

2012 Annual Energy Team Meeting

Banking Hall, 49-51 Chambers
September 27, 2012

NYC Citywide Administrative Services | Energy Management

planNYC



Agencies: You're On!



Energy Management - by the numbers

78 ° max summertime
air conditioning
temperature

187
Energy efficiency
retrofits completed

29,525
kW enrolled in 2012
**Demand
Response**

Save energy = save \$

94 Retro-commissioning
reports in progress

2,615 City buildings
benchmarked

125 meters installed
at **46** buildings

3% reduced energy
use Citywide
FY12 compared to FY11
(after adjusting for weather)

213
Audits and
retrofits
underway

WOW!

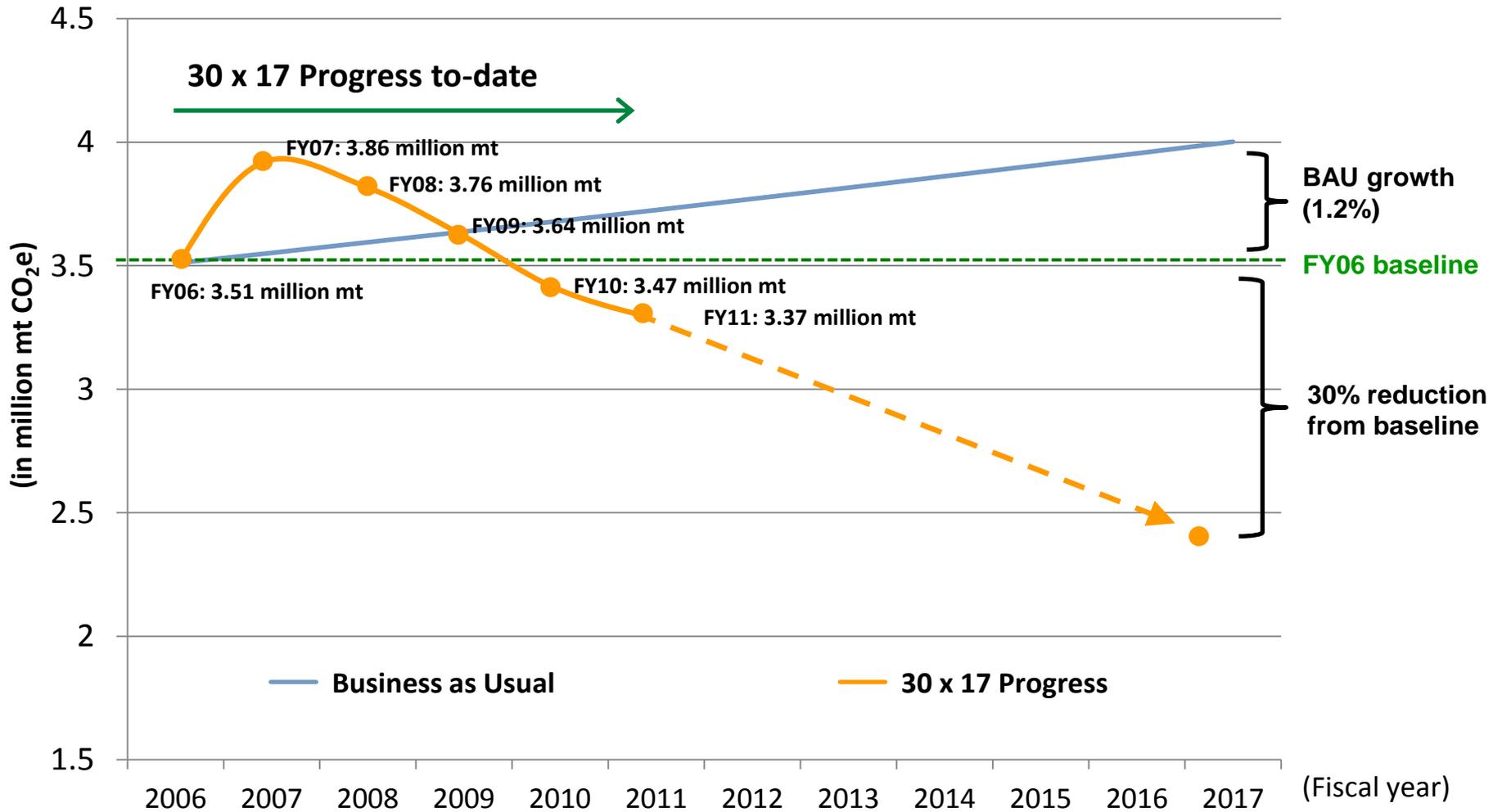
54.7%
electricity reduction at
winning school

36 Retro-commissioning
reports completed

338 NYC staff
trained in energy
management in FY12

**2012 Green Cup
Challenge**

30 x 17 Progress and Update



Benchmarking results are in...

Totals

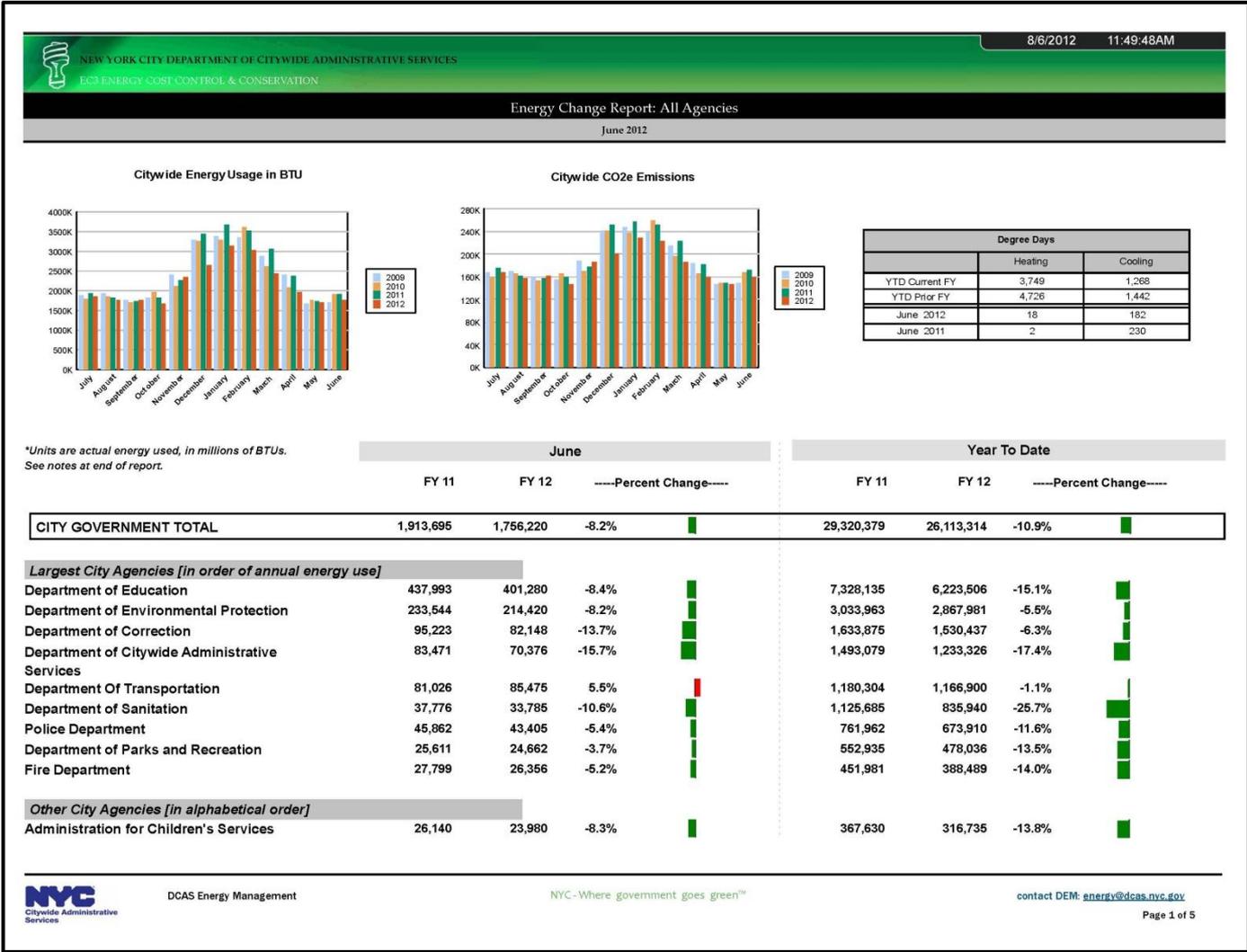
- 2,615 buildings
- 1,956 individual buildings:
 - 1,176 schools
 - 116 libraries
 - 69 police precincts
 - 66 day care centers
 - 50 garages
 - 39 shelters and residences
 - 20 courts
 - 14 wastewater treatment plants
- 48 campuses; 659 buildings within campuses
- 281,511,000 total square footage
 - 16% of entire New York City square footage benchmarked for LL84



