



**conEdison**



# Local Law 97: Carbon Emissions Limits & Con Edison's Energy Efficiency Solutions

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# Agenda

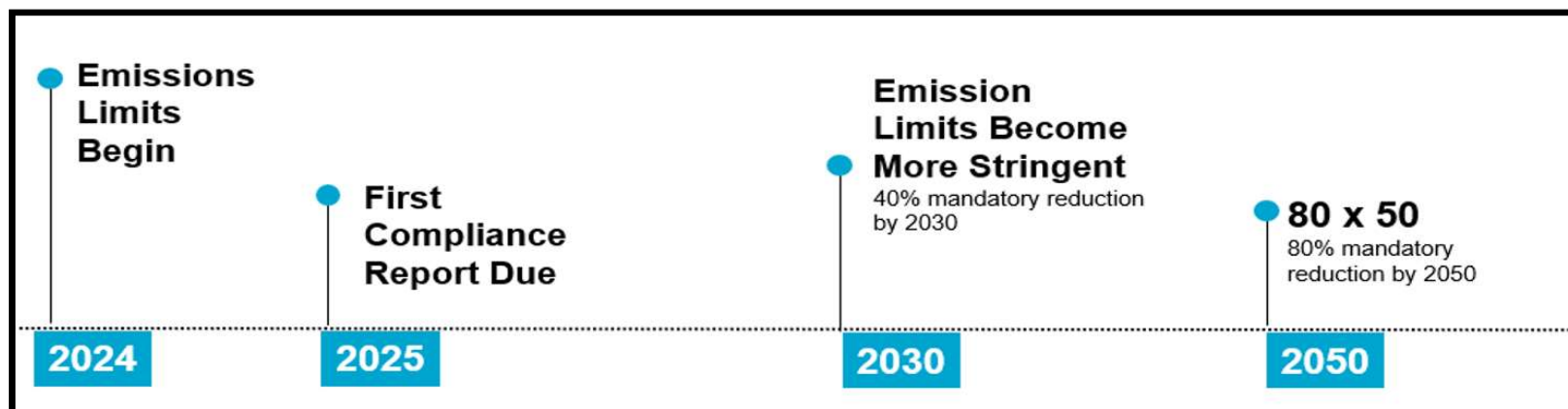
Overview of Local Law 97

Con Edison's Energy Efficiency Programs

- Commercial & Industrial Energy Efficiency Program
- Multi-Family Energy Efficiency Program
- Small-Medium Business (SMB) Energy Efficiency Program

# Local Law 97

- **What is Local Law 97?**
  - New York City law that sets carbon emissions caps for energy use in NYCs large buildings starting in, 2024, becoming more stringent through 2050.
- **Who does it affect?**
  - Buildings greater than 25,000 square feet
- **What does it require?**
  - 40% citywide emissions reductions by 2030 and 80% by 2050.



## LL97: Core Elements

- Large building greenhouse gas emissions (GHG) targets, starting 2024
- Energy emissions coefficients through 2029
- Allows use of renewable energy certificates (RECs), carbon offsets to comply
- Penalty rate of \$268/ton CO<sub>2</sub> (with exceptions)
- Stakeholder Advisory Board





Example of 25,000 square foot building potentially subject to LL97

# Our customers want to know about LL97...



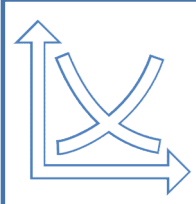
Am I in compliance?

How much is my fine?



How much will it cost to come into compliance?

Is it worth it?



Here's where Con Edison EE programs help.

# The Evolution of the Utility's Role in Clean Energy



## Core Business

Three Commodities:  
Electric, Gas and  
Steam



## Our Customers

Diverse market  
segments, unique  
building stock



## Growth Strategy

Investing \$1.5B in “EE”  
and heating  
electrification by 2025



## Trusted Energy Advisor

Promote customer  
choice, education  
and incentives

# Increase Profitability, Decrease Energy Usage



- Offset project costs with cash incentives
- Increase ROI
- Lower monthly bill
- Lower maintenance costs
- Avoid paying fines



- Reduce carbon footprint
- Meet sustainability goals
- Meet state compliance goals
- Enhance brand reputation



