

BERDO REVIEW BOARD PUBLIC MEETING

January 8, 2024



Mayor Michelle Wu

BERDO REVIEW BOARD



Rashida Boyd
Board Member



Stephen Ellis
Board Member



Lovette Jacobs
Board Member



Gail Latimore
Board Member



Lee Matsueda
Board Member



Jack Nelson
Board Member



Matt O'Malley
Board Member



Kai Palmer-Dunning
Board Member

CITY OF BOSTON STAFF



**Diana
Vasquez**

*Environment
Department*



**Hannah
Payne**

*Environment
Department*

Agenda

Today's Meeting



- 1. Approval of Meeting Minutes**
- 2. Update and Discussion on BERDO Implementation**
 - a. BERDO Team*
 - b. Plans for 2024*
 - c. Flex Measures Application Reviews*
- 3. Administrative Updates**
- 4. Meeting Adjournment**

Approval of Meeting Minutes

Board votes on approving previous meeting's minutes



BERDO Implementation

Update and Discussion



BERDO Team

Review of the BERDO team



Director of Carbon Neutrality
Hannah Payne

Leads carbon neutrality

BERDO Program Manager
BERDO Management & Implementation

Building Decarbonization Manager
Building Decarbonization Management & Implementation



S. Carbon Neutrality Project Manager
Aidan Callan

Reporting & Data Processes



S. Enviro Policy Analyst
Maura Zlody

Point of Contact & User Experience



Review Board Manager
Diana Vasquez

Review Board Processes & Staffing



Policy Fellow
Claudia Diezmartinez

Regulations & Policy Development



Carbon Neutrality Project Manager
Dima Moujahed

Retrofit & Decarbonization Consultations



BERDO Assistant
Augustine Bottorf



BERDO Assistant
Darius Zgripcea Bailey

Review Board Assistant

= New position being hired for

Key Dates

For building owners



Key BERDO Deadlines for Building Owners

May 15

Reporting deadline for 2023 energy and water usage.

July 1*

Long-term Hardship Compliance Plan application deadline.

September 1

Building Portfolio application deadline.

Individual Compliance Schedule application deadline.

October 1**

Short-term Hardship Compliance Plan application deadline.

After 2024, long-term Hardship Compliance Plan applications are due **9 months before the first year the HCP would be used.*

***Short-term Hardship Compliance Plan applications are due **3 months before** the first year the HCP would be used.*

Slide updated on January 23, 2024

Key goals for early 2024

Expand the BERDO Team

- Hire for three new positions

Reporting Process Improvements for 2024

- Update BERDO reporting form
- Updated reporting guidance
- Process improvements for data management and quality

Emissions Compliance Outreach Ahead of 2025

- Series of webinars (Emissions, compliance options, renewable energy purchasing, flexibility measures, etc.)
- Educational materials from design and communication firm (deliverables in spring)
- [Emissions Calculator](#)

Support for Buildings

- Zero-over-time planning
- No cost reporting and verification
- Developing condo compliance guide

Launch Equitable Emissions Investment Fund

- Project evaluation form

Establish Review Board Processes

- Create consistent processes for staff and Review Board review of applications for flexibility measures
- Provide technical assistance to the Review Board on relevant technical topics
- Tenant-focused meeting
- Kick-off commercial real estate and healthcare institutions connected to district energy systems

Application Forms Review

Application Forms

Flexibility Measures



- PDFs with application questions available at boston.gov/berdo
 - [Google Drive here](#)
- Currently have [online forms](#) hosted on knack.com for **Building Portfolios** and **Individual Compliance Schedules**.
- Plan to migrate to Touchstone IQ, current BERDO reporting platform.

Building Portfolios

Application Overview

Building Portfolios

Before starting the application:

Applicant must check eligibility to apply.



Applicant must check if their proposed portfolio would trigger the need to complete an Emissions standard compliance plan.



STEP 1: Before starting your application

1) Determine if your proposed Building Portfolio meets the following eligibility criteria:

- All Buildings in the proposed Building Portfolio have the same Owner, as defined in [Section XI.a.](#) of the regulations, or are part of one approved Institutional Master Plan.
- The Building Uses, Energy Use, Gross Floor Area, and Emissions data of all Buildings in the proposed Building Portfolio were third-party verified during the last applicable Verification Year.
- All Buildings in the proposed Building Portfolio are in compliance with the Ordinance and Regulations, including the payment of any applicable fees, the submission of missing data where feasible, and the submission of compliance mechanisms to correct any failure to meet an Emissions standard.
- None of the Buildings in the proposed Building Portfolio are vacant, as defined in Section 4 the [BERDO Policies & Procedures](#);

2) Determine if your proposed Building Portfolio triggers the requirement to prepare an Emissions standard compliance plan.

A Building Portfolio triggers the requirement to prepare an Emissions standard compliance plan if it includes **any** of the following:

- On-site Campus District Energy Systems* that use non-renewable or CO₂e emitting fuels and are located in Environmental Justice Populations**.
- On-site Combined Heat and Power Plants located in Environmental Justice Populations.
- Industrial or manufacturing Buildings located in Environmental Justice Populations.
- Energy/power station Buildings located in Environmental Justice Populations.
- A combination of Residential Buildings located in Environmental Justice Populations and non-Environmental Justice Populations.
- A combination of Deed-Restricted Residential Buildings*** and other Residential Buildings.