Average Rating: 52

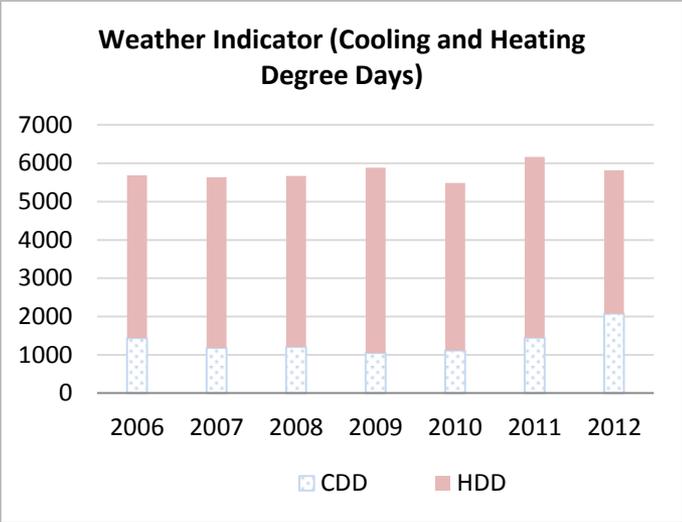
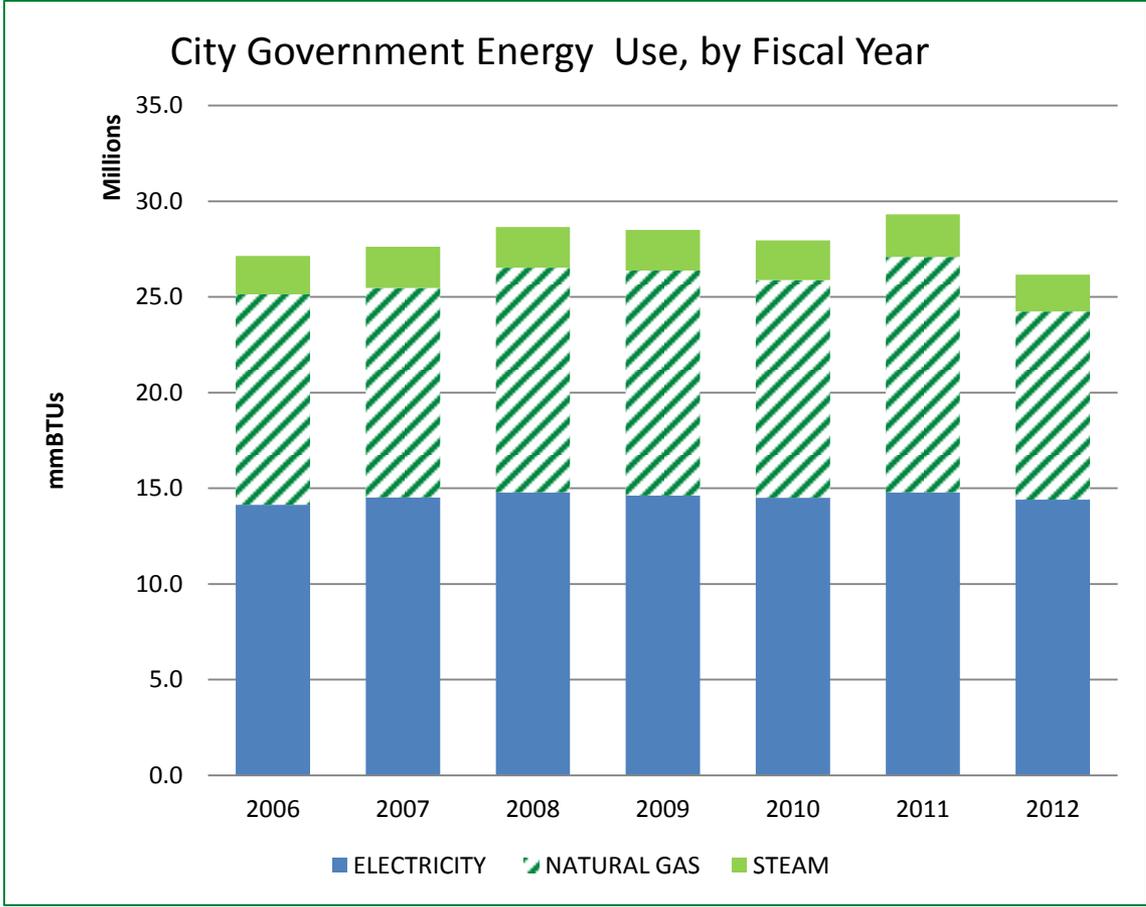
Average EUI: 234 kBtu/sq ft

Citywide energy reports... and how did your agency do?



- DCAS tracks electricity, natural gas, and steam use (heating fuel use tracked and managed by individual agencies)
- 8% energy use reduction FY11 to FY12, Citywide
- 3% reduction after adjusting for weather
- This is the net impact of all changes: **increases** from new facilities and programs, offset by **decreases** from retrofits, your implementation of O&M programs and other conservation efforts
- Challenge to agencies: help drive down the average!

Citywide energy use over time



Key Take-aways:

- No resting on FY12 laurels
- We need to make those reductions larger and ongoing

Citywide Operations & Maintenance Plan Update



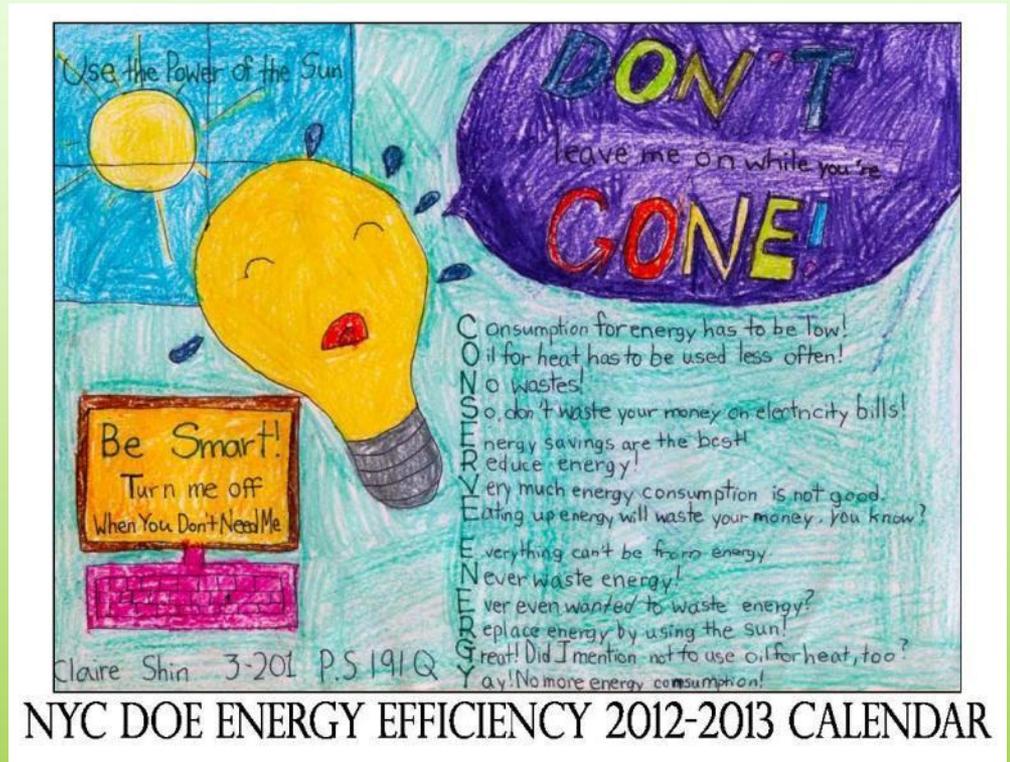
Key lessons learned:

- The most successful agencies have buy-in at the highest management level
- A comprehensive and coordinated energy strategy produces the greatest improvement
- Energy conservation visibility and employee training and recognition are critical to success

Key Plan Updates:

- More data analysis and evolving incentives
- Increased use of social media and recalibrated training curriculum
- Transition from deferred to preventative maintenance

How DOE Uses DCAS Energy Data for Planning & Implementation

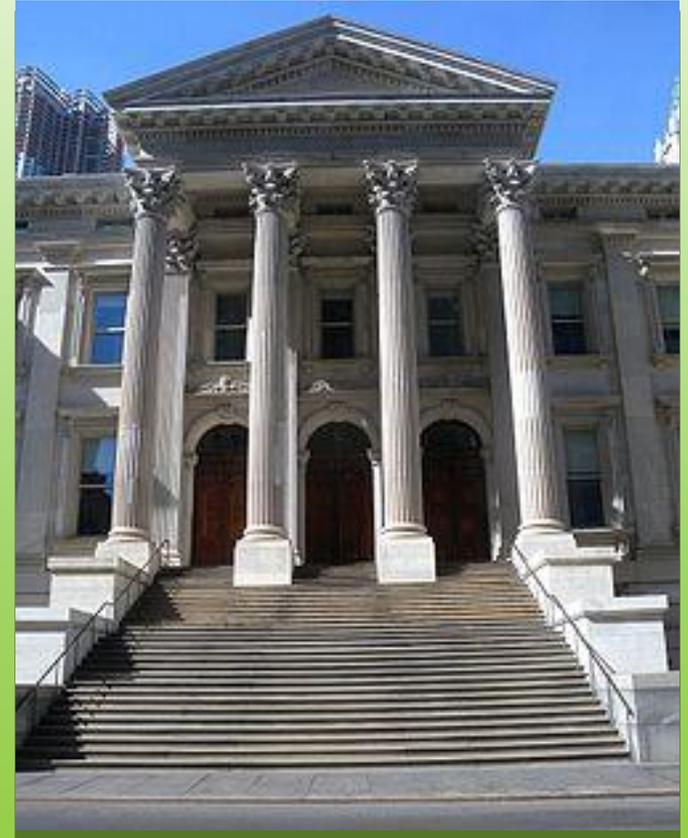


Annual Energy Team Meeting
September 27, 2012

NYC Department of Education

The New York City Department of Education is the largest system of public schools in the United States

- **1.1 million students**
- **75,000 teachers**
- **1,270 Buildings**
- **1,700 schools**
- **\$24 billion annual budget**
- **369 new schools since 2002**



