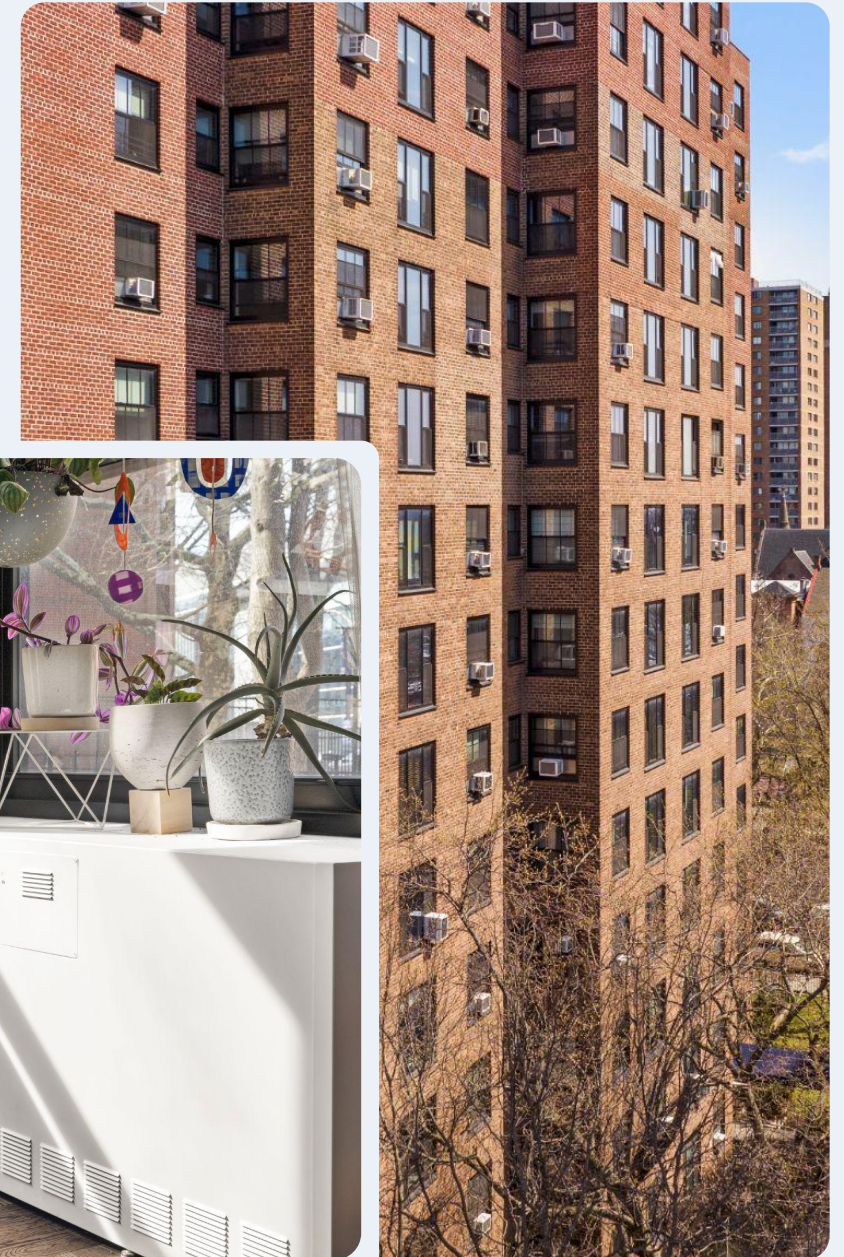




Achieve **Local Law 97** Compliance

The Prescriptive Pathway



Meet the Presenters



Kelvin

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BRIGHT POWER

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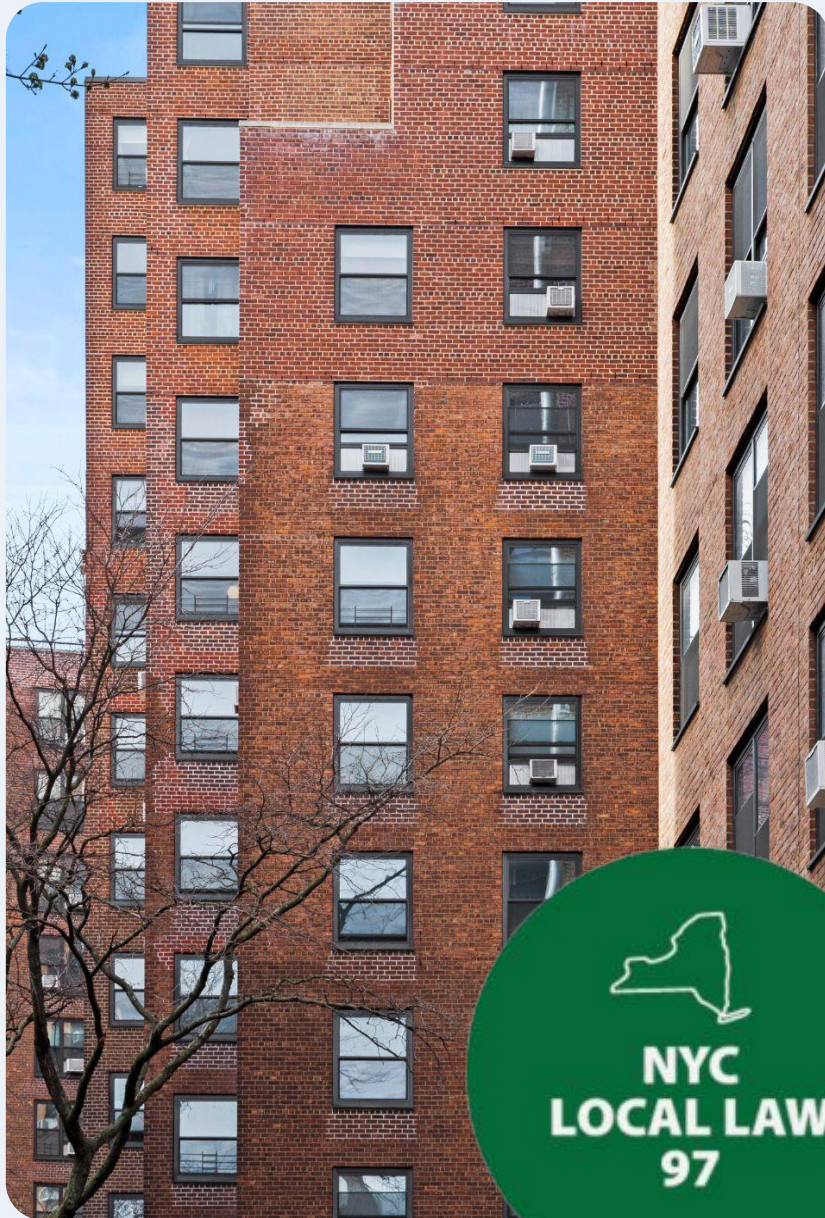
Agenda

- 1. Understanding Local Law 97
- 2. Prescriptive Pathway Guidance
- 3. Bright Power's role
