

# **NYC Local Law 97 for Houses of Faith**

**Bricks and Mortals LL 97 Public Forum  
March 1, 2022**

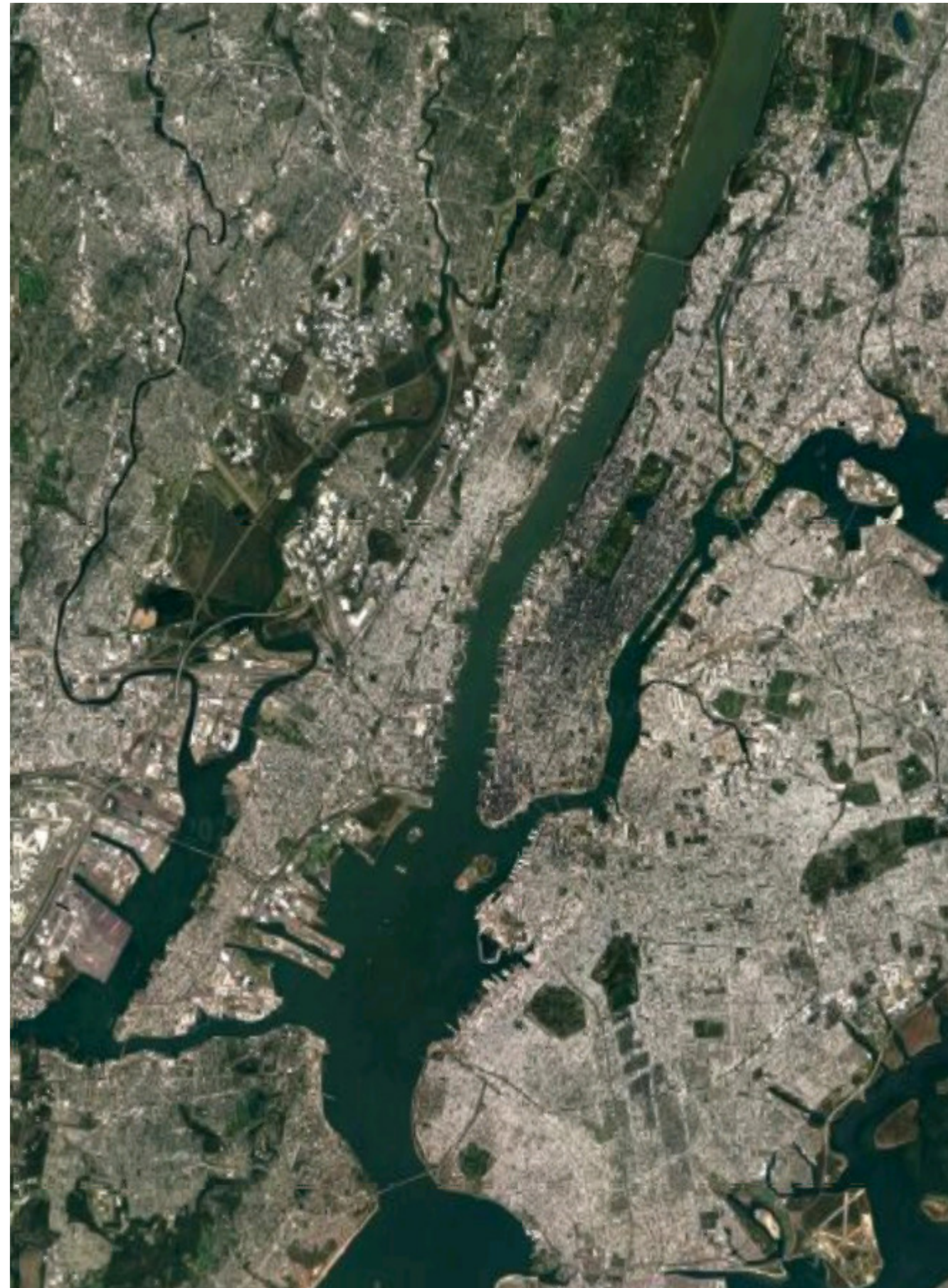
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# OUTLINE - LL97 for Houses of Faith



- **What is NYC Local Law 97 (LL97) ?**
- **Why LL97 ?**
- **What Houses of Faith are covered by LL97 ?**
- **What are LL97 Prescriptive Measures?**
- **Flexible Paths and Penalties**
- **Landmarked Houses of Worship**
- **Multiple Occupancy Groups on a site**
- **Opportunities for smaller Houses of Faith**
- **Where can you learn more about LL97?**
- **Q&A with Ms. Fatou Jabbie, NYC Accelerator**