NYC DOE Sustainability Initiative

Vision: Lead current and future generations to a sustainable future

Mission: DOE to be the nation's leader in the operation of sustainable school facilities and integrated sustainability education

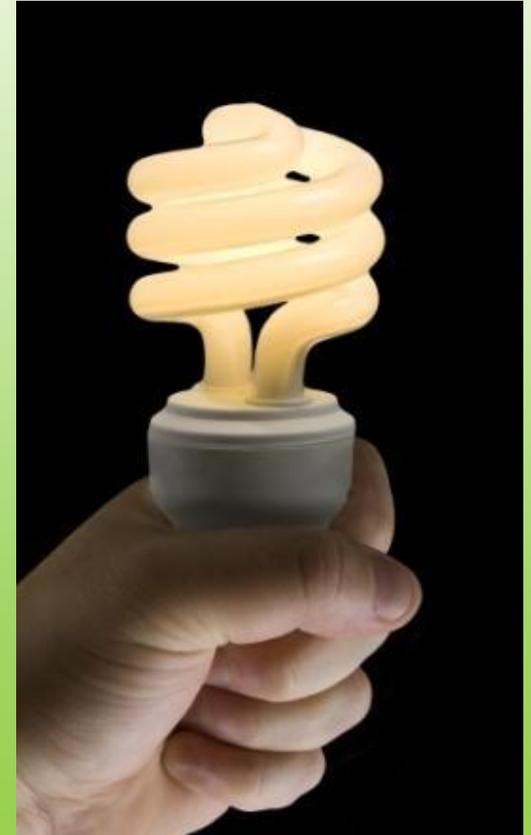
Goals:

- **Energy:** Reduce GHG emissions from buildings and operations by 30% by 2017
- **Recycling:** Double annual recycling rate by 2013
- **Curriculum:** Provide sustainable curriculum resources to principals and teachers
- **Ecology:** Participate in Citywide PlaNYC initiatives: School Gardens, Million Trees, Schoolyards to Playgrounds



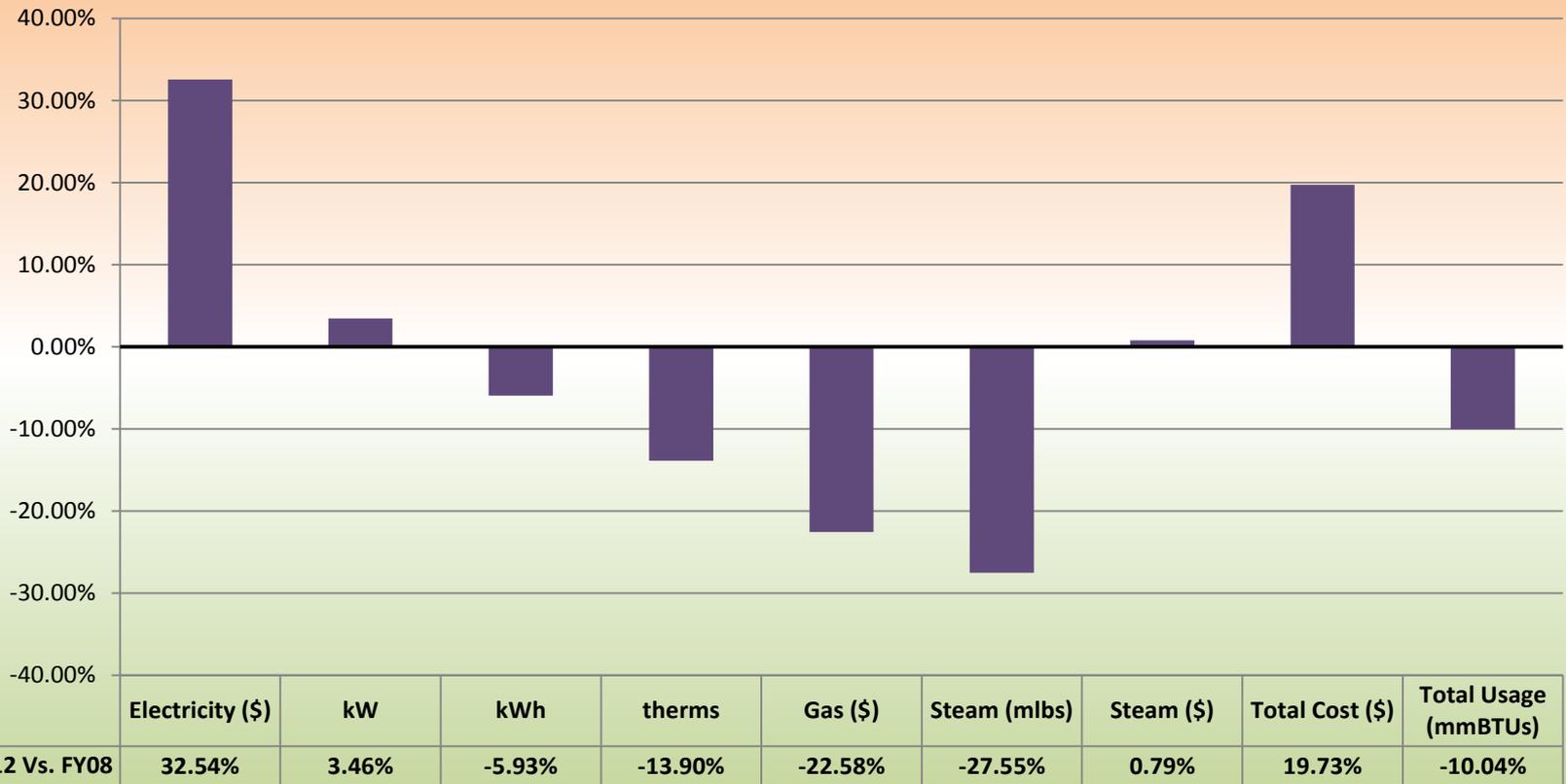
Energy Conservation @ NYC DOE

- **Energy Goal Progress**
- **DCAS Energy Data Utilization**
- **Energy Audits and Retrofit Projects**
- **Renewable Energy**
- **Demand & Plug Load Management**
- **O&M Program**
- **Energy Outreach**
- **Staff Training on Energy Conservation**
- **School Curriculum**



Energy Goal Progress

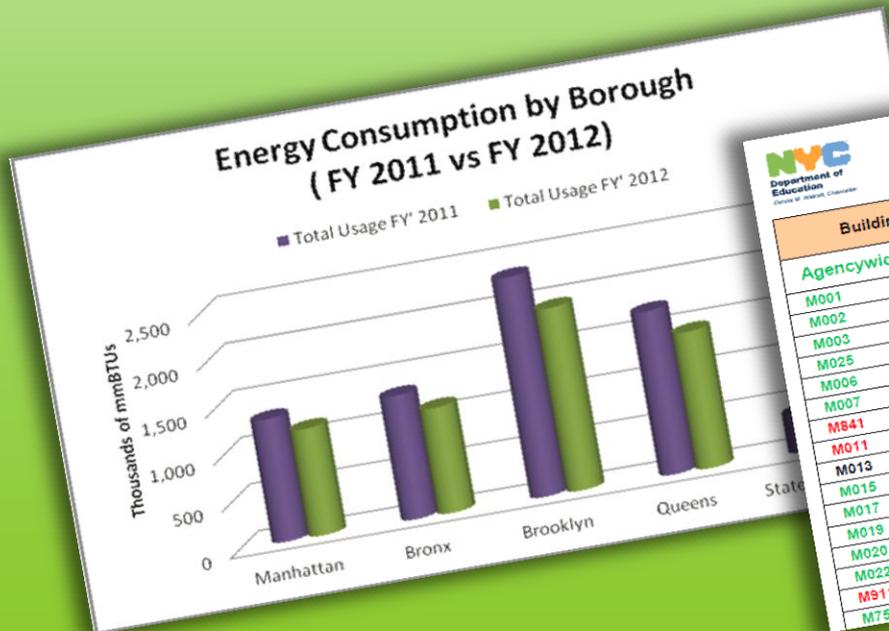
Energy Usage Change (FY12 Vs. FY08)



DCAS Energy Data Utilization

Use EC-3 data to develop monthly reports:

- Deputy Chancellor’s Office - energy consumption analysis and Portfolio Manager ratings
- DSF CEO and Borough Managers – energy consumption change by borough
- Custodian Engineers/Building Managers - Electric Change Reports



Building Code	Nov-Apr 2011 (kWh)	Nov-Apr 2012 (kWh)	Percent Change
Agencywide	512,420,612	479,910,203	-6.8%
M001	247,600	202,400	-22.3%
M002	281,600	242,000	-9.9%
M003	182,400	177,280	-2.9%
M025	757,600	689,600	-9.9%
M006	266,000	230,480	-15.4%
M007	338,160	302,640	-11.7%
M841	246,800	248,800	0.8%
M011	221,280	225,120	1.7%
M013	410,000	410,000	0.0%
M015	259,920	225,600	-19.6%
M017	250,720	232,160	-8.0%
M019	215,600	205,200	-5.1%
M020	215,680	203,200	-6.1%
M022	516,000	492,400	-4.8%
M911	181,280	186,240	2.7%
M751	150,720	140,080	-7.6%