- 5. Kelvin's Role
- 6. Recap
- Q&A



01.

Understanding Local Law 97



Local Law 97 Overview

- Part of NYC's Green New Deal, aiming for carbon neutrality by 2050.
- Sets ambitious carbon emission limits for NYC buildings.

Targeted Buildings

Buildings over 25,000 square feet.

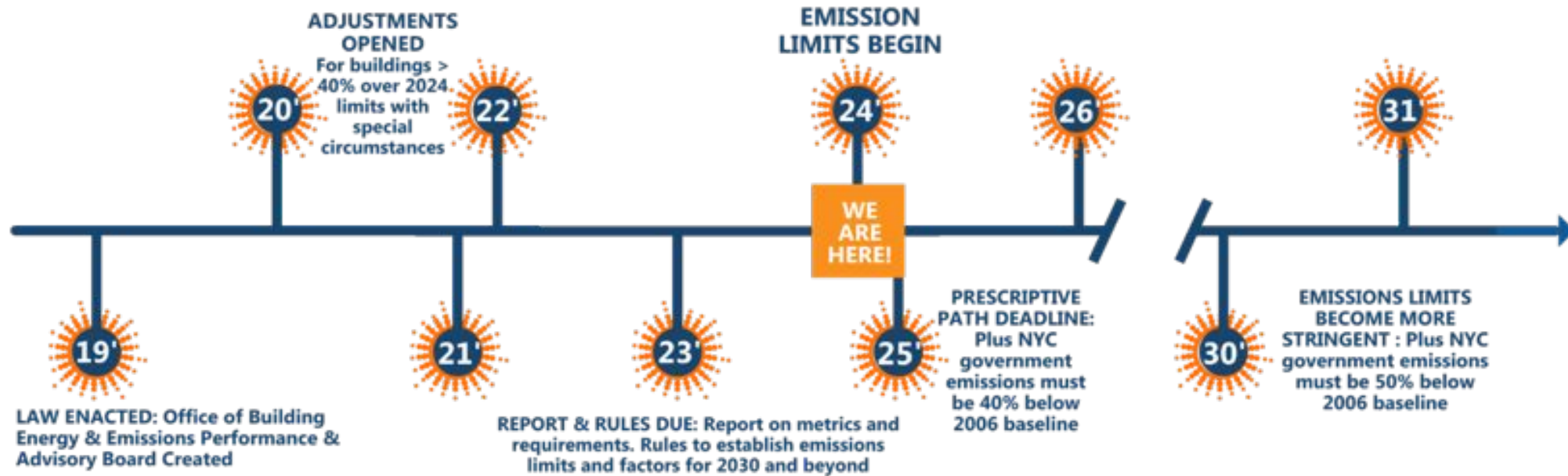
Affects a significant portion of the city's built environment.