# What is NYC Local Law 97?



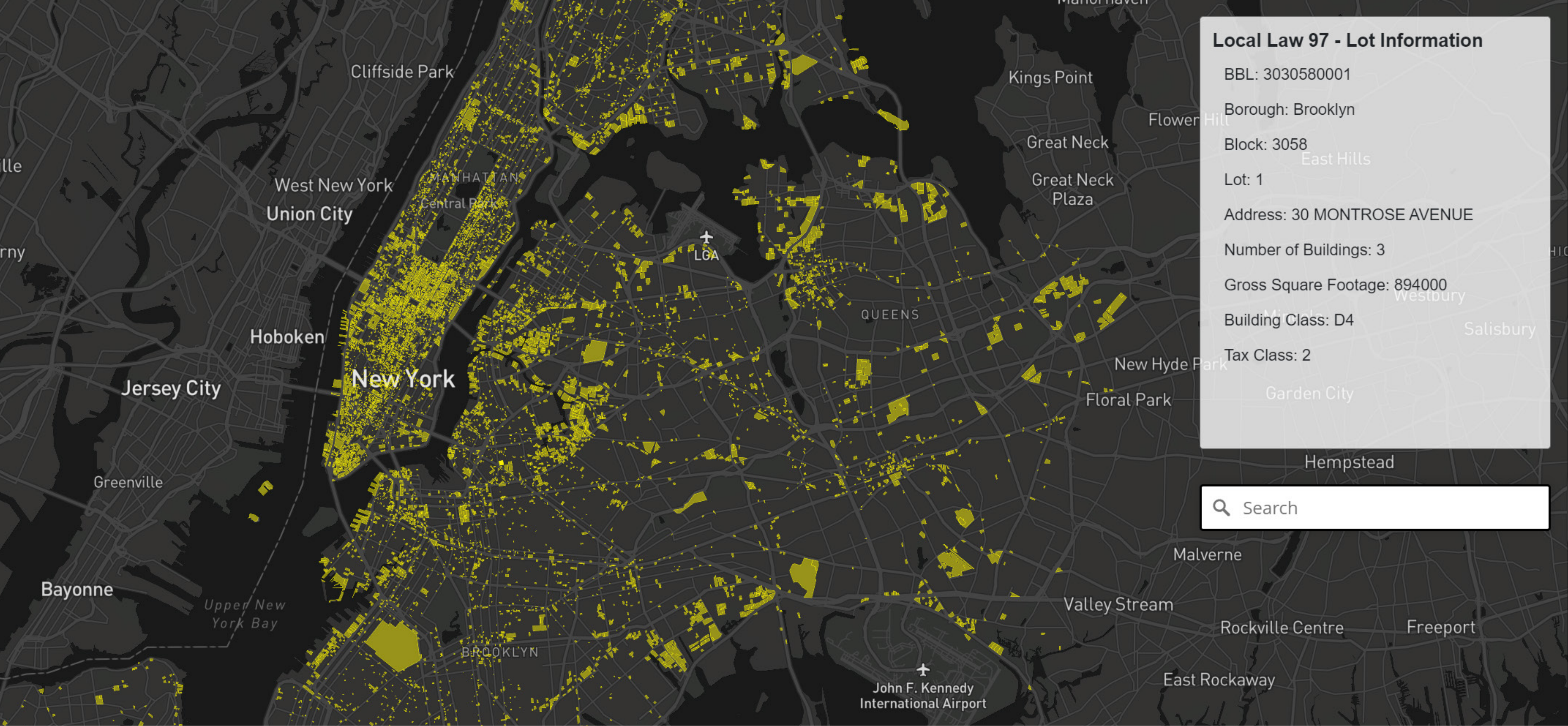
**Local Law 97 of 2019 (LL97)** is the centerpiece of New York City's landmark Climate Mobilization Act of 2019 (CMA), also known as the NYC Green New Deal. LL97 and subsequent amendments will place strict limits on greenhouse gas emissions (GHG) from all buildings larger than 25,000 square feet (SF).

**By 2024 buildings larger than 25,000 SF** have to limit the carbon that their building emits into the atmosphere by reducing the use of fossil fuels and non-renewable electricity in heating and cooling, lighting and more...

*This helps NYC reduce 80% of its GHG emissions by 2050.*



# LL97 - Map of Covered Buildings



Source: <https://www1.nyc.gov/assets/sustainablebuildings/html/LL97-n-LL33-map.html>



# LL97 - Climate Mobilization Act

**The NYC Climate Mobilization Act - a.k.a. NYC Green New Deal** *is the name of a package of laws passed by the New York City Council on April 18, 2019.*

**Local Law 97** *(the building emissions law) is the centerpiece of the package and by far the most impactful.*

*Local Laws 92 & 94 – Green Roofs & Solar PV: Requiring green roofs solar PV systems on certain new construction and renovation projects.*

*Local Law 95 – Building Labeling: Adjusting metrics used for letter grades assessing building energy performance.*

