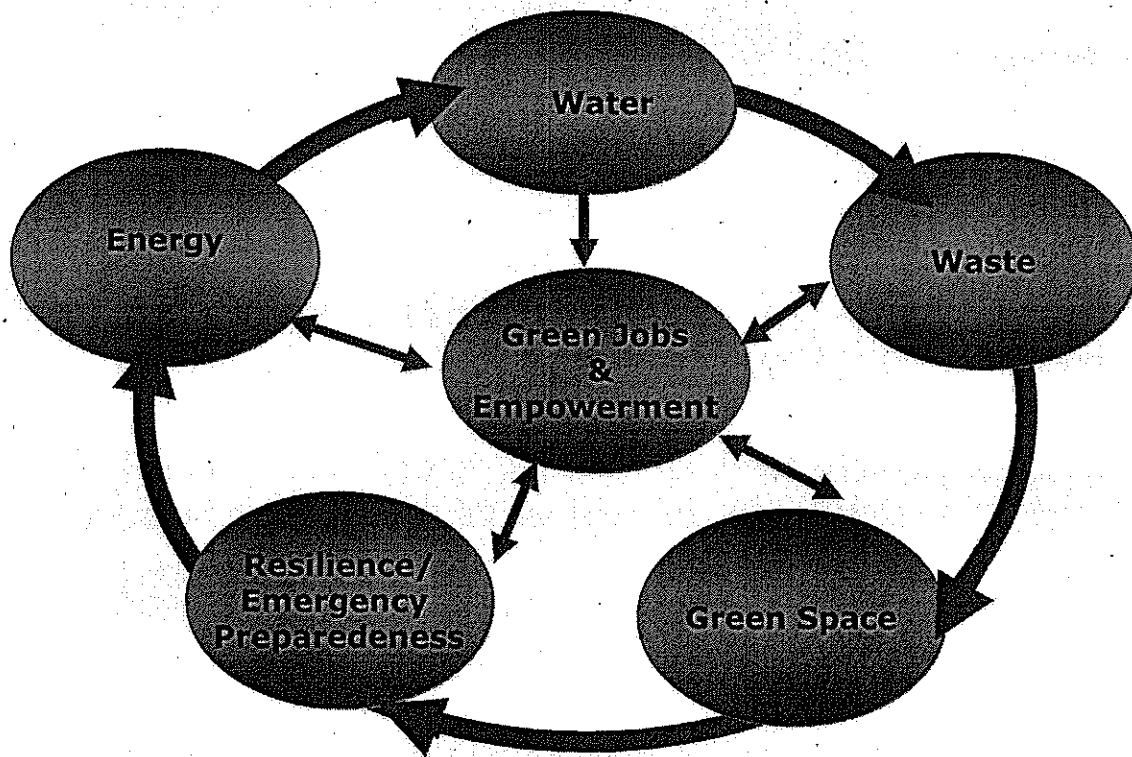


NYCHA

NYCHA's Direct Stakeholders



6 Core Green Agenda Pillars



Current Projects by Division

Community Operations

- 1) Green Corps
- 2) VISTAs low carbon lifestyle guide
- 3) Community Gardens
- 4) Rain Water Harvesting

Energy

- 7) Energy Efficiency & Retrofit

REES

- 8) Resident Green Collar Job Training

Current Projects by Division

Capital

- 9) Eco-Roofs
- 10) Storm Water

Supply Chain

- 11) Green Procurement

Media

- 12) Raise Green Agenda Awareness
- 13) Lectures Series & Video

Green Corps and Resident Green Committees



Pink Houses Resident Green Committee Meeting

Wednesday, February 17th at 7pm

Pink Houses Community Center, 2702 Linden Blvd Brooklyn NY 11208

Come to learn about...

- saving energy
- preserving public housing
- green jobs
- tree care and gardening
- resident engagement
- community development

1. Community Operations: Green Corps by 1Q2010

Overview

The Green Corps will mobilize residents to create an active Resident Green Committee in each EPC Phase I development by the end of 2010.