Goals of LL97

Reduce greenhouse gas emissions from buildings, which are the city's largest emissions source.

Encourage energy efficiency and the use of renewable energy sources

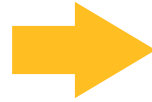
Timeline



Timeline data courtesy of UG

Unprecedented Scale

~50,000
covered
buildings
citywide



9,000
buildings
subject to
Prescriptive
Pathway

02.

Prescriptive Pathway Guidance

Prescriptive Pathway Guidance

LL97 covered buildings[†] with rent regulated and/or affordable units must follow one of the pathways below:

Article 321: The Prescriptive Pathway

If building includes any of the following:

- > 35% of units subject to rent regulation (regardless of any income restrictions), OR
- Is an HDFC co-op (not a rental), OR
- Has 1+ units that participate in a federal project-based housing program (e.g., Section 8, Section 202, Section 811, or CoC), OR
- Participates in NYCHA PACT



The building must:

- Demonstrate that emissions are below the applicable 2030 limits, OR
- Show that applicable [Prescriptive Energy Conservation Measures](#) have been fully implemented

And file a one-time report by May 2025*

**Note that new rules may give some buildings additional time to comply if they can demonstrate progress*

*Further information is available here: [§28-321](#)

Article 320: The 2026 Pathway

If building :

- Has 1+ rent regulated units and no more than 35% of units subject to rent regulation (regardless of any income restrictions)



The building must:

- Meet emission limits starting in 2026, or face penalties of \$268 per ton of carbon for exceeding the limits

And file annual reports starting May 2027*

*Further information is available here: [§28-320.3.10.1](#)

Article 320: The 2035 Pathway

If building:

- Is a Mitchell-Lama with no units that participate in a federal project-based housing program, OR
- Has no rent regulated units and has 1+ units that are income restricted through certain* loans, grants, real property tax benefits (e.g., 420-c, Article XI, UDAAP), or property disposition programs

Units with an income restriction imposed solely through the Zoning Resolution (e.g., Inclusionary Housing programs) do not count as "income restricted" for the purposes of this path.



The building must:

- Meet emission limits starting in 2035, or face penalties of \$268 per ton of carbon for exceeding the limits

And file annual reports starting May 2036*

*Further information is available here: [§28-320.3.9](#)

[†]LL97 generally covers, with some exceptions: buildings that exceeds 25,000 gross square feet; two or more buildings on the same tax lot that together exceed 50,000 square feet; two or more condominium buildings governed by the same board of managers and that together exceed 50,000 square feet.

Pathways

ASSIGNED PATHWAYS	REQUIREMENTS	TIMELINE
STANDARD PATHWAY	Reduce carbon emissions below the limit assigned to your property	Baseline year is 2024, reporting begins in 2025
PRESCRIPTIVE PATHWAY	Choose one: 1. Install 13 measures, OR 2. Reduce carbon emissions below the year 2030 limit assigned to your property	Due December 2024
STANDARD PATHWAY WITH EXTENSION TO 2026	Reduce carbon emissions below the limit assigned to your property	Baseline year is 2026, reporting begins in 2027
STANDARD PATHWAY WITH EXTENSION TO 2035	Reduce carbon emissions below the limit assigned to your property	Baseline year is 2035, reporting begins in 2036

Properties that did not meet their 2030 emissions target in 2023 should choose Option #1

Prescriptive Pathway PECMs

1. Heating and DHW Temperature Setpoints
2. Repair Heating System Leaks
3. Heating System Function/Operation
4. Radiator Temperature Controls
5. Piping Insulation
6. Steam and Hot Water Tank Insulation
7. Indoor/Outdoor Temp. Sensors
8. Functioning Steam Traps
9. Steam System Venting
10. Upgrade Lighting
11. Building Envelope
12. Exhaust Fan Timers
13. Radiant Barriers

Strategies for Prescriptive Pathway

For properties complying with Option #1 Installing PECMs:

1. **Assess** your properties for PECMs
2. **Implement** applicable measures
3. Engage an RCx Agent/RDP to **Verify and Submit** to DOB by May 1, 2025