*Local Law 96 – PACE: Establishing clean energy financing tools for building owners.*

*Local Law 98 – Wind Energy: Obliging the Dept. of Buildings to include wind energy generation in its toolbox of renewable energy technologies.*

# Why LL97? NYC Goals

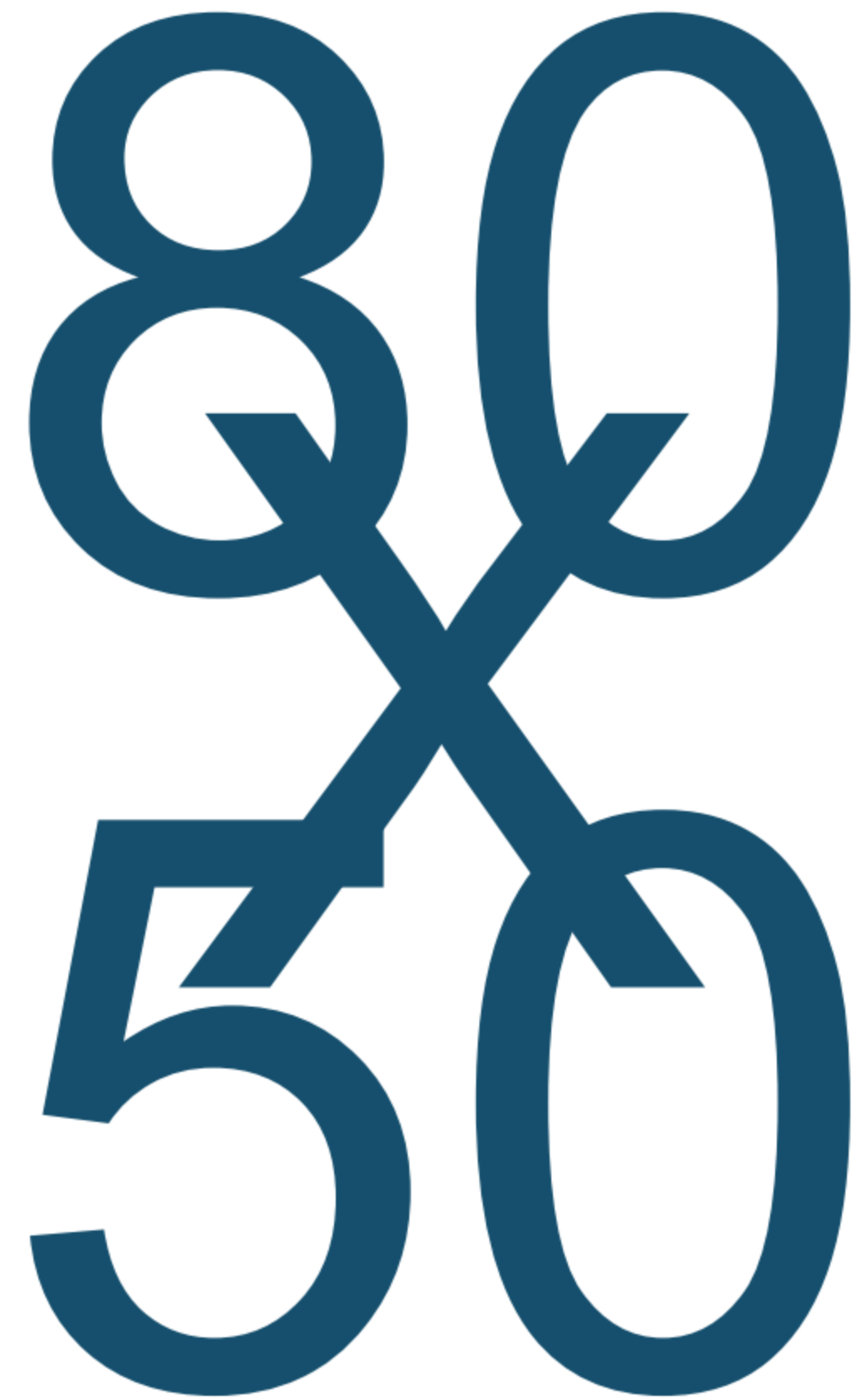


*To reduce operational greenhouse gas emissions (GHG) of mid-size and large existing buildings (i.e. heating, cooling, lighting, hot water, etc.) and meet New York City's and global climate action plan commitments;*

*To expand the energy retrofit market by approximately \$20 billion from now through 2030, which will create approx. 141,000 design, engineering, and construction jobs; and*

*To provide valuable building upgrades and energy savings to building owners and tenants.*

