

CHAPTER 2024-40

No. 345 **AN ORDINANCE AMENDING CHAPTER 5 "BUILDINGS AND STRUCTURAL APPURTENANCES" OF THE CODE OF ORDINANCES TO RENAME ARTICLE X "GREENHOUSE GAS EMISSIONS REDUCTION TARGETS IN BUILDINGS" AND ADD SECTIONS 5-126 "BUILDING ENERGY REPORTING PROGRAM" AND 5-140 "ENERGY EFFICIENCY AND CARBON NEUTRAL GOALS FOR MUNICIPAL BUILDINGS"**

Approved July 23, 2024

Be it ordained by the City of Providence:

Section 1: Chapter 5 "Building and Structural Appurtenances" is hereby amended as follows:

Article X - GREENHOUSE GAS EMISSIONS REDUCTION TARGETS IN BUILDINGS

Sec. 5-126. BUILDING ENERGY REPORTING PROGRAM.

(a) *Purpose and intent.* The purpose and intent of the Building Energy Reporting Program is to create a data collection process and establish a database to enable municipal tracking of energy use of large buildings in the City of Providence, as well as to:

- (1) To encourage efficient use of energy and to reduce greenhouse gas emissions by requiring annual measurement and disclosure to the City of building energy usage;
- (2) To enable more effective energy and climate mitigation planning by the City, the state, and large building owners;
- (3) To gather data necessary for informing the design and implementation of municipal programs to meet the science-based targets in the statewide Act on Climate legislation.
- (4) To provide the public with information concerning the City's and others' energy consumption, improvement in energy efficiency, and reduction of greenhouse gas emissions.

Sec. 5-127. Definitions.

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a differing meaning:

Benchmarking information shall mean information generated by the Benchmarking Tool as herein defined, including information about the physical property and its operational characteristics. The information shall include, but need not be limited to:

- (1) Property address;
- (2) Primary use type;
- (3) Gross floor area;
- (4) Annual Energy Use;
- (5) Source Energy Use Intensity (EUI); Site EUI, Weather Normalized Source EUI, Weather Normalized Site EUI;
- (6) Annual greenhouse gas emissions;
- (7) Compliance or noncompliance with this Ordinance.

Benchmarking Tool shall mean ENERGY STAR Portfolio Manager, the internet-based tool developed and maintained by the U.S. Environmental Protection Agency (U.S. EPA) to track and assess the relative energy performance of buildings nationwide. Should ENERGY STAR Portfolio Manager become unavailable for any reporting year(s), the reporting obligations herein will be suspended until such time it is again available or a comparable alternative is designated by the Department of Sustainability.

Campus shall mean two or more buildings that are served by shared utility services and predominantly used for health care, research or higher education purposes.

Covered property shall mean all residential and non-residential buildings and Campuses in the City that contain 20,000 or more gross square feet and all municipal buildings and Campuses in the City that contain 10,000 or more gross square feet as defined herein and identified by the Tax Assessors Database.

Dwelling unit shall mean a single residential unit consisting of one or more rooms, occupied or arranged to be occupied as a residential unit separate from all other residential units within a building, and used primarily for residential purposes and not primarily for professional or commercial purposes.

Director means the Director of the Department of Sustainability or designee.

Energy shall mean electricity, natural gas, steam, hot or chilled water, heating oil, or other product for use in a building, or renewable electricity generation, for purposes of providing heating, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities.

ENERGY STAR shall mean the U.S. Environmental Protection Agency program related to improving energy efficiency in buildings and products.

Gross square feet shall mean the gross floor area of the property as defined by the U.S. EPA Portfolio Manager.

Municipal property shall mean a building that contains 10,000 or more gross square feet that is owned by the City of Providence.

Owner shall mean:

- (1) An individual or entity designated in the records of the City Tax Assessor as the owner of a Covered Property;
- (2) An agent authorized by law to act on behalf of the owner of a Covered Property;
- (3) In the case of a condominium, the person or persons authorized by law to act on behalf of the condominium association or its board of directors, managers or trustees; and/or
- (4) In the case of a cooperative, the person or persons authorized by law to act on behalf of the cooperative.