Application Overview

Building Portfolios

Must Select an Application Pathway

Pathway 0

- Multiple buildings on a single parcel that sum to at least 20,000 sq ft or 15 units, but individually are not subject to BERDO.

Pathway 1

- Buildings that are individually subject to BERDO and **do not** trigger the need for an Emissions standard compliance plan.

Pathway 2

- Buildings that are individually subject to BERDO and **do** trigger the need for an Emissions standard compliance plan.

Pathway 3

- Buildings that do not meet the eligibility criteria **OR** owner is who simultaneously applying for an Individual Compliance Schedule.



STEP 2: Application Pathway Selection

Use the following checklists to determine which application pathway is appropriate for your proposed Building Portfolio:

PATHWAY ZERO	If all of the following apply: <ul style="list-style-type: none"><input type="checkbox"/> Building Portfolio consists of multiple Buildings on a single parcel that collectively sum to at least 20,000 square feet or 15 units, but are not otherwise individually subject to BERDO.<input type="checkbox"/> All Buildings meet the eligibility criteria for Building Portfolios (see page 3).<input type="checkbox"/> Owner can calculate a blended Emissions standard.<input type="checkbox"/> Owner is not applying for an Individual Compliance Schedule for the Building Portfolio.<input type="checkbox"/> None of the Buildings already have an Individual Compliance Schedule.
PATHWAY ONE	If all of the following apply: <ul style="list-style-type: none"><input type="checkbox"/> Building Portfolio consists of multiple Buildings that are individually subject to BERDO.<input type="checkbox"/> Building Portfolio does not trigger the requirement to prepare an Emissions standard compliance plan (see page 3).<input type="checkbox"/> All Buildings meet the eligibility criteria for Building Portfolios (see page 3).<input type="checkbox"/> Owner can calculate a blended Emissions standard.<input type="checkbox"/> Owner is not applying for an Individual Compliance Schedule for the Building Portfolio.<input type="checkbox"/> None of the Buildings already have an Individual Compliance Schedule.
PATHWAY TWO	If all of the following apply: <ul style="list-style-type: none"><input type="checkbox"/> Building Portfolio consists of multiple Buildings that are individually subject to BERDO.<input type="checkbox"/> Building Portfolio triggers the requirement to prepare an Emissions standard compliance plan (see page 3).<input type="checkbox"/> All Buildings meet the eligibility criteria for Building Portfolios (see page 3).<input type="checkbox"/> Owner can calculate a blended Emissions standard.<input type="checkbox"/> Owner is not applying for an Individual Compliance Schedule for the Building Portfolio.<input type="checkbox"/> None of the Buildings already have an Individual Compliance Schedule.
PATHWAY THREE	If one or more of the following apply: <ul style="list-style-type: none"><input type="checkbox"/> Any Building in the Building Portfolio does not meet one or more of the eligibility criteria for Building Portfolios.<input type="checkbox"/> Owner is unable to calculate a blended Emissions standard for the Building Portfolio.<input type="checkbox"/> Owner is simultaneously applying for an Individual Compliance Schedule.<input type="checkbox"/> One or more of the Buildings in the proposed Portfolio already have an Individual Compliance Schedule.

Application Overview

Building Portfolios



Application Outline

1. Owner's contact information
2. Confirmation of common ownership or Institutional Master Plan
3. Building information for each building in the proposed portfolio and calculation of blended emission standard
4. If applicable, maps with Environmental Justice layers and narrative relating to an emissions standard compliance plan
5. Confirm relationship with an Individual Compliance Schedule
6. Signature and submit

Application Overview

Building Portfolios



Application Outline

Building owner's contact information.

OWNER'S INFORMATION

1. Name of Owner
2. Contact for Owner:
 - a. Email
 - b. Phone number
 - c. Mailing address

Application Overview

Building Portfolios



Application Outline

Confirmation of common ownership or Institutional Master Plan.

CONFIRMATION OF COMMON OWNERSHIP

1. All buildings in the proposed Building Portfolio must have the same Owner. Please select the option that applies to the proposed Building Portfolio.

- All Buildings have the same Owner as listed in the records of the Boston Assessing Department.
- All Buildings have the same Owner in accordance with [Section XI.a.i \(a\) - \(d\)](#) of the regulations. Please check each of the following that apply:
 - The same Sponsor of two or more Deed-Restricted Residential Buildings may be considered the Owner of record for purposes of creating a Building Portfolio, provided, however, that a Building may not be in more than one Building Portfolio.
 - The same majority owner or beneficial owner (provided that the beneficial owner is the entity legally responsible for BERDO compliance) of two or more special purpose entities or charitable organizations may be considered the Owner of record for purposes of creating a Building Portfolio; provided, however, that a Building may not be in more than one Building Portfolio.
 - An entity that, directly or indirectly through its subsidiaries, exercises control over, or acts as managing member or managing partner (provided that the entity, directly or indirectly through its subsidiaries, (i) has ownership interest, (ii) is the entity legally responsible for BERDO compliance, and (iii) in the case of a limited

partnership, is a general partner) of two or more special purpose entities or charitable corporations may be considered the Owner of record for purposes of creating a Building Portfolio; provided, however, that a Building may not be in more than one Building Portfolio.

