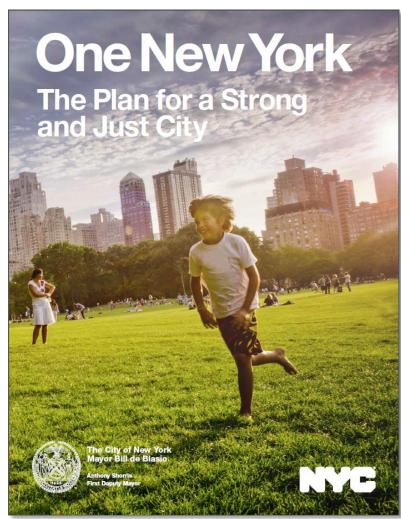
NYC Carbon Challenge Program Overview June 2019 Mayor's Office of Sustainability Sustainability in New York



OneNYC



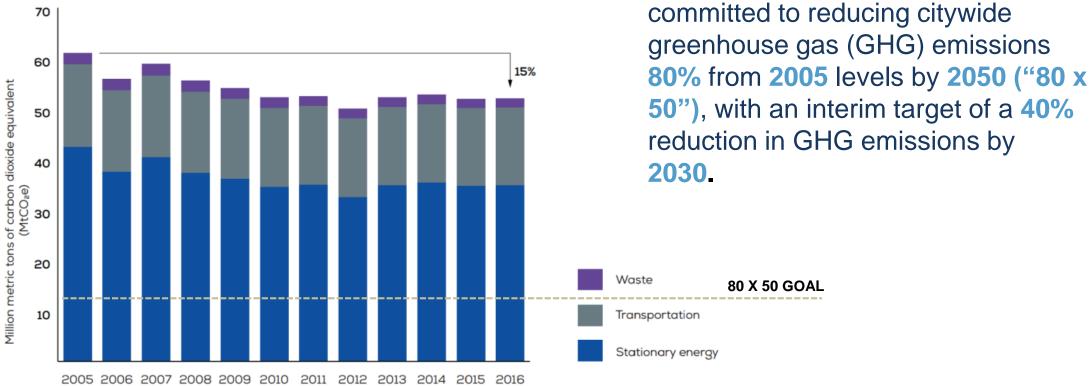


Released April 2015:

- OneNYC is a comprehensive plan that seeks to prepare New York City for its fifth century
 - Vision 1: Our Growing, Thriving City
 - Vision 2: Our Just and Equitable City
 - Vision 3: Our Sustainable City
 - Vision 4: Our Resilient City
- The Plan envisions how we want our City to look in ten years, twenty years, and beyond
- We articulate the goals and initiatives designed to achieve that long-term vision
- OneNYC connects with other City efforts, including Tenyear Capital Strategy, Executive Budget, Center for Economic Opportunity's Poverty Report
- More information can be found at nyc.gov/onenyc

New York City's 80 x 50 Commitment

70 |

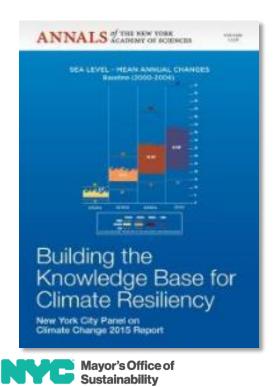




In September 2014, New York City

Why 80 x 50?

- According to the IPCC, developed nations must reduce greenhouse gas emissions 80
 percent by 2050 to avoid catastrophic impacts of climate change
- The NYC Panel on Climate Change (NPCC) projects increased chronic climate hazards and increased impact from extreme water events



By the 2050s:

- 4.1°F to 5.7°F increase in average temperature
- Number of days in NYC above 90° could triple
- Sea levels likely to rise 1-2 ft.; maybe 2½ ft.

OneNYC 2050

New York City's long-term strategy and Green New Deal to build a strong and fair city. The plan includes 8 goals and 30 initiatives to secure our city's future:





A Livable Climate

New York City will lead a just transition to achieve carbon neutrality and adapt the city to withstand and emerge stronger from the impacts of climate change.