Site Energy shall mean the annual amount of all the energy each property consumes on-site, regardless of the source. It not only includes energy purchased from a utility or in bulk, but also renewable energy generated and consumed on-site such as from solar or wind (excess renewable energy generated on-site is excluded from site energy use). Site Energy can be used to understand how the energy use for an individual property has changed over time.

Source Energy shall mean the total amount of raw fuel that is required to operate your property. Source EUI (Energy Use Intensity) is Source Energy divided by the property's Gross Floor Area. In addition to what the property consumes on-site, source energy includes losses that take place during generation, transmission, and distribution of the energy, thereby enabling a complete assessment of energy consumption resulting from building operations. Source Energy will be used to understand the complete energy impact of each property and compare the energy performance across covered properties in the program.

Tenant shall mean a person or entity leasing, occupying or holding over possession of a Covered Property or Municipal Property.

Utility shall mean an entity that distributes, supplies, or transmits energy to Covered Properties.

Sec. 5-128. Establishment.

There is hereby established a Building Energy Reporting Program for Covered Properties with the purpose of helping the City conserve energy, reduce energy costs for businesses, and meet its goal to be carbon neutral by 2050 by requiring large building owners to benchmark their buildings' energy use and report this data to the City. The City will be responsible for reporting this information to the public in order to provide transparency to the marketplace.

Sec. 5-129. Benchmarking required for municipal properties.

No later than May 15, 2024 and by May 15 thereafter, the City, by the Director of the Department of Sustainability or their designee, shall input annual energy use from January 1st through December 31st of the previous calendar year and all other descriptive information required by the Benchmarking Tool, into the Benchmarking Tool for each of its covered properties. Where a Covered Property's Benchmarking Information in the Benchmarking Tool has fallen out of date, said Benchmarking Information shall be updated no later than the annual reporting date.

Sec. 5-130. Benchmarking required for other covered properties.

Owners of Covered Properties shall input annual energy use from January 1st through December 31st of the previous calendar year and all other descriptive information required by the Benchmarking Tool, into the Benchmarking Tool, according to the following schedule:

- (1) For buildings that contain 50,000 or more gross square feet, no later than May 15, 2025 and by every May 15 thereafter;
- (2) For buildings that contain 20,000 to 49,999 gross square feet, no later than May 15, 2026 and by every May 15 thereafter;
- (3) For buildings that contain 10,000 to 19,999 gross square feet, by May 15, 2026;
- (4) Following the receipt of Certificate of Occupancy, a new Covered Property that has not yet accumulated 12 months of energy use data by the first applicable reporting deadline shall comply with this Ordinance in the following year.

Sec. 5-131. Notification of Covered Properties.

Between September 15 and December 15 of each year, the City shall notify Owners of Covered Properties of their obligation to input Energy use into the Benchmarking Tool. By January 31 of each year, the City shall post a list of the addresses of Covered Properties. The list shall be published in the Office of the City Clerk and on the Department of Sustainability's City webpage.

Sec. 5-132. Exemptions.

An owner of an otherwise “Covered Property” may seek an exemption from the requirements of this Ordinance for a reporting year if any of the following conditions apply:

- (1) None of the property was occupied for the entire calendar year required to be benchmarked;
- (2) A demolition permit for the entire property was issued and demolition work commenced during the calendar year;
- (3) The property did not receive energy services for the entire calendar year required to be benchmarked
- (4) The property was a Residential Property with 15 or fewer Dwelling Units; and

If the building owner has substantial and documented difficulty accessing data from tenants and/or the relevant utility.

Applications for exceptions can be filed with the Director of the Department of Sustainability, using a form created by the Department, and with all relevant supporting documentation included and notarized prior to submission. Waivers will be granted or denied at the discretion of the Director of the Department of Sustainability.

Sec. 5-133. Provision and publication of benchmarking information.

Owners shall annually provide Benchmarking Information to the Director, in such form as established by the Director, by the date provided by the schedule in Sec. 5-130 above.

No later than October 15, 2024 and thereafter by October 15 of each year, the Director shall deliver a summary report on the program to the Administration and City Council and then publish said report on the Department of Sustainability’s webpage. The report shall include, but not be limited to:

- (1) Benchmarking Information for each Covered Property, as described in Sec. 5-127, Definitions, above, for the current year;
- (2) Progress against baseline year data from intervening years for both energy use and GHG emissions.
- (3) Covered Properties’ compliance status with the Energy Assessment or Actions Requirements described in Sec. 5-135 below.