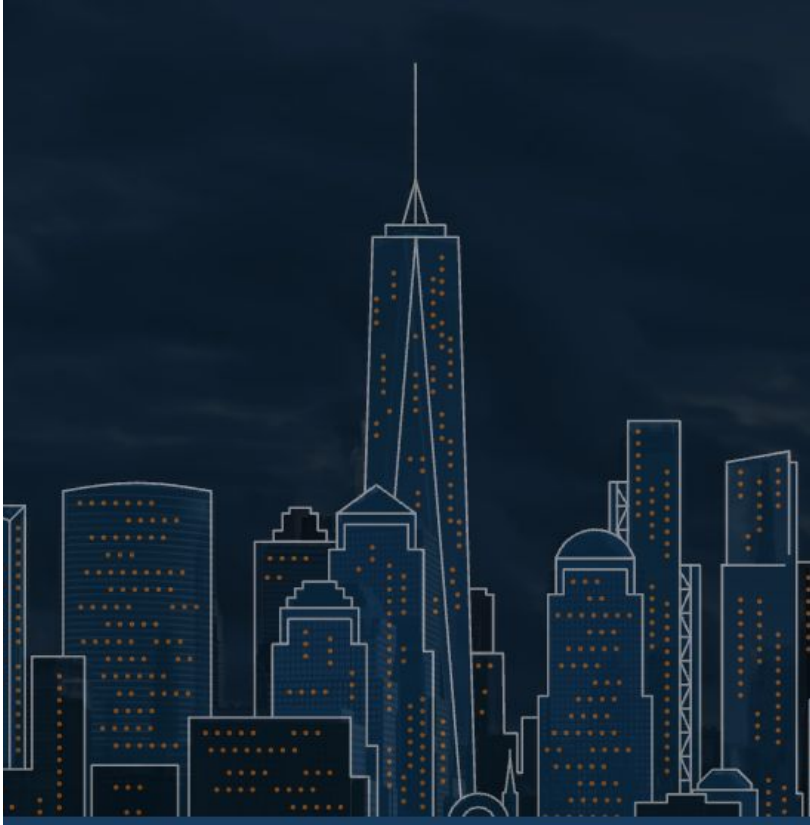
For properties complying with Option #2 beating your 2030 emissions target:

1. **Confirm** energy usage is below 2030 limits in 2023
2. **Reduce** usage in 2024
3. **Hire an RDP** to Submit to DOB by May 1, 2025

03.

Bright Power's role

About **BRIGHT POWER**



Bright Power is the premier provider of energy and water management consulting services for real estate owners, investors, and operators. We partner with NYC building owners to navigate the complexities of Local Law 97.

- Proprietary EnergyScoreCards benchmarking database for 115,000+ properties
- Performed 2,400+ energy audits
- Consulted on 600+ energy efficiency retrofits
- Registered Design Professional (RDP) LL97



Bright Power's Expertise

- We verify and submit compliance data for properties under LL97 Prescriptive Energy Conservation Measures and Local Law 88.
- Our expert team assists real estate owners in leveraging compliance requirements and incentives for property decarbonization.
- Bright Power team members are active in the Department of Buildings Advisory Group: Solutions & Service Providers.

We participate in the Regulatory Committee for the NY Energy Consumers Council.

New Technical Guidance for Option #1 Installing PECMs

Heating Systems & Applicable PECMs

Article 321 Prescriptive Energy Conservation Measures (PECMs)

Type of heating system	Article 321 Prescriptive Energy Conservation Measures ("PECMs")												
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Temp. set points	Repair leaks	Heating system function	Radiator temperature controls*	Piping insulation	Water tank insulation	Indoor / outdoor temp. sensors*	Steam traps*	Master steam system venting*	Lighting	Building envelope	Exhaust fan timers	Radiant barriers
One-pipe steam	●	●	●	▼	●	●	●		●	●	●	●	●
Two-pipe steam	●	●	●	●	●	○	●	●	○	●	●	●	●
Hydronic	●	●	●	●	●	●	●			●	●	●	●
Forced air	●		●				●			●	●	●	
Heat pump	●	●	●		●					●	●	●	
Electric resistance	●		●	●						●	●	●	●

Key Guidance Change

#4 Radiator Temperature Controls

Two Pipe Steam

- There is no guidance change for these properties.
- Properties are required to install TRVs or thermostatic radiator enclosures on all terminal units

One Pipe Steam

- Latest DOB guidance (April) now requires installation of TRVs or Thermostatic Radiator Enclosures (COZY's) on the apartment radiators, **if they are deemed to be "overheated"**
- DOB did not define "Overheating"
- Insulated Radiator Enclosures reduce overheating and save energy. They are also helpful in complying with PECM #7 and #8

Hydronic Heating

- Radiators do not require installation of new individual controls.
- However, if currently present they are required to be in working order.

