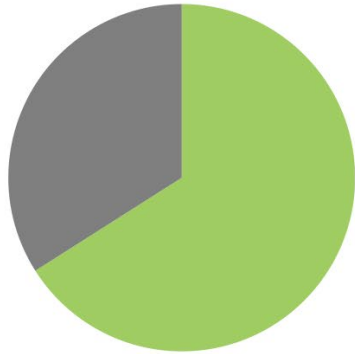


A photograph of the New York City skyline at sunset. The sky is a vibrant red and orange, and the silhouettes of several skyscrapers are visible against the bright background. The buildings are dark, with some lights starting to glow.

Laurie Kerr, FAIA, LEED AP

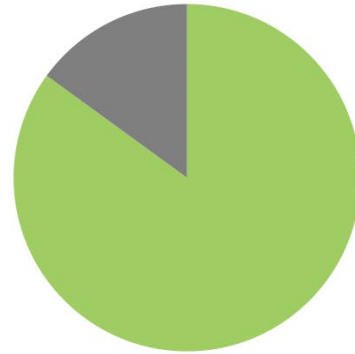
Adding it Up: CO₂ Emissions Reductions from NYC Building Policies

It's all about buildings, especially existing buildings



66%

of NYC's emissions
come from energy
used in buildings



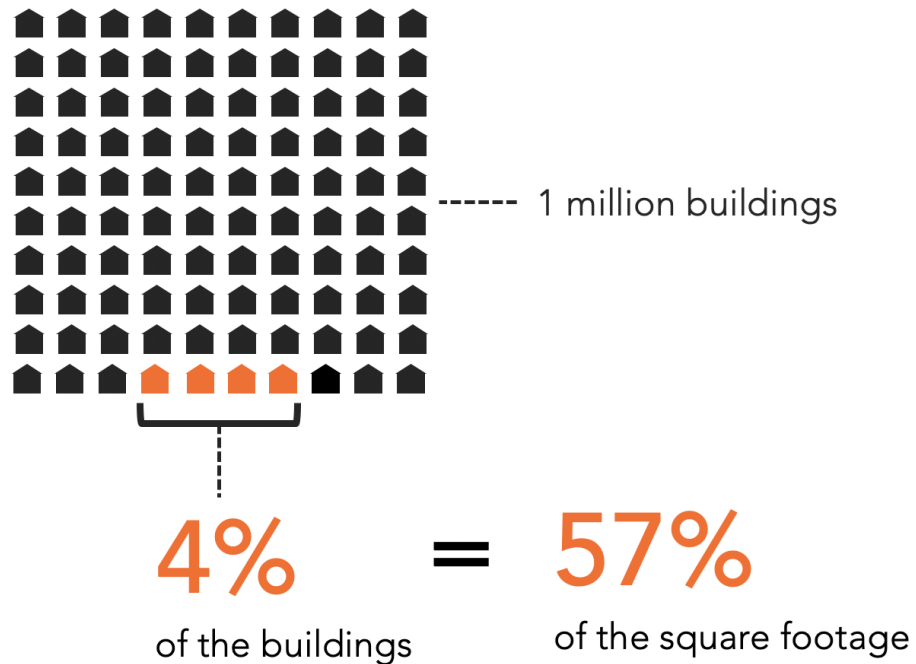
85%

of NYC's buildings in
2050 will be buildings
we already have today

Starting with the largest buildings is logical

NYC has a million buildings

The 40 k properties > 25 k sf account for 57% of the square footage



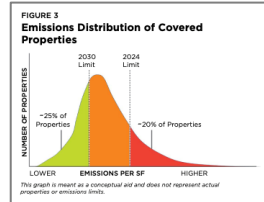
Timeline of Critical Policies



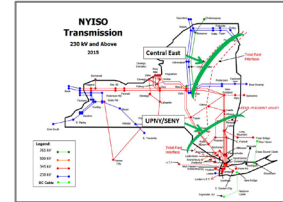
Greener, Greater Buildings Plan



Stretch codes: LL32 of 2018



Carbon Caps: LL 97 of 2019



Clean Grid: NYS Climate Act, 2019



Gas ban: Intro 2317???