Opportunity

- Increase resident engagement in GCs
- Reduce deficit & GHGs
- Improve environment

Key Actions

- Train 15 GCs staff members by end 3Q 2010
- Mobilize RGCs in developments
- Develop and implement performance tracking system with key metrics tied to Green Agenda Pledge: Water, Energy, Open Space, Waste

Constraints

- Lack of funding
- Union requirements
- Lack of resident engagement

Status: Received 22 applications, exceeded goal by 46%

Young Volunteers at NYCHA



- NYCHA has eight *Volunteers In Service To America* members to assist in organizing the committees
- To date, there are 32 Resident Green Committees with almost 300 NYCHA resident members that volunteer to support NYCHA's Green Agenda.
- Four committees were recently awarded grants from "LOVE YOUR BLOCK" to implement green initiatives in their respective development

2. Community Operations & VISTAs:

Inspire Low Carbon Lifestyle – 2Q 2010

Overview

Engage 300 Residents to support NYCHA's Green Agenda by adopting a low-carbon lifestyle by July 31, 2010

Opportunity

- Support maximum return on EPC investment
- Empower residents to be eco-responsible

Key Actions

- Develop Green Guide with DGMs' input
- Test Green Guide in few developments
- Receive Pilot Residents' input
- Gather best practices in similar initiatives adopted with other PHAs

Constraints

- Resistance from RAs
- Funding
- Maintain resident interest

Status: Completed Green Guide in English and Spanish and it will be distributed at the Speaking Green Lecture on April 22nd.

Preserving and Expanding Our Gardens for Future Generations



Young Residents
Planting at
King Towers

3. Community Operations:

Expand Community Gardens Program Tentative Completion 2011

Overview

Increase number of gardens from current 600 and create resident-led business cooperatives (flowers)

Opportunity

- Preserve & increase green space
- Create revenue streams empowering residents

Key Actions

- Assess current reality
- Update database and identify areas for new gardens
- Assess existing resident business models and identify other best practices
- Find key sponsors/partners

Constraints

- Funding
- Lack of engagement
- Access to water
- Capacity (only 2 staff members)
- No updated database

Status: Created a Community Gardens Task Force

Why harvest rain?



- **NYCHA water costs for 2009: \$137,457 million**
- **Rates increased in double digits for the past 4 years**
- **NYCHA has 600 gardens and over 11,000 newly planted trees**

4. Community Operations:

Rainwater Harvesting by 2Q2010

Overview

NYCHA collaborates with BX River Alliance and other organizations to pilot water harvesting techniques, assess and scale up based on success rate and funding

Opportunity

- Reduce water costs
- Provide water for gardens
- Reduce CSO

Key Actions

- Monitor project at Bx River Houses
- Explore other best practices
- Offer rainwater harvesting workshops to residents