- Charitable organizations under common ownership and control of an entity that is legally responsible for BERDO compliance may be considered the Owner of record for purposes of creating a Building Portfolio; provided, however, that a Building may not be in more than one Building Portfolio.
- All Buildings are part of the same Institutional Master Plan.
 - If yes, what is the name of the Institutional Master Plan?
 - If yes, please provide a link to the Institutional Master Plan. You can find all approved Institutional Master Plans [here](#).

Application Overview

Building Portfolios



Application Outline

Building information for each building in the proposed portfolio and calculation of blended emissions standard

- [Blended emissions template provided.](#)

BUILDING PORTFOLIO INFORMATION

1. Please input your portfolio information in the table below or provide a spreadsheet with the following information. You can confirm your BERDO ID on the [BERDO Covered Buildings List](#). Please note that a Building may not be part of more than one Building Portfolio.

BERDO ID	Owner's Name	Parcel ID	Address
11111	Example Name	22222222	111 Main St Boston, MA 02201
...	

2. Please confirm that your proposed Building Portfolio complies with the following conditions:
 - All Buildings in the proposed Building Portfolio are located on a single parcel and collectively sum to at least 20,000 square feet or 15 units, but are not otherwise individually subject to BERDO (i.e., the individual buildings have a gross Building Area of less than 20,000 square feet or less than 15 units).
 - All buildings in the proposed Building Portfolio meet the eligibility criteria for Building Portfolios (see page 3: Step 1, subsection 1).

If you cannot confirm compliance with any of these conditions, then you must use a different application pathway to create a Building Portfolio.

3. Please confirm that, if the Building Portfolio is approved, you shall comply with the following conditions:

- I shall use a blended Emissions standard for the proposed Building Portfolio for purposes of complying with the Emissions standards.
- [Using this template](#), please provide your calculated blended Emissions standards for your proposed portfolio.

- I shall meet any Building-specific Emissions standard every year for any Building in the Building Portfolio that is required to meet (i) a net-zero Emissions standard or (ii) a more stringent Emissions standard set through zoning requirements prior to 2050.

If you cannot calculate a blended Emissions standard, then you must use a different application pathway to create a Building Portfolio. Failure to maintain compliance with these conditions may result in the termination of a Building Portfolio.

Application Overview

Building Portfolios



Application Outline

If applicable, maps with Environmental Justice layers and narrative relating to an Emissions standard compliance plan.

- [Environmental Justice Mapping Tool](#)

ENVIRONMENTAL JUSTICE INFORMATION

1. Using [this mapping tool](#) for this step, please provide an image file for each of the following:
 - A map of Buildings in the proposed Building Portfolio with a layer of the Environmental Justice Population criteria.
 - Map of Buildings in the proposed Building Portfolio with a layer of Asthma Prevalence.
 - Map of Buildings in the proposed Building Portfolio with a layer of the Air Toxics Respiratory Hazard Index.
 - Map of Buildings in the proposed Building Portfolio with a layer of the Urban Heat Island Intensity.

On each of these maps, Owners shall denote and label any of the following in the proposed Building Portfolio:

- On-site Campus District Energy Systems that use non-renewable or CO₂e emitting fuels located in Environmental Justice Populations.
- On-site Combined Heat and Power Plants located in Environmental Justice Populations.
- Industrial or manufacturing Buildings located in Environmental Justice Populations.
- Energy/power station Buildings located in Environmental Justice Populations.
- Residential Buildings located in Environmental Justice Populations.
- Deed-Restricted Residential Buildings.

2. Please provide a brief narrative of any existing plans to achieve compliance across the proposed Building Portfolio. Your narrative may include, but need not be limited to, information such as:

- Any anticipated Building energy audits, weatherization projects, building retrofits, on-site renewable energy projects, capital improvements, or other emission reductions efforts that may be implemented in the Building Portfolio in the near term. Where feasible, please provide information at the Building level.
- Any recent energy efficiency or decarbonization projects within the Building Portfolio that you would like to describe.
- Any energy efficiency or building decarbonization assessments or best practices integrated into ongoing processes such as routine maintenance work, appliance and heating system replacements and upgrades, or major building modifications. Where applicable, please specify the Building(s) where any such best practices are in place.
- Any preliminary strategies for developing your Emissions standard compliance Plan.
- If applicable, any preliminary plans to inform and engage tenants in the development of the Emissions standard compliance plan.

Application Overview

Building Portfolios

Environmental Justice Mapping Tool



The screenshot displays the 'CITY of BOSTON BERDO ENVIRONMENTAL JUSTICE MAP TOOL' interface. At the top left, there is a search bar labeled 'BERDO ID or Address'. Below the search bar is a map of Boston with various colored overlays. A legend on the right side of the map, titled 'mask_boston', lists the following categories:

- BERDO Buildings (represented by a red square)
- Massachusetts Environmental Justice Populations 2020 (represented by various shades of blue and teal squares):
 - Three criteria: Minority, Income and English isolation (darkest blue)
 - Two criteria: Income and English isolation (dark blue)
 - Two criteria: Minority and English isolation (medium-dark blue)
 - Two criteria: Minority and Income (medium blue)
 - One criterion: Language isolation (medium-light blue)
 - One criterion: Income (light blue)
 - One criterion: Minority (lightest blue)

On the left side of the map, there is a layer control panel with the following items:

- mask_boston
- BERDO Buildings
- Massachusetts Environmental Justice Populations 2020
- Asthma Prevalence
- Urban Heat Island Intensity (UHII) Index
- Respiratory Hazard

At the bottom right of the map, there is a dark blue box with white text: 'For assistance using the map tools, please contact berdoreviewboard@boston.gov'.

