Boston's Building Performance Zoning

CalBEM 11.20.2025

CITY of BOSTON

Planning Department

Boston's BPS: BERDO

Boston's Building Emissions Reduction and Disclosure Ordinance (BERDO) sets requirements for large existing buildings to reduce their greenhouse gas emissions over time.

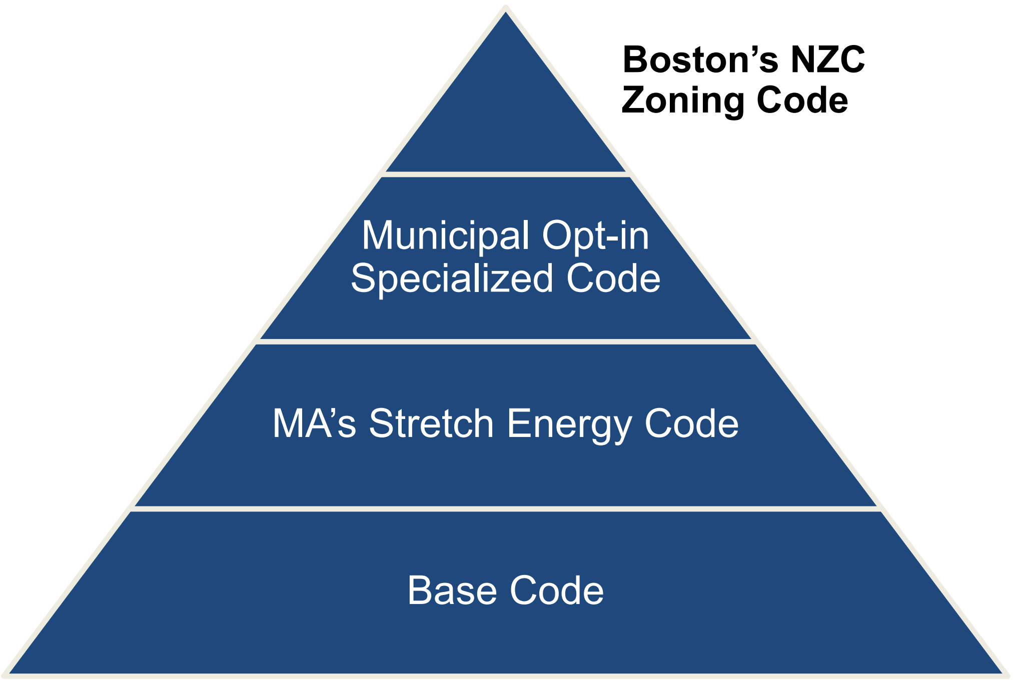
Buildings must begin complying with emissions standards in 2025 or 2030, depending on their size.

	2025 - 2029	2030 - 2034	2035 - 2039	2040 - 2044	2045 - 2049	2050 –
ASSEMBLY	7.8	4.6	3.3	2.1	1.1	0
COLLEGE/ UNIVERSITY	10.2	5.3	3.8	2.5	1.2	0
EDUCATION	3.9	2.4	1.8	1.2	0.6	0
FOOD SALES & SERVICE	17.4	10.9	8.0	5.4	2.7	0
HEALTHCARE	15.4	10.0	7.4	4.9	2.4	0
LODGING	5.8	3.7	2.7	1.8	0.9	0
MANUFACTURING/ INDUSTRIAL	23.9	15.3	10.9	6.7	3.2	0
MULTIFAMILY HOUSING	4.1	2.4	1.8	1.1	0.6	0
OFFICE	5.3	3.2	2.4	1.6	0.8	0
RETAIL	7.1	3.4	2.4	1.5	0.7	0
SERVICES	7.5	4.5	3.3	2.2	1.1	0
STORAGE	5.4	2.8	1.8	1.0	0.4	0
TECHNOLOGY/ SCIENCE	19.2	11.1	7.8	5.1	2.5	0

Emissions standard ($kgCO_2e/ft^2/year$)

Net Zero Carbon

On July 1st, 2025, Boston's amended **Zoning Article 37***, Green Buildings and Net Zero Carbon standards, took effect for projects submitting new* **Article 80 Small Project Review Applications (SPRAs)***,* **Article 80B Large Project Notification Forms (PNFs)** *and some* **Notice of Project Changes (NPCs)***.*