Key Guidance Change

#12 Exhaust Fan Timers For Fans

For Fans Designed to Operate Continuously

- This measure is not applicable to fans that provide central ventilation, relief air or combustion air
- Fans serving critical functions such as rooftop exhaust fans, AHUs, boiler combustion air, elevator machine room, electrical rooms etc.
- Fans operating based on space temperature or humidity levels

For Fans Designed to Operate Intermittently

- Where already present, these fans are required to have a timer installed to operate based on occupancy schedule
- Most intermittent fans in bathrooms and kitchens have switches, where this measure does not apply
- **Applicable fans include fans in laundry rooms, storage rooms etc**

Timing for PECM Option #1 Compliance



Verification and Submission

- **Bright Power** offers verification, implementation and submission services for **LL97 PECMs** and **LL88**
- **Reduced costs** for properties that received LL87 audits
- Service will include the following:
 - **Inspection and verification** of the required LL97 PECMs
 - Inspection and verification of lighting and submetering for LL88 (if applicable)
 - Submission of the LL97 PECM Report to DOB by May 1, 2025 Reach out to your Account Manager for more information

Prescriptive Pathway is No Longer One-and-Done!

Properties must maintain their eligibility for Prescriptive Pathway every year



Properties who maintain their eligibility over time will still be one-and-done once they comply by May 1, 2025

Properties that don't maintain eligibility are at risk of big fines!



For properties with rent regulation that is expiring, they may be pushed to a different pathway

The new pathway would take effect on Jan 1 following the expiration date

The property will likely be subject to annual emissions and fines

Prescriptive Pathway: New Options Under Mediated Resolution

Primary Compliance Options	Strategy Considerations
1. Install 13 prescribed measures by December 31, 2024 (PECMs)	<ul style="list-style-type: none"> This is generally the cheaper option
2. Meet your 2030 emissions target early by December 31, 2024	<ul style="list-style-type: none"> Baseline year started January 1, 2024 Might work for recent ground up new construction or gut rehabs already performing under their 2030 emissions target
Additional Compliance Options under Mediated Resolution	
1. Install 13 prescribed measures by December 31, 2025 (PECMs)	<ul style="list-style-type: none"> It offers an extra year to get the 13 PECMs implemented Somewhat risky because it requires a special application and no guarantee of DOB approval
2. Meet your 2030 emissions target in 2030	<ul style="list-style-type: none"> It offers an extra five years to meet your 2030 emissions target Could work for buildings with plans for retrofits, electrification, solar, etc Somewhat risky because it requires a special application and no guarantee of DOB approval

Documentation of Affordable Housing Guidance

Path & Type	Documentation
Article 321 (The Prescriptive Pathway)	
Buildings in which <u>more than 35%</u> of units are rent regulated	DHCR Certified Registered Apartment Information Report showing number of units under rent regulation.* Owners can request records here: orarecords@hcr.ny.gov
Co-ops under HDFC ownership ("HDFC co-ops")	Certificate of Incorporation certified by the state* Owners can get copies here: https://dos.ny.gov/copies-corporation-or-business-entity-documents
Projects with HUD project-based assistance (e.g., Section 8, 202, 811, or CoC)	Contract showing proof of project-based assistance program*
NYCHA Public Housing participating in the PACT program or served by project-based Section 8	NYCHA data

Article 320.3.10.1 (The 2026 Compliance Pathway)	
Buildings with > 1 unit and up to 35% of units that are rent regulated	DHCR Certified Registered Apartment Information Report showing number of units under rent regulation.* Owners can request records here: orarecords@hcr.ny.gov
Article 320.3.9 (The 2035 Compliance Pathway)	
Mitchell-Lama Buildings	Certificate of Incorporation certified by the state* Owners can get copies here: https://dos.ny.gov/copies-corporation-or-business-entity-documents
Buildings with one or more units where income is restricted in accordance with certain types of affordable housing programs. The following tax exemptions may qualify: Article IV, Article V, Article XI, DAMP, UDAAP, or 420-c. Loans made under the authority of the Private Housing Finance Law Articles 8, 8A, 8B, 15, or 22 may also qualify. IH/MIH without any other loan or tax exemption does not qualify.	Copy of Regulatory Agreement or Restrictive Declaration, executed in connection with one of the programs at left, showing at least one unit with income restriction on it.* Obtain regulatory agreements and restrictive declarations here: ACRIS If providing a regulatory agreement or restrictive declaration pursuant to a tax exemption and only a tax exemption, provide a DOF property tax bill with proof of the exemption.* Obtain property tax bills from DOF's Property Tax Public Access Web Portal
Documentation must be accurate at the time of the compliance deadline. If a project's status changes, it may be subject to other provisions of the law.	

Questions about your pathway? Reach out!