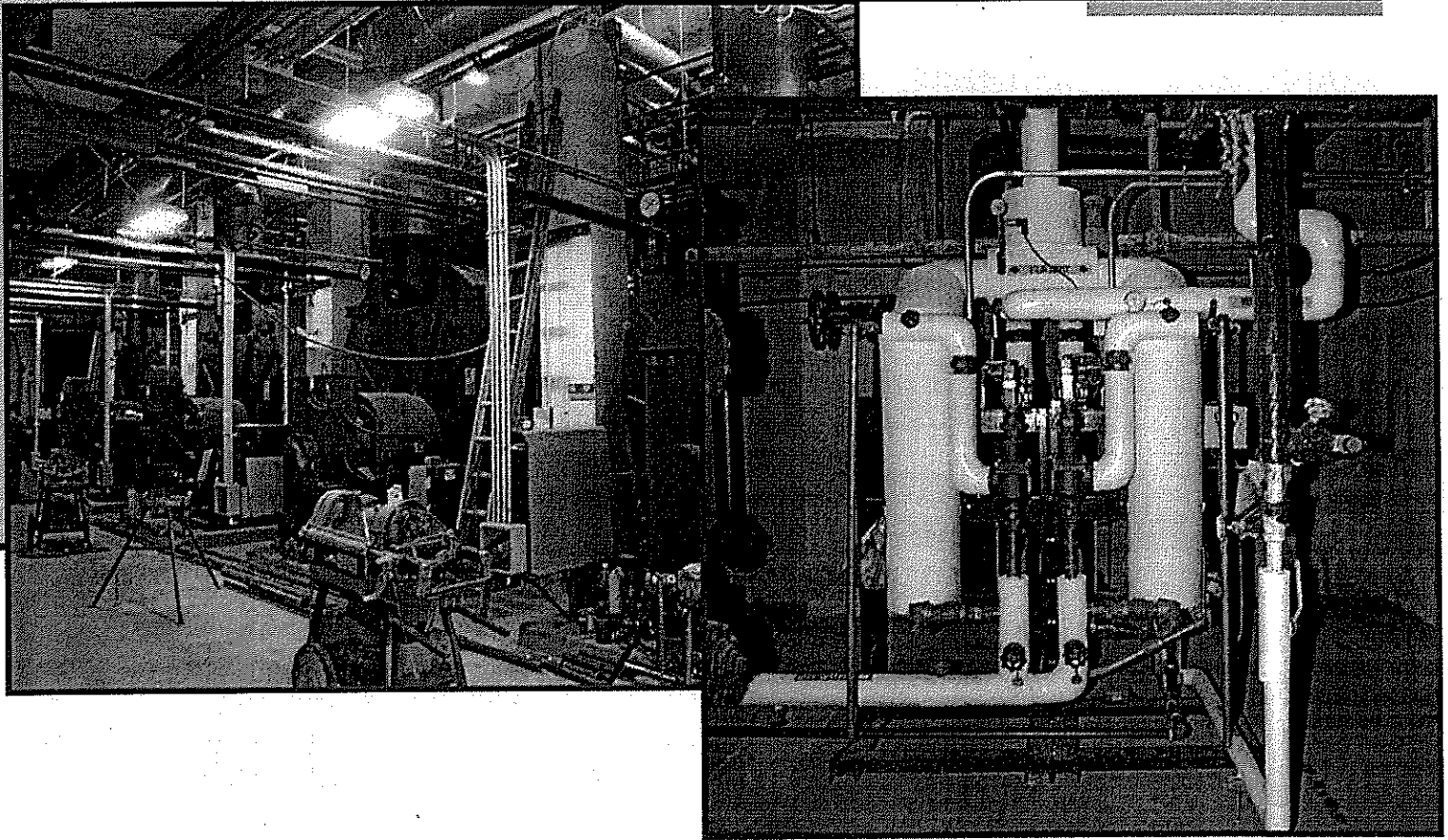
Constraints

- Funding for technologies

Status: 4-rain barrels system installed at BX River Houses. Total collection capacity is 200 gallons. A second system is ready to be installed.

EPC Phase I:

Green Building Retrofit



1. Energy:

Implementation of EPC Phase I

Overview

NYCHA will reduce its GHGs and operating costs in Phase I while generating sustainable careers for residents, paving the way for other PHAs

Opportunity

- Generate Savings for Phase II
- Set precedent with HUD for future EPCs

Key Actions

- HUD Approval – Pending
- Secure financing
- Issue RFPs with Green Collar training specifications – 3Q/10
- Identify skills and job positions that will be created – 3Q/10

Constraints

- Capacity
- Funding
- Software to track progress

Status: NYCHA has already installed 178,000 CFLs in 30,000 units in 73 developments saving \$3.9 million a year. Energy Star Award

MTNYC 2009 Green Collar Job Training: 24% Graduates - NYCHA residents



1. REES Eco-Goal: Green NYCHA Workforce for Phase I - 200 Green Collar Jobs

Overview

The Green Collar job training will equip NYCHA's residents with the skills for the 200 jobs projected by EPC Phase I and for the NYC Green Economy Plan