# Energy Efficiency Strategy

## 1) Education about LL97 & potential impacts



- Customers are seeking answers to their questions from Con Ed team, a trusted team of experts
- Educate commercial and multi-family building owners about impact of LL97 on their specific building



## 2) Provide pathway to compliance



- Utilize specific building knowledge to suggest pathways towards compliance
- Heating electrification and envelope improvements as a long-term carbon reduction strategy
- Package lowest cost EE measures with “deeper” EE measures to improve customer ROI while meeting regulatory goals
- Pathway provides longer term customer engagements, follow-on scopes of work based on pathway (e.g. electrify water heaters this year, electrify space heating next year)

# Commercial & Industrial (C&I) Energy Efficiency Program Overview

In 2021, Con Edison has paid **\$10.8 million in cash incentives** to commercial and industrial customers, saving over **70,000 MWh** and **2,500 DTh** annually – reducing their carbon footprint by over **40,000 metric tons**.

- **Managed in-house**
- **Knowledgeable and experienced team**
  - Business Development Managers
  - Energy Specialists
  - Operations
  - Engineers
  - Inspectors
- **Work hand in hand with C&I customers to submit projects**



# Commercial & Industrial Energy Efficiency Program Eligibility

## Electric Projects

- All customers with a commercial account over 100 kW average peak demand on a rolling 12-month basis are eligible for C&I incentives, excluding multifamily buildings.

## Natural Gas Projects

- All customers with commercial accounts are eligible except customers with a service class of SC-14 or customers receiving service via a negotiated contract.

## Existing Buildings

- Project must be in an existing facility.
- New construction is not eligible..

## No Double Dipping

- Cannot apply or received an incentive from NYSERDA, Con Edison or another utility for the same project

# Commercial & Industrial Energy Efficiency Program Measures

Lighting &  
Controls

HVAC &  
Controls

Variable  
Frequency  
Drives

Building  
Envelope

Air  
Compressors

Steam Trap  
Replacement /  
Repair

Refrigeration

Secondary  
Steam

Building  
Automation  
Systems

Elevator  
Modernization

Demand  
Control  
Ventilation

Custom  
Measures

# Commercial & Industrial Energy Efficiency Program Case Study

## Energy Efficiency Project in **Queens**

- **Scope of Work:** Early Replacement Barrel Mixer Asphalt
- Facility able to produce the same amount of asphalt while using 30% less natural gas

## Energy Savings: Over **300,000 Therms**

- **1,500 Tons of CO2 reduced**

## Financials: **\$548,603.20** incentive

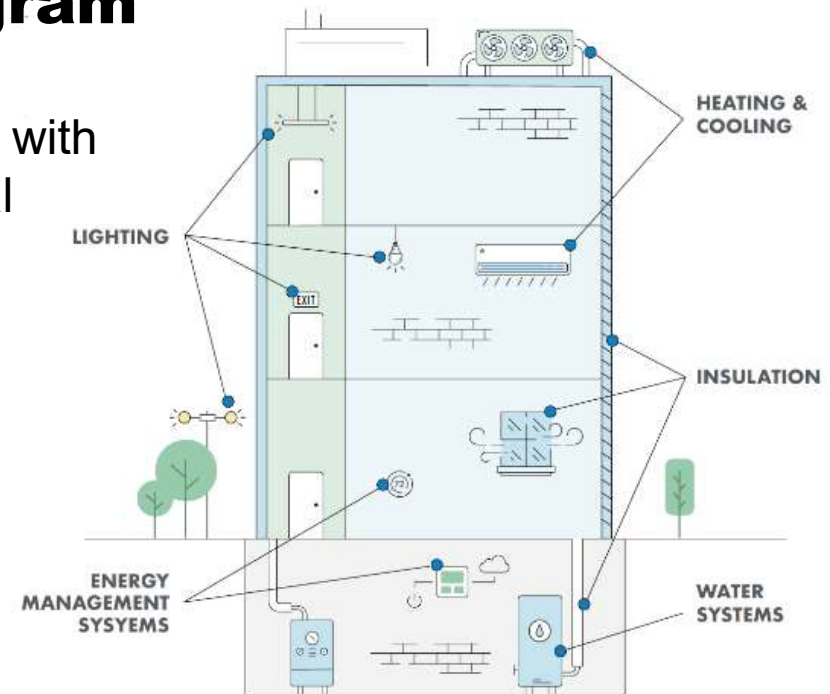
- Payback: < **2** years

# Multifamily Energy Efficiency Program

If you own or manage a residential multifamily building with 5+ residential units you can take advantage of financial incentives for approved equipment upgrades.

