

City of Newton Proposed BERDO

Building Emissions Reduction and Disclosure
Ordinance

Nov. 13, 2023

Discussion

BERDO Team

Why BERDO?

Buildings Covered

Boston as Model

Emissions Standard

Compliance Timeline for Bldg Owners

Discussion

Continued

Compliance Flexibility

Enforcement

Emissions Investment Fund

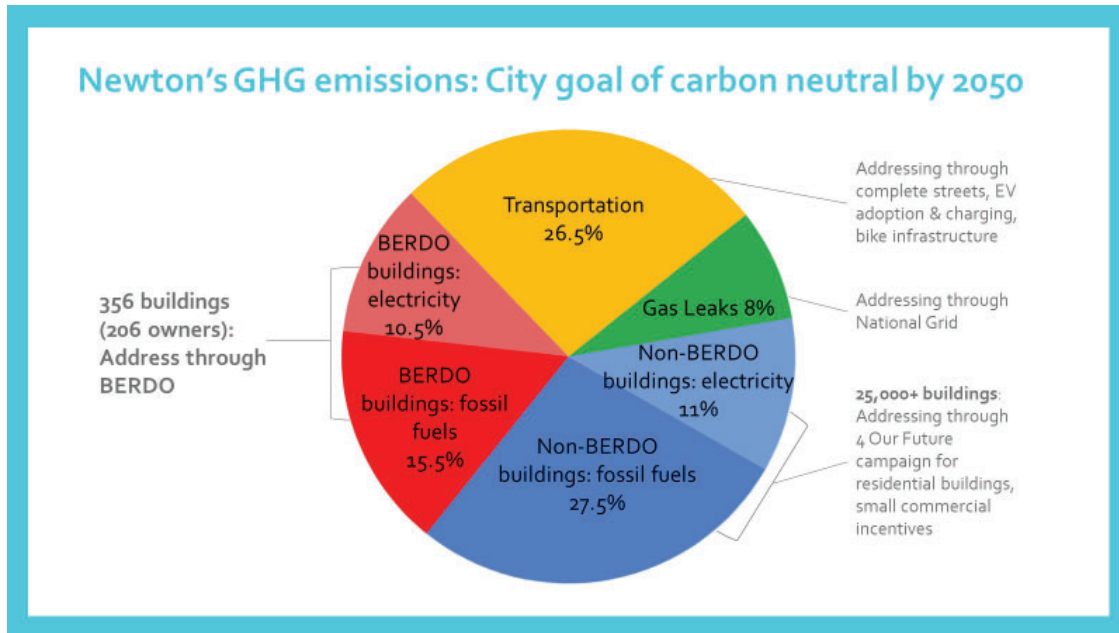
Legal Authority

Issues Still Under Review by BERDO Team

Newton BERDO Team

- City Staff- Bill Ferguson, Ann Berwick, Liora Silkes, Barney Heath, John Sisson
- NCCE- Halina Brown, Phil Hanser, Michael Gevelber
- Green Newton- Dan Ruben
- Consultant- Philip Eash-Gates, Synapse Energy Economics

Why BERDO?



Buildings Covered

- 356 buildings equal to or greater than 20,000 square feet of gross floor area
- Residential and non-residential buildings
- Exceptions: residential condos?, state and federal buildings

Proposed Covered Buildings (Excluding Residential Condos)

- There are 356 BERDO-covered buildings, with a combined GFA of 22.7 million square feet.
- Covered buildings account for 1.6% of the total number of buildings in Newton, 16.3% of the total building floor area in Newton and 26% of total emissions.

Tier	Description	Count of Buildings	Number of Owners	Total GFA (sq ft)	Emissions (metric tons CO ₂ e)	
1	Non-residential, GFA ≥ 100,000 sq ft	47	29	8,631,279	77,774	42%
2	Non-residential, GFA 50,000–99,999 sq ft	70	41	4,948,885	42,246	23%
3	Non-residential, GFA 35,000–49,999 sq ft	67	15	2,825,059	23,480	13%
	Residential, GFA ≥ 50,000 sq ft	18	51	2,191,572	11,824	6%
4	Non-residential, GFA 20,000–34,999 sq ft	107	88	2,848,581	23,678	13%
5	Residential, GFA 20,000–49,999 sq ft	47	25	1,279,608	6,845	4%
Total	All covered buildings	356	206*	22,724,984	185,845	100%

*Note that the total number of covered building owners is less than the sum of the rows, because some building owners appear in multiple tiers.