- Bright Power has no-cost assessment tool to help you confirm your pathway
- Our tool is designed to capture key details like rent stabilization expiration that is not yet accounted for in some City resources
- Reach out to Bright Power experts for more information



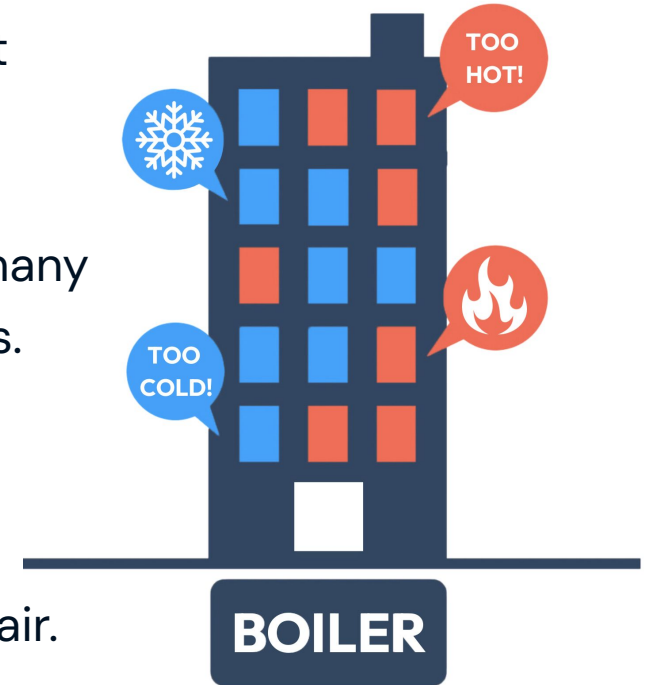
04.

Kelvin's Role



Radiator heating is a 19th Century technology

- Radiator buildings target coldest areas due to municipal guidelines.
- Causes overheating in many areas of legacy buildings.
- Many residents feel excessively hot.
- Windows constantly opened to bring in cold air.



Result: Hugely wasteful, expensive and uncomfortable.



Meet The Cozy. It brings radiator heating into the 21st Century. The Cozy provides comfort, control, and flexibility for building managers and residents



The Cozy™

A proprietary insulated radiator cover that traps excess warm air inside



Onboard Controls

The Cozy enables tenants in radiator heated buildings to control their apartment temperature with the help of an App or manual buttons.

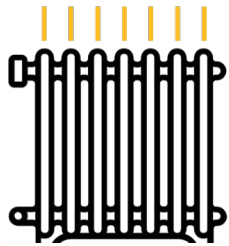


Analytics

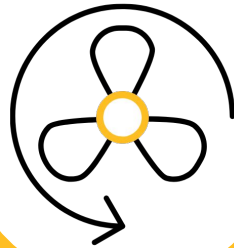
Building managers get real-time data with proactive alerts and can control how heat is released into each apartment.

The Cozy, is a modular insulated radiator cover distributing heat with maximum efficiency.

HOW THE TECHNOLOGY WORKS



The Cozy is an insulating enclosure that is installed over existing radiators and **traps warm air inside**



When the system senses that a **room needs heat**, a small fan turns on to **circulate warm air** through the room



When the **desired temperature** is reached, the fan turns off to **trap heat** and **prevent overheating**



The result: **comfortable** rooms, cost **savings**, and **reduced** building **emissions**



The Cozy is a solution for all types of radiators

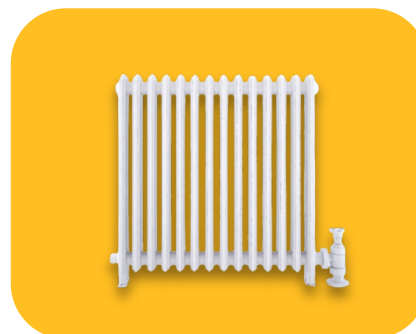
Wall Mount



Baseboards



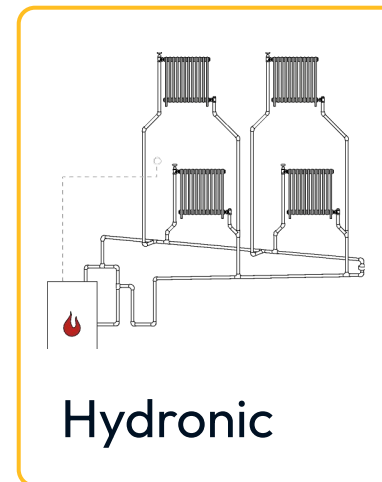
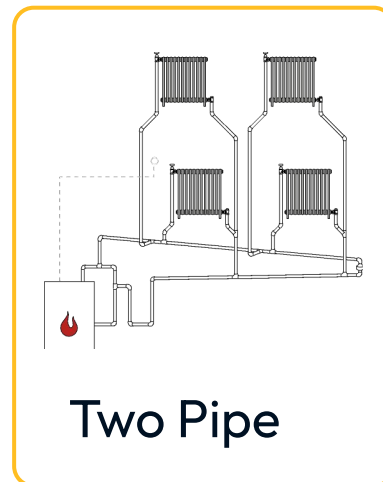
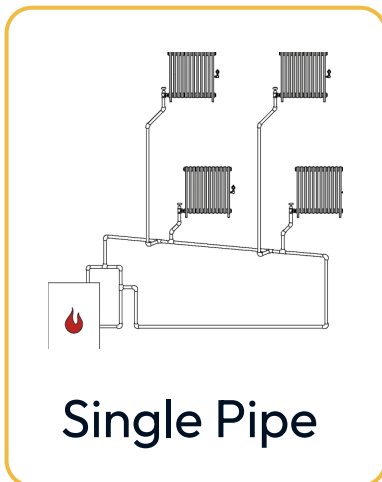
Cast Iron Radiator