Application Overview

Building Portfolios



Application Outline

- Confirming relationship with an Individual Compliance Schedule.
- Signature and Submit.

RELATIONSHIP TO INDIVIDUAL COMPLIANCE SCHEDULES

Please confirm that:

- I am currently not applying for an Individual Compliance Schedule for the proposed Building Portfolio.
- None of the Buildings in the proposed Building Portfolio have an approved Individual Compliance Schedule.

If you cannot confirm compliance with any of these conditions, then you must use a different application pathway to create a Building Portfolio.

SIGNATURE

The Owner of the proposed Building Portfolio must sign the application and attest to the following:

I hereby certify under penalties of perjury that all information and supporting data provided in this application is true and complete to the best of my knowledge.

Signature of Building Owner

Date

If you are submitting this application on behalf of a Building Owner, please check the box below and provide your contact information.

- I am submitting this application on behalf of the Building Owner and questions should be directed to me.

Individual Compliance Schedules

Application Overview

Individual Compliance Schedules



Before starting the application:

Applicant must check eligibility to apply:

- *Have data verified during last verification year*
- *Total GFA cannot have been reduced by more than 10% from baseline year(s) and primary use(s) must be the same*
- *Building(s) must currently be in compliance with BERDO*



STEP 1: Before Starting Your Application

- 1) **Determine if your Building or Building Portfolio meets the following eligibility criteria for an Individual Compliance Schedule:**
 - The following data has been third-party verified during the last applicable Verification Year. If your application is based on a Building Portfolio, these requirements apply to all Buildings in the Building Portfolio.
 - Energy Use;
 - Gross Floor Area (GFA);
 - Building Use(s); and
 - Emissions Factors data for the year(s) selected as baseline
 - Total Gross Floor Area has not been reduced by more than 10% percent and primary Building Use(s) have not changed.
 - For a single Building*, the total Gross Floor Area has not been reduced from baseline year by more than 10% and the largest primary Building Use remains the same;
 - For a Building Portfolio*, the total Gross Floor Area for each Building has not been reduced from their baseline year by more than 10% and the largest primary Building Use for each Building remains the same.
 - The Building(s) are currently in compliance with BERDO. This includes:
 - If applicable, conditions of an approved Building Portfolio;
 - The payment of fines for any failure to report, to report accurate data, or meet an Emissions standard; and
 - Submission of relevant compliance mechanisms in the amount required to correct any failure to meet an Emissions standard in the past. This applies to all buildings in a Building Portfolio.

Application Overview

Individual Compliance Schedules



Must Select Application Type

- *Individual Compliance Schedule for an **Individual Building***
- *Individual Compliance Schedule for a **Building Portfolio***

Application Overview

Individual Compliance Schedules

Application Outline

1. Owner's contact information
2. Building information and selection of baseline year(s)
3. Establishing baseline data and alternative reduction schedule
 - a. *Baseline Energy Use(s)*
 - b. *Baseline Emissions Factors*
 - c. *Baseline Gross Floor Area*
4. Additional narrative information
5. Signature and submit

Application Overview

Individual Compliance Schedules



Application Outline

Building owner's contact information.

OWNER'S INFORMATION

1. Name of Owner

2. Contact for Owner:
 - a. Email

 - b. Phone number

 - c. Mailing address

Application Overview

Individual Compliance Schedules



Application Outline

Building information and selection of baseline year(s).

BUILDING INFORMATION AND BASELINE YEAR

1. An Individual Compliance Schedule is based on data from a baseline year between 2005 and 2021. Please confirm the following:
 - Your baseline year is not before the year 2005 or after the year 2021.
2. Please fill out the table below with the following information of the building you are applying an Individual Compliance Schedule for. [See Table 1](#) of the Ordinance for a list of Primary uses.

BERDO ID	Address	Baseline Year	Baseline Year: GFA (sq. ft.)	Baseline Year: Primary Building Use	Verification Year: GFA (sq. ft.)	Verification Year: Primary Building Use



Application Overview

Individual Compliance Schedules

Application Outline

Establishing baseline data and alternative reduction schedule.

- *Baseline Energy Use(s)*

<p>ESTABLISHING BASELINE DATA AND ALTERNATIVE REDUCTION SCHEDULE</p> <p>1. You must establish your baseline Energy use. Please indicate which of the following methods you are using and provide the corresponding data source to establish your baseline Energy use:</p>
<p><input type="checkbox"/> Historical utility data or utility bills. Please provide supporting documentation;</p> <p><input type="checkbox"/> Public reports meeting a third-party standard or accreditation, including internally produced sustainability reports. Please provide supporting documentation; or</p> <p><input type="checkbox"/> Other. Please describe this data source and provide supporting documentation.</p> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 10px;"></div>

Application Overview

Individual Compliance Schedules

Application Outline

Establishing baseline data and alternative reduction schedule.

- *Baseline Emissions Factors*

2. You must establish your **baseline Emissions Factors**. Please confirm which of the following methods you are using to establish Emissions Factors.

Electric Grid

- Historical Emissions Factors published by ISO New England. When available, using Emissions Factors including net imports. [Use this table](#).