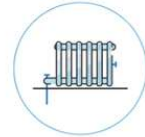
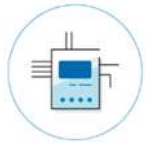
## Incentive Level Tracks:

- Market Rate Incentives
- Affordable Housing Incentives
- In-unit Direct Install
- Neighborhood Program
- Clean Heat Program



**In 2021, Con Edison paid over \$32.2 million in cash incentives to multifamily customers saving over 30,000 MWh and over 392,000 Dekatherms.**

## Incentives are available for the following equipment upgrades:



### Electric Equipment

- Common Area LED Lighting and Controls
- In-Unit LED Bulbs
- Elevator Modernization
- HVAC
  - Variable Frequency Drives
  - EC Motors
  - Chiller Replacement
  - Cooling Tower Replacement
  - Packaged Terminal Air Conditioners
  - Air Conditioner – Central Unit Replacement

### Gas Equipment

- Boiler Replacements and Boiler Clean & Tune
- In-Unit Showerhead and Faucet Aerators
- Energy Management Systems
- Pipe Insulation
- Steam Traps
- Boiler Clean and Tune
- 2-pipe Steam Retro-Commissioning
- Building Envelope
  - Air Sealing
  - Roof and Wall Insulation
  - Window Replacement

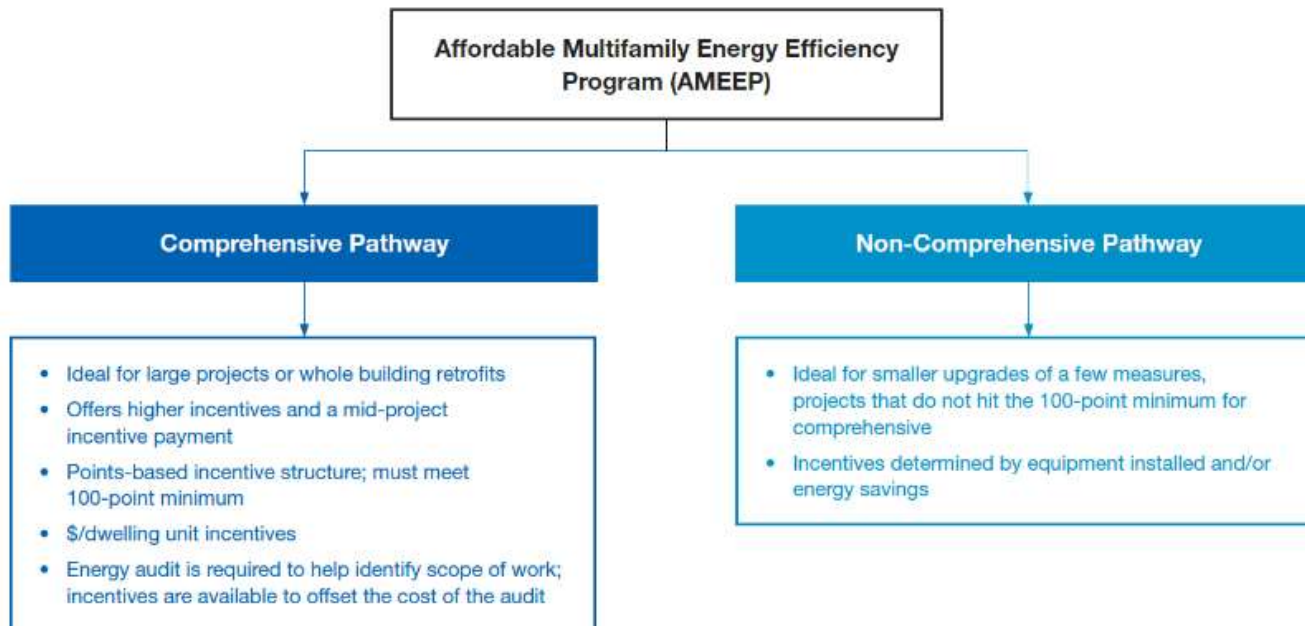
**Eligible neighborhoods in Brooklyn and Queens qualify for bonus incentives to reduce grid demand.**