Recessed Convactor

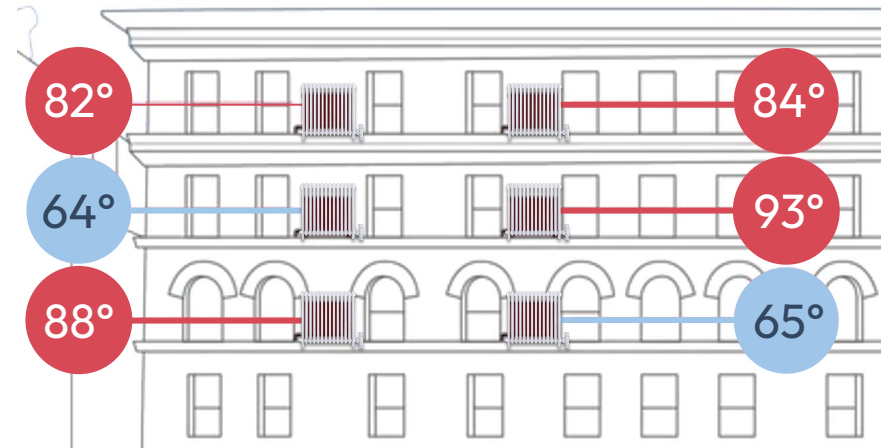


The Cozy works with all types of radiator distribution systems





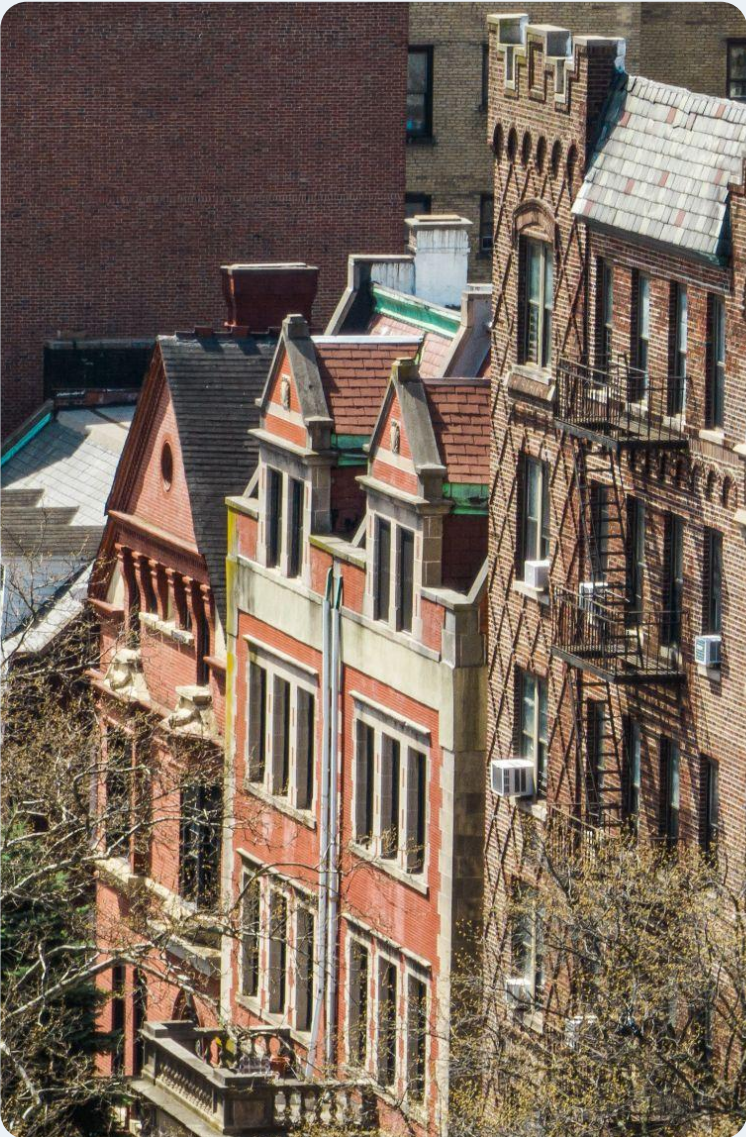
Improved heating distribution



Before Cozy



After Cozy



Customer results are unprecedented

25.5%

Average fuel savings

Other efficiency technologies like TRVs or Boiler Controllers, get <10% – 20%

*NYSERDA Report Number 18-12, May 2018, "A Focused Demonstration Project: The "Cozy" by Radiator Labs" (now Kelvin)