2009

2018

2019

2019

2021

The Greener Greater Building Plan of 2009 & Phase out of Dirty Oil:

GGBP

Addressed existing buildings comprehensively

First such set of ordinances in the world

Four ordinances that set the stage:

- LL 84: Benchmarking buildings > 25k sf
- LL 85: NYC adopted its own energy code
- LL 87: Audits and Retro-commissioning
- LL 88: Lighting Upgrades and sub-metering

Phase out of dirty oil:

Required buildings to switch from #6 oil to natural gas or #2

Local Law 32 of 2018: More Stringent Codes

LL 32

Stretch code:

For 2019 and 2012, stretch code to be 20% more stringent than NYS base codes

Base code:

At the same time, the underlying NYS codes are getting more stringent

Regulates carbon from buildings:

The earliest and most stringent such law in the world

**Local Law 97 of 2019: A
new type of law**

LL97

Vast area impacted:

Sets carbon caps on buildings > 25k sf (57% of NYC's sq. ft.)

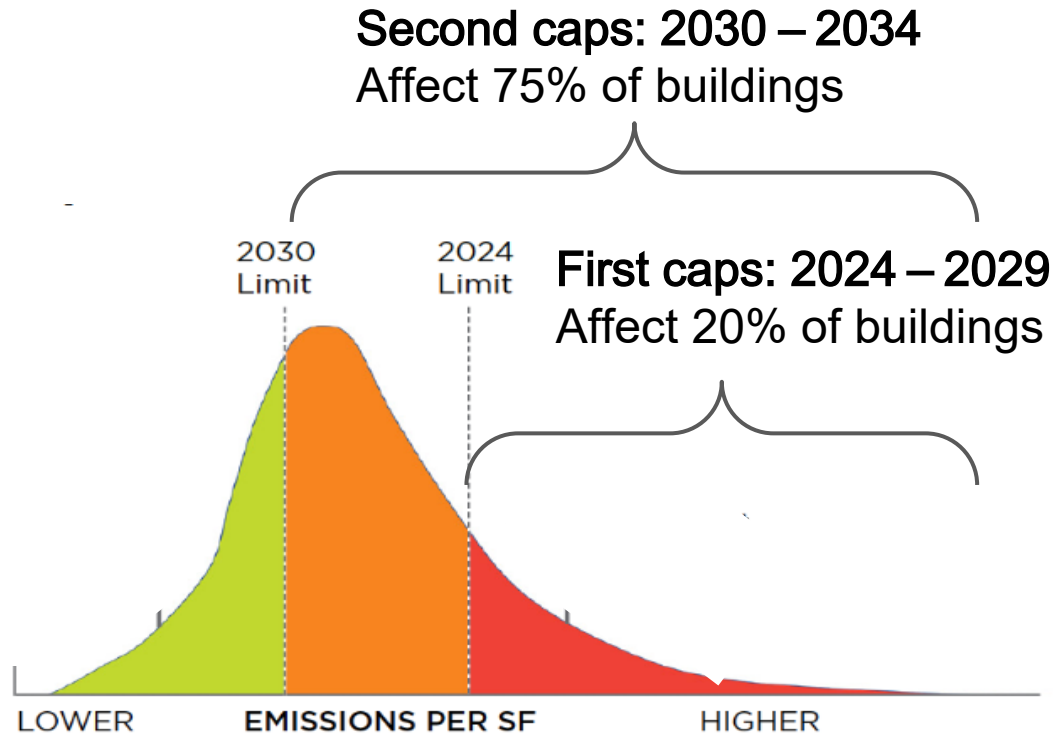
Long time horizon:

Caps begin in 2024, decreasing 5 times to achieve 80% portfolio wide reduction by 2050