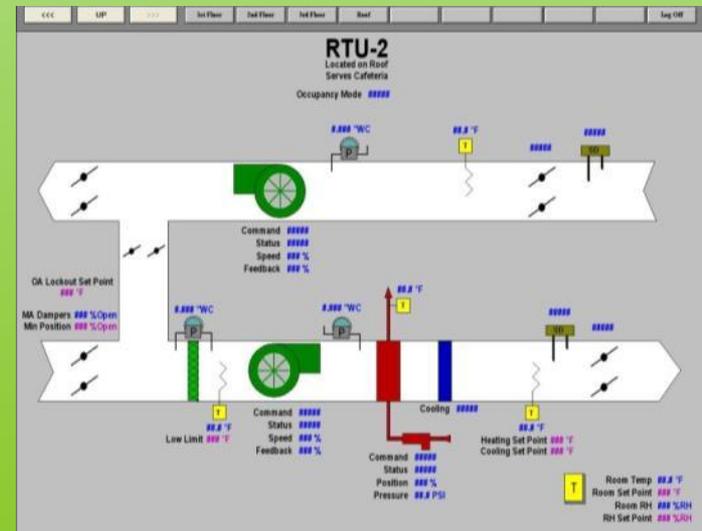
DCAS Energy Data Utilization

- **Populate Portfolio Manager and IBee monthly**
- **Baseline and monitor various school energy challenge programs**
- **Estimate electric savings from unplugged freezer/refrigerators**
- **Prioritize schools for energy audits, retrofits, operations & maintenance**
- **Select Renewable Energy Project**
- **Determine schools for demand response and plug load management**
- **Integrate with curriculum**



Energy Audits and Retrofit Projects

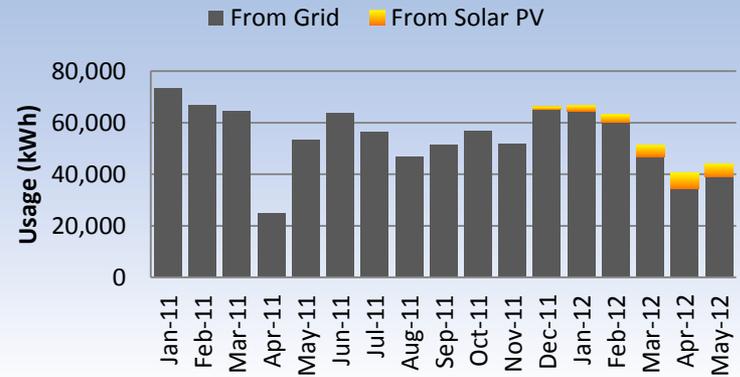
- Participate in and support DCAS audit and retrofit projects in schools
- Coordinate with SCA to prioritize lighting upgrade projects and ESCO Program
- Completed over \$6 Million ARRA Funded Projects at 100 schools in FY12
- #6 oil to #4 oil burner conversions



Renewable Energy

- Brandeis Education Complex 47kW PV
- New Horizons Middle School 47kW PV
- H. Lehman High School 257.6 kW PV (DCAS)
- JFK High School 149.5kW PV (DCAS)
- SCA Solar PV Studies in Manhattan

Electricity Consumption for New Horizon Middle School



New Horizon School PS-32 Plant overview

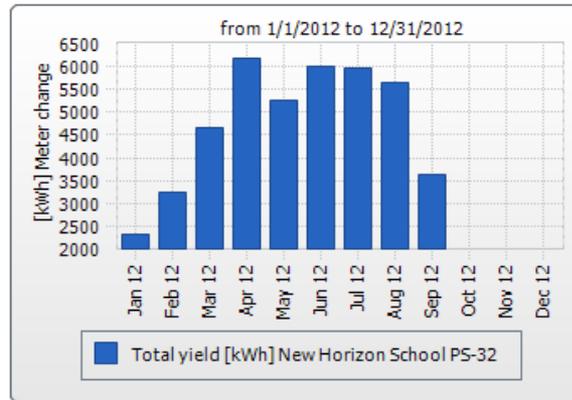
Date:
9/25/2012

Energy:
44,912.96 kWh



CO2 avoided:
31,439.07 kg

Reimbursement:
19,317.06



1/1/2012 - 12/31/2012

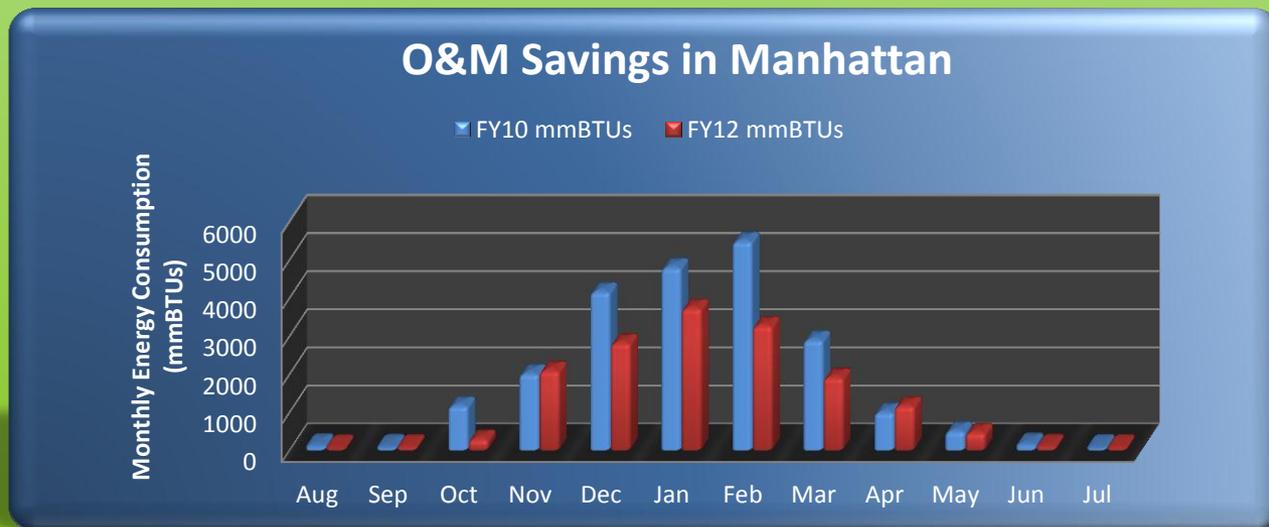
Demand and Plug Load Management

- **All energy consuming equipment installed must receive approval**
 - If PM rating is below 75 and/or electricity per sq ft is above 4, energy reduction plans are requested
 - All personal appliances must be removed
 - Buildings' energy consumption tracked to monitor plan's effectiveness
- **Chancellors Regulation A-850 requires removal of all personal appliances**
- **SchoolFood Summer Kitchen Energy Conservation (~50% of buildings)**
- **Demand Response program at 130 schools**
 - Provide data to facilities and O&M team



O&M Program

- Support DOE Energy Conservation program, goals and objectives
- Review Portfolio Manager ratings to optimize O&M activities
- Use data to prioritize maintenance activities across NYC DOE buildings
- Assess facility staff performance on energy conservation
- Develop Operations, Maintenance and Repair plan for schools
- Prioritize Retro-commissioning projects by DCAS & SCA



Energy Outreach and Fun!

- **Energy Conservation Calendar Competition**
- **Birdie USB Drives**
- **ThinkEco Modlets at Division of School Facilities headquarters**
- **Solar One Green Curriculum on National News!**



WSJ
Live

U.S. NEWS
Student Recruits in City's Energy Effort

As part of New York City's goal to reduce energy consumption by 30% in its buildings, officials are turning to an unusual resource: city students. WSJ's Sophia Hollander visits a Bronx classroom to find out how.

WSJ.com

Facebook Twitter Google+ YouTube Email

Staff Training on Energy Conservation

- **Building Operators Certificate Training (30 weeks) for all custodian engineers**
- **LEED EBOM training for all DSF Managers**
- **Energy Conservation training for school food managers and staff**
- **NYC DOE Sustainability Coordinator Training on Energy Conservation, Recycling, Ecology and Curriculum (3 trainings a year since FY11)**
- **Professional Development for Teachers with NYSERDA, CELF, Solar 1 and Cloud Institute**



School Curriculum

- **Solar 1 Green Design Lab at 50 schools since FY11**
 - **Solar 1 Energy Challenge (6 months)**
 - For the 50 schools in the program
- **Map Green Curriculum Resources to STEM, ELA, Common Core and post on the website**
- **Partner with Disney's Planet Challenge**
- **Participate in Green Schools Alliance Programs**
 - **Student Climate Conservation Congress (SC3)**
 - **Green Cup Energy Challenge (4 weeks)**
 - November 2012 for 2012-2013 school year
- **Partner with Junior Energy Enrichment Program **
- **New HS for Energy & Technology**



High School for Energy & Technology



Green Careers Path



- Straight to workforce
- More career and technical courses

Higher Education Path



- On to college
- More research courses and college preparation

Sustainability Initiative Website

Sustainability at DOE:

[Energy](#) | [Materials & Recycling](#) | [Green Curriculum](#) | [Ecology](#)

Get Involved:

[Greening Your School](#) | [Partner With Us](#) | [Donate](#)

search here...



The NYC DOE
Sustainability Initiative



Connect standards to real life!

Share Your Ideas

NYC DOE Sustainability Initiative is participating in NYC Simplicity Idea Market crowdsourcing program! Sustainability Coordinators can login [here](#) to share and vote on user-generated ideas to make our City greener and more efficient!

The Plan for Sustainability

In order to continue to be the leader in sustainable education and operate facilities, DOE plans to double its annual recycling by 2013, to reduce greenhouse emissions by 30% by 2017 from DOE buildings and operations, to provide curriculum resources to principals and teachers, to participate in citywide programs to set up programs to increase water efficiency.

News & Events

Join the Disney's Planet Challenge!
Disney's Planet Challenge (DPC) is available to classrooms nationwide within two competition tracks: [elementary school](#) (grades 3-5) and [middle school](#) (grades 6-8). You must [register](#) by December 23, 2011.

