# Draft Ordinance: Brookline Building Emissions Reduction and Disclosure Ordinance (BERDO)

*Note: This draft is based on the Brookline BERDO proposal and plan and integrates best practices from Boston’s BERDO 2.0, Cambridge’s BEUDO amendments and Newton’s BERDO. It is intended as a starting point for legal counsel and the Brookline Town Meeting. Citations to other ordinances are provided for reference.*

## Section 1 – Purpose and Findings

1.1 Brookline hereby enacts a **Building Emissions Reduction and Disclosure Ordinance (BERDO)** to reduce greenhouse‑gas emissions from existing buildings, improve public health, advance climate resiliency and achieve the Town’s commitment to **net‑zero emissions by 2040** as established under Warrant Article 37. Buildings account for approximately **43 %** of Brookline’s GHG emissions, including 19 % from non‑residential buildings and 24 % from residential uses (one‑to‑three‑family homes, condominiums and apartments).

1.2 The Town recognizes that other Massachusetts municipalities have adopted building‑performance ordinances—Boston’s BERDO 2.0 covers non‑residential buildings ≥20 000 ft² and residential buildings with 15+ units[[1]](https://www.boston.gov/departments/environment/berdo#:~:text=Who%20is%20covered%3F), Cambridge’s BEUDO requires non‑residential buildings ≥100 000 ft² to reach net‑zero by 2035 and buildings 25–100 k ft² by 2050[[2]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=%2A%20Non,to%20net%20zero%20by%202035), and Newton’s BERDO covers commercial buildings ≥20 000 ft² and phases in residential buildings later[[3]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=BERDO%20Notes%20for%20PEX%20Meeting,vote%20to%20approve%20BERDO%2038). This ordinance draws upon these precedents while tailoring provisions to Brookline’s building stock and equity priorities.

1.3 The Town finds that achieving emissions reductions from buildings must be accomplished equitably. Building‑performance standards can impose burdens on owners who lack capital or technical resources and on tenants through increased rents. The Town therefore establishes an **Equitable Emissions Investment Fund** (Section 7) and support programmes to ensure benefits accrue to Environmental Justice (EJ) populations and affordable housing.

## Section 2 – Definitions

**Building.** Any structure used or intended for sheltering any occupancy or use. For purposes of this ordinance:

* **Non‑residential building** means a building, or group of buildings on a parcel, with a total gross floor area of **20 000 ft² or more** used for commercial, institutional, industrial, educational or mixed uses.
* **Residential building** means a building or group of buildings containing **15 or more dwelling units** or having **20 000 ft² or more** of gross floor area used for residential purposes. Condominium associations shall aggregate units to determine coverage.
* **Large building** refers to a non‑residential building **≥100 000 ft²**, which is subject to accelerated emissions requirements (Section 5.2).

**Covered building.** A non‑residential or residential building meeting the size or unit thresholds defined above, subject to reporting and compliance requirements in the applicable phase.

**Portfolio.** A group of covered buildings under common ownership or control that elect to comply by aggregating their emissions (Section 6.3).

**Net‑zero emissions.** For a covered building, achieving zero annual greenhouse‑gas emissions from on‑site fossil‑fuel combustion and purchased energy, after accounting for renewable energy procurement and allowable offsets.

**Verification year.** A calendar year in which covered buildings must submit third‑party verified emissions reports (see Section 4.5). Verification years occur every five years beginning in 2026.

Other terms (e.g., **emissions factors**, **Alternative Compliance Payment**, **Verified Carbon Credit**, **Environmental Justice population**) shall be defined by regulation.

## Section 3 – Applicability and Phased Implementation

3.1 **Phases of coverage.** The ordinance shall be implemented through four phases. Each phase may be enacted by the Select Board, subject to ratification by Town Meeting.

