



November 10, 2022

Distinguished Members of the Air Pollution Control Commission  
1 City Hall Square, Room 709  
Boston, MA 02201

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Richard A. Dimino  
**PRESIDENT & CEO**

\* Former Chair

**RE: A Better City’s Formal Comments on Draft Phase 2 Regulations for BERDO 2.0**

Dear Chair Gerratt, Commissioner Brizius, and members of the Commission:

On behalf of A Better City’s membership representing 130 of Boston’s business leaders across multiple sectors of the economy, thank you for the opportunity to provide formal comments on the draft Phase 2 Regulations of the Building Emissions Reduction and Disclosure Ordinance (BERDO 2.0). We are grateful for the City of Boston’s continued climate leadership and for your constructive engagement with the Greater Boston business community. We are committed to continuing to work with you and the City’s team to ensure the successful implementation of BERDO 2.0.

Many of our member companies and institutions continue to have broader implementation concerns about BERDO 2.0, in addition to comments offered that are specific to draft Phase 2 regulatory language. These overarching comments focus on consistency with other decarbonization efforts, alignment between BERDO 2.0 and BPDA’s Zero Net Carbon (ZNC) Zoning, the consideration of a grace period for some buildings transitioning from a ZNC building to a BERDO 2.0 building, suggestions for the Equitable Emissions Investment Fund, and support of efforts that instruct utilities to conduct coordinated grid modernization planning. Our specific Phase 2 comments focus on blended emissions, the development of emissions factors, the selection of the Review Board, and the role of Power Purchase Agreements.

We appreciate your continued willingness to engage with leaders in the Greater Boston business community to craft workable regulations that will position the buildings sector to achieve the City of Boston’s ambitious climate goals without negatively impacting economic growth in the region.

Sincerely,

Richard A. Dimino  
President and CEO  
A Better City

Enclosures: 1

cc: Michelle Wu, Mayor, City of Boston  
Mariama White-Hammond, Chief of Environment, Energy, & Open Space

## **COMMENTS ON PHASE 2 REGULATIONS FOR BERDO 2.0**

A Better City (ABC) and its members support the City of Boston’s goal of achieving net zero emissions by 2050 and recognize the urgent and important role that existing buildings play in achieving our decarbonization commitments. We appreciate the BERDO team’s ongoing engagement with the business community, across public meetings, listening sessions, and a meeting with ABC members on October 3, 2022, to discuss proposed Phase 2 regulations for BERDO 2.0. Based on feedback from ABC members, detailed below are comments and recommendations to ensure that aggressive but achievable regulations are set.

### **A. OVERARCHING COMMENTS FOR CONSIDERATION**

#### **1. Consistency with other Decarbonization Efforts**

Building decarbonization policies, especially those within Boston and across the Commonwealth, must be consistent and aligned to the greatest extent feasible as uncertainty and inconsistency make it difficult for building owners to plan and make necessary financial and operational decisions. ABC members are concerned about the rapid pace of buildings policies currently, how these policies will work together, and how city-level commitments in Boston will intersect and/or overlap with state-level statutory climate commitments. Within the City of Boston alone, there is BERDO 2.0, Zero Net Carbon (ZNC) Zoning, an update to the stretch Energy code that will come into effect for the commercial sector in July 2023, uncertainty about whether the City plans to sign up for the Specialized Opt-In Stretch Energy Code, and uncertainty about the outcome of Boston’s request to be selected as one of 10 municipalities to develop fossil fuel bans by local approval as per the 2022 Climate Act. Even the most sophisticated and progressive building owners and developers are unable to keep up with this rapid pace of buildings policies. ABC members are asking for clarity and transparency about how consistency and alignment will be maintained across building policy compliance and implementation.