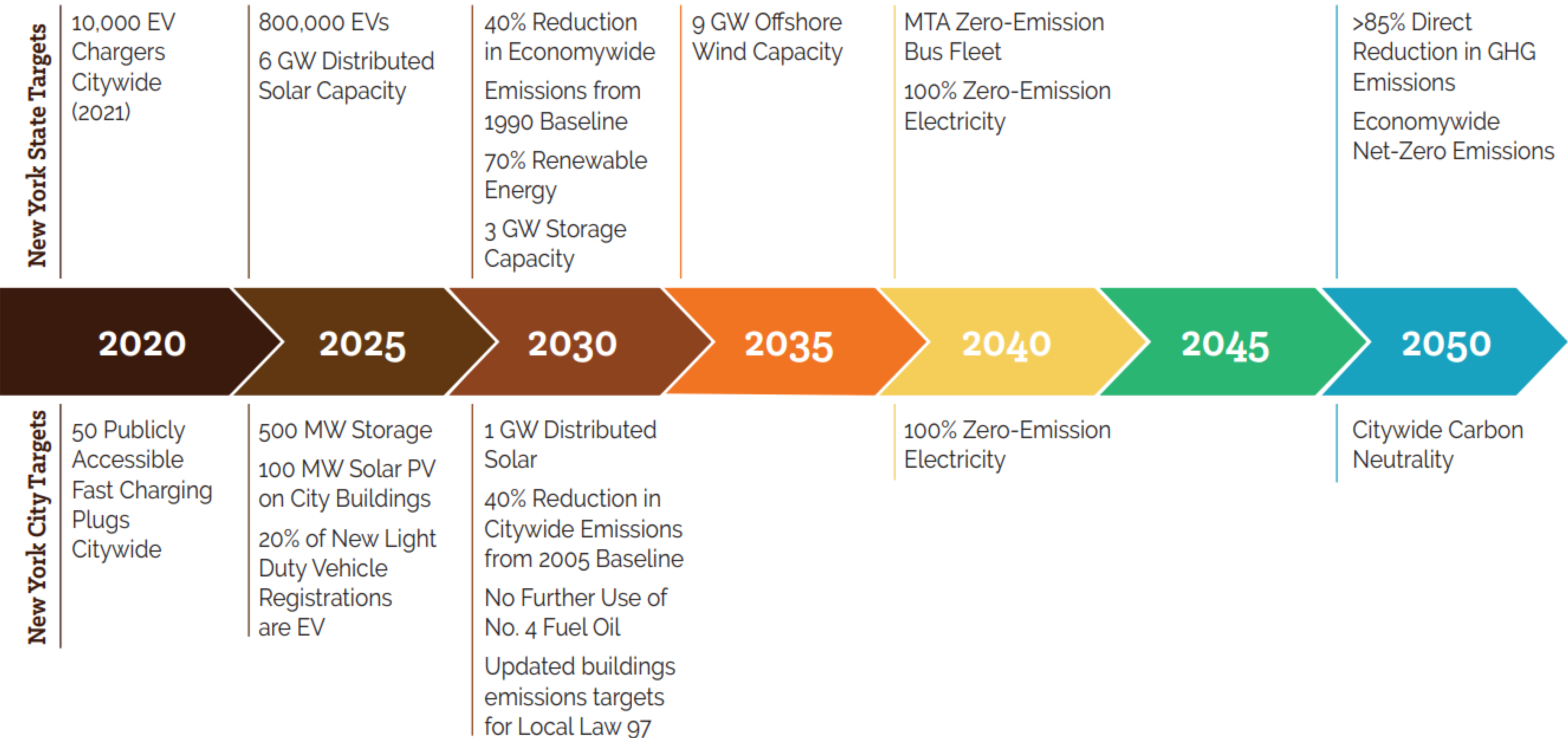
# NYC Targets = 80 x 50 + 40 x 30



*In **September 2014**, New York City Mayor Bill de Blasio committed to reduce New York City's greenhouse gas (GHG) emissions 80 percent below 2005 levels by 2050 (**80 x 50**), joining other leading cities around the world in committing to the target the United Nations set for developed countries to avert the worst impacts of climate change.*

*Since then, the Mayor has committed to additional targets, which include the "Under 2 MOU," a commitment among subnational governments to limit GHG emissions to under two metric tons of carbon dioxide equivalent (tCO<sub>2</sub>e) per capita, and an interim target of a 40 percent GHG reduction by 2030 (**40 x 30**).*

# NYS & NYC Climate Timeline



New York City and New York State have made ambitious climate goals for 2050, accompanied by sector- and technology-specific interim targets.  
 Source: Carbon-Neutral-NYC, April 2021



# Local Law 97 and Houses of Faith



## SUMMARY:

**Houses of Faith larger than 25,000 square feet** *must comply with LL 97 by 2024 by implementing a series of Prescriptive Measures to reduce their carbon emissions.*

**LL 97 Prescriptive Measures** *include the installation of insulation, sensors, or controls for HVAC equipment, as well as other energy efficiency measures.*