District Energy System (if applicable)

- Operator provided historical Emissions Factors that have been verified by a third-party; or
- Corresponding Emission Factors reported by [ENERGY STAR Portfolio Manager](#) (Figure 3).

Campus District Energy System (if applicable)

- Owner calculated historical Emissions Factors by one of the following methods. Please provide an explanation of how this was calculated:
- Following the Emissions Factors requirements for District Energy Systems as outlined in [Section VIII.a.iii](#) of the Regulations;
 - Applying the appropriate Emissions Factors to their central plant's fuel inputs and apportion the emissions across their connected buildings following [Section VI.a](#) of the Regulations; or
 - Relevant Emissions Factors reported by [ENERGY STAR Portfolio Manager](#) (Figure 3).

Explanation here

Other

- Please describe your method and reasoning for your proposing an Alternative Emissions Factors.

Description here

Application Overview

Individual Compliance Schedules

Application Outline

Establishing baseline data and alternative reduction schedule.

- *Baseline Gross Floor Area*
- *Alternative reduction schedule - [template provided](#)*

3. You must confirm your baseline **Gross Floor Area**. Please confirm which of the following data sources you are using for your baseline Gross Floor Area.

Boston Assessing Department's records; or

Calculated historical Gross Floor Area pursuant to [Section IV.b.](#) and [existing guidance by the Environment Department.](#)

4. Provide your alternative CO₂e Emissions standard reduction schedule that includes baseline Energy use, baseline Emission Factors, and baseline Gross Floor Area. [You may use this template.](#)

Confirm that total emissions are reduced by 50% by 2030 and by 100% by 2050.

Application Overview

Individual Compliance Schedules



Application Outline

Additional narrative information.

ADDITIONAL INFORMATION

1. Please provide a brief narrative description of significant emissions reduction efforts completed in the Building from the baseline year to date.

Response here

2. If applicable, please describe new construction since the baseline year and its impact on emissions.

Response here

3. Please provide a brief narrative description of expected methods to meet the alternative CO₂e Emissions standard reduction schedule. This may include, but need not be limited to, any anticipated buildings audits, retrofits, capital improvements, or any other emissions reduction efforts that may be implemented in the Building in the near term.

Response here

Application Overview

Individual Compliance Schedules



Application Outline

- Signature and Submit.

SIGNATURE

The Owner of the proposed Building Portfolio must sign the application and attest to the following:

I hereby certify under penalties of perjury that all information and supporting data provided in this application is true and complete to the best of my knowledge.

Signature of Building Owner

Date

If you are submitting this application on behalf of a Building Owner, please check the box below and provide your contact information.

- I am submitting this application on behalf of the Building Owner and questions should be directed to me.



Hardship Compliance Plans

Application Overview

Hardship Compliance Plans



Before starting the application:

Applicant must check eligibility to apply:

- *Building(s) must currently be in compliance with BERDO*
 - *Applicant may request a waiver for a reduction of fines or compliance mechanisms needed*
- *The owner does not have an ICS or is seeking to replace their ICS*
- *The owner has considered other compliance mechanisms and flexibility measures, but still faces a hardship*



STEP 1: Confirm Eligibility Criteria

1) Determine if you meet the eligibility criteria for Hardship Compliance Plans.

Select all that apply to your Building or Building Portfolio.

- The Building or Building Portfolio is in compliance with the Ordinance and Regulations, including:
 - If applicable, any fines issued for failure to comply with reporting requirements have been paid.
 - If applicable and where feasible, missing required reporting data has been submitted.
 - If applicable, any fines issued for failure to comply with Emissions standards have been paid.
 - Select this box if you would like to request a waiver or reduction of fines by the Review Board due to financial reasons. Please elaborate below.
 - If applicable, any compliance mechanisms in the amount required to correct any failure to meet an Emissions standard have been submitted.
 - Select this box if you like to request a waiver or reduction of compliance mechanisms needed to correct any failure to meet a past Emissions standard due to financial reasons. Please elaborate below.
 - If applicable, requirements for an approved Building Portfolio have been met.
- The Building or Building Portfolio does not have an Individual Compliance Schedule or the Owner is requesting to replace an existing Individual Compliance Schedule.
- Due to the unusual circumstances or characteristics of the Owner, Building or Building Portfolio, meeting the applicable Emissions standard through all combinations of compliance mechanisms and flexibility measures authorized by the Ordinance would result in an eligible hardship (as demonstrated pursuant to Section VII and Appendix B of this application).

Application Overview

Hardship Compliance Plans



Application Outline

1. Owner's contact information
2. Building information
3. Evaluation/Consideration of all BERDO compliance mechanisms and flexibility measures
4. Emissions reduction efforts to date
5. Evaluation of opportunities, feasibility, costs, and financial support
6. Demonstration of circumstances or characteristics that create hardship
7. Demonstration of eligible hardship(s)
8. Proposed relief and alternative compliance
9. Proposed benefits to Environmental Justice populations
10. Signature and submit

Application Overview

Hardship Compliance Plans

Application Outline

Owner's contact information.

Building information.

Evaluation of BERDO compliance mechanisms and flexibility measures (ACPs got cut off from this image).