Pratt Industries Donates 40,000 Paper Recycling Bins!
Pratt Industries donated 40,000 recycling bins to be placed in every classroom at schools located in Manhattan, Bronx, and Staten Island! This donation was the collaborative efforts of Pratt Industries, Department of Education, GrowNYC of Sanitation.

Mr. Fix It Custodian Engineer Neal C. High School Running Smoothly!

[More News](#)

Sustainability at DOE:

[Energy](#) | [Materials & Recycling](#) | [Green Curriculum](#) | [Ecology](#)

Get Involved:

[Greening Your School](#) | [Partner With Us](#) | [Donate](#)

search here...



The NYC DOE
Sustainability Initiative

Videos

Save energy today! Click here to watch the citywide video and start saving energy in your school.



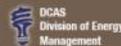
About the Sustainability Team

[Program Partners](#)

[Press Inquiries](#)

[Contact Us](#)

To build sustainable schools, T



Thank You!

Contact Information

sustainability@schools.nyc.gov

Sustainability Website

<http://schools.nyc.gov/sustainability>



New York Botanical Garden investments in training pay back in energy savings

- Training program emphasizes a systematic approach for each facility
- Example: Demand Response Event Procedure Check-list

PLM – Event Procedure:

	PLM	On Line
1. JPSC:		
• Set the chilled water supply temp at 10F above the current settings.	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize/cut speed of AC-1 & 2.	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize/cut speed of AC-8.	<input type="checkbox"/>	<input type="checkbox"/>
• Set Ac-7 controls at min output.	<input type="checkbox"/>	<input type="checkbox"/>
• Set cooling tower fans at low speed.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all humidifiers and dehumidifiers.	<input type="checkbox"/>	<input type="checkbox"/>
• Set CHW pumps VFD at low speed.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down electric water heaters (Chiller Room & Mans Room on 6 th Floor).	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
2. Pratt/Library:		
• Set the chilled water supply at 6-7F higher than normal.	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize outside air intake to all AHU.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down electric water heaters: (R-157 & Custodial Washing Room)	<input type="checkbox"/>	<input type="checkbox"/>
• Set all window A/C units at or above 78F, walk through the building couple of times, and check if everyone is complying.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Lecture Hall A/C unit and both AHU (if there are no scheduled events).	<input type="checkbox"/>	<input type="checkbox"/>
• Set the temperature in the stock-room 6 F above current setting.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Boiler # 3.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Electric Heater (Boiler Room).	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>

	PLM	On Line
3. Watson:		
• Set the chilled water supply at 10F higher than normal.	<input type="checkbox"/>	<input type="checkbox"/>
• Set RTU-1 and AC-1 air supply temp at or above 65F	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down electric water heaters.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off one of the two DT perimeter pumps	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all FC Units in all classrooms not in use	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
4. Pfizer:		
• Set the chilled water supply at 6F higher than normal.	<input type="checkbox"/>	<input type="checkbox"/>
• Set all the pumps VFD at lowest speed possible.	<input type="checkbox"/>	<input type="checkbox"/>
• Set the exhaust fans at lowest speed possible.	<input type="checkbox"/>	<input type="checkbox"/>
• Check all the re-heats and set them so they do not generate excessive heat load.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down heating system including HW pumps.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
5. Café:		
• Set the chilled water supply at 6F higher than normal.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off tent A/C units (if no events)	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize outside air intake.	<input type="checkbox"/>	<input type="checkbox"/>
• Keep the entire facility at or about 75F.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>

	PLM	On Line
6. Conservatory:		
• Set all A/C units including Satellite building at or above 78F.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Electric HW Heater.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
7. Visitor Center:		
• Set all the A/C units at or around 78F.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down all electric HW heaters.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off the restroom Exhaust Fans.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
8. ECAG:		
• Set all the A/C units at or around 75F.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down all electric HW heaters (both bldgs)	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
9. Stone Mill:		
• Optimize chilled water operations.	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize outside air intake.	<input type="checkbox"/>	<input type="checkbox"/>
• Keep the entire facility at or about 75F.	<input type="checkbox"/>	<input type="checkbox"/>
• Shut down heating system including HW pumps	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
10. Stone Catage:		
• Shut down condensing units:	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>

	PLM	On Line
1. HOC:		
• Set all window A/C units at or above 78F.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
2. Nolen Greenhouses:		
• Set all the VAV A/C units at or above 78F.	<input type="checkbox"/>	<input type="checkbox"/>
• All heating related pumps and equipment should be off by now.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off: EF-1, SF-1, TE1, SF	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Domestic water pumps and open the by-pass.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>
3. Operations:		
• Set all window A/C units at or above 78F.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off Electric HW Heater	<input type="checkbox"/>	<input type="checkbox"/>
• Minimize usage of electrical power tools.	<input type="checkbox"/>	<input type="checkbox"/>
• Turn off all unnecessary lights.	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Name: _____

Date: _____



New York Botanical Garden – June 22 Demand Response results



Favorable results are easily achieved when following this procedure:

Facility	Commitment (kW)	Savings achieved
IPSC	75	103
Pfizer Labs	50	140
Visitors Center	40	44
Watson Museum Complex	50	108

The Enid A. Haupt Conservatory at The New York Botanical Garden. Photo by Joseph DeSciose.

Demand Response – Overview of results and 2013 Outlook

What is DR?

Demand Response (DR) programs yield net revenue to agencies for reducing electrical load on high consumption days

2011 Results

2011 revenue to 11 City agencies almost \$550,000

- Delivered in excess of 20 MW commitment
 - Option 2: 16.7 MW DR reduction and \$366,100 payment
 - Option 3: 13.8 MW DR reduction and \$181,200 payment

2012 Results

2012 Results are still being calculated

2013 Outlook

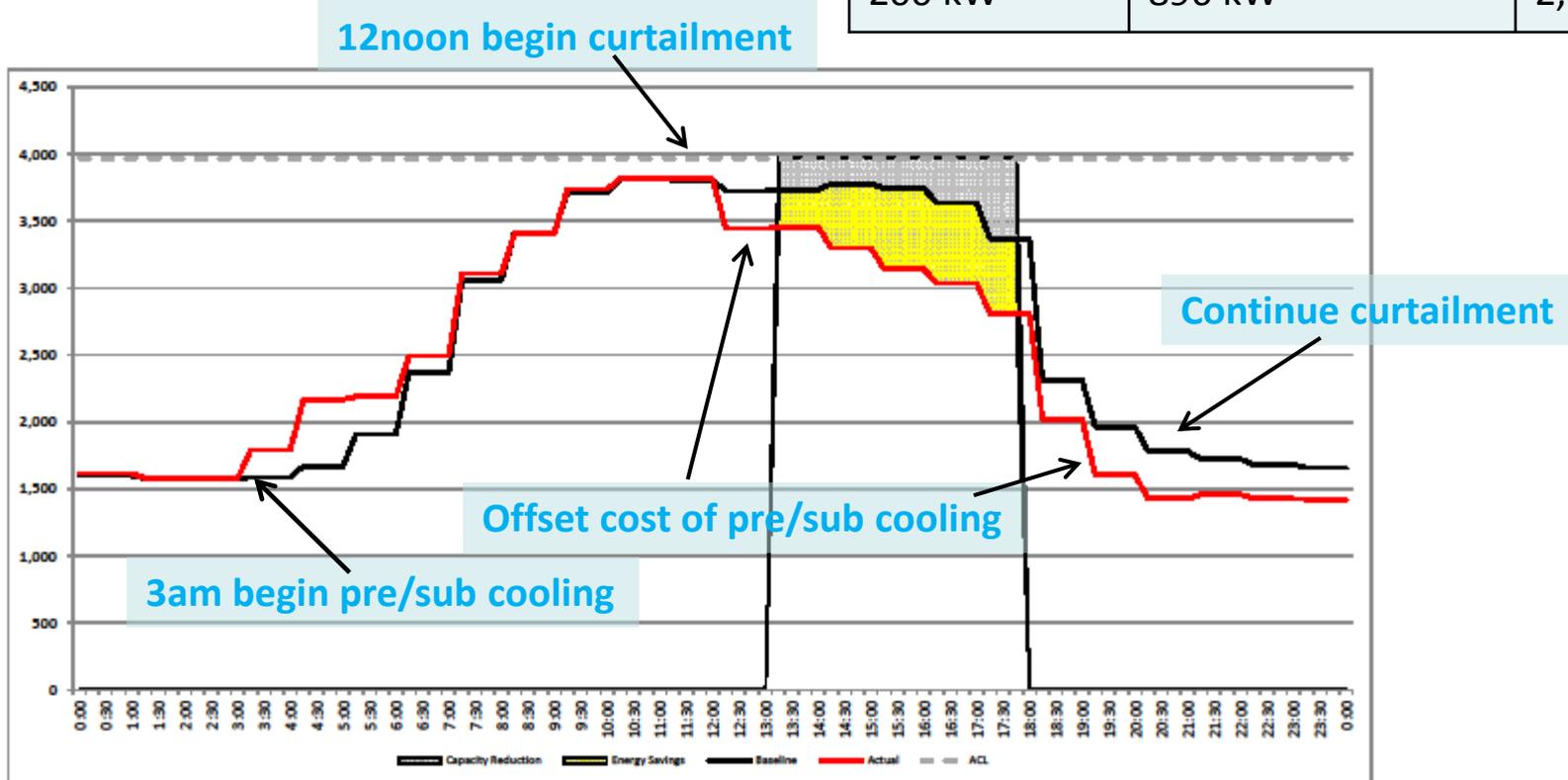
Goal to increase DR program to 50 MW

- Review current enrolled base to identify additional DR opportunities (summer 2013)
- Identify new opportunities presented by DM opt-out memo
 - High level consultant review complete
 - Field interviews and verifications – fall 2013
- Support DR protocol development to document facility actions required
 - In process and ongoing with enrolled agency/facility