Net Zero Carbon

	Emissions standards (kgCO2e/SF/yr)					
Building Use Type	**2025 - 2029**	**2030 - 2034**	**2035 - 2039**	**2040 - 2044**	**2045 - 2049**	**2050**
Assembly	0	0	0	0	0	0
College/University	0	0	0	0	0	0
Education	0	0	0	0	0	0
Food Sales & Service	0	0	0	0	0	0
Healthcare	10	7.4	4.9	2.4	0	0
Lodging	0	0	0	0	0	0
Manufacturing/Industrial	15.3	10.9	6.7	3.2	0	0
Multifamily Housing	0	0	0	0	0	0
Office/ Clinic	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Services	0	0	0	0	0	0
Storage	0	0	0	0	0	0
Technology/Science	5.1	2.5	0	0	0	0

Article 37 Updates

Key Amendments:

- Adds standards for Net Zero Carbon (NZC) limiting building operational greenhouse gas emissions to zero for most building use types.
- Lowers the applicability threshold for the new NZC standards to include Article 80E Small Projects greater than 20,000 SF or 15 or more residential units.
- Adds standards for Embodied Carbon Life Cycle Analysis (LCA) reporting for Article 80B Large Projects greater than 50,000 SF
- REMOVED the Carbon Neutral Building Assessment requirements in the Design and Construction filing stages

Subject to Net Zero Carbon

Applicability of Net Zero Carbon

New Buildings 15+ Units / 20,000+ SF, Additions 50,000+ SF

Does not include:

- Hospital Additions (no SF limit)
- Renovations (no SF limit)
- Changes of Use (no SF limit)
- Additions under 50,000 Gross SF

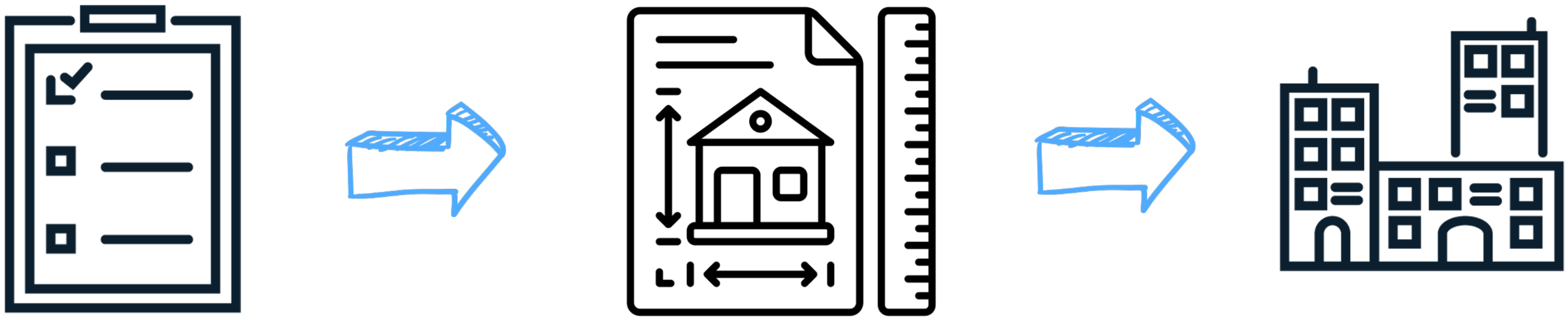
Comprehensive Sustainability

Applicability of LEED Green Buildings

New Buildings 50,000+ SF / Additions 50,000+ SF

Any project subject to or electing to comply with Article 80 B Large Project Review.

- LEED Green Building (*same*)
- Carbon Neutral Bldg Assessment (CNBA) discontinued
- Net Zero Carbon (*new*)
- Embodied Carbon Life Cycle Assessment (*new*)



Initial Filing

Included in the
SPRA or PNF documents

Design Filing

Prior to Building Permit application

Construction Completion Filing

Prior to Certificate of Occupancy
Permit application

Both Small and Large Project Article 37 submissions and compliance reviews occur at three project phases.

Emissions Intensity Calculator

First Emissions Compliance Year (Yr of Construction completion)	2025	year

PROPOSED BUILDING - USE, ENERGY AND GENERATION DATA

This subtitle provides a brief explanation of the table below.