I. Owner's Information

1. Name of Owner
2. Contact for Owner:
 - a. Email
 - b. Phone number
 - c. Mailing address

II. Buildings Covered by Hardship Compliance Plan

1. Are you applying for a Hardship Compliance Plan for a single Building or an approved Building Portfolio?
 Single Building
 Approved Building Portfolio
2. Please input the information in the table below or provide a spreadsheet with the following information for the Building(s) for which you are applying for a Hardship Compliance Plan. You can confirm your BERDO and Parcel IDs on the [BERDO Covered Buildings List](#)

BERDO ID	Owner's Name	Parcel ID	Address
111111	Example Name	222222222	111 Main St Boston, MA 02201
...	

III. Evaluation of All BERDO Compliance Mechanisms and Flexibility Measures

Please include a brief narrative description of how the Owner has used, plan to use, or considered the use of the following compliance mechanisms and flexibility measures authorized by the Ordinance. If any of the listed compliance mechanisms or flexibility measures are not feasible or applicable to the Owner, please briefly explain why. Please include total Emissions (kgCO₂) and the Emissions intensity (kgCO₂/SF) for your Building or Building Portfolio during your last reporting year in your response.

- Building Portfolios
- Individual Compliance Schedules
- Boston's Municipal Electricity Aggregation Program
- Local Renewable Energy
- Power Purchase Agreements
- Renewable Energy Certificates

Application Overview

Hardship Compliance Plans

Application Outline

Emissions reduction efforts to date.

IV. Emissions Reduction Efforts to Date

1. Provide a brief narrative description of known significant emissions reduction efforts and work on heating/cooling systems and high-energy systems/process loads in the Building or Building Portfolio since 2013.
2. To the best of your ability, provide a brief narrative description for each of the following existing physical categories (Structure, Envelope, Systems, and Other) for the Building or each of the Buildings included in the Building Portfolio covered by the requested Hardship Compliance Plan.
 - Structure
 - Each Building(s) structure (e.g. steel, original from 1940) and its condition (e.g. no visible issues, minor repairs).
 - Envelope
 - Each Building's existing envelope type (e.g. curtainwall or masonry, insulation type, glazing, etc.) and its condition and performance (e.g. original, leaky, airtight with proven test results).
 - Include information on major renovations to the envelope made since the Building was built (e.g. window replacements, repointing, reroofing) and for each renovation describe the impact on the envelope performance (e.g. single to double pane windows, additional roofing insulation).
 - Systems
 - A brief narrative description of each Building's HVAC system (e.g. gas-condensing boilers, centrifugal chillers, cooling tower), domestic hot water system, and miscellaneous (e.g. humidification process) systems, including relative locations of equipment/systems (e.g. enclosed penthouse, rooftop, basement).
 - Approximate operating schedule (e.g. Monday-Friday 8a-6pm, Monday-Sunday 24/7).
 - For buildings with multiple uses or process loads, a description of the Building's energy end-use and for each of these end-uses, provide an estimated percentage of the end use to the total Building energy use.
 - Indication of whether the end-use is currently utilizing electricity, district steam or fossil fuels (e.g. natural gas, propane, oil).
 - Indication of which end-uses are the subject of the hardship application, and for these uses:
 - The age of the relevant equipment/materials, with reference to the industry standard for end of useful life.

- Information on the most recent replacement(s), if applicable and available.
 - Any additional pertinent information to support the hardship claim.
- Other information on existing conditions the Owner would like to share.

Application Overview

Hardship Compliance Plans

Application Outline

Evaluation of opportunities, feasibility, costs, and financial support.



V. An Evaluation of Opportunities, Feasibility, Costs, and Financial Support

Provide a detailed evaluation of opportunities, feasibility, costs and financial support for compliance-related work in the Building or Building Portfolio, including, where applicable, opportunities for conducting compliance-related work in phases to reduce or avoid hardships. This description should include, but need not be limited to, the following information.

On-Site Opportunities to Reduce Emissions

1. The Owner must have a qualified professional complete an energy audit and feasibility assessment of options to reduce energy use and emissions. The results of the audit and assessment must be included in this application. (This can be a no-cost Mass Save audit or other equivalent audit).
2. Has the Owner performed any feasibility studies to evaluate the installation of on-site renewable energy systems at any of the Building(s) covered by the requested Hardship Compliance Plan?
 Yes
 No
 - a. If Yes, please provide a copy of the assessment.
3. Has the Owner performed any other relevant feasibility studies to evaluate different compliance-related work in the Building or Building Portfolio (e.g., Building systems and appliance substitution and replacements, envelope upgrades, electrification, etc.)?
 Yes
 No
 - a. If Yes, please provide a copy of the assessment and any additional relevant analysis.

Funding Availability

1. Has the Owner applied, or plan to apply, for any available financial support or incentives (Mass Save, Massachusetts Department of Energy Resources, Inflation Reduction Act Investment Tax Credits, etc.) to implement compliance-related work? For more information on possible funding sources, you may visit the [retrofit resource hub website](#).
 Yes

No

- a. If Yes, please provide a budget and brief narrative description of the financial support or incentive, including whether any funds have already been granted.

2. Has the Owner received money from and/or applied to the Equitable Emissions Investment Fund?

Yes
 No

- b. If Yes, please describe any previous funding received from the Equitable Emissions Investment Fund and/or past applications to the Equitable Emissions Investment Fund.

Scheduling and Phasing

Provide a narrative description of phasing or timeline opportunities that could support or facilitate compliance-related work in Building(s).

Application Overview

Hardship Compliance Plans

Application Outline

Demonstration of circumstances or characteristics that create hardship, including supporting documentation, a narrative description, and all relevant analysis.