**A Better City recommends providing clarity and transparency about how BERDO 2.0 will work across City and State legislative, administrative, and regulatory agencies to ensure consistency and alignment across the various building policies and their implementation. Specifically, we recommend Boston publish a timeline that shows where BERDO 2.0 implementation falls relative to other city-level and state-level building policies that Boston buildings will be required to report to and/or comply with.**

#### **2. Alignment Between BERDO 2.0 and ZNC Zoning Policy & Standards**

There is enormous confusion and concern with building owners and developers about the transition of a ZNC building under BPDA to a BERDO 2.0 building under the City of Boston’s Environment Department. We are requesting that the Environment Department and BPDA include the details of this transition and its implications in the regulatory language of each policy, and that BERDO 2.0 include this language specifically under Phase 2’s topic of “other clarifying regulations as needed”. The language should include specific detail about when Alternative Compliance Payments are due, what the baseline for a ZNC building under BERDO 2.0 will be, and how long after occupancy a ZNC building becomes a BERDO 2.0 building for reporting and compliance. In addition, members have requested clarity about whether a ZNC building can be added to an existing building portfolio under BERDO 2.0 for compliance purposes. This kind of information is crucial to provide sufficient clarity for developers and building owners to plan for future development in Boston.

**A Better City requests clarity on the compliance transition from a ZNC building to a BERDO 2.0 building. We recommend that language clarifying the compliance transition from a ZNC to BERDO 2.0 building be included in BERDO 2.0 Phase 2 regulations under the topic “other clarifying regulations as needed” as well as in ZNC Zoning, Policy, and Standards language under development in BPDA. In addition, we request clarity about whether a ZNC building transitioning into BERDO 2.0 compliance will be eligible for inclusion in an organization’s existing BERDO 2.0 building portfolio.**

### 3. Grace Period for Hard-to-Decarbonize ZNC Buildings Transitioning to BERDO 2.0

Some sectors of the built environment have demonstrated ZNC in new construction, like affordable housing, while other sectors have limited, if any proof of concept. Technology isn't available for all building use types, and the cost to electrify the last 10-15% of emissions remains unfeasible for some of these building types. For these harder to decarbonize buildings, many are finding that retaining some fossil fuel use for backup/standby for resiliency, heating, or as federally required for some healthcare facilities, is necessary. However, despite these challenges, it is our understanding that a ZNC building owner will be faced with paying Alternative Compliance Payments a year after receiving a certificate of occupancy, when it will become a BERDO 2.0-covered building. ABC suggests the City consider clarifying how hardship exemptions will be determined in hard-to-decarbonize ZNC buildings once they are occupied and transition to BERDO 2.0, and to consider a grace period for certain hard-to-decarbonize ZNC buildings.

**A Better City recommends that in the cases where technology isn't available or it is not feasible to fully electrify a new building under ZNC Zoning, that there is a grace period for Alternative Compliance Payments under BERDO 2.0 until technologies are available and/or feasible. Another consideration would be to broaden the compliance options available to meet the mitigation requirements for fossil fuel use to include verified carbon offsets in these specific circumstances with parameters to ensure effective, transparent, equitable carbon removal best practices like those clarified in [ABC's carbon offsets report](#).**

### 4. Equitable Emissions Investment Fund

We understand the Equitable Emissions Investment Fund (EEIF) will be part of BERDO 2.0 Phase 3 regulations, but as it is already a frequent topic of conversation amongst the commercial real estate and developer communities, A Better City is providing some initial suggestions for consideration as Phase 3 of the regulatory process begins. Members are requesting estimates be provided of the total amount of anticipated annual Alternative Compliance Payments (ACPs) that will be paid into the EEIF, based on building data that will become available once reporting is completed in December 2022. They are suggesting some uses of the EEIF that would benefit all communities in Boston while also helping to achieve Boston's climate goals:

- **Retrofitting demonstration pilots by use type.** This has been discussed for many years with the understanding that some building use types are harder to decarbonize than others. Funding of demonstration pilots for harder to decarbonize buildings will be an important resource for all large buildings to learn from.
- **Providing technical assistance for large buildings.** New York City has a [NYC Accelerator](#) program that provides resources, training, and one-on-one expert guidance to help building owners and industry professionals improve energy efficiency and reduce carbon emissions. Although resources for buildings with smaller square footage are available, resources are limited for very large buildings. EEIF funds could provide these resources. In addition, the BPDA has technical expertise in large building construction that could benefit existing buildings as well. We suggest coordinating with the BPDA to develop resources for decarbonizing BERDO 2.0 buildings with larger square footage.
- **Providing incentives for building retrofits.** New York has recently launched the [Empire Building Challenge](#) that incentivizes deep energy retrofits in existing buildings. EEIF funding could be used to fund a similar program in Boston, providing energy efficiency "carrots" for leading by example.

**A Better City recommends providing anticipated annual total estimates of Alternative Compliance Payments to the EEIF. ABC also recommends EEIF spending consider retrofit demonstration pilots by use type, technical assistance for large buildings, and incentives for building retrofits – which would help to scale up and decarbonize our largest emitters, benefitting all communities in Boston.**



### **5. Support of Efforts that Instruct Utilities to Conduct Coordinated Grid Modernization Planning**

As mentioned in previous comments, A Better City members are concerned about the need for grid modernization and capacity expansion as both the buildings and transportation sectors transition to electricity. We suggested in our Clean Energy and Climate Plan comments that a study be conducted to understand the increase in electricity demand by load zone and sub load zone over time, in conjunction with understanding the current capacity of the grid by load zone and sub load zone. This would help to understand what areas have the capacity for electrification now, and what areas will require additional capacity before pursuing electrification. Conducting a study on electric capacity by load zone would help to sequence the electrification of buildings and transportation based on current and new electrical capacity, to ensure that the increasing demand is safely and strategically managed, and grid failure is avoided. We understand the City of Boston has limited jurisdiction with regards to utilities but ask for your support in any grid modernization studying and planning efforts.

**A Better City requests the City of Boston’s support with a proposed study of the projected increase in electricity demand from electrified buildings and transportation by load zone and sub load zone, alongside the current electrical capacity of each load zone and sub load zone. Such a study would help to ensure electrification is sequenced appropriately and safely by load zone. We recommend this study be done in coordination with the newly established Grid Modernization Council and Transmission Working Group, as per the 2022 Climate Act.**

## **B: BERDO 2.0 PHASE 2 COMMENTS**

### **1. Blended Emissions**

The definition of “Gross Area” is not defined adequately in the proposed BERDO 2.0 Phase 2 regulations. Building owners use gross square footage when discussing the whole building, but not when discussing a floor or portion of a building, as this can be very nuanced. It is also very difficult to allocate common space and back-of-house space that often has multiple uses. Further definition and clarification are required in the regulatory language, as the understanding of this will differ by who is measuring and who is providing third party verification. Also, the Boston Assessing records are at the property or parcel level, not the building level, so not all buildings can defer to these records, and they don’t always break out the parking garage Gross Floor Area appropriately. Additionally, ABC members suggest that there should be an acceptable variation in measurement of gross area allowed, like 2-5%, to account for variations when measuring. This could help save the costs to the owner to remeasure.

**A Better City recommends that the Gross Area be adequately defined in the Phase 2 regulatory language and that an acceptable variation in measurement like 2-5% be allowed to account for any variations by those measuring.**

### **2. Development of Emissions Factors**

Emissions factors should be consistent across city and state climate policies to ensure consistency and alignment throughout implementation. Currently this is not the case. Within the City of Boston, the Environment Department and BPDA should work together to release emissions factors for all energy types. Similarly, the City should work with state partners at EEA, DEP, and DPU to ensure the City’s emissions factors are in alignment with those at the state level. This is crucial as Boston’s buildings must also comply with state codes, regulations, and policies.