Learn more about the Multifamily Neighborhood Program [here](#)

# Affordable Multifamily Energy Efficiency Program

Additional incentives are available for buildings that are owned and maintained as affordable housing

The program has been structured into two separate pathways: **Comprehensive** and **Non-Comprehensive**



Visit [conEd.com/Multifamily](https://conEd.com/Multifamily) to learn more



# Case Study – Multi Family Con Edison Building



## Building Info:

180 residential units

224,416 square feet

Built in 2005





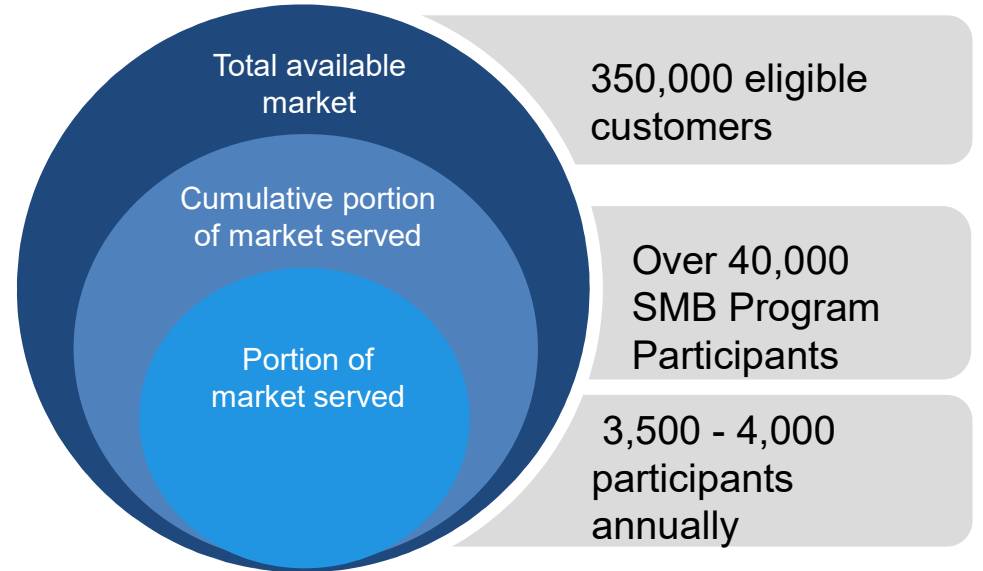
Project	Description	Achieved Energy Savings	Total Project Cost	Total Incentive	Project Cost Covered	Annual Energy Cost Savings
Common Area Lighting	Provides quality lighting and reduces electricity consumption	12,090 kWh	\$6,230	\$1000	16%	\$2,230*
Rooftop Exhaust Fan	Reduce electric consumption by improving ventilation	49,426 kWh	\$30,600	\$15,300	50%	\$9,390*
In-Unit Lighting	Provides quality lighting and reduces electricity consumption	15,279 kWh	<b>FREE</b>			




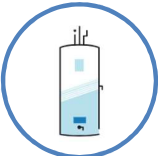
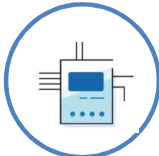
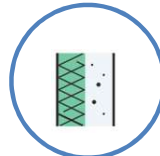
\*Assuming \$0.19/kWh and \$1/Therm

# SMB Program Overview

Visit [conEd.com/smallbusiness](http://conEd.com/smallbusiness) to learn more

- **Who?**
  - Small and mid-sized business customers in Con Edison's service territory
- **What?**
  - Free Energy Surveys.
  - Incentivized direct installations of energy efficient technology.
- **How?**
  - Participating contractors recommend ways to save energy and money and perform the upgrades if the customer is interested
- **Why?**
  - Saving money on energy bills allows small-medium business owners to spend more money on growing their businesses



-  Lighting & Controls
-  HVAC
-  Refrigeration
-  Hot Water System
-  Energy Management Systems
-  Building Envelope

# Program Benefits

- Reduce energy consumption
- Reduce maintenance costs
- Reduce carbon footprint
- Latest and greatest technology
- Increased sales




“  
**Free,  
energy-saving  
LEDs**  
”

- Do-It-Yourself
- Neighborhood Program
- Submit an Interest Form

Visit [conEd.com/smallbusiness](http://conEd.com/smallbusiness) to learn more

Show off your eco-friendly business View online




**Your Business Protects the Planet— Let Customers Know!**

Join our network of 40,000+ energy-efficient businesses in New York City and Westchester with a storefront badge.