* **Phase 1 (2026–2028)** – Applies to **non‑residential buildings ≥20 000 ft²**. Building owners must report annual energy use and greenhouse‑gas emissions beginning with calendar year 2026. Emissions standards do not apply in this phase but will inform baseline development.
* **Phase 2 (2029–2031)** – Adds **residential buildings ≥20 000 ft² or 15+ units**. Emissions standards take effect for large non‑residential buildings (≥100 000 ft²) beginning with emissions year 2030. Owners may satisfy standards directly or through compliance pathways under Section 6.
* **Phase 3 (2032–2035)** – Expands coverage by lowering the size threshold as follows: buildings ≥15 000 ft² (2032), ≥10 000 ft² (2033) and ≥5 000 ft² (2034). Emissions standards apply to non‑residential and residential buildings according to Section 5. Buildings below 5 000 ft² remain exempt.
* **Phase 4 (2036–2040)** – Applies emissions standards to all covered buildings; smaller buildings added in Phase 3 shall meet standards commensurate with their sector. All covered buildings must achieve **net‑zero emissions by 2040**.

3.2 **Exemptions.** The following buildings are exempt from this ordinance: (a) municipal, state or federal facilities; (b) buildings scheduled for demolition within 12 months; (c) facilities with emergency power functions where compliance would compromise public safety; (d) buildings granted a hardship compliance plan (Section 6.5).

## Section 4 – Reporting Requirements

4.1 **Annual reporting.** Covered buildings shall annually report whole‑building energy use, water use (optional) and greenhouse‑gas emissions using the EPA’s **ENERGY STAR Portfolio Manager** or successor platform. Reports shall be submitted by May 1 of the following year.

4.2 **Electricity emissions.** During Phase 1 and Phase 2, electricity consumption shall be reported but **excluded from emissions compliance calculations**, consistent with Newton’s approach[[4]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=PEX%20vendor%20notes%20%E2%80%A2%20Newton,whole%20building%20all%20at%20once). The Town may incorporate electricity emissions into standards in Phase 3 or Phase 4 through regulation, following consultation with the Brookline Emissions Review Board.

4.3 **Baseline.** Each covered building shall establish a baseline emissions value by averaging two consecutive calendar years between 2018–2024. Owners may select baseline years to capture prior efficiency investments. Baseline data must be third‑party verified.

4.4 **Data disclosure.** Aggregated building performance data, compliance status and investment fund distributions shall be published annually by the Town, protecting confidential business information where required.

4.5 **Verification.** Covered buildings shall obtain third‑party verification of reported data in **verification years**, which occur every five years beginning with **2026**. The Town shall accredit qualified verifiers and maintain a public list of eligible professionals.

## Section 5 – Emissions Standards and Timeline

5.1 **General standard.** The Town shall establish emissions standards, expressed in kilograms of CO₂e per square foot per year, for each building type (e.g., office, retail, laboratory, residential). Standards shall decrease progressively so that all covered buildings meet **net‑zero emissions by 2040**. Standards shall be informed by benchmarking data and regional decarbonization pathways.

5.2 **Accelerated track for large emitters.** **Non‑residential buildings ≥100 000 ft²** shall meet emissions standards four years earlier than smaller buildings, reaching **net‑zero by 2035**, mirroring Cambridge’s accelerated schedule[[2]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=%2A%20Non,to%20net%20zero%20by%202035).

5.3 **Emissions factors.** The Town shall publish annual emissions factors for electricity, steam, chilled water and district energy, projected into future years. Factors shall reflect state and regional grid decarbonization trajectories.

5.4 **Schedules.** The Town Administrator or designee shall promulgate a schedule of emissions standards and deadlines for each phase. Standards shall be adopted via regulation, following public hearing and review by the Brookline Emissions Review Board.

## Section 6 – Compliance Pathways

6.1 **Direct compliance.** Building owners may meet emissions standards by reducing on‑site fossil‑fuel use and improving energy efficiency. Compliance may include electrification of heating systems, installation of heat pumps, envelope upgrades and demand‑management measures.

6.2 **Renewable energy procurement.** Owners may procure renewable electricity through power‑purchase agreements (PPAs), virtual PPAs, community solar subscriptions or renewable energy certificates certified by the New England grid operator. Credit shall be granted only for **bundled renewable energy** demonstrating additionality.

6.3 **Portfolios.** Owners of multiple covered buildings may create a **portfolio** and meet an aggregated emissions target across the portfolio. Portfolios must demonstrate that benefits (e.g., retrofits, lower energy burdens) are prioritized for **Environmental Justice communities** and affordable housing.