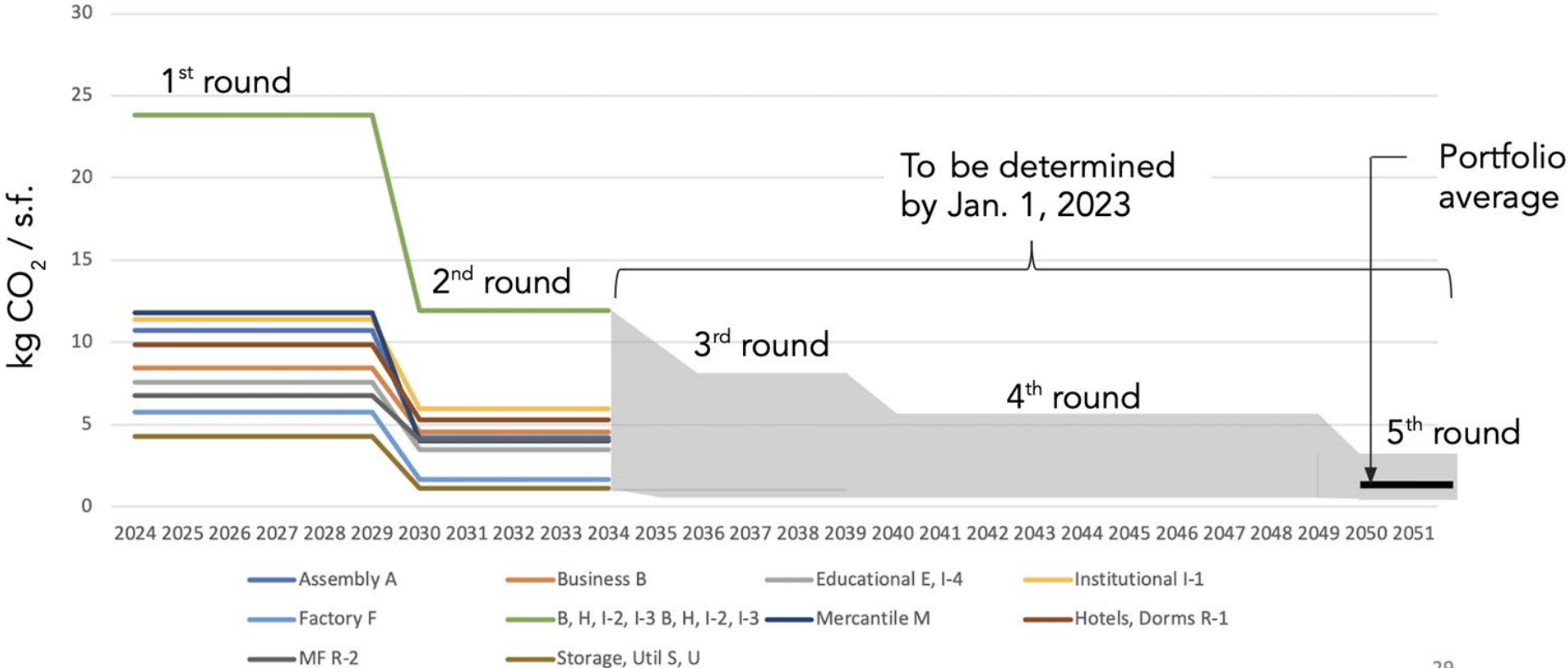
Regulates carbon from buildings:

The earliest and most stringent such law in the world

The first and second caps will impact 20% and 75% of buildings > 25k sf, respectively



LL 97's Carbon Caps decrease over 5 rounds to achieve an 80% portfolio-wide reduction

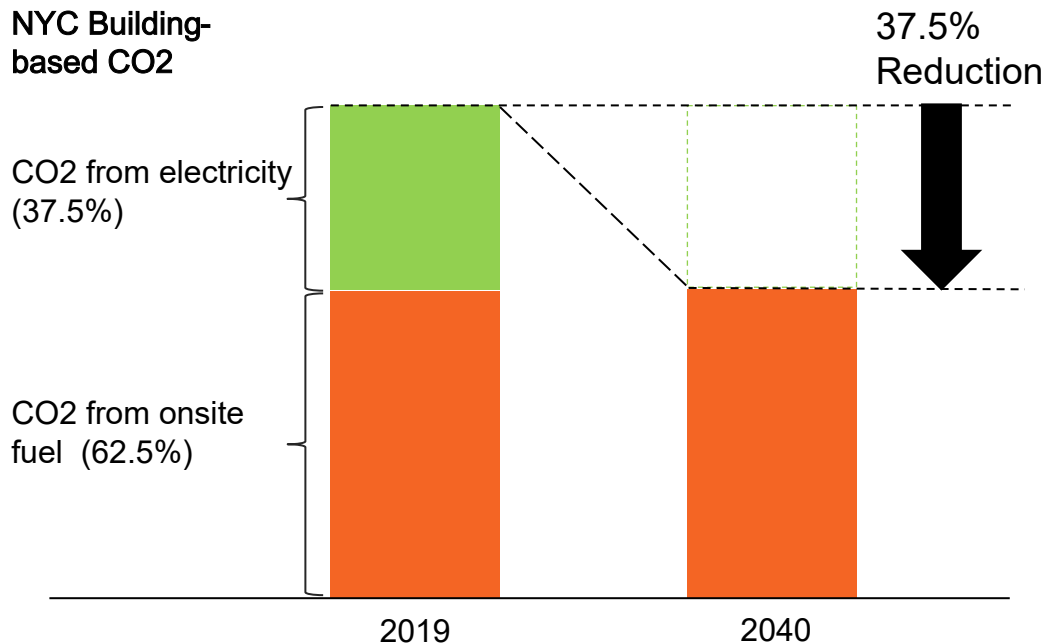


NYS Climate Leadership
and Community
Protection Act of 2019

NYS
CLIMATE
ACT

Decarbonizing the NYS Grid:

100% Zero-emission Electricity by 2040— Will
reduce NYC's building based CO2 by 37.5%

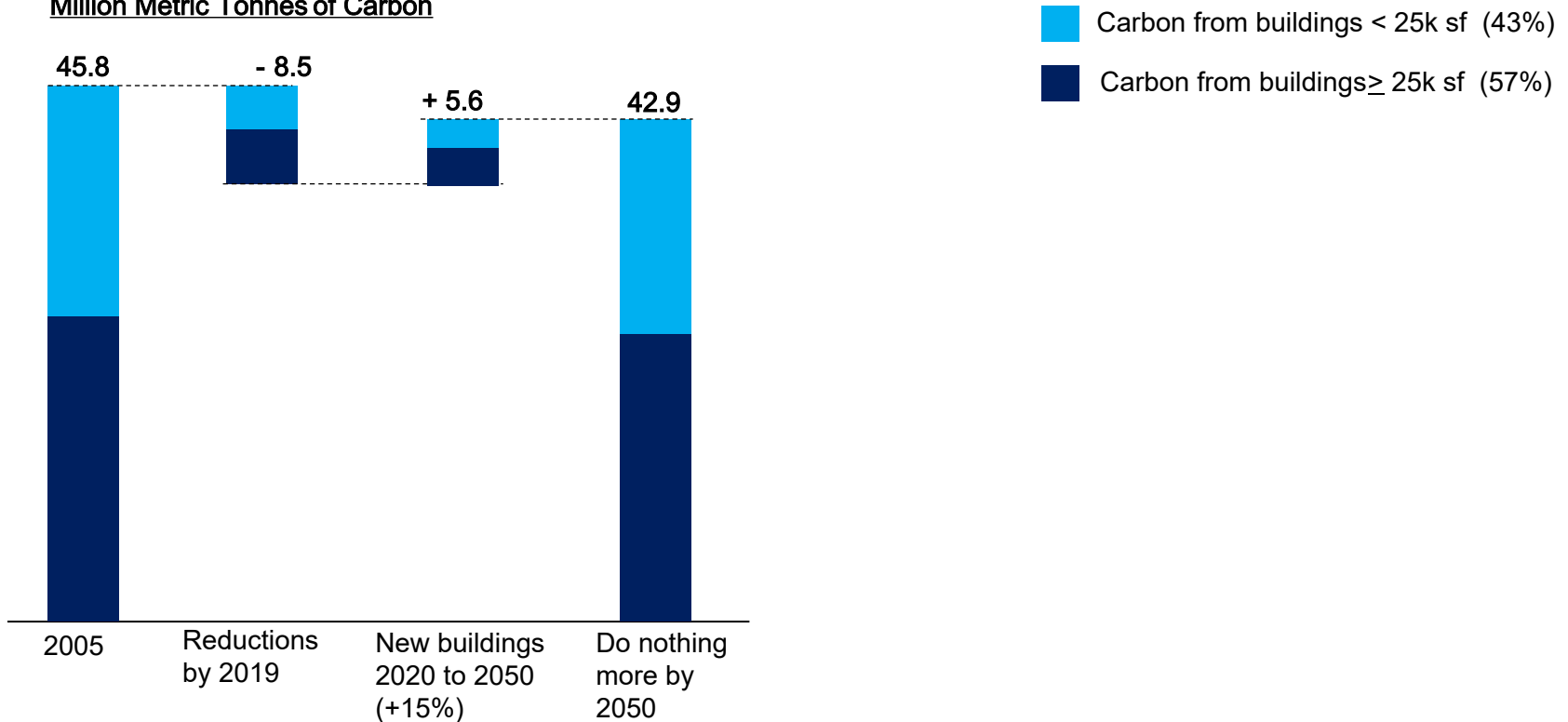


Intro 2317 of 2021

- Would prohibit new buildings and substantial renovations from burning fuels with high carbon coefficients
- Essentially a gas ban
- Will it pass?