Demand Response Case Study – Manhattan Municipal Building

NYC DCAS – Manhattan Muni Bldg

Commitment	Capacity Reduction	Energy Savings
200 kW	896 kW	2,523 kWh



June 22 — 1 PM-6 PM



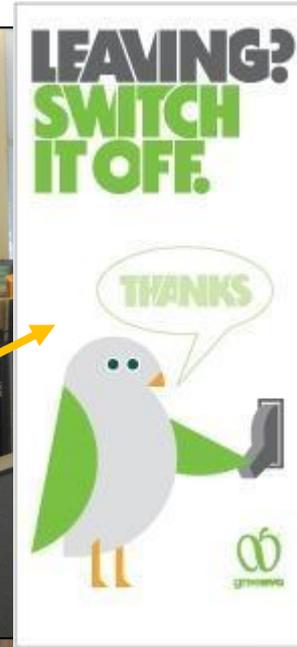
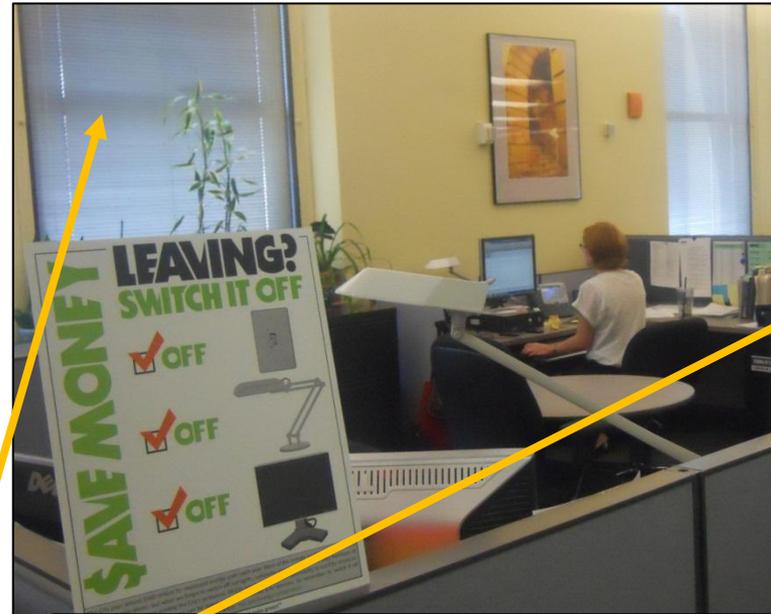
Demand Response Protocol: Teamwork and motivation drives success

Facility operations (Joe)

- Pre/sub-cool
- Shut down systems
- Switch to steam chillers
- Raise temp set-points

Facility maintenance (Jerry)

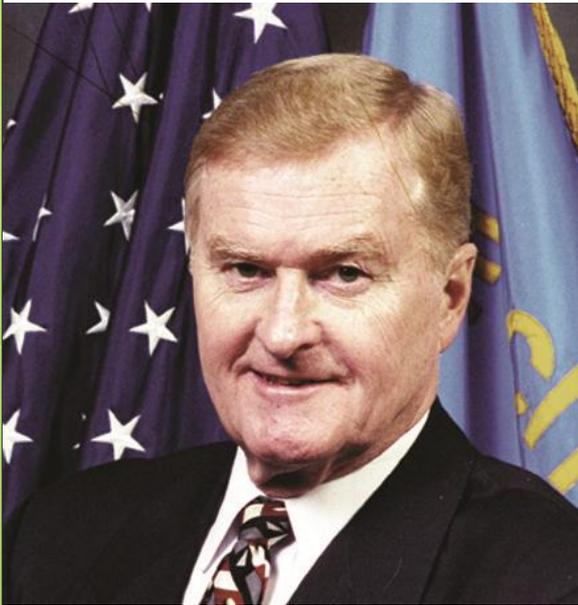
- Blinds drawn throughout building
- Switch it Off stickers throughout building
- Lights dimmed
- Motivated by: Birdie lapel pins, Recognition Ceremony



Department of
Sanitation

**Leadership, Teamwork,
and Commitment to
Achieve Energy Savings**

Leadership and Teamwork are critical to success



Early and Aggressive pursuit towards 30X17 Goal

DSNY's alternative fleet

CNG Brooms	20
CNG Refuse (includes what's on order)	43
CNG HRB Refuse	1
Diesel HRB Refuse (includes what's on order)	51
Diesel HEV Brooms	7
Diesel HEV Rack/Tire	14
Diesel HEV Refuse	8
Ethanol (E85)	211
HEV Passenger Cars	399
HEV Sport Utility Vehicles	266
Chevy Volt (gas/electric)	21
Navistar eStar (pure electric)	1
Ford Transit Connect (pure electric)	2
	1044

From 2007 -2012 we have dispensed 46,518,000 gallons of Biodiesel. B-5 & B20 w/ #1 & #2 oils.

From this we have displaced 2,325,900 gallons of Regular Diesel Fuel.

DSNY uses benchmarking and energy use data to prioritize building energy efficiency projects



- Using EC3 the energy team targets problem facilities
- Energy Team along with local facility managers scrutinize facility operations.
- Building operations efficiencies are addressed. (O&M, scheduling, and equipment updating)
- DSNY has 200 + facilities

26th Street Repair Garage



- DCAS, DSNY, and NYPA recently completed phase 3 of a comprehensive energy efficient retrofit project (pictured)
- First 2 phases completed in 2010 included 1,567 light fixtures and installation of rapid roll-up doors.
- Combined cost of \$5.5 million will result in **\$328,155** annual savings and **1,365** (TONm) reduction in GHG
- O&M, BMS, and building occupant awareness will result in energy savings and consumption reduction.
- Bringing 26th St BMS controls into the DSNY open source model.



DSNY is committed to Training & Education

- DCAS/CUNY training programs
- Direct manufacturer training.
- Currently developing a module for new employee orientation

Course Title	Completed
BOC-1	13
BOC-2	8
CEM	12

Flip D. Switch



"SAVE ENERGY"

Raising awareness about energy efficiency throughout the agency

- Voluntary Green Team Program
- Global tenant energy saving practices
- The Energy Manager will keep Green Team current through available training
- Show and tell style facility walkthroughs to help expose examples of inefficiencies

How Sanitation responds to Energy Management Incentive Programs

ARRA

- 10 sites designed for lighting control projects, boiler servicing, steam traps, occupancy sensors
- 2 of the 10 lighting control projects selected for implementation with automated controls were completed this year

EIAP

- Early phase was about Green Team Outreach and O&M
- EC3 monthly report distribution by the Energy Managers office helped maintain focus
- Positive uniform service participation and response
- First year EIAP results: **\$920,636** return to-date



Lessons we've learned

- Buy-in at the highest management level produced the best results at DSNY
- Coordinated energy strategies produced the greatest improvement
- Persistent energy outreach produces outstanding results with uniform services (i.e. tenants)
- Listen to different perspectives (i.e. tenants, trades, etc.)
- Energy Manager's EC3 data analysis is critical to agency efforts moving forward
- DSNY has become more hands-on with respect to the energy audit process and ECM/RCM selection

Upcoming initiatives... what's next?

- Solar Hydronic Systems/ Domestic Hot water / HVAC Heating
- Currently evaluating training programs that fit into DSNY's overall BMS strategy
- Accessing equipment manufacturer training options for various trades
- Procuring equipment preconfigured to meet DSNY's BMS strategy

Main Challenge:

- Currently assessing options to streamline the procurement cycle - avoid DSNY, DCAS, Controller clerical bog down



Back to basics...managing utility accounts from bottom to top



Reminder: Energy Team Tasks

- Check monthly energy reports.
- Manage all utility account changes for your agency.
- Gather annual information for the Heat, Light, and Power (HLP) budget for your agency.
- Distribute energy conservation outreach materials and communications throughout your agency.

Seasonal announcements and reminders help you avoid fees and lower your agency's costs

NYC Heating Season Guidelines 2012-13

FOR ALL BUILDING OCCUPANTS

Five simple steps to conserve energy while remaining comfortable at your workplace:

1. Open blinds, shades, and drapes during daylight hours in order to take advantage of natural light and heat provided by the sun.
2. Arrange desks, chairs and workstations away from windows and outside walls to avoid cold drafts.
3. Keep radiators and hot-air registers clear and free of obstructions such as plants.
4. Make sure that window air conditioners are properly sealed.
5. Do not use supplementary heating equipment such as electric or kerosene space heaters. These are fire hazards and are absolutely prohibited.

FOR FACILITY MANAGERS

During the heating season, managers of City facilities must follow these guidelines:

1. Building temperatures must be maintained no higher than 68 degrees F when heating systems are on. The City will not allow daytime temperatures of up to 72 degrees in hospitals.
2. Clear radiators and boilers.
3. Maintain proper settings. Heat timers are working.

Be sure to distribute among facility staff

Remainder of... Make sure your oil tanks... for dual fuel services will result in... classification.

For... source from the US Department of Energy on... costs: [from_combustion.pdf](#).

These provisions are to be implemented consistent with the Health Code. City buildings and spaces which have been exempted from these requirements will continue to be exempt.

Please contact the DCAS Energy Management at (212) 669-2568 with any questions or visit our website at www.nyc.gov/energy-conservation.

2012-2013 Interruptible (Dual Fuel) Reminder

Agencies with facilities that have interruptible (natural gas) heating: it is important to prepare burners, fuel supply, and switching equipment.