**Houses of Faith smaller than 25,000 square feet** *do not have to comply with LL 97.*

**Smaller Houses of Faith** *are encouraged to reduce their carbon emissions; City offers technical and financial help.*



# Local Law 97 - Covered Buildings:



- *A building that exceeds 25,000 gross square feet, or*
- *Two or more buildings on the same tax lot that together exceed 50,000 gross square feet, or*
- *Two or more buildings held in the condominium form of ownership that are governed by the same board of managers & that together exceed 50,000 gross square feet*
- *Any building subject to the NYC Benchmarking Law (LL84/LL133)*

**Houses of Faith** (buildings whose main use or dominant occupancy is classified as occupancy group A-3 religious house of worship) must meet **Prescriptive Measures by 2024.**



# LL 97 Prescriptive Measures (1 of 4)



**A baseline energy study for your House of Worship must be conducted to inform the Prescriptive Measures.** *Reference: Article § 308: Energy Audits and Retro-commissioning of Base Building Systems (NYC Law)*

**1) A registered Retro-commissioning Agent** *shall be hired to perform an energy audit of the building(s).*

**2) An Energy Audit** *is a systematic process of identifying and developing modifications and improvements of the base building systems, including but not limited to alterations of such systems and the installation of new equipment, insulation or other generally recognized energy efficiency technologies to optimize energy performance of the building and achieve energy savings.*

# LL 97 Prescriptive Measures (2 of 4)



**The Energy Audit will focus on Base Building Systems:**

*Base Building Systems include systems or subsystems of a building that use energy and/or impact energy consumption including:*

- 1. The building envelope.*
- 2. The HVAC (heating ventilating and air conditioning) systems.*
- 3. Conveying systems.*
- 4. Domestic hot water systems.*
- 5. Electrical and lighting systems.*



# LL 97 Prescriptive Measures (3 of 4)



**By December 31, 2024, the owner of a covered building shall ensure that these prescriptive energy conservation measures have been implemented where applicable (informed by the Energy Audit):**

- 1. Adjusting temperature set points for heat and hot water to reflect appropriate space occupancy and facility requirements;*
- 2. Repairing all heating system leaks;*
- 3. Maintaining the heating system, including but not limited to ensuring that system component parts are clean and in good operating condition;*
- 4. Installing individual temperature controls or insulated radiator enclosure with temperature controls on all radiators;*
- 5. Insulating all pipes for heating and/or hot water;*
- 6. Insulating the steam system condensate tank or water tank;*

# LL 97 Prescriptive Measures (4 of 4)

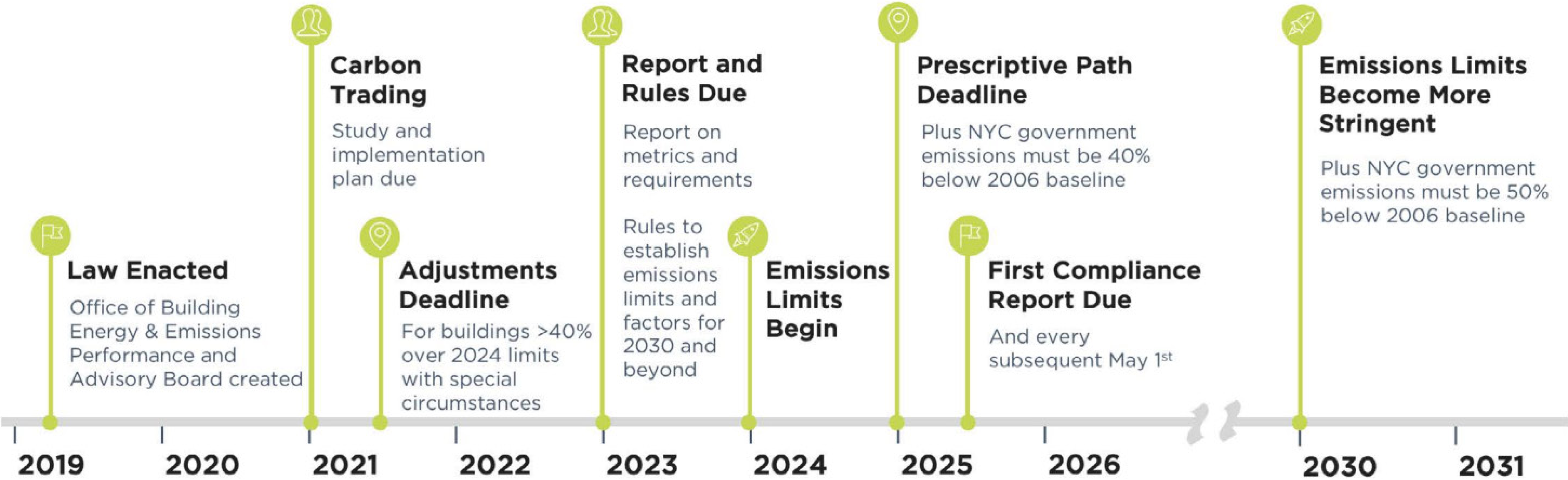


**By December 31, 2024, the owner of a covered building shall ensure that these prescriptive energy conservation measures have been implemented where applicable (informed by the Energy Audit):**