Sec. 5-134. Direct upload.

Owners of Covered Properties may authorize an energy utility or other third party to report building-specific energy data on their behalf to the Director. Such authorization shall not remove the obligation of property owners to comply with reporting requirements.

Sec. 5-135. Energy assessments or actions.

The Director shall establish requirements for energy assessment or actions, in the manner set forth below. Each Covered Property not exempted by the Director shall complete either an energy assessment or action, described below, within five (5) years of its first energy reporting deadline and within every five (5)-year period thereafter. The owner may elect whether to complete an assessment or an action.

Sec. 5-136. Energy assessment or action requirements.

- (1) In establishing requirements for energy assessments, the Director shall look to the most recent edition of Procedures for Commercial Building Energy Audits published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) for guidance, and may vary these requirements based on building size, age, energy performance, and other building characteristics as well as incentives in utility-administered or other energy efficiency programs and changes in energy assessment technology.
- (2) Energy actions may include investments in energy conservation measures, development of comprehensive energy management plans, retro commissioning of energy systems, or similar actions.
- (3) Summary results of energy assessments and actions shall be reported to the Director in such form as the Director shall specify.

Sec. 5-137. Maintenance of records.

Owners shall maintain and make available upon request the following records for a period of five (5) years:

- (1) The U.S. EPA Portfolio Manager Confirmation email evidencing the date the Owner submitted its report;
- (2) Such other records as the Director determines is necessary for carrying out the purposes of this Ordinance, as reflected in the Director's regulations.
- (3) Sellers of Covered Property will provide purchasers all information necessary for the purchaser to report Benchmarking Information in a timely manner.

Sec. 5-138. Violations and Enforcement.

Any person or entity that violates any provision of this Ordinance shall be subject to the following civil remedies:

- (1) For the first violation, the City may issue a written warning to the building owner.
- (2) For a second or subsequent violation, the City may impose civil fines as follows for each building not reported:
 - (a) For Buildings that contain 50,000 or more gross square feet, \$40.00 per day to a maximum of \$4,000.00 per year;
 - (b) For Buildings that contain 20,000 or more gross square feet, \$30.00 per day to a maximum of \$3,000.00 per year;
- (3) Upon request by the Director, the Office of Sustainability shall issue notices of violation in accordance with this section. The Director shall identify the department responsible for conducting enforcement.
- (4) Any person who makes a misrepresentation of a material fact in any document or filing governed by this Ordinance shall be subject to any and all other remedies available at law.
- (5) In addition to any remedies provided above, the City may, by and through the Solicitor, seek injunctive relief in a court of competent jurisdiction.
- (6) This subsection shall not be amended unless a public hearing is convened by a committee of the Council.

Sec. 5-139. Severability.

If any provision of this Ordinance shall be held to be invalid by a court of competent jurisdiction, then such provision shall be considered separately and apart from the remaining provisions, which shall remain in full force and effect.

5-140. Energy Efficiency and Carbon Neutral Goals for Municipal Buildings.

(a) Purpose and intent.

The purpose and intent of this article is to ensure that the City of Providence is leading by example and ensuring that municipal buildings are carbon neutral by 2040. Specifically, this article is intended to create guidelines to ensure all municipal buildings are no longer fueled by fossil fuel or onsite combustion and are carbon neutral. This article intends to encourage electrification coupled with energy efficiency upgrades including, but not limited to, electric heating and cooling systems, electric hot water heating, 100% renewable energy consumption, maximum on-site renewable energy production, thermal energy networks, and biofuel or battery electric emergency backup facilities, in all municipal buildings, including schools. As well as to:

- (1) Align the city of Providence's municipal capital improvements and maintenance projects with existing state requirements outlined in R.I.G.L 42-6.2-9 (The Act on Climate; Statewide greenhouse gas emission reduction mandate), and R.I.G.L 39-26 (Renewable Energy Standard).
- (2) Provide a path forward to meeting the goals set forth in the Providence Climate Justice Plan of 2019; and
- (3) Provide a guide to prioritizing municipal buildings for energy efficiency, electrification, and carbon reduction improvements.
- (4) Expand equitable access to clean energy careers with family-sustaining wages and benefits as part of the city of Providence plan to decarbonize its building stock

Sec. 5-141. Definitions.