Checklist:

- Ensure ability to switch to the alternate fuel when the temperature drops, or when the cold weather arrives. A minimum 10 day supply of alternate fuel is required.
- Notified by the utility company.
- Requires an affidavit attesting that there is adequate supply of alternate fuel for use for the alternate fuel, that the equipment for using the alternate fuel is operable, the customer has read and understands the customer obligations, and understands the alternate fuel requirements.
- Registration of all interruptible accounts. Visit energysites.com/nonfirm-communication to register and submit contact information. DEM will be in for new communication options.
- Participate in any and all tests. **A test failure is counted as a violation.**
 - Con Edison test date (limited to accounts that switch by notification) is to be determined (late October, November), with 4-6 hours notification.
 - NGED tentative test date (applies to all accounts) is Tuesday, Dec. 4, 2012 from 6 am to 2 pm.
- Provide facility personnel with the utility contact information (below). In the event of a failure to interrupt, notify the utility company and DCAS Energy Management immediately. The utility must be notified of a failure within ONE HOUR of its occurrence, and repairs must be made within 24 hours. (The utility may grant an extension of up to seven days if a necessary part is not available.) A financial penalty for a failure to interrupt gas can be charged until the violation is corrected.
- "Two strikes and you're out" rule: Two test failures will result in a firm service at higher rates.
- Only one exception will be allowed for a lack of alternate fuel.
- Utility contact information:
 - Con Edison: Gas Customer Training
 - National Grid: 718-403-3333
- For Con Ed has an eLearning module. Go to [coned.com](http://www.coned.com) - choose the Document Center from the left-hand menu and click on the page to "Dual Fuel Interruptible".

Questions are welcome after the meeting

Con Ed Interruptible Accounts

Notification

- At least six (6) hours advance notification:
 - Recorded telephone message
 - Fax notification
 - Email
 - Text message (Limited # of characters)

Pre-Season Customer Actions

- Provide up-to-date contact information
 - Telephone and fax (24 hours/7 days per week)
 - Email
 - Text message Number
- Ensure operational dual fuel equipment
- Adequate supply of alternate fuel

Customer Actions During An Interruption

- Switch to alternate fuel prior to start of interruption
- Remain on alternate fuel until notified by Con Ed
- Report equipment failures within 1-hour
 - Telephone hotline: 212-460-3459
 - Fax: 718-246-3241
 - Email: EM-Gasinterruptions@coned.com
- Complete repairs within 48 hours
- Provide documentation of completed repair

Consequences of Non Compliance (ConEd Accounts)

Unauthorized gas usage charges

Unauthorized Gas consumed during interruption beyond 2 therms per hour for ignition charged at the higher of:
9 times the Interruptible Gas Rate
OR
2 times the cost of gas plus transportation

Two Violation Rule

Failure to comply for two interruption periods:

- Assessed unauthorized usage charges
- Transferred to firm service classification
- Remain on firm rate for remainder of heating season plus 12 months

Exception To The Two Violation Rule

One (1) documented equipment failure exception permitted each heating season which may not count towards the Two Violation Rule

- 3 conditions must be satisfied for 1-time exception:
 - Notify Con Ed within one (1) hour of the failure
 - Repair faulty equipment within 48 hours
 - Provide documentation of completed repair and demonstrate ability to comply with ongoing or future interruption
- Unauthorized usage charges assessed

National Grid – Interruptible Account Info

National Grid Contact info:

718-403-3134

or

800-930-5005 for Far Rockaways

2012-2013 Interruptible (Dual Fuel) Reminder

Agencies with facilities that have interruptible (natural gas) heating:
it is time to prepare burners, fuel supply, and switching equipment.

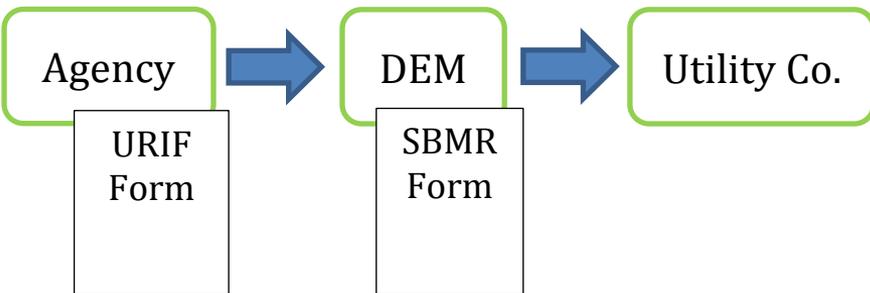
Checklist:

- Check dual fuel burners to ensure ability to switch to the alternate fuel when the temperature drops, or when the utility company requests a switch.
- Fill your facility's oil tanks before the cold weather arrives. A minimum 10 day supply of alternate fuel is required.
- Submit any information requested by the utility company.
- For certain accounts, Con Edison requires an affidavit attesting that there is adequate supply of alternate fuel for that location, adequate storage for the alternate fuel, that the equipment for using the alternate fuel is operable and will be maintained, that the customer has read and understands the customer obligations, and understands the consequences of failing to meet alternate fuel requirements.
- National Grid *requires* online registration of all interruptible accounts. Visit <https://ngrid.myenergysites.com/nonfirm-communication> to register and submit contact information. DEM recommends *Opting In* for new communication options.
- Participate in any and all tests. *A test failure is counted as a violation.*
 - o Con Edison test date (limited to accounts that switch by notification) is to be determined (late October, November), with 4-6 hours notification.
 - o ~~NGrid~~ tentative test date (applies to all accounts) is Tuesday, Dec. 4, 2012 from 6 am to 2 pm.
- Provide facility personnel with the utility contact information (below). **In the event of a failure to interrupt, notify the utility company and DCAS Energy Management immediately.** The utility must be notified of a failure within **ONE HOUR** of its occurrence, and repairs must be made within 48 hours. (The utility *may* grant an extension of up to seven days if a necessary part is not available.) **A financial penalty (9 times the cost of gas) can be charged until the violation is corrected.**

Other information:

- "Two strikes and you're out": If two violations occur in the heating season, the customer will be transferred to firm service at higher rates for the remainder of the heating season and the next 12 months.
- Only one exception will be allowed, and only for a documented mechanical failure; there is no exception for a lack of alternative fuel.
- Utility contact information
Con Edison: Gas interruption hotline: 212-460-3459, fax: 718-246-3241, email: EM-GasInterruptions@coned.com
National Grid: 718-403-3134 (800-930-5003 for facilities in the Far Rockaways)
- For Con Ed has an eLearning tool as a guide through the notification process. Go to www.coned.com – choose the Document Center from the 'About Us' drop down menu-then scroll down the page to "Dual Fuel Interruptible Notification Gas Customer Training Tool".

How to: URIF form, revised



URIF = Utility Request Information Form

SBMR = Service Billing Modification Request

URIF Revisions:

- Mostly the same information as prior version
- A few more choices on Action Requested (select from drop-down list)
- If action is Termination, include reason
- Include OEC ID for changes in existing facilities

~~Fax or mail in~~

Utility Request Information Form
 Division of Energy Management
 Department of Citywide Administrative Services

DCAS
Division of Energy Management

Complete this Utility Request Information Form (URIF) for any change in meter or billing for electricity, gas or steam services. DEM will use this URIF to create a Service and Billing Modification Request (SBMR) and will submit the SBMR to the Utility Company. DEM will provide confirmation once the service change is made by the Utility Company; it is your job to check the energy reports provided by DEM to ensure that the Utility Company made the correct change. Submit this form with your Agency's Authorization (via email inclusion of Agency Energy Manager or Assistant Commissioner; cover letter optional), to: Marilyn Steeps (msteeps@dcas.nyc.gov) [DCAS Division of Energy Management, 1 Centre St., 17th floor, NY 10007; 212 669-3623; fax 212 669-3160]

Requesting agency or institution: _____

ELO name: _____ ELO Telephone: _____ ELO email: _____

Today's date: _____ Effective date of Request _____

Facility Identifiers:
 Facility Name: _____ Facility Address: _____
 OED ID: _____ B-B-L: _____

Facility access staff-person: Name: _____ Telephone: _____

Part of facility supplied by account(s): _____ Is facility leased: No

Type of utility service (select just one, file a URIF for each action requested): Electricity Gas Steam

Action Requested (select just one; file a URIF for each action requested) Account Change of Supplier (Sales Type Change)

* For a new Con Ed gas and/or electric meter, identify work order request number (CORS ID#): _____

**Agency that account is being transferred to: _____

***Reason for termination: _____

Utility Company: Other _____

List of Account and Meter #s (if the Action Requested affects more than one account or meter, enter each in its own cell)

Account Number(s):	Meter Number(s):

Service Requirements:	Gas (check all that apply)	Steam (check only one)
Electricity (enter amount) _____ kW	<input type="checkbox"/> Heating	<input type="checkbox"/> General Rate (< 100 mlbs/mo)
Lighting: _____ kW	<input type="checkbox"/> Cooking	<input type="checkbox"/> Annual Power Rate (> 100 mlbs/mo)
Air Conditioning: _____ kW	<input type="checkbox"/> Hot Water	
Motors _____ hp	<input type="checkbox"/> Firm Service	
Other equipment _____ kW	<input type="checkbox"/> Interruptible	