[Get Started →](#)


**What Is the Badge For?**

- \* If your business has participated in our Small-Medium Business program, you'll get an Energy Saving Business badge for your storefront
- \* The badge will identify you as a proud member of our network of energy-efficient businesses and will help attract environmentally conscious customers



**What Are the Benefits?**

- \* Your badge will make you stand out as an energy-efficient business
- \* 9 out of 10 New Yorkers want to discover eco-friendly businesses in their neighborhood
- \* 1 in 2 will go out of their way to shop at energy-efficient businesses



**How Do I Get One?**

- \* Join our Small-Medium Business program and make energy-efficient upgrades to earn your badge
- \* Once your upgrades are installed, you'll get the badge and join our network of more than 40,000 energy-efficient businesses in New York City and Westchester

Start spreading the word with a badge now!

[Get Started →](#)

# SMB Case Study: Rack Compressor Replacement

## Energy Efficiency Project in **Manhattan**

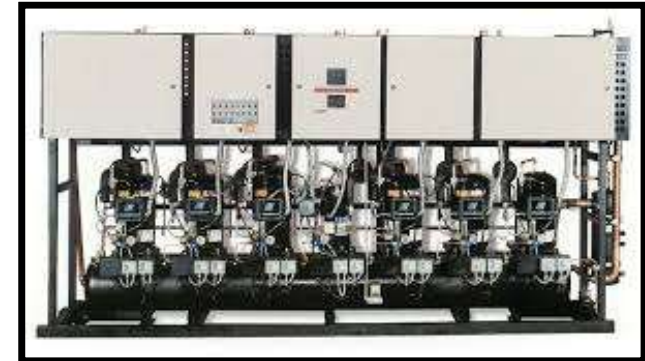
- **Project involved** removal and replacement of two Rack Compressors

## Energy Savings: Over **80,000 kWh** annually

- **56 Metric Tons of CO2 reduced**

## Financials: **\$36,105.87** incentive

- Incentives: Covered **54%** of project costs
- Annual Electric Cost Savings: **\$12,035**
- Payback: **3** years



Refrigeration Rack Compressor

Visit [conEd.com/smallbusiness](https://conEd.com/smallbusiness) to learn more

# SMB Case Study: Lighting

## Energy Efficiency Project in **Queens**

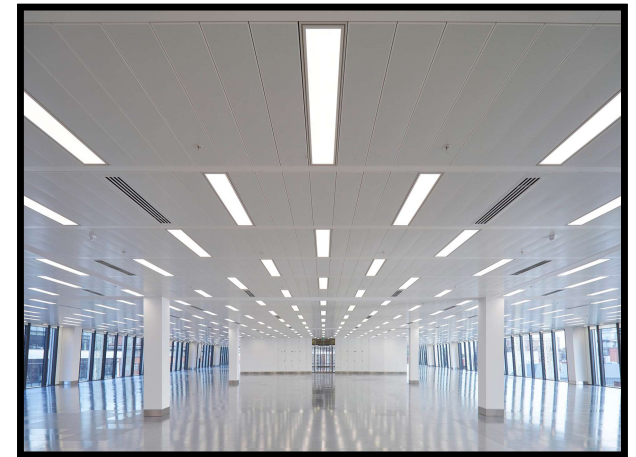
- **Project involved** upgrading hundreds of lighting fixtures

## Energy Savings: Over **68,000 kWh** annually

- **48 Tons of CO2 reduction**

## Financials: **\$7,211.00** incentive

- Incentives: Covered 70% of project costs
- Annual Electric Cost Savings: **\$10,217**
- Payback: **3.6 Months**