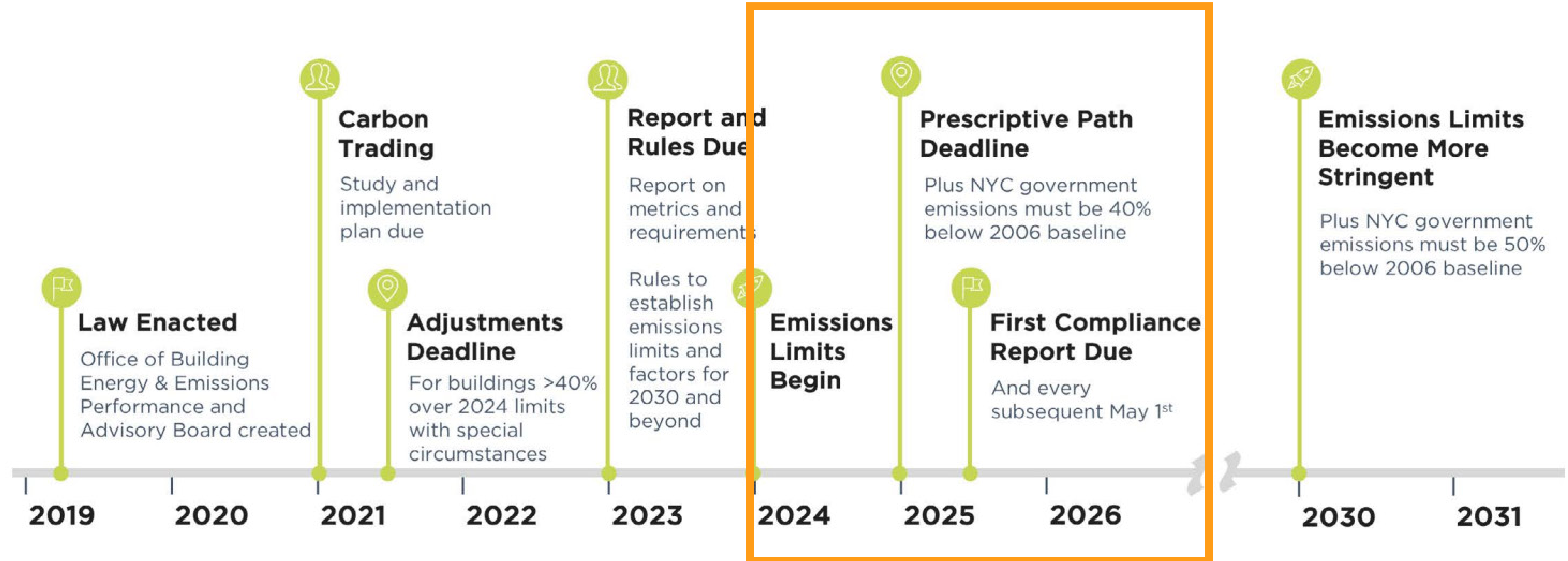
- 7. Installing indoor and outdoor heating system sensors and boiler controls to allow for proper set-points;*
- 8. Replacing or repairing all steam traps such that all are in working order;*
- 9. Installing or upgrading steam system master venting at the ends of mains, large horizontal pipes, and tops of risers, vertical pipes branching off a main;*
- 10. Upgrading lighting to comply with the standards set forth in section 805 of the NYC city energy conservation code on or prior to December 31, 2024.*
- 11. Weatherizing and air sealing where appropriate, including windows and ductwork, with focus on whole-building insulation;*
- 12. Installing timers on exhaust fans; and*
- 13. Installing radiant barriers behind all radiators.*



# LL97 Implementation Timeline



# LL97 Timeline: Limits begin in 2024





# Complying w/ Prescriptive Measures



**NYC Department of Buildings deadlines:**

*By December 31, 2024, the owner of a covered building shall ensure that prescriptive energy conservation measures have been implemented where applicable.*

*By May 1, 2025, an owner of a covered building shall submit a report to the department to demonstrate compliance, and every year after that.*

*A **Retro-Commissioning Agent (RCA)**, shall prepare and certify a report in a form and manner determined by the department. The NYC Accelerator can recommend RCAs.*

# Complying w/ Prescriptive Measures



*The report shall include information relating to the completion of the prescriptive energy conservation measures:*