Opportunity

- Phase-out residents from Structural Unemployment
- Reduce rent delinquencies

Key Actions

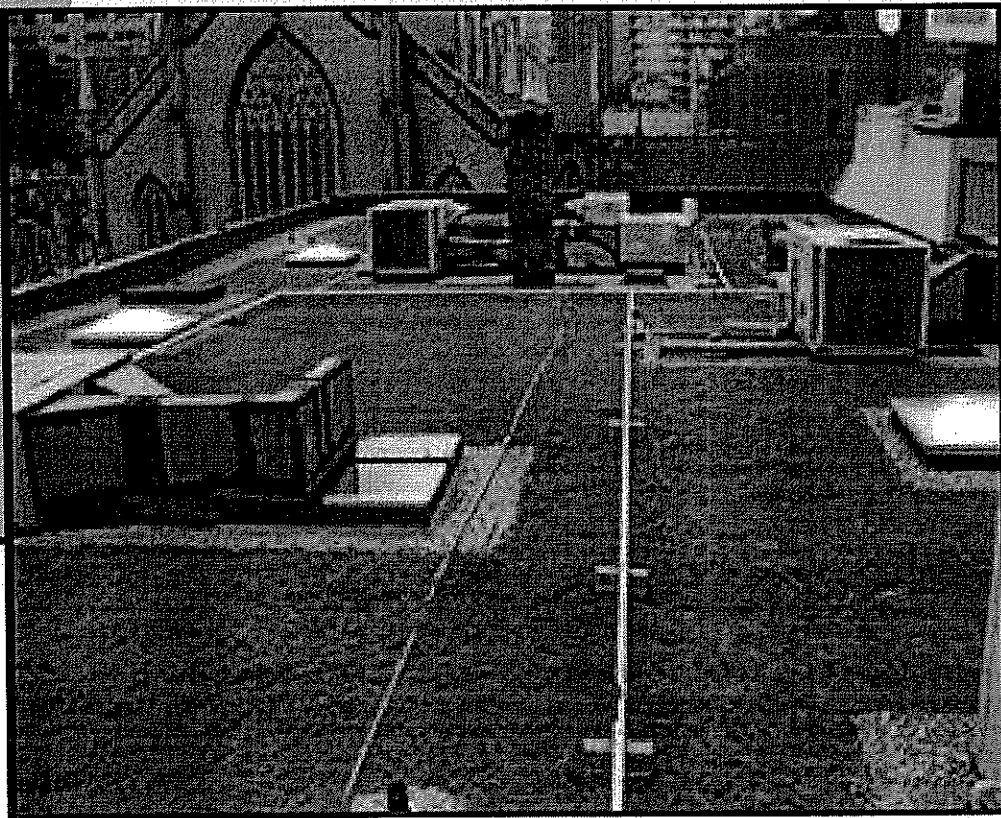
- Identify strategic training partners
- Develop curriculum with environmental & life-skills training components
- Engage vendors & establish enforcement mechanism to monitor Section 3 and REP compliance

Constraints

- Funding
- Union compliance
- Placement
- Enforce implementation with vendors

Status: Recruiting NYCHA young adults Clean Energy Corps training to start in May 2010 with Green City Force.

Eco-Roofs at NYCHA



Did you know that

- Green Roofs can reduce energy cost by 25%
- Extend lifespan 2 to 3X over conventional roofs
- Provide insulation
- Reduce storm water runoff
- Filter air pollution and reduce CO2 emissions

Why Cool Roofs?

They increase solar reflectance and thermal emittance, reduce temperature up to 30 F° & energy costs up to 30%