	Use square Footage (sq.ft.)	Building Use Type (Choose from dropdown)	Annual Grid Electricity Use (kWh)	Annual Natural Gas Use (MMBtu)	District Steam (Vicinity - Boston) (MMBtu)	District Steam (Vicinity - Longfellow) (MMBtu)	District Steam (MATEP) (MMBtu)	District Chilled Water (MATEP) (MMBtu)	District Electricity (MATEP) (MMBtu)
Largest Primary Building Use	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Second Largest Building Use	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Third Largest Building Use	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV annual electricity production (in AC)	0	kWh							

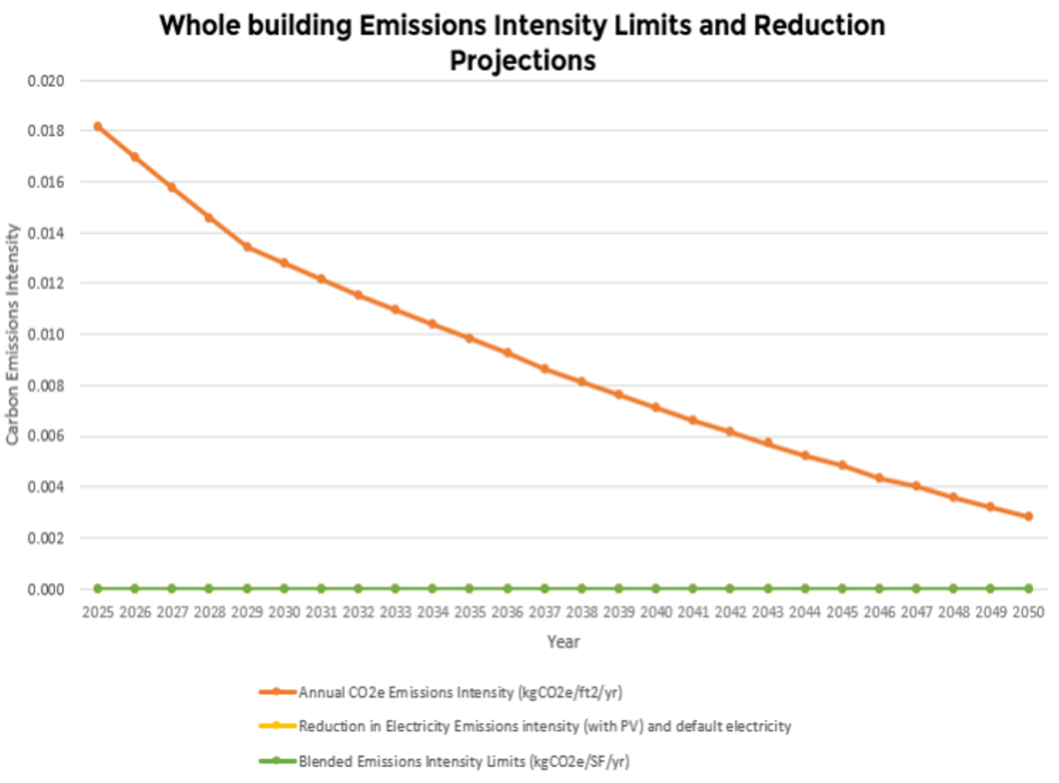
Required inputs:

- ➔ Building Uses
- ➔ Areas
- ➔ Predicted Energy Use
- ➔ Solar PV production (optional)

Emissions Intensity Calculator

Resulting Calculations:

- ➔ Predicted Carbon Emissions Intensity until 2050
- ➔ Action when non-compliant
- ➔ Amount of renewable energy to be purchased
- ➔ Amount of fossil emissions to be offset or eliminated



Emissions Intensity Calculator

ENERGY SOLUTIONS FOR NZC - **ELECTRICAL EMISSIONS only**

This subtitle provides a brief explanation of the table below.