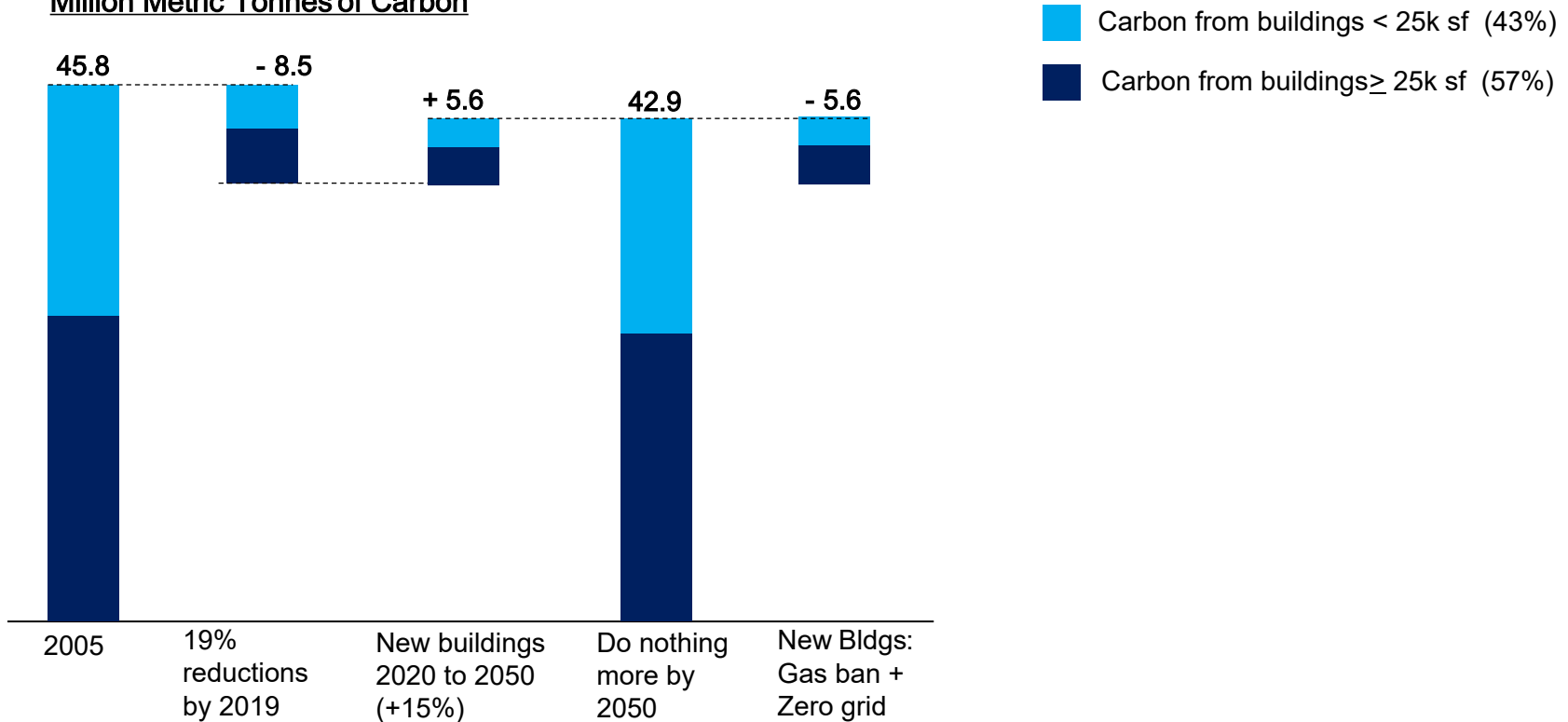
How far will those policies take NYC's building sector?