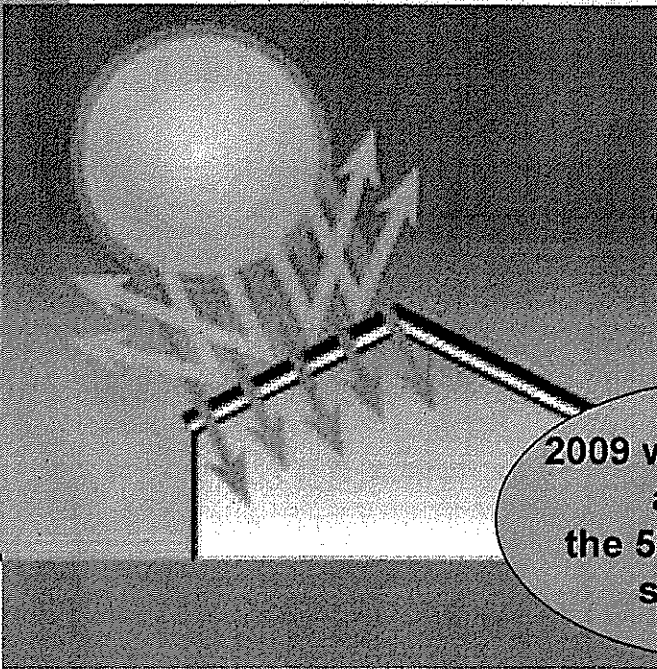


FIG. A
ROOF WITH CONVENTIONAL PAINT

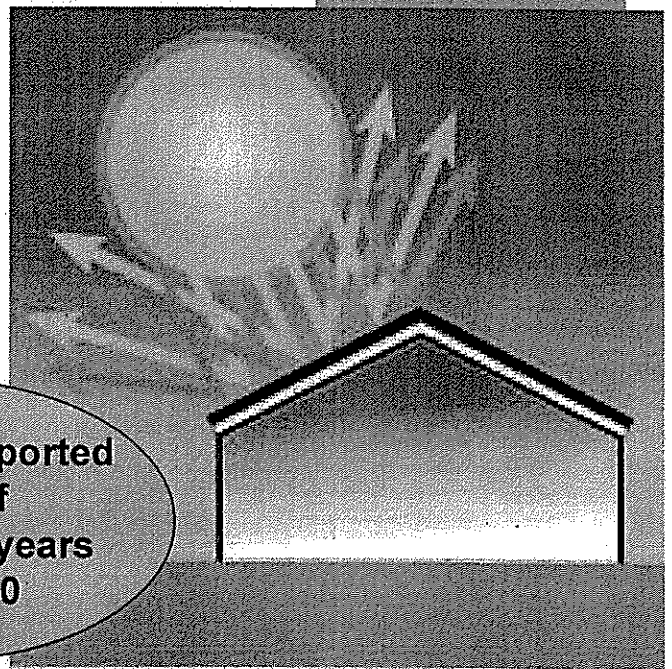


FIG. B
ROOF WITH COOL ROOF PAINT

2009 will be reported
as one of
the 5 hottest years
since 1850

VISIBLE LIGHT WAVES

ULTRA VIOLET WAVES

1. Capital:

Green Roofs, Cool Roofs & White Gravel by 4Q2010

Overview

Pilot and scale innovative techniques that can reduce NYCHA's environmental impact, surface temperatures, energy costs

Opportunity

- Increase innovation
- Reduce financial deficit and GHGs
- Reduce power outages

Key Actions

- Pilot green roof at Corsi – Summer 2010
- Find sponsors and roll out Cool Roofs
- Establish tracking mechanism to assess environmental and financial benefits

Constraints

- Maintain clear access to roofs
- Upfront cost
- Finding sponsors & volunteers

Status: Identified 100,000 sq ft for Cool Roofs and changed contracts to white gravel for 500,000 sq ft in 8 developments.

2. Capital:

Piloting Solar Panels with NYPA by 4Q of 2010

Overview

Pilot installation of PVs on NYCHA roofs to reduce NYCHA's environmental impact and generate carbon credits

Opportunity

- Pilot PVs with no upfront capital cost
- Contribute to green jobs

Key Actions

- Identify feasible roof surface – 1Q 2010
- Find installer with whom to team up
- Negotiate terms with NYPA that will allow NYCHA to capture environmental benefits and financial incentives

Constraints

- Maintain clear access to roofs
- Cost per kWh may be higher in the short term

Status: Met with NYPA to hear 100 MW Solar Power Purchase proposal and awaiting feedback

3. Capital:

Piloting Storm Water Management Best Practices With DEP & OLTPS

Overview

Pilot and scale innovative techniques that can reduce NYCHA's environmental impact, sewage overflow and water costs

Opportunity

- Increase Innovation
- No upfront capital cost
- Reduce water damage

Key Actions

- Define terms of collaboration with DEP—January 2010
- Assess feasibility and implement by June 2010
- Establish tracking mechanism to assess environmental and financial benefits

Constraints

- Roof load capacity
- DEP inflexible terms

Status: Project started

Storm Water Management

Potential Pilots

1. Blue Roof

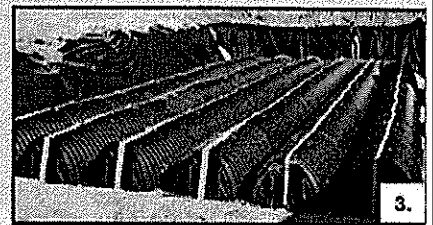
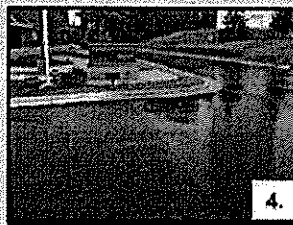
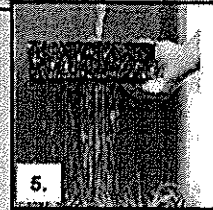
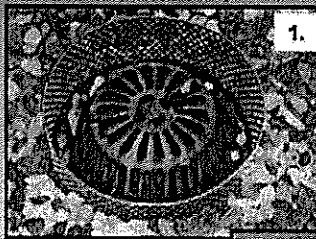
2. Linear Landscaped Rain Garden