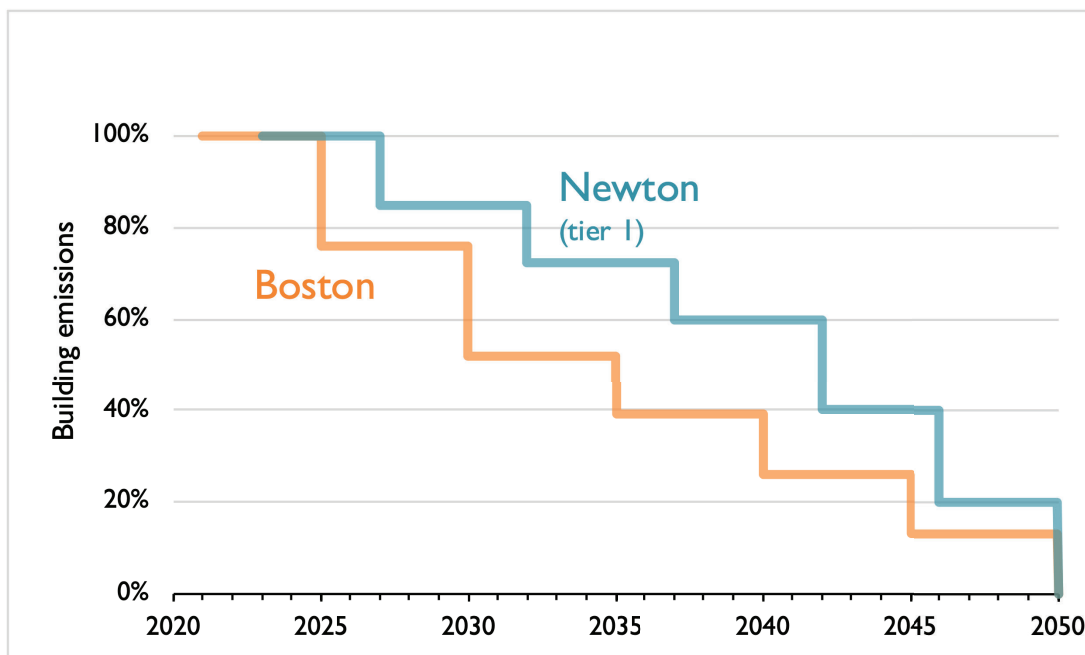
Boston as a Model-Proposed Differences

- Since 2013 Boston has had a Building Energy Reporting Requirement.
- In Sept. 2022 Boston adopted an Emissions standard because the reporting requirement was not achieving energy savings.
- Newton’s proposed BERDO is based on Boston with some notable exceptions:
 - Timeline: Emissions reductions start in 2025 in Boston-2027 in Newton.
 - Newton is focused on individual buildings and Boston includes buildings on a parcel.
 - Rate of Emissions reduction is not steep in the early years.

Proposed Table 1: CO₂e Emissions Standards by Building Use

Building use	Emission standards (kgCO ₂ e/SF/yr)					
	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Assembly	8.4	6.0	4.7	2.8	1.4	0.0
College/University	12.6	8.5	5.8	3.4	1.6	0.0
Education	4.2	3.3	2.6	1.7	0.8	0.0
Food Sales & Service	19.0	13.4	10.2	6.4	3.2	0.0
Healthcare	15.2	12.6	10.1	6.6	3.2	0.0
Lodging	6.3	4.7	3.7	2.4	1.1	0.0
Manufacturing/Industrial	27.1	22.9	18.6	11.7	5.0	0.0
Office	5.9	4.4	3.3	2.0	0.9	0.0
Residential	4.8	3.5	2.6	1.6	0.8	0.0
Retail	9.3	6.3	4.4	2.2	0.9	0.0
Services	9.3	6.5	4.7	3.0	1.5	0.0
Storage	7.3	5.1	3.4	1.8	0.6	0.0
Technology/Science	20.3	15.9	12.3	7.0	3.3	0.0