- Financial
- Regulatory or Contractual
- Technical or Operational
- Other

Characteristic or Circumstance	What is the Supporting Documentation?*
expenditures that cannot be changed or are beyond the control of the Owner.	
Regulatory or Contractual	
The Owner has a long-term energy contract without reopeners for a significant portion of a Building's or Building Portfolio's energy demand.	
The Owner has a long-term lease without reopeners signed prior to 2019 that prohibits any significant compliance-related work at a Building.	
The Owner has delays in delivery of renewable energy credits pursuant to executed Power Purchase Agreements because of delays in initial commercial operation for reasons beyond a Building Owner's control.	
The Owner experiencing delays in electric system interconnections or adequate delivery of electricity for reasons outside a Building Owner's control. <i>Provided that requests for interconnections and notification of anticipated electricity demands were made in a timely manner in light of planned work and Emissions standard compliance deadlines.</i>	
The Owner experiencing denial or delays in government permits or approvals, including approvals through the Mass Save program, for significant compliance-related work. <i>Provided that applications for such permits or approvals were made in a timely manner in light of planned work and Emissions standard compliance deadlines.</i>	
The Owner has to meet government regulations affecting minimum energy use. <i>Provided that any resulting hardship arises from reducing Emissions from such energy use.</i>	
The Owner has to meet accreditation/certification standards affecting minimum energy use. <i>Provided that any resulting hardship arises from reducing Emissions from such energy use.</i>	
Technical or Operational	
The Owner has Building and/or space constraints that limit significant compliance-related work.	



Application Overview

Hardship Compliance Plans



Application Outline

Demonstration of eligible hardship(s).

VII. Demonstration of Eligible Hardship(s)

1. Please select the following eligible hardships that apply to the Owner's Building or Building Portfolio. See **Appendix B** for information on demonstrating each of the eligible hardships.
 - Compliance requires space that is not available.
 - Compliance requires equipment or electric service that is not available.
 - Compliance would significantly interfere with or significantly increase the cost to provide services that are critical to community health and safety.
 - Compliance costs would be significantly higher due to the unusual circumstances or characteristics.
 - Compliance costs would interrupt the financial ability to operate a Building or its primary uses.
 - Compliance costs would have a more than merely negligible effect on a State agency's or State-created entity's ability to fulfill an essential government function.
 - Compliance costs would cause other significant effects that the Owner believes should be mitigated in light of benefits provided by and/or greenhouse gas emissions avoided by the Building or Building Portfolio.
2. For each Hardship selected in question 1, provide a brief, narrative description, accompanied with supporting documentation, of the hardship resulting from the combination of:
 - The compliance actions described in Section III of this application, and
 - The circumstances and characteristics described in Section VI of this application.

See **Appendix B** for required supporting documentation.

Application Overview

Hardship Compliance Plans



Application Outline

Proposed relief and alternative compliance.

VIII. Proposed Relief and Alternative Compliance

1. Is the Owner seeking a short-term (1 to 3 years) or long-term (4 or more years) Hardship Compliance Plan? *If Long-term, the Hardship Compliance Plan will be reassessed every 5 years by the Review Board.*
 - Short-term (1 to 3 years)
 - Long-term (4 or more years)

2. If the Owner has an approved Building Portfolio, do they have to develop an Emission standard compliance plan?
 - Yes
 - No

If you selected Yes to question 2, please answer questions 3 -5. If you selected No to question 2, skip to the next section.

3. If Emissions standard compliance plan has not been developed, please describe how the requested Hardship Compliance Plan would impact the development of the plan?
4. If the Emissions standard compliance plan has been developed, how would the requested Hardship Compliance Plan impact the compliance efforts described in the plan?
5. If applicable, has the Owner notified tenants about the requested Hardship Compliance Plan and/or any changes to the Emissions standard compliance plan?
 - Yes
 - No

Proposed Alternative Compliance

1. Which of the following relief measures is the Owner seeking?
 - Alternative schedules for complying with the Emissions standards in the Ordinance.
 - Alternative Emissions standards than those in the Ordinance.
 - Exemption of specified Energy use(s), in whole or in part, from a Building Owner's compliance obligations.
 - Adjusted compliance obligations in light of third-party barriers or delays to significant energy efficiency or electrification projects, provided that such third-party is unrelated to the Owner.
 - Additional compliance mechanisms (that the Review Board must determine are consistent with achieving the Purpose set in Section 7-2.2.(a)).

Other relief the Review Board may deem appropriate on a case-by-case basis.

2. For each of the selected proposed relief measures, provide a description of the requested relief(s) and the proposed alternative compliance. Please include type, scope, and length of the relief.

Application Overview

Hardship Compliance Plans



Application Outline

Proposed benefits to Environmental Justice populations.

Proposed Benefits to Environmental Justice Populations

1. Please describe how the proposed relief and alternative compliance will provide benefits to Environmental Justice Populations and/or advance the purpose of the Ordinance in Section 7-2.2.(a), including through proposed conditions related to issues such as, but not necessarily limited to, equitable workforce development, housing affordability and stabilization, energy cost- and benefit-sharing, public health, and climate resilience. This is required for long-term Hardship Compliance Plans, but may also be included for short-term Hardship Compliance Plans.
2. Please fill out the table below describing your proposed conditions.

Type of Benefit	Brief Description	Anticipated Beneficiaries	Anticipated Timeline	Why Benefit is Appropriate with Scale of Relief
...