**Project and team information:** *including building address, experience and certification of persons performing the prescriptive energy conservation measures and any staff involved in the project. (I.e.: Name, affiliation, and contact information for persons performing the prescriptive energy conservation measures, owner of building, and facility manager of building.)*

**Building information:** *List of all HVAC, domestic hot water, electrical equipment, lighting, and conveyance equipment types serving the covered building.*



# Flexible Paths and Penalties (1 of 2)



**Section §28–320.6.2 of Local Law 97, Civil penalty for failure to file a report:** *It shall be unlawful for the owner of a covered building to fail to submit an annual report on or before the applicable due date. LL 97 provides some flexibility for buildings to comply with any of the following:*

- *OPTIONAL: Achieving some or all of the greenhouse gas reductions by purchasing credits for renewable energy generated in NYC or directly sinking into the NYC grid.*
- *The NYC Dept. of Buildings will also have the authority to grant exceptions, for reasons such as financial hardship and practical constraints. This will require proof of significant financial hardship for the combined two years prior to filing the report.*

# Flexible Paths and Penalties (2 of 2)



*The law creates fines for violations; and a false statement is also considered a misdemeanor:*

**Violation Type**

**Maximum Fine**

<b>Failure to file a report</b>	<i>\$0.50 per building square foot, per month</i>  <i>A minimum of \$12,500.00 per year</i>
<b>False statement</b>	<b>\$500,000.00</b>

*Fines are assessed on an annual basis.*



# Landmarked Houses of Worship



**Landmarked Houses of Faith larger than 25,000 square feet** *must follow the Prescriptive Path.*

*They must send a report to the Dept. of Buildings on May 1, 2025 documenting their prescriptive measures during the year 2024 – and every year after that.*

*Most of the 13 prescriptive path measures focus on the interior of the building – however anything relating to the exterior of the building; i.e. building envelope prescriptive measures (windows, roof, insulation, etc. ), will have to follow the regulatory process for historic districts and individual landmarks.*



# Multiple Occupancy Groups on a site?



**For covered building(s) with spaces classified in more than one occupancy group on a single lot (BBL):**

*Each occupancy group (A–Assembly, B–Offices, E–Educational, etc...) has a different emissions limit multiplier. See § 28–320.3.1*

**A– Assembly occupancy group** (which includes Houses of Worship) has a multiplier of “0.01074”

**0.01074 tCO<sub>2</sub> e/sf × gross floor area (sf) = emission limit**

*For a covered building with spaces classified in more than one occupancy group, the **annual building emissions limit** shall be the **sum of the calculated values** from each occupancy group (i.e. A +B +E etc.) as applicable for each space.*



# What about smaller Houses of Faith?



*The City is encouraging **Buildings of Every Size** to retrofit and climate-proof their buildings.*

*The City is offering a variety of low interest loans through financial partners – for larger projects, the city has created a financial instrument called PACE (Property Assessed Clean Energy); smaller loan packages are also available.*

*A variety of City and NYSERDA incentives are available for energy retrofits and renewable energy installations.*

*Option: Energy Services Agreements (solar or heat pump)*

*Option: Solar Cooperatives or Community Solar*



# Houses of Faith < 100K of Energy Exp.



*Smaller Houses of Worship can participate in a **Green Jobs Green New York** energy study as well as a clean heating and cooling screening to identify energy efficiency opportunities. This is a NYSERDA incentive program that provides consultations with impartial energy consultants.*

**Eligible Participants:** *Not-For-Profit Organizations with \$100,000 or less in annual energy expenses.*

**Costs for Not-For-Profit Organizations:**  
*Between \$100.00 (NFPs with 10 full-time employees or less) and \$500.00 (NFPs with more than 100 full-time employees)*

**Email:** *info@NYEnergyStudy.com* or **Call** (888) 338-0089



# List of Qualified Service Providers



*A list of Qualified and Approved Service providers will be available by **March 15th** at the NYC Accelerator website.*

*This list includes engineers, architects, green building retrofit firms, energy services providers (solar, heat pump, geothermal, etc.), and community solar providers.*

*[www.nyc.gov/accelerator](http://www.nyc.gov/accelerator)*



# Fatou Jabbie, NYC Accelerator



**Fatou Jabbie, LEED AP BD+C, Senior Account Manager**  
*She holds a M. Science in Sustainability Management from Columbia University and a Bachelor of Science in Computer Science from Kentucky State University.*

*She and her team provide technical advice in the **Mayor's Office of Sustainability's NYC Accelerator Program**, working with building owners, decision makers and their teams; to comply with local laws, implement cost effective deeper energy retrofits and smart technologies in buildings. Prior to pivoting to the energy and sustainability field, Fatou had over 15 years of data center IT network design and systems engineering expertise in the e-commerce, wireless telecommunications and financial sectors.*