LED Lighting

Visit [conEd.com/smallbusiness](https://conEd.com/smallbusiness) to learn more

# Neighborhood Program

- **Objective:** Eliminate or defer traditional projects with location specific (targeted) customer side projects.
- Provide incentives to customers of varying market types to install energy efficiency for quick implementation.
- **Traditional Projects:** Substations, new transmission, new distribution lines
- **Non-Wires Solutions Territories:** BQDM, Newtown
- **Customer Segments:** Commercial/Industrial, Multifamily, Small-Medium Business, Residential



# Thank you!

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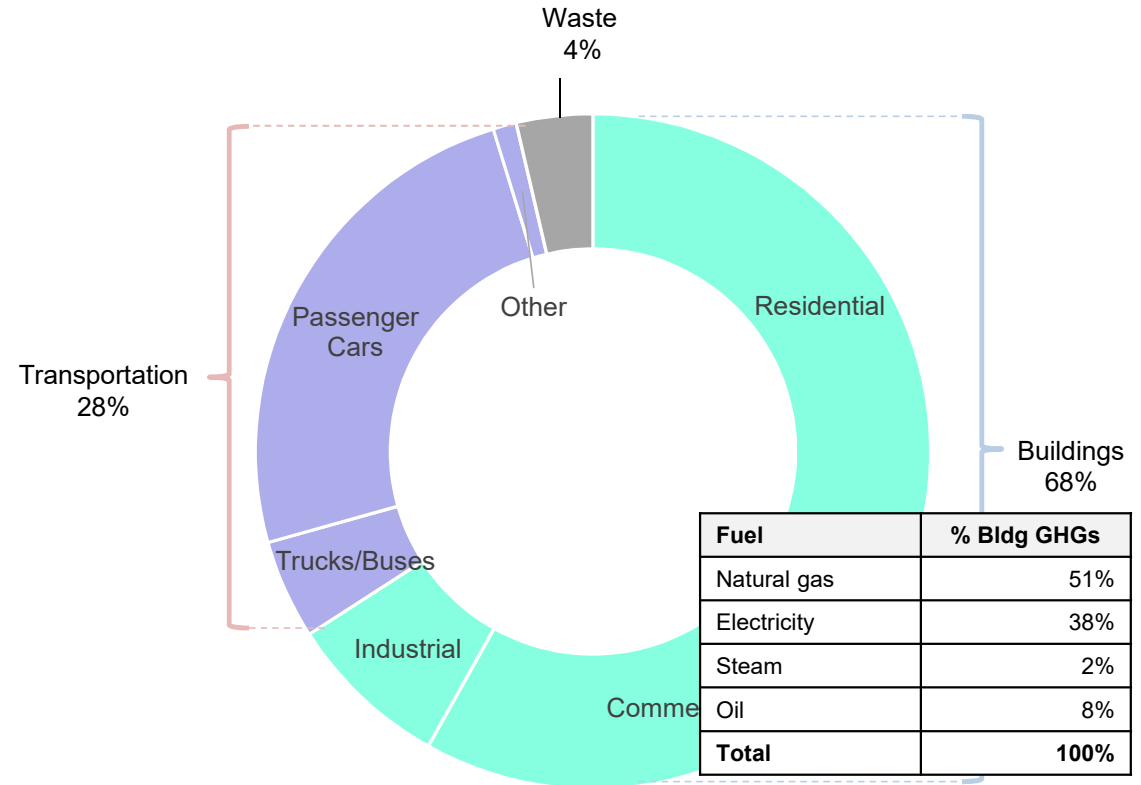
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# LL97: Goals

- NYC economy-wide emissions goals (compared to 2005 baseline\*):
  - 40% by 2030
  - 80% by 2050
- Bldgs cause 68% of GHG emissions
- Local Law 97 of 2019 (LL97) sets GHG targets for large buildings

## NYC GHG Emissions by Sector



\* Note: these targets are stricter than NYS 85x50 goal (which uses a 1990 baseline)

Source: NYC GHG Inventory 2019



# Agenda

- Intro
- LL97 overview
- Program Overviews
  - C&I
  - MFEE
  - SMB
  - Case
- Case studies
- Program performance metrics (GHG equivalents, etc)
- Potential Q&A

# Local Law 97

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  - NY State law that sets carbon emissions caps for energy use in NYCs large buildings starting 2024, becoming more stringent through 2050.
- **Who does it affect?**
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