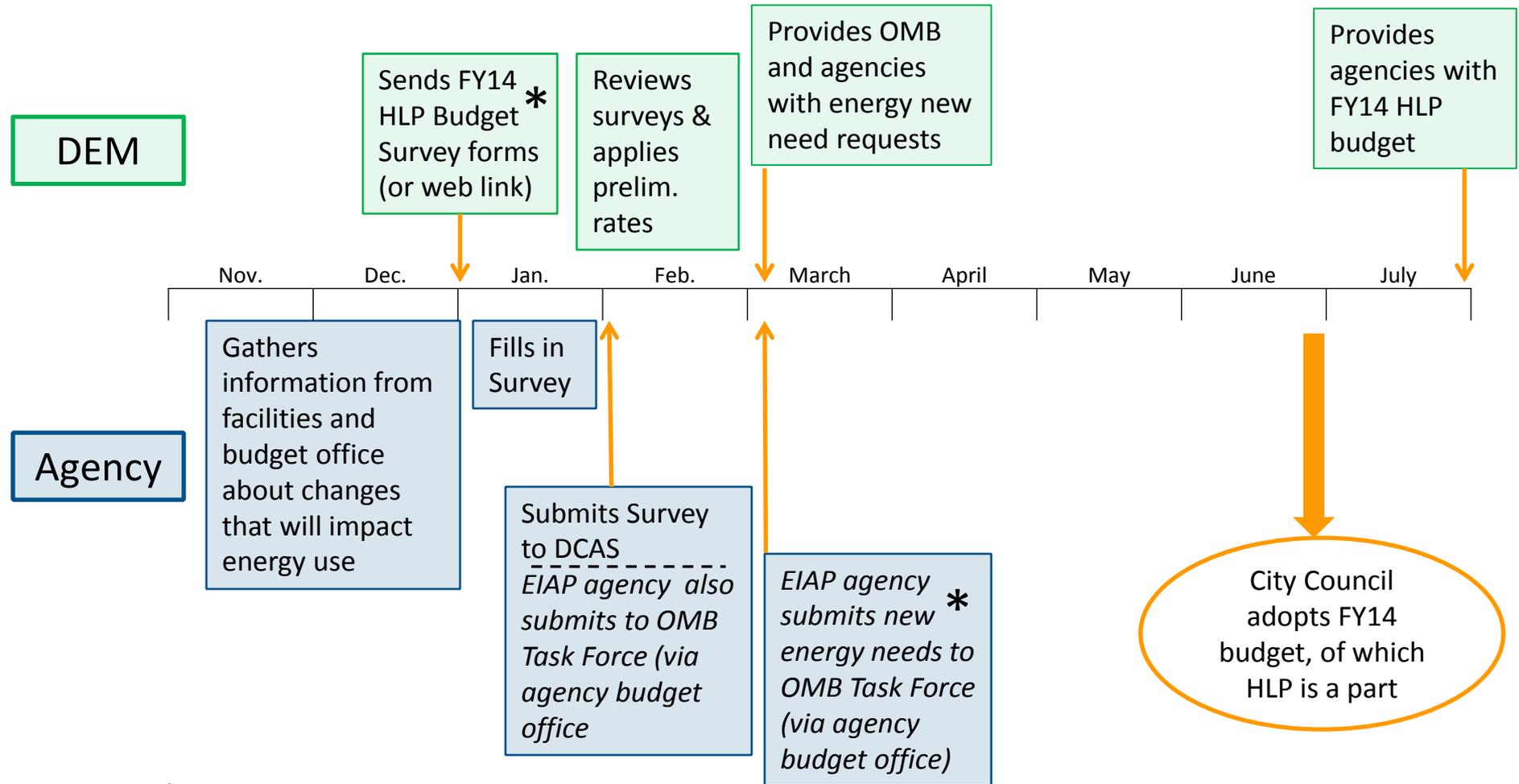
NOTES

Any bills received after the effective date of the URIF should not be paid; send to DCAS Division of Energy Management; attention Marilyn Steeps.

If a new service is required or additional load is being added to an existing service, the Utility Company must be contacted by your agency or your agency's consulting engineer, to obtain a "Service Layout" or a ruling on the adequacy of the existing service to accommodate the new load.

For information on inspections, and other procedures and rules for the installation of new electric or gas service, please check the Department of Buildings' website, including but not limited to entries under "About The Buildings Department/Frequently Asked Questions"; and "Contact the Department".

Energy Budgeting basics #1



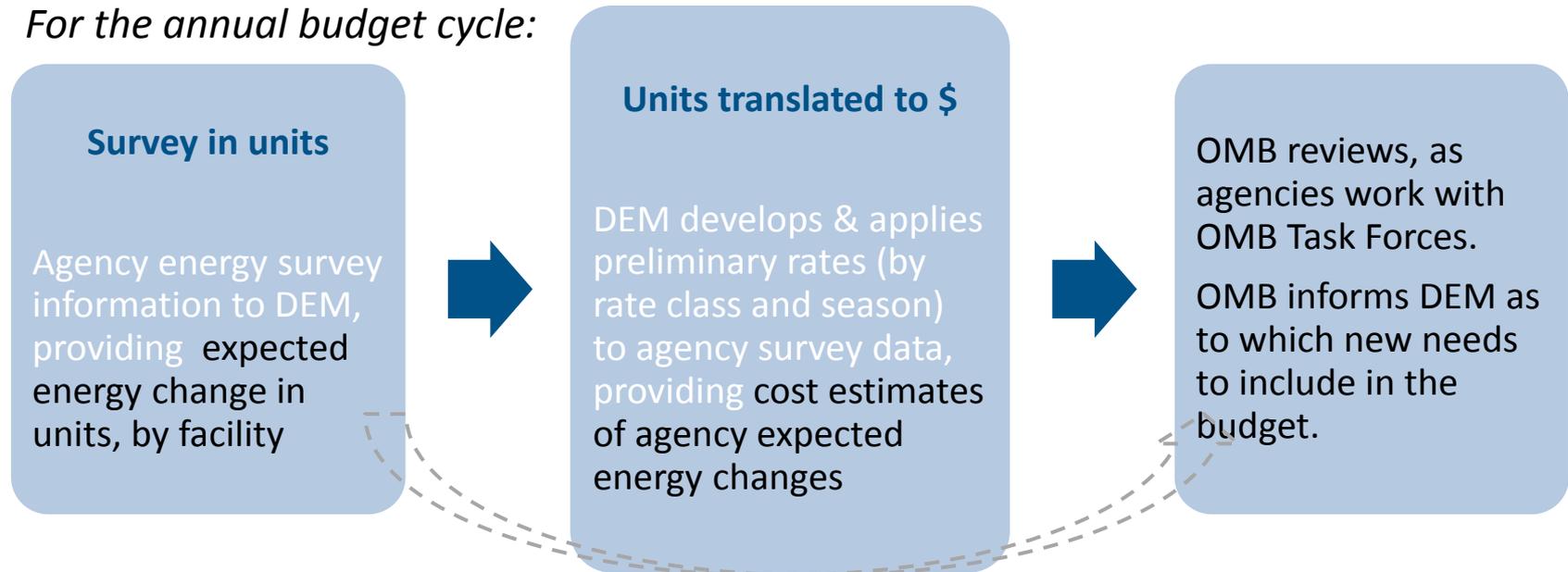
* New this year:

DEM working with DCAS IT to provide an input screen for survey information, in place of the excel sheets. No change in the kind of information requested, but IDs for existing facilities will come from a drop-down list.

EIAP agencies need to provide information from energy surveys to their OMB Task Force as a New Need.

Energy Budgeting basics #2: New needs request for EIAP agencies

For the annual budget cycle:



And similarly for energy changes during the fiscal year:

- Go to OMB with a New Need request if you know there will be an increase in energy costs
- Check with DEM for rate information (to translate needed units into expected costs)
- Let DEM know if a New Need request has been approved

Energy Budget requirements

Task 1 / Tasks 1&2 file, Green tab	<u>Addition or Deletion of Facilities.</u> List all facilities your agency plans to add or surrender. Include estimated date of addition or surrender, and anticipated annual energy consumption. <i>Additional needs for new space will be reviewed by OMB.</i> Note: Information for 6 additional months, through December 2013, is required for the addition or deletion of facilities 500 kW or greater (or approximately 100,000 sq. ft. of office space), to plan for electricity load. The New York Power Authority can charge more for load additions not reported in advance
Task 2 / Tasks 1&2 file, Orange tab	<u>Change in Energy Use at Existing Facility.</u> List anticipated increases or decreases in energy use at existing facilities. <i>Requests for increased usage will be reviewed by OMB.</i> Consider the impact of your agency's program modifications, capital projects and acquired equipment on energy use. Review projected agency operational changes (e.g., extra shifts, longer hours, weekend operations, computerization, construction and rehabilitation, downsizing, relinquishments, etc.) which will impact energy use. These must be identified so they can be incorporated into the energy budget. Unidentified changes will be reported, and agencies may be held responsible.
Task 3 / [Task 3file]	<u>Review of all Listed Accounts.</u> Review all accounts/facilities assigned to your agency, and report to DEM any that do not belong to your agency. Use the Active Energy Account List file [PDF version for viewing layout; excel version for submission] <u>and mark the last column (Column J) if you find any listed account that should not be the responsibility of your agency.</u> <i>For any accounts checked, you must file an SBMR to either terminate or transfer those accounts if you have not done so already.</i>



Same process as last year for reviewing account list

New process for submitting information on Additions/Deletions/Changes

- Same 'form' for submitting any kind of usage change
- ELO will fill out information within EC3
- For changes at existing locations, ELO will select location from drop-down list, and add description of expected change-

Energy Management Coming Attractions

- ✓ Release of Annual Greenhouse Gas Inventory
- ✓ Operations & Maintenance plan release
- ✓ Increased demand response participation opportunities
- ✓ New blended learning training courses
- ✓ New award categories to compete for at annual O&M Ceremony
- ✓ Solar power purchase agreement launch
- ✓ Further ramp up of audit & retro-commissioning program to feed pipeline of comprehensive retrofits

**Let's take this show on
the road!**



Thank you!...and stay tuned for:



- Heat, light, & power budgeting discussion
- Minimum demand billing information
- Other account, billing or budgeting questions welcome