# What is NYC Accelerator?

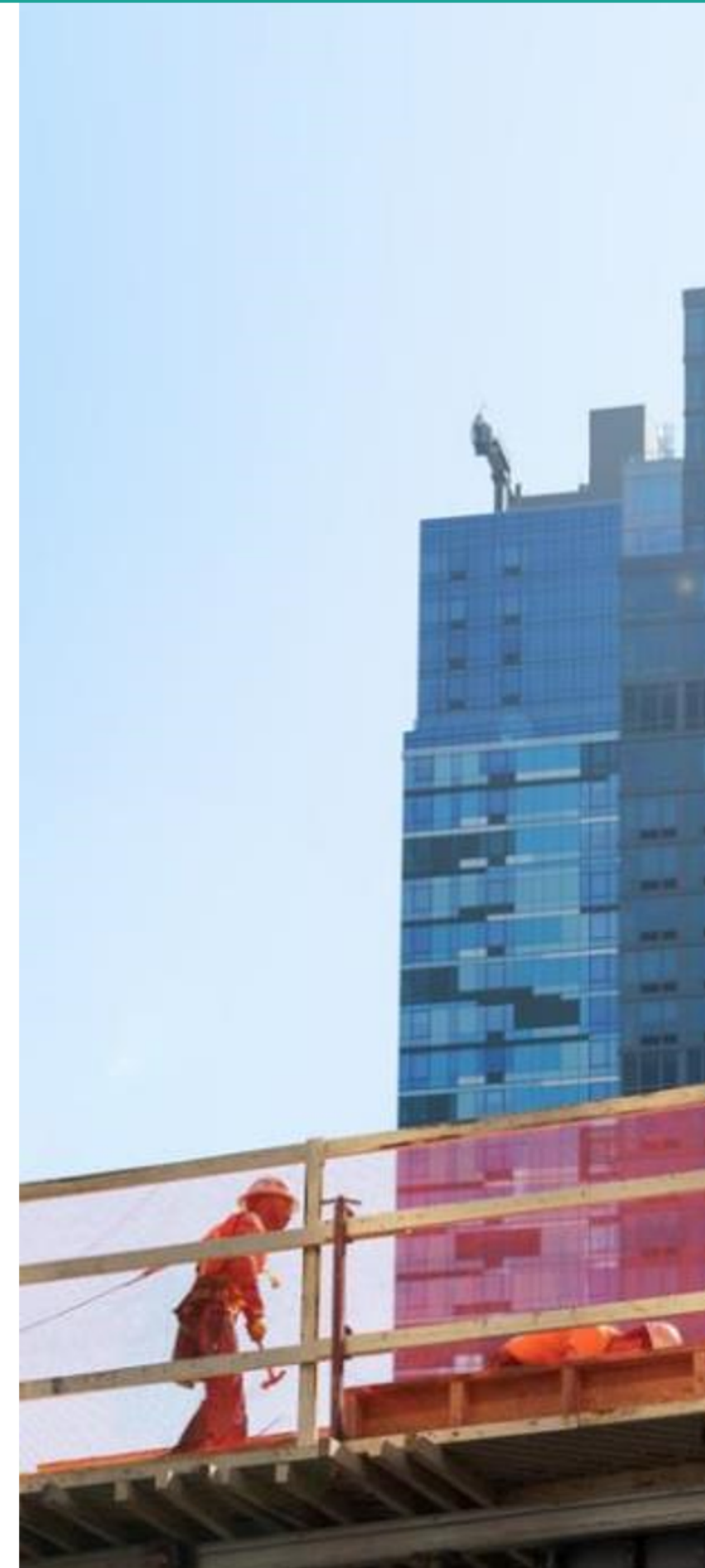
- ✧ A City program to help control costs, meet local law compliance, boost building performance, increase energy savings, and reduce carbon emissions across NYC buildings
- Provides free technical guidance to help the market transform how our buildings operate and are built
  - Identifies building upgrade projects to help meet emissions limits established under the Climate Mobilization Act
  - Offers no-cost building operator trainings and supports green workforce development
  - Connects building decisionmakers directly with service providers to implement decarbonization projects
  - Helps buildings identify applicable financial incentives and financing, such as NYC Accelerator PACE





# How Can NYC Accelerator Help?

- ✧ Identify applicable financial incentive programs and financing, such as NYC Accelerator PACE
- ✧ Provide technical assistance for building upgrades
- ✧ Deliver expert advice to determine requirements and help meet local energy laws
- ✧ Connect buildings with service providers for energy/carbon reduction projects
- ✧ Offer no-cost online trainings for building operators and stakeholders





# Contact Our Team of Experts



Web: [www.nyc.gov/accelerator](http://www.nyc.gov/accelerator)

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Phone: 212-656-9202