3. Subsurface Infiltration

- Stormwater Chamber
- Gravel Bed
- Perforated Pipe

4. Pervious Pavement

5. Flexi-Pave Surfacing



Managing H2O at Bronx River Houses

Potential Pilot Applications

Blue Roof

Landscaped Rain Garden

Subsurface Infiltration

Pervious Pavement

Flexi-Pave Playground

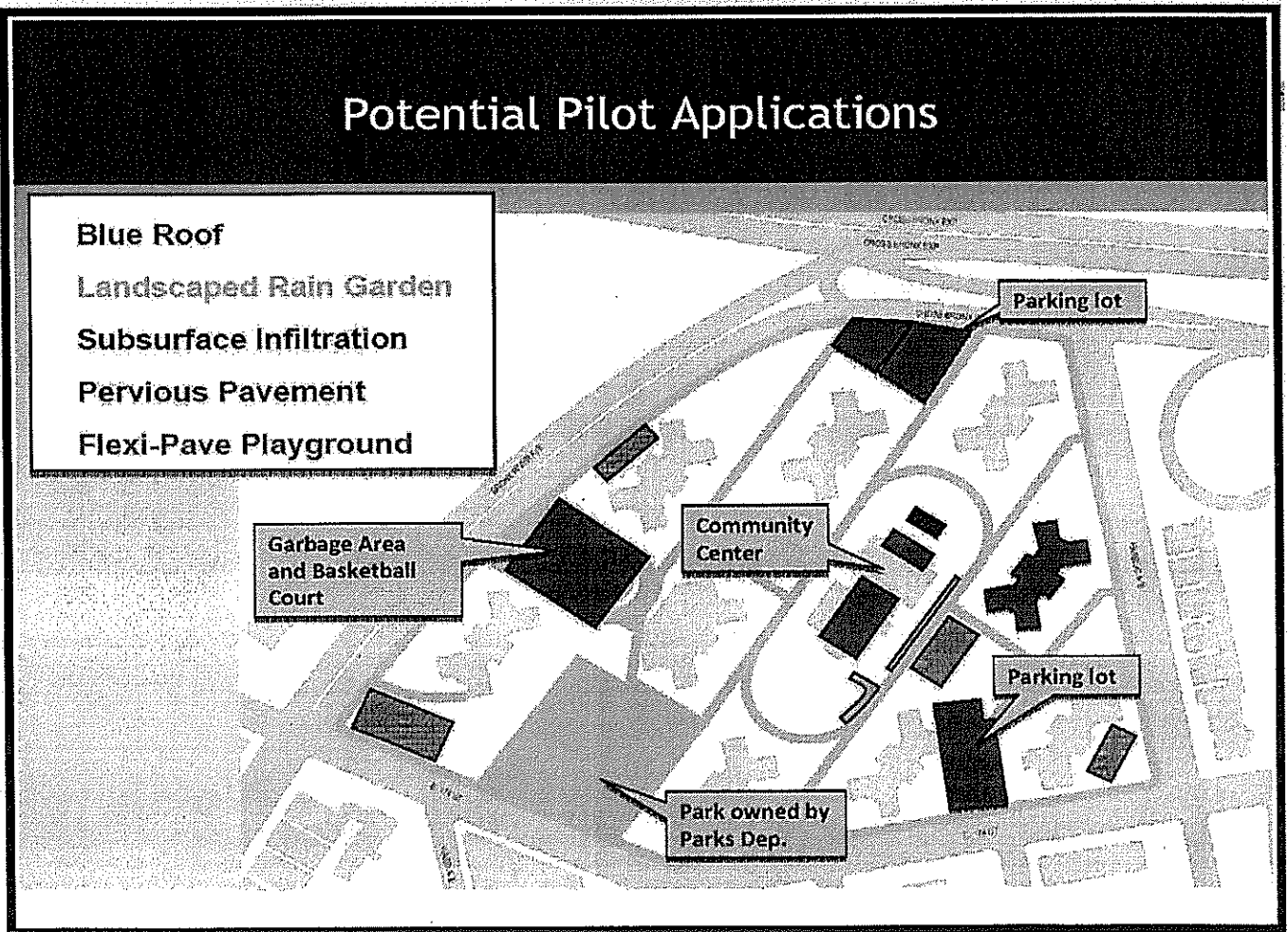
Garbage Area
and Basketball
Court

Community
Center

Parking lot

Parking lot

Park owned by
Parks Dep.