**A Better City recommends that the City develop emissions factors for all energy types for use across all City agencies regulating building emissions, and then work with state agencies to ensure alignment with state emissions factors for all energy types as well.**

- ***Electricity Emissions Factors***

- The grid emissions standards proposed do not account for interconnection issues (from onsite distributed generation) or the potential inability of the grid to supply the increased demand of electricity. The inability to interconnect would delay a building’s GHG emissions reduction; the electricity grid’s inability to supply electricity as demanded would likely result in the use of energy sources with higher emissions factors (as well as an increased risk of grid failure). The result in both situations would be that buildings would be required to pay additional Alternative Compliance Payments (ACPs), although both situations are out of their control. The current draft Phase 2 regulations indicate that if an interconnection request for an on-site renewable energy system was filed in a timely manner but significantly delayed by the utilities, then the owner could appeal to the Review Board to use estimated renewable energy generation for compliance. We request this be allowed without the need to appeal to the Review Board. Similarly, in the case where the utilities are unable to meet demand, we recommend Boston follows the draft BEUDO regulations in Cambridge that provide an exemption for a utility’s failure to meet demand. We also request exemption processes be as streamlined as possible.

**A Better City recommends including ACP exemptions for buildings in cases of interconnection delays and the grid’s inability to supply the electricity demanded, and to clarify this exemption process in the regulatory language.**

- A timeline on the availability of the forward-looking grid emissions factors has been requested by members for planning purposes. For BERDO 2.0 reporting in 2025-2030, they have requested the forward-looking grid emissions factors be made available now to help building owners with the planning of their decarbonization efforts.

**A Better City recommends the City develop a timeline indicating the availability of the forward-looking grid emissions factors, and that the grid emissions factors for 2025-2030 reporting be provided now for planning purposes.**

- Emissions factors that are applied to a PPA should be determined and fixed at the time of contract execution to ensure off-takers can be confident that their project will continue to comply with BERDO 2.0 over the length of the term of the contract.

**A Better City recommends that emissions factors for PPAs be determined and fixed at the time of the contract’s execution.**

- ***District Energy Emissions Factors***

- ABC appreciated the city convening a group of stakeholders to discuss district energy emissions factors given the complexity of district energy systems. As a merchant generator, Vicinity’s Kendall Square plant is required to report all plant emissions according to EPA Part 75 and they are also obligated to meet the Regional Greenhouse Gas Initiative. The steam from the recovery of waste heat from the generation process should not have carbon emissions associated with it. For Vicinity’s steam, the steam from their steam boiler plants (Kneeland and Scotia) mixes with the zero-carbon steam from the waste heat recovery (Kendall). The emissions factor from the steam is a carbon intensity that should be calculated as the weighted average volume (in Mlbs) respective of how the steam was generated for the district that the customer is connected to. For clarification, customers should be grouped into 3 distinct categories reflective of their connection to the district energy system and unique generation mix: Boston, Cambridge, and the Longfellow Loop. This methodology is distinct from the efficiency method and should be allowed as a separate methodology for merchant generators required to report all plant emissions according to EPA Part 75.

**A Better City recommends that the unique methodology, described above, be allowed for merchant generator plants to adhere to federal and regional mandated regulations and to avoid the negative impacts on customers.**

- As currently written, the draft Phase 2 regulations state that if a District Energy System operator fails to provide verified annual system emissions factors by April 1st, that emissions factors reported by Energy Star Portfolio Manager will be used for compliance. As the Energy Star Portfolio Manager emissions factors are likely be inaccurate for Boston, a suggestion has been made to default to the lower of the previous year’s emissions factor or the Energy Star rating instead.