Renewable Energy Needed to Mitigate Electricity Emissions Over Limit [kWh]	3650	*kWh/ yr*	**2025**
Option 1 Utility Plan	Default (RPS Class I)		
AND/ OR Option 2 MassClass 1 RECs / PPAs	0	*kWh / yr*	
Remainder Renewable Energy Needed to Mitigate Electricty Emissions Over Limit [kWh]	3650	*kWh/ yr*	**2025**

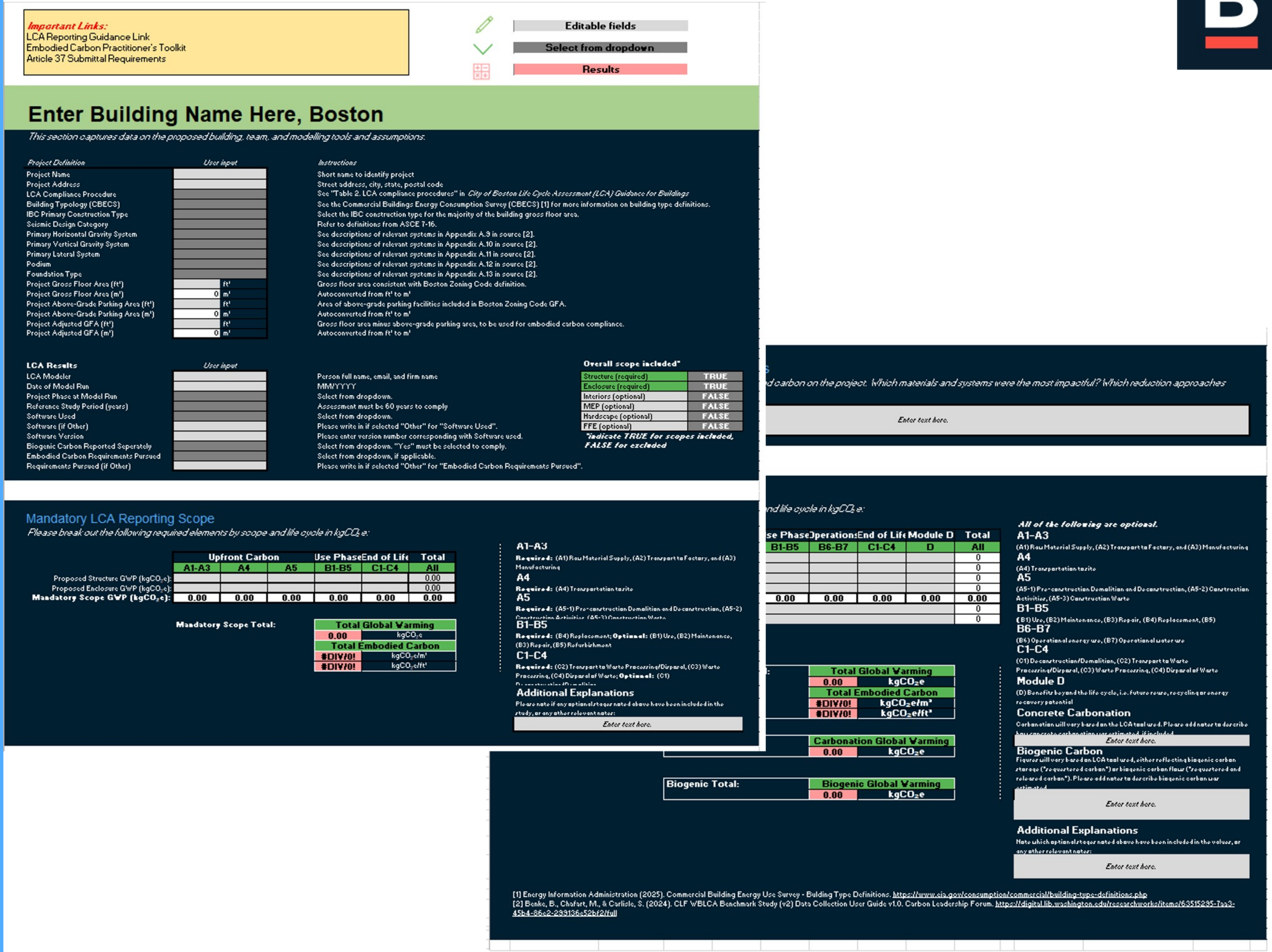
Note: Negative value signifies a Net energy positive design and the value is equivalent to the amount of avoided carbon (intensity)

Solution Pathways available on tool:

- → Reduced Energy Use with more efficient envelope and energy systems
- → Increase Solar PV production
- → Utility Service Plan
- → RECs/ Power Purchase Agreements
- → Alternative Compliance Payments for fossil fuel emissions

Embodied Carbon LCA Reporting Template

Embodied Carbon LCA Reporting Instructions



ARTICLE 37 WEBSITE

New resources and content are now available on the Article 37 Website

Links to Zoning Language, Guidelines, Resources and Case Studies