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a differing meaning:

Analysis of feasibility means a report created by a qualified professional that estimates the costs, savings, cost-effectiveness, and greenhouse gas reductions for an on-site renewable energy system, electric heating and cooling system, thermal energy network, or energy-efficiency measure, and shall include a financial plan with sources and uses of funding, including but not limited to, federal, state, and utility incentives.

Carbon Neutral Building means a building where the design, construction, and operations do not contribute to emissions of greenhouse gases that cause climate change.

Capital improvements shall mean improvements to the physical infrastructure of a building including building systems such as HVAC and major equipment.

Cost-effective means measures that are projected to generate energy cost savings and avoided social cost of carbon dioxide equal to or greater than overnight capital costs and operations and maintenance costs over the lesser of

- (i) Useful life of the equipment, or
- (ii) 20 years

Covered Project means a construction, capital improvement, renovation or maintenance project on buildings owned by the City of Providence, including buildings owned by the City and managed by other entities, as well as any capital improvements and maintenance of mechanical systems in each building, especially when those systems are upgraded, including but not limited to:

- (i) The building envelope
- (ii) Lighting and controls
- (iii) Heating, Ventilation, and Air Conditioning (HVAC) systems
- (iv) Building management systems

Energy shall mean electricity, natural gas, steam, hot or chilled water, heating oil, or other product for use in a building, or renewable electricity generation, for purposes of providing heating, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities.

Greenhouse gas means climate pollution released by burning fossil fuels that alter the atmosphere, including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Maintenance means amounts spent for repairs or replacements for the purpose of keeping a municipal building open and safe for use, including repairs, maintenance, and replacements to a municipal building's heating, lighting, ventilation, security, building management system, and other fixtures to keep the facility or fixtures in effective working condition. Maintenance shall not include contracted or direct custodial or janitorial services, expenditures for the cleaning of a municipal building or its fixtures, the care and upkeep of grounds, recreational facilities, or parking lots, or the cleaning of or repairs and replacements to movable furnishings or equipment.

Measurement and Verification (M&V) is the process of planning, measuring, collecting, and analyzing data for the purpose of verifying and reporting energy and carbon savings within an individual facility resulting from capital improvements specific to and in alignment with this ordinance.

Renewable energy shall mean renewable energy resources as described in R.I.G.L 39-26 (Renewable Energy Standard).

Thermal energy means piped non-combustible fluids used for transferring heat into and out of buildings for the purpose of eliminating any resultant on-site greenhouse gas emissions of all types of heating and cooling processes, including, but not limited to, comfort heating and cooling, domestic hot water, and refrigeration.

Thermal energy network means all real estate, fixtures and personal property operated, owned, used or to be used for or in connection with or to facilitate a utility-scale distribution infrastructure project that supplies thermal energy.

Sec. 5-142. Scope and applicability.

This article is applicable to all buildings owned by the City of Providence, including buildings owned by the City and managed by other entities. This article is applicable to all capital improvements and maintenance of mechanical systems in every municipal building, especially when those systems are upgraded, including but not limited to:

- (i) The building envelope
- (ii) Lighting and controls
- (iii) Heating, Ventilation, and Air Conditioning (HVAC) systems
- (iv) Building management systems

Sec. 5-143. Priorities and Timeline.

All municipal buildings are to be carbon neutral buildings by 2040. School facilities shall meet the latest definition of Zero Energy Capable as defined by the Northeast Collaborative for High Performance schools (NE-CHPS) by 2040. The priorities for reaching carbon neutrality for each building include, but are not limited to the following:

- (i) Completing a comprehensive accounting and analysis of all energy uses in all municipal buildings.
- (ii) Identification and analysis of energy efficiency measures and energy saving opportunities, as well as applicable local, state, federal, and other sources of capital to defray costs of these measures. Investing in all cost-effective energy efficiency and energy savings opportunities.
- (iii) Analysis of the feasibility of using thermal energy and thermal energy networks at the facility, including any anticipated limitations on the use of thermal energy networks, along with a characterization of any such limitations, including whether they are permanent, temporary, or resolvable in a cost-effective basis.
- (iv) Determination of the feasibility and advisability of gathering, combining, or expanding any clean energy sources or central thermal energy networks with neighboring or nearby related municipal facilities.
- (v) An analysis of the feasibility of installing electrically powered space and water heating and cooling systems, and associated structural and electrical upgrades, with a goal of all electric buildings.
 - a. Where and when electrically powered space and water heating and cooling systems are determined to be cost-effective, the City will prioritize these recommended systems and place the system in service, except in cases where thermal energy and thermal energy networks are installed as suitable cost-effective alternatives.
- (vi) Preference for the installation of on-site renewable energy generation where feasible based on location and building characteristics (orientation, sunshade, etc.), as well as battery storage systems.
- (vii) Require all public buildings to have an energy use intensity (EUI) assessment within a year of passage in order to prioritize the need for an investment grade energy audit.
- (viii) Schedule investment grade energy audits based on the above prioritization for buildings with the worse EUI ratings, or with the most favorable renewable energy potential within three years of passage (unless one has been performed in the prior two years), to assess energy savings opportunities, electrification potential, and renewal and battery energy storage system capabilities, and updated based on funding potential and required levels of performance. Buildings scheduled to receive capital improvements based on the City's CIP or other schedules must undergo an investment grade energy audit prior to the issuing of formal construction documents.
- (ix) Within a year of the investment grade audit, the city will assess the audit findings and create a priorities plan for capital improvements to advance the decarbonization goals of the city/described in this article.
- (x) All school buildings must be not powered by metered and delivered fossil fuel by 2040 for all primary building systems. Starting immediately, no new connections to the fossil fuel system from a municipal building will be permitted, provided that the replacement thermal system for heating, cooling, hot water, and appliances in the building provides the same or greater safety, reliability, and cost-effectiveness as defined in Sec. 141.

- (xi) All other municipal buildings must have completed the relevant evaluations as described above and invest in all cost-effective energy efficiency and clean energy systems to move toward full electrification as soon as it is cost-effective, leveraging all available local, state, federal, and other available funding. All other municipal buildings must be powered by 100% carbon pollution-free electricity by 2033, at least half of which will be locally supplied clean energy, as required in the Climate Justice Plan.

Sec. 5-144. Annual Reporting Guidelines.

The Departments of Public Property, Sustainability, and/or Providence Public School Department shall submit an annual report on progress towards achieving carbon neutrality by 2040 to the City Council and the Mayor. The annual report shall include, but is not limited to, the following information:

- i) Energy and carbon neutral benchmarks.
- ii) Overall energy use and carbon emissions trends.
- iii) A plan for the upcoming year in action steps to reduce energy use and carbon emissions in municipal buildings.
- iv) Operation goals.
- v) A maintenance plan for upgraded buildings.
- vi) Any associated annual budgetary needs for meeting the goals set forth in this article.
- vii) Jobs created or sustained by these projects.

Sec. 5-145. Labor Standards.

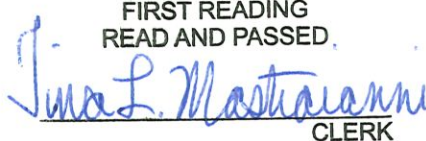
The City shall support equitable access to family-sustaining jobs with good wages and benefits by:

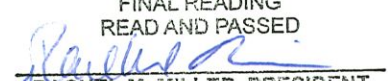
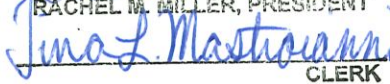
- (i) For all projects subject to the provisions of this ordinance, the city will comply with the requirements of property owners in Article XVIII Section 21-306(h) Providence Tax Stabilization Investment Act.
- (ii) Conducting an independent, objective, reasoned study, using reviewable criteria, to determine whether adoption of a project labor agreement on the proposed project or projects will help achieve the goals of the state purchases act, for all covered projects over twenty-five million dollars (\$25,000,000).

Sec. 5-146. Severability.

If any provision of this ordinance shall be held to be invalid by a court of competent jurisdiction, then such provision shall be considered separately and apart from the remaining provisions, which shall remain in full force and effect.

SECTION 2. This Ordinance shall take effect upon passage.

IN CITY COUNCIL
JUL 11 2024
FIRST READING
READ AND PASSED.

CLERK

IN CITY
COUNCIL
JUL 18 2024
FINAL READING
READ AND PASSED

RACHEL M. MILLER, PRESIDENT

CLERK

I HEREBY APPROVE.


Mayor

Date: 7/23/24