- 20 Achieve carbon neutrality and 100% clean electricity
- 21 Strengthen communities, buildings, infrastructure, and the waterfront to be more resilient
- **22** Create economic opportunities for all New Yorkers through climate action
- **73** Fight for climate accountability and justice



NYC's Green New Deal

Our commitments to **climate action** and **inclusive growth** will drive an additional **30% reduction in greenhouse emissions by 2030** and spur **tens of thousands of good-paying jobs.** To do this, New York City will:



Achieve <u>carbon neutrality</u> and <u>100% clean</u> electricity.

Require **buildings to cut their emissions**.

<u>Hydro-power</u> City government.

Mandate **organics recycling** citywide.

<u>Reduce waste</u> and carbon-intensive consumption.

Align with **Sustainable Development Goals**.

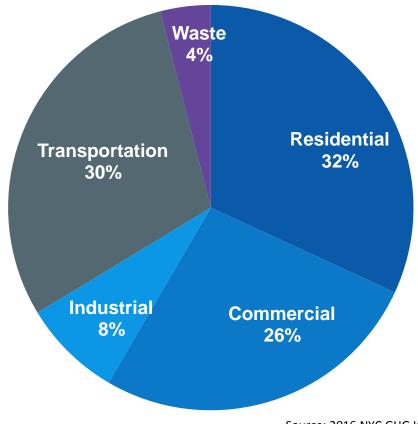


The Importance of Existing Buildings

Improving energy efficiency in buildings is critical to achieving 80 x 50.

- 66% of NYC's GHG emissions come from the energy used in buildings
- 90% of NYC buildings that exist today will still exist in 2050
- 26% of New York City's Greenhouse Gas Emissions is attributable to commercial buildings

2015 NYC GHG Emissions by Source



Source: 2016 NYC GHG Inventory



NYC Carbon Challenge

A cross-sector voluntary leadership program to reduce greenhouse gas emissions by 30% or more in ten years.

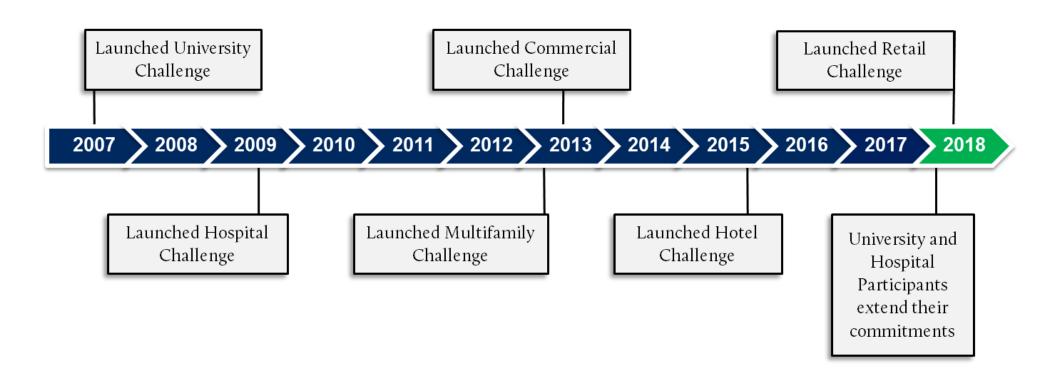
- 18 leading universities
- **9** largest hospital organizations
- **43** commercial firms
- 22 residential management firms
- 19 hotels
- **13** retail organizations

- 510 million square feet
- **9%** of citywide square footage
- **580,000** metric tons of carbon reduced
- **\$190 million** in energy cost savings to date
- 1,600 direct jobs created





Program Timeline







NYC Carbon Challenge – Participants

Universities

- 1. Barnard College
- 2. Berkeley College
- 3. City University of New York
- 4. Columbia University
- 5. The Cooper Union
- 6. Fashion Institute of Technology
- 7. Fordham University
- 8. The New School
- 9. New York University
- 10. NY School of Interior Design
- 11. Pace University
- 12. Polytechnic Institute of NYU
- 13. Pratt Institute
- 14. The Rockefeller University
- 15. School of Visual Arts
- 16. St. John's University
- 17. Wagner College
- 18. Weill Cornell Medical College