Million Metric Tonnes of Carbon



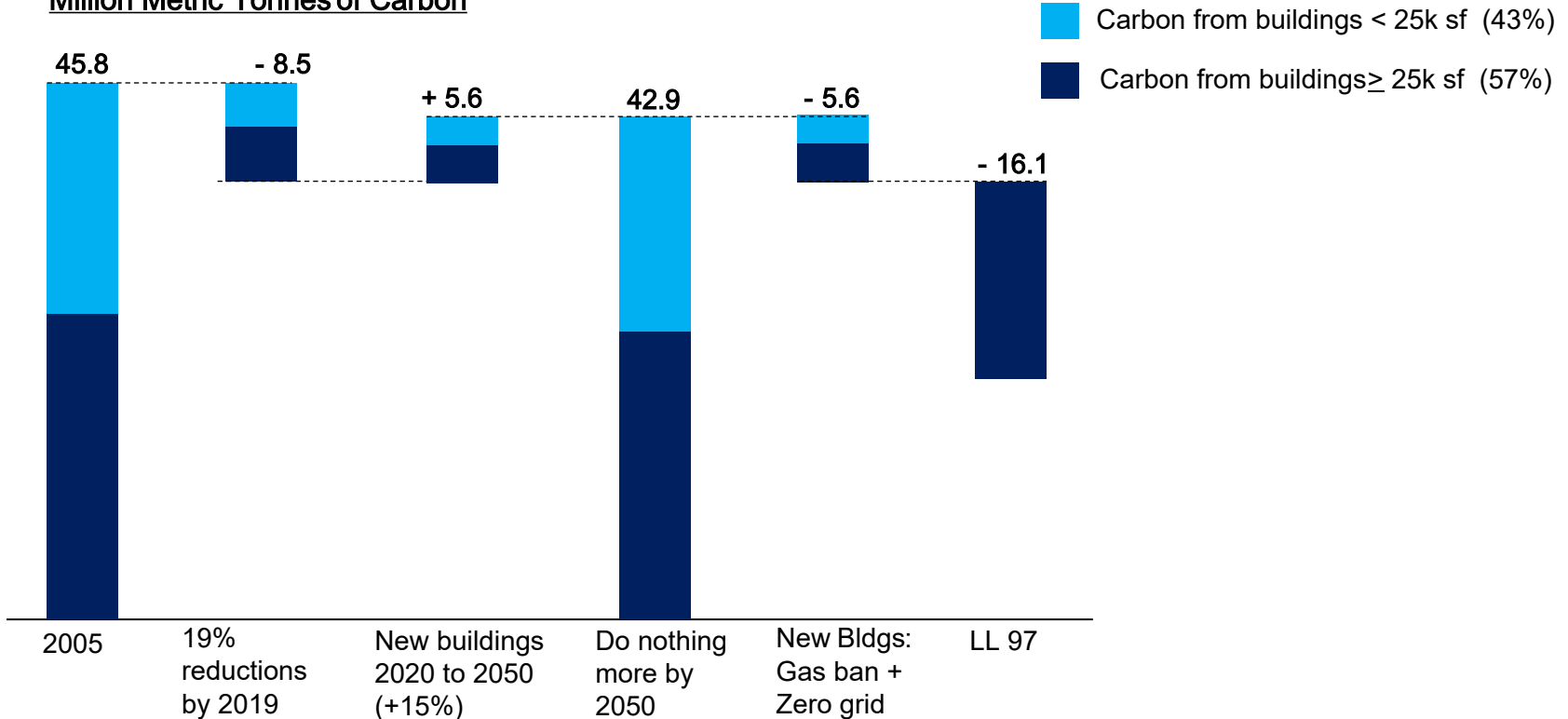
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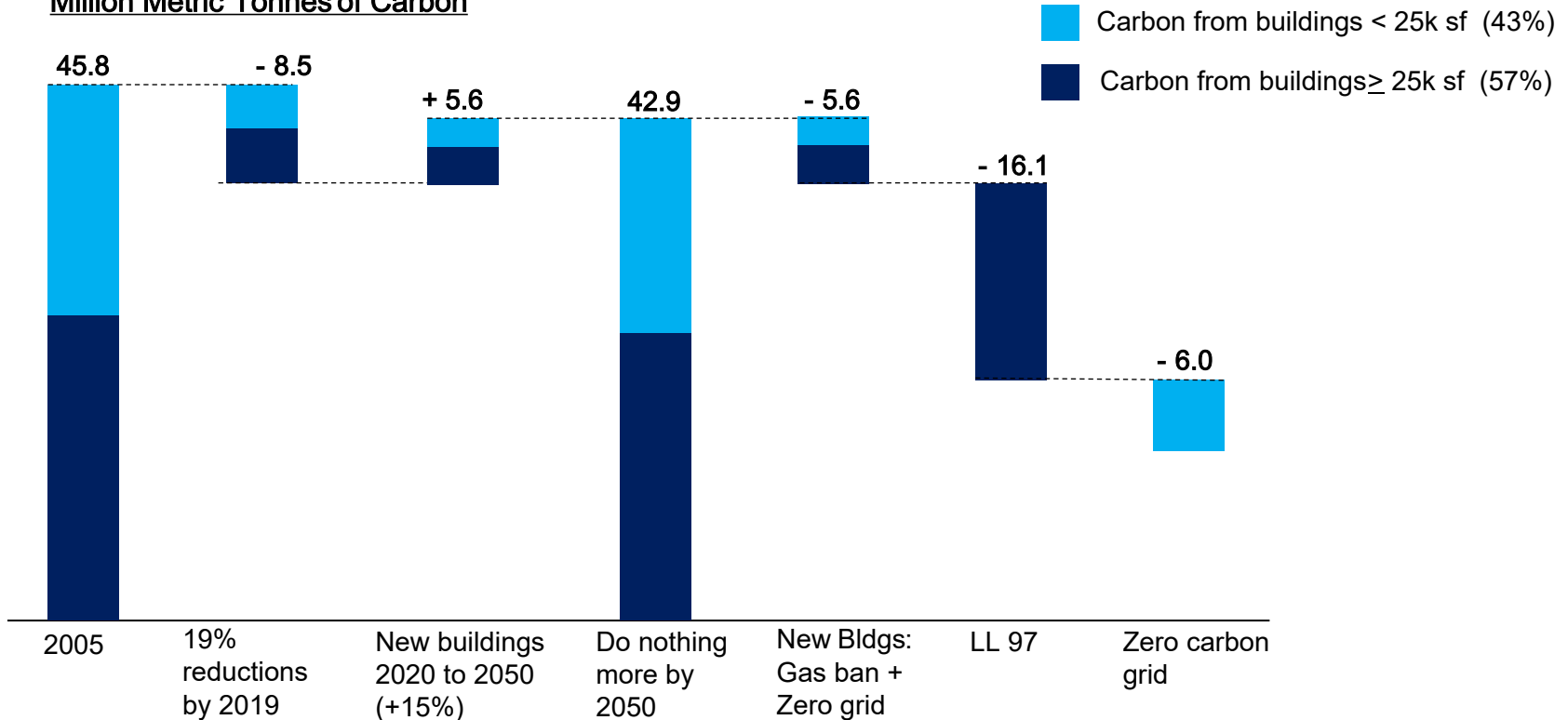