6.4 **Individual compliance schedules.** Owners may apply for an individual schedule that aligns emissions reductions with major capital cycles or building renovation timelines. Schedules must show a path to meeting the standard by the required deadline and be approved by the Brookline Emissions Review Board.

6.5 **Hardship compliance plans.** Owners experiencing financial or technical hardship may apply for a hardship compliance plan. Applications must document constraints and propose interim measures. The Review Board may approve partial or temporary relief but must protect tenant rights and public health.

## Section 7 – Alternative Compliance and Investment Fund

7.1 **Brookline Equitable Emissions Investment Fund.** The Town hereby establishes a dedicated fund to support emissions‑reduction projects that benefit Brookline residents, with priority for **Environmental Justice populations** and **affordable housing**. The fund shall receive revenue from **Alternative Compliance Payments (ACP)**, administrative penalties, and any appropriations by Town Meeting. Money in the fund shall be used solely for building carbon‑abatement projects, climate resilience improvements, workforce development, tenant support programmes and related administration, following the model of Boston’s Equitable Emissions Investment Fund[[5]](https://www.boston.gov/departments/environment/equitable-emissions-investment-fund#:~:text=The%C2%A0Building%20Emissions%20Reduction%20and%20Disclosure,established%20to%20support%20this%20goal).

7.2 **Alternative Compliance Payments.**

* **Price.** The price of an ACP shall be set by regulation but shall not be less than **$234 per metric ton of CO₂e**, matching Boston and Cambridge’s initial pricing[[6]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=Alternative%20Compliance%20Payments%3A%20are%20payments,234%2FmT%20for%202026%20to%202030). Prices may be indexed to inflation and may increase in later phases to incentivize direct reductions.
* **Use of funds.** ACP revenue shall be deposited into the Equitable Emissions Investment Fund and allocated by the Brookline Emissions Review Board (Section 8) through an open grant process. Projects must demonstrate public benefits and prioritize EJ populations. Projects eligible for funding may include electrification of affordable housing, energy‑efficiency upgrades in EJ communities, workforce training for heating and cooling professionals, and resilience projects (e.g., cooling centres).

7.3 **Verified Carbon Credits (VCCs).**

Owners may use a limited quantity of VCCs to offset emissions, subject to strict criteria: (a) only offsets from projects within New England or approved jurisdictions; (b) offsets must meet rigorous additionality and verifiability standards; (c) allowable offset percentage shall decline over time (e.g., 10 % in Phase 2, 5 % in Phase 3, 0 % in Phase 4), following Cambridge’s declining caps[[7]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=Verified%20Carbon%20Credits%3A%20Starting%20in,site%20thermal%20energy%20emissions).

7.4 **Deferrals.** Owners may apply for a deferral of up to five years when compliance is infeasible due to construction projects, major capital upgrades or grid constraints. Deferral applications must include a detailed plan and schedule and are subject to approval by the Review Board.

## Section 8 – Governance and Administration

8.1 **Brookline Emissions Review Board.** The Town shall create a **Review Board** comprising **nine members** appointed by the Select Board with representation from: (a) environmental justice or community‑based organisations; (b) affordable housing organisations; (c) building science/engineering experts; (d) energy policy experts; (e) real‑estate or building‑owner representatives; (f) tenant or renter advocates; and (g) one member designated by Town Meeting. Members shall serve staggered three‑year terms.

8.2 **Responsibilities.** The Review Board shall: \* Evaluate compliance submissions, individual compliance schedules and hardship plans. \* Set rules and procedures for the Equitable Emissions Investment Fund; review and approve grant applications. \* Recommend emissions standards and ACP pricing to the Town Administrator. \* Oversee verification protocols and maintain a list of accredited verifiers. \* Produce an annual report on programme performance, compliance rates, emissions reductions and fund allocations, to be presented to the Select Board and Town Meeting.

8.3 **Staffing.** The Town shall hire a **BERDO Program Manager**, data analysts, equity programme managers and community outreach staff as outlined in the Brookline BERDO plan. Staffing and administrative costs may be supported by ACP revenue.