1. Supply Chain & Administration:

Greening Offices by 4Q of 2010

Overview

Promote eco-thinking with NYCHA staff that will lead to spontaneous environmentally responsible practices in each office.

Opportunity

- Employee engagement
- Reduce financial deficit and GHGs
- Get ahead of regulation

Key Actions

- Work with Standards Committee to shift to eco-responsible procurement and set key performance indicators & scorecard
- Develop tool for Eco-Suggestions
- Develop performance tracking system
- Create Green Champions Award

Constraints

- Divert resources from day to day operations
- Interrupt business continuity with suppliers
- Impact cost effectiveness
- Resistance to change

Status: Over 50 green products in supply chain. NYCHA purchases Energy Star appliances and WaterSense plumbing products.

1. Media:

Promote Green Agenda Awareness

Overview

Increase awareness of Green Agenda with all stakeholders, share success stories and acknowledge efforts of RGCs

Opportunity

- Increase employee & resident engagement
- Create sponsorship opportunities

Key Actions

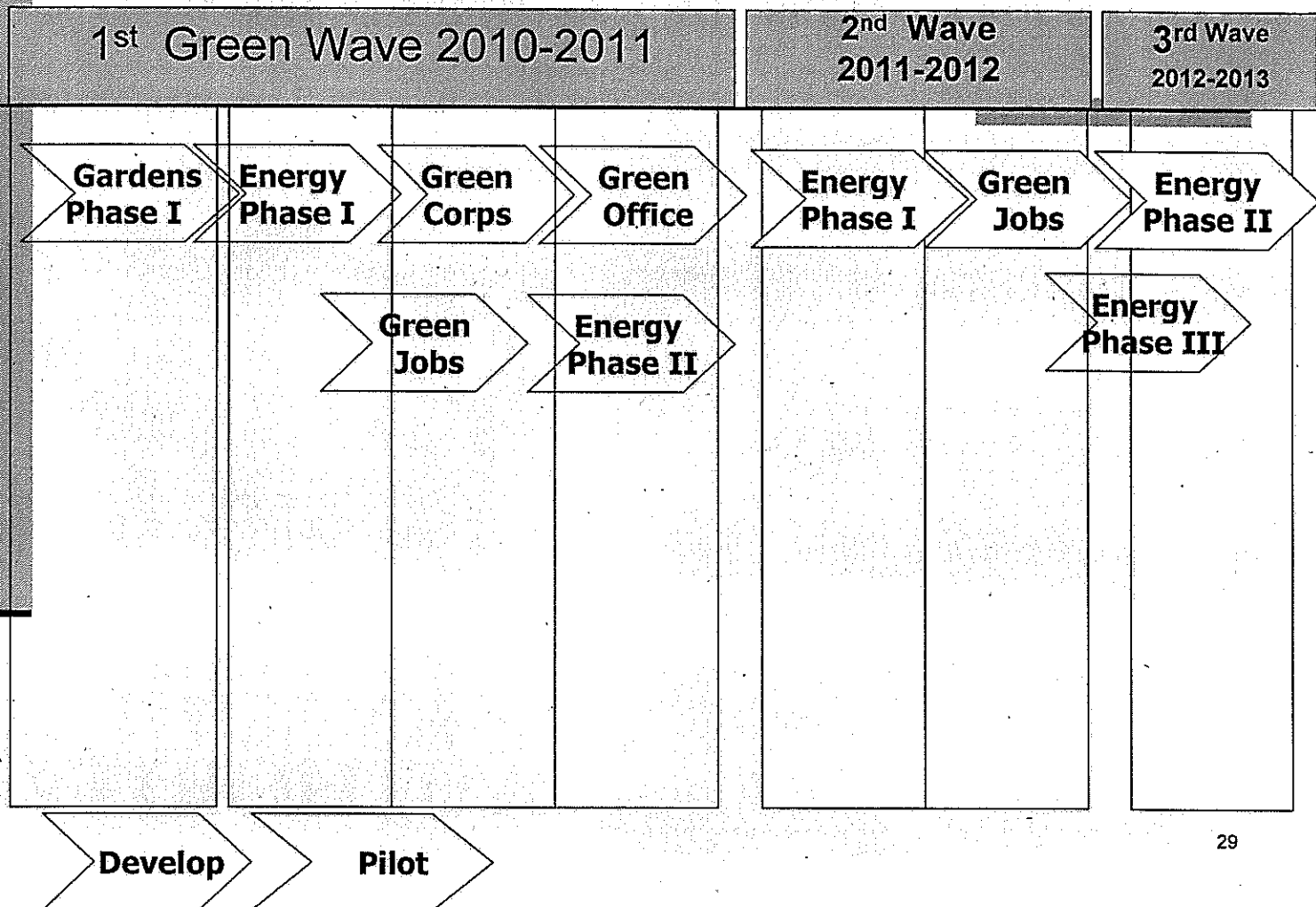
- Update Green Agenda content in Bulletin, Journal & Website - 2Q/10
- Develop eco-tips for Intranet – 2Q/10
- Identify speakers and dates for Lecture Series – April 2010
- Develop video for Manhattan Cable