**A Better City recommends using the lower of the previous year's emissions factor or the Energy Star rating for a district energy system operator that fails to provide verified annual system emissions factors by April 1st as required.**

### **3. Selection of a Review Board**

- As written in the BERDO 2.0 Ordinance, the nine-member Review Board will have six members selected by Community Based Organizations (CBOs). A Better City recommends that the City consider CBOs that represent the business community, including large commercial and residential building owners and tenants. Additionally, the City should consider the length of time the CBO has operated in their communities and the kind of impact they have had within their communities.
- For the two Review Board seats not selected by CBOs (or the one for the City Council's Environmental Committee Lead), the emphasis should be on filling needed expertise in building engineering and energy, real estate development and management, public health and hospitals, architecture and historic preservation, and workforce development, if these are not adequately represented in the CBO's recommendations. We recommend specifying in the regulatory language what kind of expertise these 2-3 seats will require, if not already covered in the CBO nominations.
- We request that regulatory language be added to ensure the Review Board convenes working groups like the district energy healthcare working group referenced in the Ordinance, in a timely fashion (ex. within 60 days of forming the Review Board), and that the working groups may include the expertise of non-Boston residents that currently serve or have previously served Boston communities in a professional capacity.
- We request that the Review Board approval process be objective so that hardship, individual compliance plans etc. are approved because they meet the thresholds allowed under BERDO 2.0 and rulemaking, apart from review of the Proponent/Entity initiating the request. This will ensure consistency and timeliness in the review process.
- Members have expressed concern that the Review Board will have a huge number of submissions to review/approve given all the pathways that are defined that require Board approval. Any delay in Review Board approval/review of a case should not subject an owner to penalties.

**A Better City recommends developing guidelines for the selection of CBOs and Review Board members with appropriate expertise. Since the Ordinance language specifies that 2/3 of the Review Board be nominated by CBOs, we also recommend clarifying in the regulatory language what expertise will be filled by the remaining 1/3 of seats, if not already covered by CBO nominations. We also recommend convening working groups in a timely fashion and affirming they can include non-Boston residents. Finally, we recommend the approval process by the Review Board be objective to ensure consistency and timeliness in the review process, and that any delay in approving/reviewing a case before the Review Board not result in penalties to owners.**

### **4. The Role of Power Purchase Agreements**

- We request PPA criteria not be overly specific in the regulatory language as this could complicate current efforts by building owners to negotiate PPA contracts. Renewable energy purchasing constraints will ultimately result in less renewable energy being purchased under this program, which is the opposite direction we should be going. BERDO 2.0 regulations around PPAs like contract terms, financing, etc. should, therefore, be as simple as possible.
- We do, however, request that clarification language be added to the Regulations regarding Virtual PPA's eligibility to meet compliance. While the City has stated in numerous calls that PPAs anywhere in the US are eligible given they meet the additionality and Commercial Operation Date criteria, Section IX.c.1.a only

exempts geographic location for RPS Class I eligibility criteria, but does not exempt the 'metering' criteria for the RPS Class I NE POOL GIS accounting requirement. We recommend the city clarify this further.

- We request confirmation that PPAs will remain viable for compliance throughout the term of the PPA contract.
- Given the size of PPA contracts, it would be difficult to divide up or submit a PPA contract for each building. We therefore request that building owners be given the flexibility to allocate a single or several contracts across buildings to ensure compliance of their portfolio of buildings.
- We request BERDO 2.0 regulations ensure that PPAs used for existing buildings may be the same contracts used for new buildings under the ZNC Zoning Standard.
- There is currently a lot of uncertainty in the development of Power Purchase Agreements. In some cases, this is because the timelines of offshore wind development contracts are being pushed back, and in other cases, that smaller buildings need to partner with others to have enough purchasing power. In both cases, there may be a lag in signing the contract, which is essential to meeting the additionality clause. We therefore suggest an exemption be allowed in the regulations for PPA contracts taking longer than expected to be signed, in a similar way that an exemption is provided for on-site renewable energy generation that has been delayed by utilities.

**A Better City requests clarification language be added to the Regulations regarding PPAs' eligibility to meet BERDO 2.0 compliance. ABC also recommends that PPA regulatory language not be overly specific and be flexible enough to allow for PPA use for compliance across a portfolio of buildings under BERDO 2.0, as well as for use in new construction under the ZNC Zoning Standard, when appropriate. We also recommend that an exemption be allowed in the regulations for PPA contracts taking longer than expected to be signed.**