## Section 9 – Equity and Tenant Protections

9.1 **Equitable portfolios and plans.** All portfolio and compliance plan submissions must demonstrate how benefits (bill savings, indoor air quality, comfort and resilience) will be distributed to **Environmental Justice** communities and **deed‑restricted affordable housing**. Plans must avoid displacing tenants and should include tenant engagement and protections.

9.2 **Prohibition on unjust cost pass‑throughs.** Building owners may not increase rents or fees to recoup ACPs or penalties beyond what is permitted under applicable law. The Review Board may investigate complaints of unlawful cost pass‑throughs.

9.3 **Funding for tenant assistance.** A portion of the Equitable Emissions Investment Fund shall be reserved for tenant assistance programmes, including utility bill assistance, retrofits in low‑income housing, and legal support for tenants facing eviction or displacement related to building upgrades.

## Section 10 – Enforcement and Penalties

10.1 **Violations.** Violations include (a) failure to submit required reports; (b) submission of false or incomplete data; (c) failure to comply with emissions standards; (d) failure to implement approved compliance schedules; and (e) failure to submit ACPs or comply with conditions of a hardship or deferral plan.

10.2 **Penalty structure.** The Town shall adopt a schedule of penalties. Penalties shall be progressive, starting with warnings and cure periods for first‑time reporting violations and escalating to daily fines for continued noncompliance. Penalties collected under this section shall be deposited into the Equitable Emissions Investment Fund.

10.3 **Grace period.** Penalties for exceeding emissions standards shall not be assessed until the standard has been in effect for **three years**, consistent with Newton’s approach[[8]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=%E2%80%A2%20Scope%3A%20Includes%20direct%20emissions,year%203%20of%20emission%20standards). During the grace period, owners must demonstrate good‑faith efforts to comply and may be required to submit corrective action plans.

## Section 11 – Rulemaking and Amendments

11.1 The Town Administrator, in consultation with the Brookline Emissions Review Board, shall promulgate regulations to implement this ordinance. Regulations may specify emissions standards by building type, emissions factors, calculation methodologies, verification protocols, ACP pricing, VCC criteria, and procedures for deferrals and hardship plans.

11.2 The Select Board may propose amendments to expand or modify the ordinance, including lowering square‑footage thresholds, adjusting timelines, or incorporating electricity emissions into compliance calculations. Amendments shall require approval by Town Meeting.

## Section 12 – Severability

If any section, subsection or provision of this ordinance is determined to be invalid, the remaining provisions shall remain in full force and effect.

[[1]](https://www.boston.gov/departments/environment/berdo" \l ":~:text=Who%20is%20covered%3F) Building Emissions Reduction And Disclosure | Boston.gov

<https://www.boston.gov/departments/environment/berdo>

[[2]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=%2A%20Non,to%20net%20zero%20by%202035) [[6]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=Alternative%20Compliance%20Payments%3A%20are%20payments,234%2FmT%20for%202026%20to%202030) [[7]](https://www.cambridgema.gov/sustainable/BEUDO#:~:text=Verified%20Carbon%20Credits%3A%20Starting%20in,site%20thermal%20energy%20emissions) BEUDO

<https://www.cambridgema.gov/sustainable/BEUDO>

[[3]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=BERDO%20Notes%20for%20PEX%20Meeting,vote%20to%20approve%20BERDO%2038) [[4]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=PEX%20vendor%20notes%20%E2%80%A2%20Newton,whole%20building%20all%20at%20once) [[8]](https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf#:~:text=%E2%80%A2%20Scope%3A%20Includes%20direct%20emissions,year%203%20of%20emission%20standards) September PEX Meeting

<https://www.nationalgridus.com/media/pdfs/ma/project-expediter-program/2024-september-pex-meeting.pdf>

[[5]](https://www.boston.gov/departments/environment/equitable-emissions-investment-fund#:~:text=The%C2%A0Building%20Emissions%20Reduction%20and%20Disclosure,established%20to%20support%20this%20goal) Equitable Emissions Investment Fund | Boston.gov

<https://www.boston.gov/departments/environment/equitable-emissions-investment-fund>