Constraints

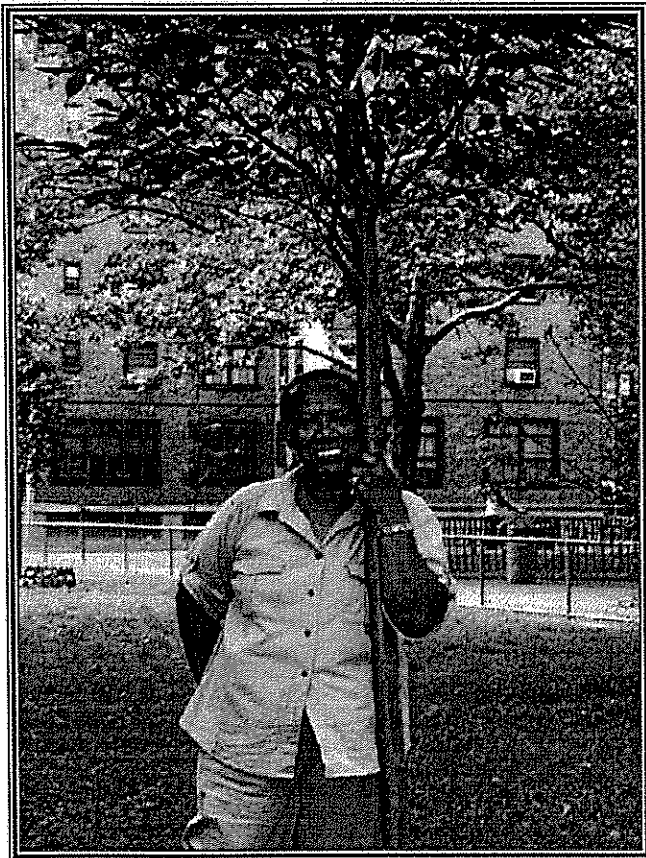
- Costs
- Timing
- Maintain content updated

Status: Green column published in NYCHA Journal. Second Year Green Lecture Series kicks off on April 22nd.

Develop Green Agenda Roadmap



The Power is in Your Hands!



**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/15/10

(PLEASE PRINT)

Name: Joseph G. Green

Address: 121 Wilson St. 4E Brooklyn NY 11211

I represent: Public Hsg. Resident Group

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/15/10

(PLEASE PRINT)

Name: Christina Fragola

Address: _____

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/15/10

(PLEASE PRINT)

Name: Felix Lam

Address: _____

I represent: NYCHA

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 4/15/10

(PLEASE PRINT)

Name: Margarita Lopez

Address: _____

I represent: WCHA

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. 4/15/10

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Miriam Corbin

Address: 3619 Carraquet rd, Bklyn, NY

I represent: SAFFINW CORP

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Ken Morice

Address: 160 Smeeth Pl. West, S.V. aly.

I represent: Intech 21

Address: 21 Harbor Park Dr.

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: George Bilawko

Address: 21 Harbor Park Dr North

I represent: Intech 21, Inc.

Address: Pore Wasington, NY

Please complete this card and return to the Sergeant-at-Arms