85%

Fewer maintenance calls made

Lowers building operating costs and increases overall tenant satisfaction

95%

Fewer heating complaints

Resulting in reduced tenant turnover



Rebates Available



Regulators have validated the Kelvin system

New York Technical Resource Manual

- ✓ One of two energy efficiency measures for steam heat buildings recognized by the NY TRM.*
- ✓ Largest savings solution in the 2019 TRM for HVAC control in the residential sector.

NYSERDA Independent Evaluation

- ✓ NYSERDA** validated 25.5% average billing savings through use of The Cozy.
- ✓ Savings are 3x-4x of next best alternative for steam-heated buildings.

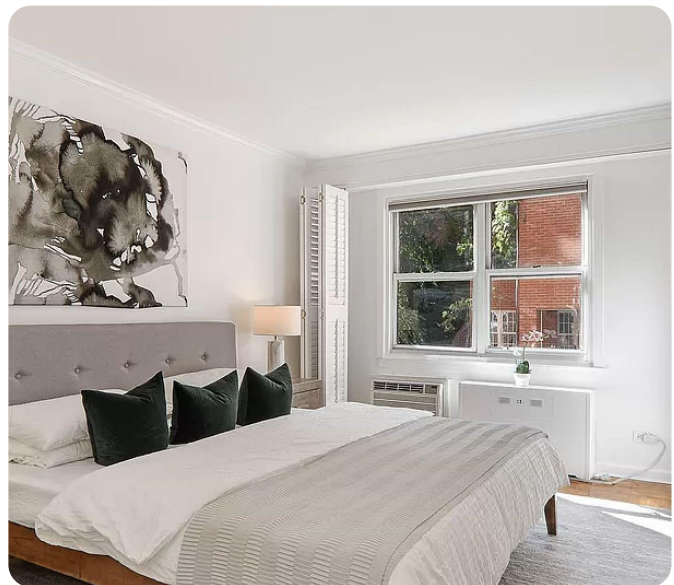
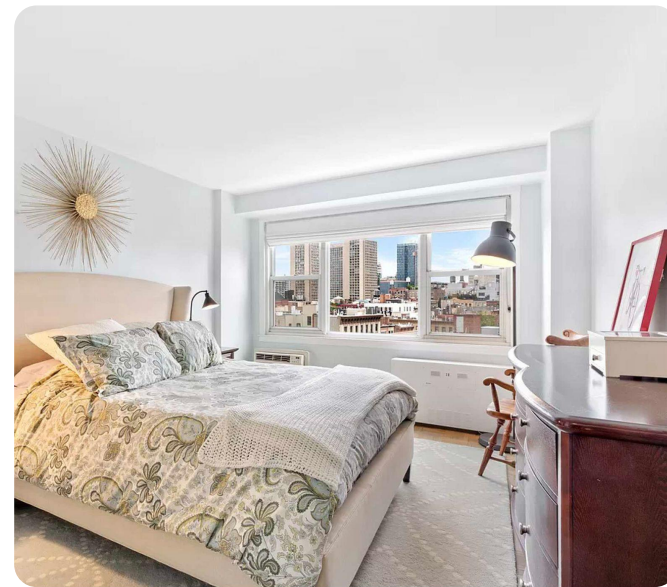
*The Technical Resource Manual (TRM) is a standardized, fair and transparent approach approach to measure energy savings across New York State's energy efficiency programs.

**NYSERDA Report Number 18-12, May 2018, "A Focused Demonstration Project: The "Cozy" by Radiator Labs" (now Kelvin)

Local Law 97 Compliance Prescriptive Pathway Article 321

- Adjusting temperature set points for heat and hot water
- Repairing all heating system leaks
- Maintaining heating systems
- Installing individual temperature controls or insulated radiator enclosures with temperature controls
- Insulating all pipes for heating and/or hot water
- Insulating steam system condensate tank or water tank
- Installing indoor and outdoor heating system sensors and boiler controls
- Replacing or repairing all steam traps
- Installing or upgrading steam system master venting
- Upgrading lighting
- Weatherizing and air sealing
- Installing timers on exhaust fans
- Installing radiant barriers behind all radiators.







Kelvin

kel.vin