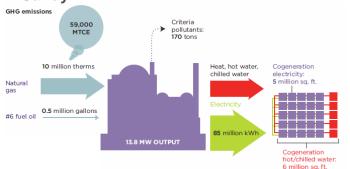




Cost Effective Strategies: Universities & Hospitals

1. Cogeneration

➤ New York University –13.8 MW cogen plant that also kept the lights on during Hurricane Sandy



3. HVAC Upgrades

- ➤ New York Hospital Queens Installed a 1200 ton chiller replacement with VFDs that uses 17% less electricity
- > Fashion Institute of Technology Installed a 3,500 ton capacity cooling tower with VFDs



2. Fuel Switching



- Columbia University
 Converting 75 residential
 buildings from No. 6 fuel
 oil to gas
- The Rockefeller University Eliminated nearly 3 million gallons of No. 6 fuel oil

4. Behavior Change



St. John's University Focusing on student outreach and behavior change as a central part of the strategy





Benefits of Participation

- Promotion and recognition for participation in program.
- Demonstrate local commitment to greenhouse gas emissions reductions.
- Participate in a platform for peer exchange of best practices between participants and building stakeholders.
- Gain access to tools and resources offered through the Mayor's Office.







Every day, our work only grows to build an even stronger, more sustainable, more resilient, and more equitable city.

- Mayor Bill de Blasio



Q&A

Samuel Man Policy Advisor Mayor's Office of Sustainability sman@cityhall.nyc.gov







#ONENYC

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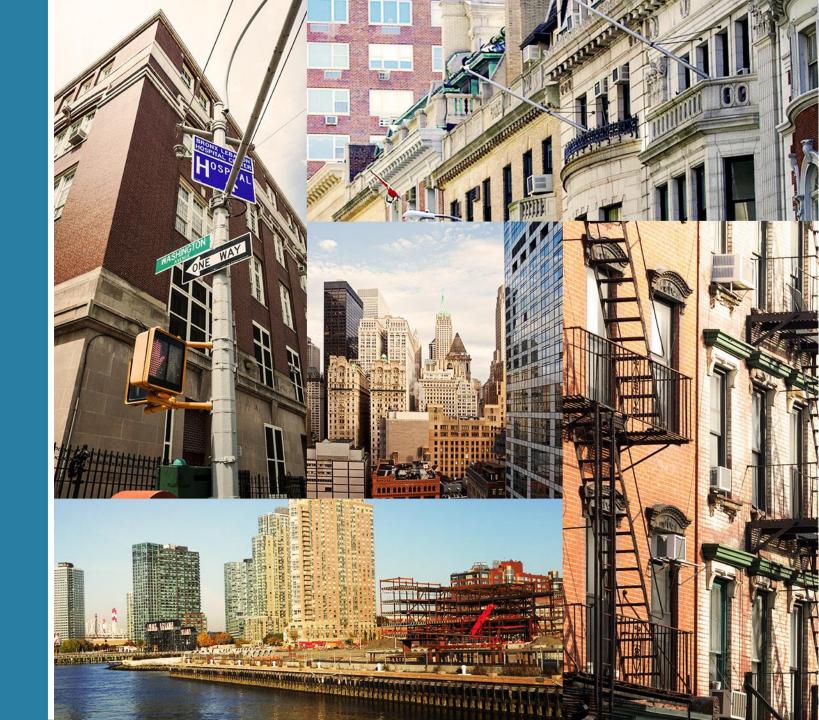
Free, personalized advisory services to streamline the process of energy efficiency improvements





We're already working with **6,500 buildings** across all five boroughs

2,700 buildings completed at least one project







- Work one-on-one to understand needs
- Connect you with qualified contractors
- Find cash incentives and financing
- Train your building staff
- Support you every step of the way

- Privately owned NYC buildings 5+ units
- No commitment of sign-up required
- Objective advice on all energy and water needs