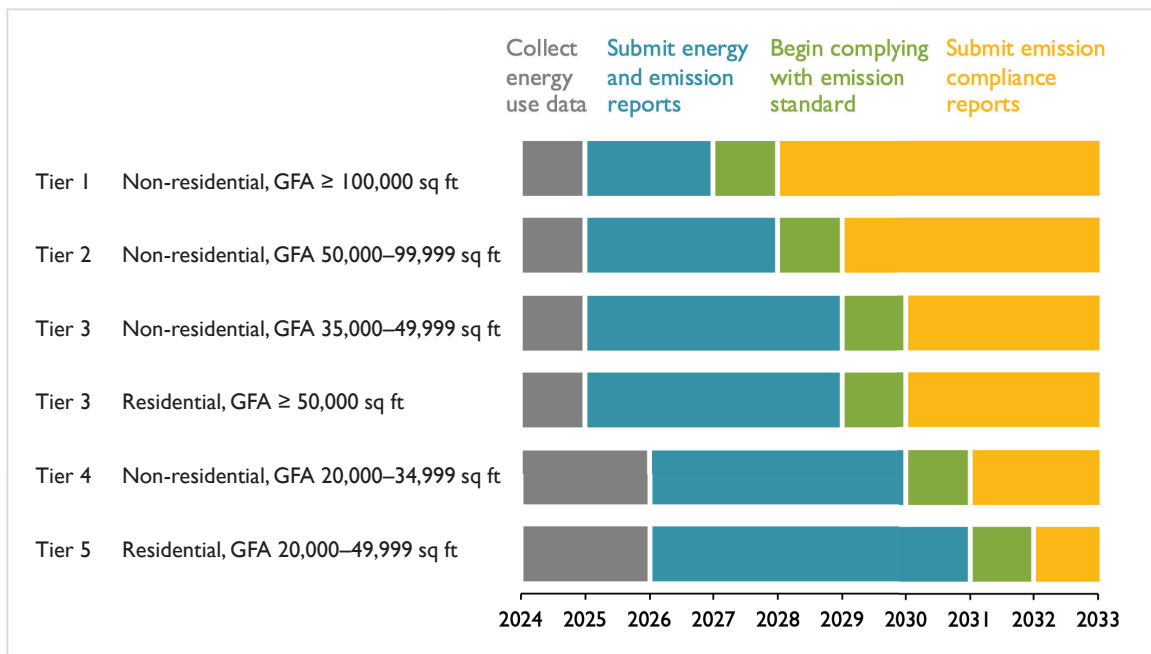
Proposed Rate of Emissions Reduction



Proposed Compliance Timeline for Bldg. Owners

Building Tier	Bldg Description	1st Energy and Emissions Report Due	1st Emissions Compliance Year	1st Report under Emissions Compliance
Tier 1	NR ≥ 100,000 sf GFA	September 15, 2025	2027	September 15, 2028
Tier 2	NR ≥ 50,000 < 100,000 sf GFA	September 15, 2025	2028	September 15, 2029
Tier 3	R > 50,000 sf GFA and NR ≥ 35,000 and < 50,000 sf GFA	September 15, 2025	2029	September 15, 2030
Tier 4	NR > 20,000 and < 35,000 sf GFA	September 15, 2026	2030	September 15, 2031
Tier 5	R > 20,000 and < 50,000 sf GFA	September 15, 2026	2031	September 15, 2032
	NR= Non-residential buildings			
	R= Residential buildings			
	GFA= Gross Floor Area			

Proposed Compliance Timeline for Bldg. Owners



Proposed Compliance Flexibility

- Portfolios- combine emissions rating of 2 or more buildings.
- Individual Compliance Plans- choose a base year from 2013 to now.
- Hardship Plans- unique circumstances or conditions.
- Multiple Compliance Pathways- phased compliance, energy efficiency, ACP.

Enforcement

- Enforcement will be by the Newton Law Department.
- Penalties for non-compliance begin the third year after the effective date of emissions requirements.
 - Failure to submit a report.
 - Inaccurate report.
 - Failure to meet emissions standard.
- Penalties and other enforcement provisions do not apply to residential tenants.

Proposed Emissions Investment Fund

- Fines, fees and penalties are placed in a special City fund.
- Fund is administered by the Climate/Sustainability Office and can be used for:
 - Projects that benefit Environmental Justice Populations,
 - Costs incurred by the City in administering the program created pursuant to this Ordinance,
 - Costs incurred by the City in complying with the program created pursuant to this Ordinance,
 - Costs incurred by non-profit entities that operate within the City, including but not limited to entities that operate affordable housing, in complying with the program created pursuant to this Ordinance,
 - Education related to implementation of the requirements of this ordinance.

Legal Authority

- Newton Law Department has reviewed.
- This is new territory legally.
- Wouldn't be surprised if it is challenged by some building owners in Boston.

Issues Still Under Review by BERDO Team

- Maryland approach: do not include electricity emissions in standard.
- Residential Condos: should they be included?
- Residential Buildings: 20,000 sq. ft. GFA adjustment?