

OpenBlue

Net Zero Buildings

Boston Building Emissions Reduction and Disclosure Ordinance (BERDO)



Find the performance standard for your property type now, so you can take action.

<https://www.boston.gov/departments/environment/building-emissions-reduction-and-disclosure>

What the law is about

The law sets requirements for large buildings to reduce their energy use, with the eventual goal of zero emissions. It sets minimum standards of efficiency for each building type that must be achieved by 2025, with targets increasing in stringency every five years. Targets are:

- 50% reduction of 2005 emissions by 2030
- Zero emissions by 2050

BERDO covers a variety of property types:

- All municipal buildings
- Commercial buildings above 20,000 sq. ft.
- Multifamily buildings above 20,000 sq. ft.
- Buildings with 15 or more residential units
- Multiple buildings on the same parcel totaling 20,000 sq. ft. or above
- Multiple buildings on the same parcel with 15 or more residential units

Any combination of energy efficiency, electrification, and on-site renewables is allowed. Buildings may use Massachusetts Class 1 pool Renewable Energy Credits to mitigate greenhouse gas emissions

from electrical demand. Buildings under a single owner can comply as a single entity, meaning their performance standard is based on the average CO₂e per square foot across the portfolio.

What it means for you

- If your building is covered, you should have already reported your energy use to the City of Boston. The deadline was June 15, 2022.
- If you haven't reported yet, you are entitled to apply for a one-time, six-month extension. Extension requests must be made through the BERDO Reporting Form at boston.gov. The deadline was December 15, 2022.
- Buildings or portfolios can opt into a self-improvement compliance pathway, which is a modified version of the straight-line trajectory approach from the baseline to a 50% reduction by 2030 and 100% by 2050.
- Owners can pay an Alternative Compliance Payment equal to \$234 per metric ton of CO₂e in excess of each building's target if they do not meet targets. Those payments will go towards the Equitable Emissions Investment Fund designed to help environmental justice populations to upgrade buildings to improve energy performance.

How we can help

Partner with Johnson Controls to develop an excellent sustainability and resiliency program to comply with Building Performance Standards laws. We'll build your business case to meet your needs, and we'll help balance the traditional conflict between cost savings and investment. We offer a wide assortment of building systems that can help you reduce your facility's emissions. We blend technical and operational expertise with our reputation for quality.

Step 1: Assess your facility.

We look at current and anticipated use to understand present energy usage, plan for energy needs, and review indoor air quality. We also make sure all your systems are right sized for your facility, which is essential for efficient operation.

Step 2: Help build your business case.

Our team develops models specific to your equipment and facility, giving you a clear picture of potential efficiency gains and lifecycle cost improvements. We draw on our industry know-how to incorporate additional opportunities to optimize performance.

Step 3: Recommend next steps.

We lay out a step-by-step plan for you to modernize against your goals and budget. We give you a menu of options and recommendations that make sense for your facility, and we include a range of smart technologies, such as tools to support predictive maintenance.

HVAC Equipment and Hydronic Systems

We offer the largest portfolio of HVAC equipment and controls in the world. With expertise in mechanical retrofitting existing systems, our team performs audits of the current equipment and identifies deficiencies that prevent you from meeting regulations and best practices in indoor air quality. From there our experts will design and recommend solutions to meet today's energy, decarbonization and healthy buildings initiatives.

Building Automation Systems and Controls

Our next generation building automation systems make it possible to extend automated control to every building system from a single platform. We make everything from simple, configurable controls to highly programmable automation systems for entire facilities. Our systems allow you to improve control of your key systems and improve desired outcomes against your goals for indicators such as CO2, Energy Use Index (EUI), kWh, emissions intensity.

Accessible Digital Tools

Our suite of tailored, AI-powered digital solutions optimize building performance through predictive maintenance, remote diagnostics, emission management, goal and targets, and more. Leverage our OpenBlue platform to integrate with Metasys and third-party BMS to deliver optimal building outcomes, ensuring compliance with building performance standards while also balancing comfort, air quality, costs and emissions.

Water Usage Reduction

We supply the expertise and funding mechanisms to provide water and energy conservation solutions for businesses. By helping decrease water leakage and operational costs, we can reduce water consumption by up to 50 percent. Water heaters can be upgraded from fossil fuel fired to electric, or we can provide high efficiency or indirect options. Our experts are able to calculate the most effective ways to reduce water usage in sinks and toilets.

Lighting

We partner with the world's premier lighting innovators to revolutionize interior and exterior lighting. Our experienced lighting engineers have designed and executed hundreds of millions of dollars in lighting projects around the world. By integrating the lighting systems to work in conjunction with existing building systems the result is a holistic system better suited for energy efficiency, convenience and security. From clinics to classrooms, these intelligent lighting systems provide advantages well beyond energy savings to help buildings run more efficiently.

Your partner in sustainability and net zero

As leaders in sustainability and net zero, our approach brings together expertise with leading capability to deliver energy efficient outcomes through our building and infrastructure management services. Upon review of your goals and your facility, our team advises on all aspects of ESG and sustainability to provide a comprehensive roadmap of actions and solutions to meet the critical milestones.

Ready to get started?

Contact your local Johnson Controls representative or visit johnsoncontrols.com/BPS