Application Overview

Hardship Compliance Plans



Application Outline

Signature and submit

SIGNATURE

The Owner of the proposed Building Portfolio must sign the application and attest to the following:

I hereby certify under penalties of perjury that all information and supporting data provided in this application is true and complete to the best of my knowledge.

Signature of Building Owner

Date

If you are submitting this application on behalf of a Building Owner, please check the box below and provide your contact information.

I am submitting this application on behalf of the Building Owner and questions should be directed to me.

Application Overview

Hardship Compliance Plans



Appendix A and B

- Appendix A: Evidence for circumstances and characteristics that may create hardship
- Appendix B: Evidence for eligible hardships

Appendix A - Evidence For Circumstances And Characteristics That May Create Hardship
 Owners must submit supporting documents to provide evidence of the existence of circumstances and characteristics that may create hardship. Table 1 below includes recommended supporting documentation and Table 2 includes a list of potential qualified professionals who can provide the necessary supporting documentation for certain circumstances and characteristics. Neither list is exhaustive. Owners may submit other additional or alternative documentation that the Review Board deems appropriate.

Table 1. Recommended Supporting Documentation

Category	Circumstances or characteristics	Supporting documentation	Requires qualified professionals?
Financial	Owner bankruptcy for all or part of a year in which an Emissions standard must be met.	<ul style="list-style-type: none"> Evidence that the Owner has filed for bankruptcy. 	Not required
	Schedule of compliance-related costs do not align with long-term schedules for capital expenditures that cannot be changed or are beyond the control of the Owner.	<ul style="list-style-type: none"> A narrative explaining the constraint(s) created by existing long-term schedules for capital expenditures and why the existing schedule cannot be changed. If applicable, a copy of any funding contracts, loan terms, or any other contract(s) that create the relevant constraint. 	Not required
Regulatory or contractual	Long-term energy contracts without reopeners for a significant portion of a Building's or Building Portfolio's energy demand.	<ul style="list-style-type: none"> A copy of the relevant long-term energy contract (may be redacted). A narrative explaining the constraint(s) created by the contract and: <ul style="list-style-type: none"> A list of the Building(s) covered by the contract. A description of any restrictions related to energy generation and use. A description of any opportunities to change the Energy supplier for any existing Buildings and/or new Buildings. For Building(s) connected to District Energy Systems, a letter from the operator of the relevant Energy generation system detailing any future plans to improve the efficiency and/or decarbonize the Energy generation system. Proof of 	Not required

Appendix B - Evidence For Eligible Hardships

Eligible hardship	Supporting documentation
Compliance requires space that is not available.	<ul style="list-style-type: none"> See Appendix A.
Compliance requires equipment or electric service that is not available.	<ul style="list-style-type: none"> See Appendix A.
Compliance would significantly interfere with services that are critical to community health and safety	<ul style="list-style-type: none"> A narrative description of how significant compliance work would require the partial or complete interruption of the relevant service(s) and the expected length of said interruption. A narrative description of whether and how the Owner plans to phase compliance work to avoid or mitigate the interruption of the relevant service(s). A narrative description of how significant compliance work would hinder the Owner's ability to maintain the Building conditions that are needed to provide the relevant service(s)
Compliance would significantly increase the cost to provide services that are critical to community health and safety	<ul style="list-style-type: none"> An estimate of the total compliance costs for the period covered by the requested Hardship Compliance Plan. Sworn statement about impact on revenue, operating costs, reserves, and capital budget. A statement by a qualified professional describing the extra costs that exist because of the relevant circumstances and characteristics A narrative description of the services provided by the Owner or the relevant Building(s).
Compliance costs would be significantly higher due to the unusual circumstances or characteristics of a Building Owner, Building or Building Portfolio	<ul style="list-style-type: none"> An estimate of the total compliance costs for the period covered by the requested Hardship Compliance Plan. A statement by a qualified professional describing the extra costs that exist because of the relevant circumstances and characteristics Sworn statement about impact on revenue, operating costs, reserves, and capital budget.
Compliance costs would interrupt the financial ability to operate a Building or its primary uses	<ul style="list-style-type: none"> An estimate of the total compliance costs for the period covered by the requested Hardship Compliance Plan. Sworn statement about impact on revenue, operating costs, reserves, and capital budget. Sworn statement about impact on revenue, operating costs, reserves, and capital budget.
Compliance costs would cause other significant effects that the Review Board determines should be	<ul style="list-style-type: none"> A narrative description of other benefits, including greenhouse gas emissions avoided by the Building(s) prior to the first BERDO compliance year, that an Owner would like the Review Board to

Next Steps

If the Board agrees, we will move forward with the following:

- Notifying building owners that applications are open.
- Discussing common elements and frameworks for Hardship Compliance Plan applications with select sectors.
- Collecting applications through existing online forms until forms in Touchstone are created.

The background of the slide is a dark blue aerial wireframe map of a city, showing the outlines of buildings, streets, and parks. The lines are white and light blue, creating a complex geometric pattern.

Board Q&A

Board Members may discuss and ask staff questions

The background of the slide is a dark blue aerial wireframe map of a city, showing the outlines of buildings, streets, and parks. The lines are white and light blue, creating a technical, architectural feel.

Additional Administrative Updates

Staff presents administrative updates

Adjourn

Thank you for your participation!