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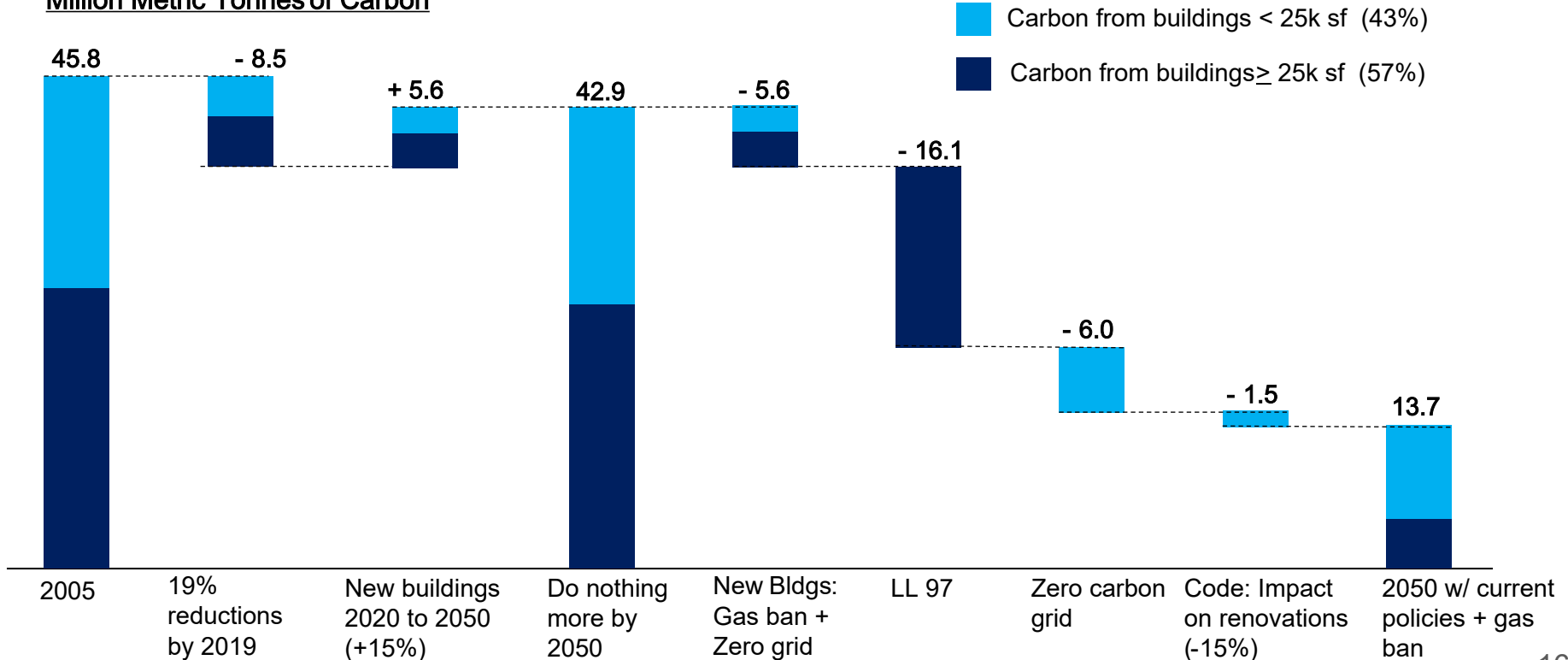
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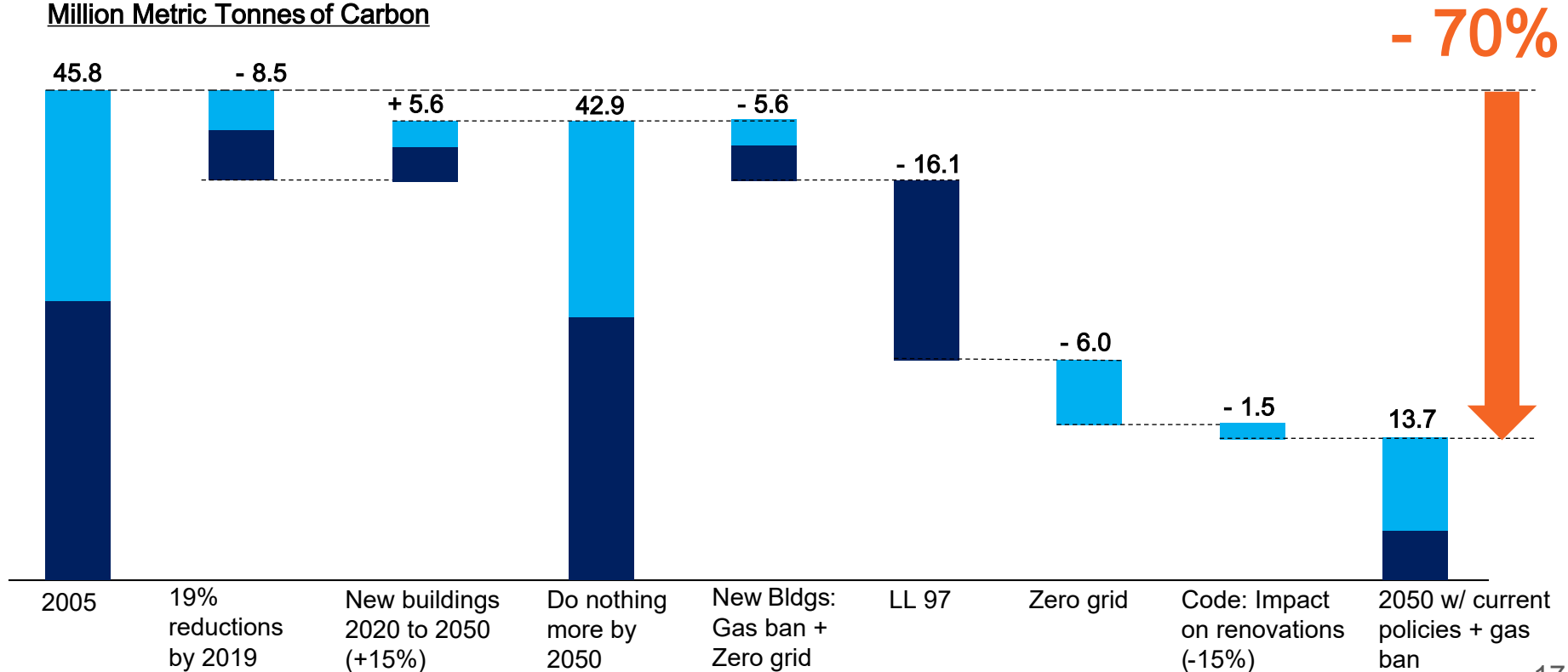
How far will those policies take NYC's building sector?

Million Metric Tonnes of Carbon



How far will those policies take NYC's building sector?

Million Metric Tonnes of Carbon





Moral?
Approaching
zero takes a lot
of policies!