



## CITY COUNCIL AGENDA REPORT

**Meeting Date:** April 20, 2023

**From:** Adrienne Etherton, Sustainability Manager

**Subject:** Building Efficiency Program Ordinance Amendments

### Recommendation

Adopt an ordinance, waiving second reading, amending Various Sections of Chapter 15.77 of the Brisbane Municipal Code Concerning Building Efficiency Program.

### Background

This ordinance was introduced at the regular City Council meeting held on April 6, 2023, and was passed unanimously with no requested changes.

### Attachments

1. April 6, 2023 staff report, including the introduced ordinance and redline version.

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Adrienne Etherton, Sustainability Manager

Handwritten signature of Randy Breault in blue ink.

Randy Breault, Public Works Director

Handwritten signature of Clayton L. Holstine in blue ink.

Clay Holstine, City Manager



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**Meeting Date:** April 6, 2023

**From:** Adrienne Etherton, Sustainability Manager

**Subject:** Building Efficiency Program Ordinance Amendments

### Community Goal/Result

Ecological Sustainability - Brisbane will be a leader in setting policies and practicing service delivery innovations that promote ecological sustainability.

### Purpose

To amend the ordinance which established the Building Efficiency Program based on current needs, understanding and best practices.

### Recommendation

Introduce an Ordinance Amending Various Sections of Chapter 15.77 of the Brisbane Municipal Code Concerning Building Efficiency Program, including the finding that the introduction and adoption of the Ordinance is not subject to further review under the California Environmental Quality Act (CEQA) because it is not a “project”. (CEQA Guidelines, Section 15378 (b)(2)).

### Background

In late 2019, the City Council adopted Chapter 15.77 of the Brisbane Municipal Code thereby establishing the Brisbane Building Efficiency Program. The ordinance put in place annual energy and water benchmarking requirements for local buildings 10,000 square feet or larger with the first reports due in May 2021 for calendar year 2020 building data. In addition, the ordinance established “Beyond Benchmarking” requirements through which owners of buildings covered by the program must either demonstrate that the buildings are already high-performing (i.e. highly energy and water efficient) or the owners must take actions to improve the building’s efficiency, including performing energy and water audits followed by improvements, retro-commissioning, or green lease agreements between tenants and landlords (where applicable).

The Beyond Benchmarking requirements start in 2023 for commercial buildings and 2024 for industrial and multi-family buildings. Accordingly, in 2022 sustainability staff began working on additional guidance and documentation for the Beyond Benchmarking phase. Through this process, staff determined that certain aspects of the original ordinance posed challenges for implementation and is recommending these clean-up amendments to ensure that building owners and representatives are able to comply with both the letter and the spirit of the law and that staff is able to efficiently and effectively administer the ordinance.

### Discussion

The recommended changes to the code fall into four areas:

1. Updating and clarifying Beyond Benchmarking reporting timelines, including incorporating interim steps and ensuring that owners of the buildings have time to see the results from one cycle before moving into the next.
2. Providing more options for water use efficiency, including an option to demonstrate high-performance status by the water use intensity being 25% better than the property type median so already efficient buildings can be recognized as such, and referencing a common water audit guideline.
3. Updating the energy performance metric from GHG intensity to Energy Use Intensity, to match the readily available metrics in both Energy Star Portfolio Manager (the free benchmarking tool used by building owners/representatives) and TouchstoneIQ (the program management software used by City staff) and align with industry best practice.
4. Changing the City notification timeline so that staff may review and incorporate Energy Star Portfolio Manager's annual platform update and recommended metrics, generally in late February, before the start of the reporting cycle.

**Fiscal Impact**

There is no cost associated with the proposed revision.

**Environmental Determination**


Introduction (and adoption) of this Ordinance is not subject to further environmental review under the California Environmental Quality Act (CEQA) because it is a continuing administrative activity of the City, i.e., general policy and procedure making, and therefore it is not a “project” under CEQA. (CEQA Guidelines, Section 15378 (b)(2)).


**Measure of Success**

Building Efficiency Program participants can comply with the requirements and staff is able to effectively administer the Program.

**Attachments**

- A. Proposed Ordinance
- B. Chapter 15.77 (BBEP) Ordinance - Redline

  
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Adrienne Etherton, Sustainability Manager

  
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Randy Breault, Public Works Director

  
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Clay Holstine, City Manager

**ORDINANCE NO. - - -**

**AN ORDINANCE OF THE CITY OF BRISBANE  
AMENDING SECTIONS 15.77.40, 15.77.070, 15.77.080, AND 15.77.100  
OF CHAPTER 15.77 OF THE BRISBANE MUNICIPAL CODE CONCERNING  
BUILDING EFFICIENCY PROGRAM**

**The City Council of the City of Brisbane hereby ordains as follows:**

**Section 1: Section 15.77.040 of the Brisbane Municipal Code is revised to read as follows:**

**"15.77.040 - Definitions.**

The following words and phrases, whenever used in this chapter, shall be construed as defined in this section unless the context indicates otherwise. Words and phrases not defined here shall be construed as defined in BMC Chapters 15.08, 15.70, 15.80, 15.81, and 15.82.

A. "Base building systems" means the systems and subsystems of a building that use or distribute energy and/or water and/or impact the energy and/or water consumption, including the building envelope; the heating, ventilating and air-conditioning (HVAC) systems; air conveying systems; electrical and lighting systems; domestic hot water systems; water distribution systems; plumbing fixtures and other water-using equipment; landscape irrigation systems and water features; energy generation and storage equipment; and electric vehicle charging infrastructure. Base building systems shall not include:

1. Systems or subsystems owned by a tenant or for which a tenant bears full maintenance responsibility, that are within the tenant's leased space and exclusively serve such leased space, and for which the tenant pays all the energy and water bills according to usage and demand as measured by a meter or sub-meter.
2. Systems or subsystems owned by a residential unit owner that exclusively serve the residential unit of that owner.

B. "Baseline year" means the calendar year that a building shall use as its past energy and water usage year when comparing to its "reporting year" usage. For the beyond benchmarking cycle 1, the baseline year is the first year of in-compliance benchmarking, which is the calendar year data of 2020 reported in 2021 unless reporting was not completed that year or had unresolved data quality issues. In subsequent beyond benchmarking cycles, the baseline year resets to the calendar year evaluated in the previous beyond benchmarking cycle. The following table reflects the data and baseline years for a typical commercial property during the first three (3) beyond benchmarking cycles:

	Baseline	Calendar Evaluation Year Data to be compared against Baseline	Year 1 – (Reporting Year) - Performance Verification Report or Audit due	Year 3 – Check-in	Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due
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Cycle 1	2020	2022	2023	2025	2027
Cycle 2	2022	2028	2029	2031	2033
Cycle 3	2028	2034	2035	2037	2039

C. "Benchmarking report" means a report, generated by ENERGY STAR® Portfolio Manager, summarizing the annual energy and water performance of a building.

D. "Commercial property" means a property that is defined by ENERGY STAR® Portfolio Manager with the exception of the property types listed on Portfolio Manager as multifamily or manufacturing/industrial plants. Commercial property includes warehouses and distribution centers.

E. "Covered building" means the current definition of "covered building" as set forth in state regulations.

F. "Decarbonized building" means any building that is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations.

G. "Demand flexibility" means the capability provided by building controls or distributed energy resources to reduce, shed, shift, modulate or generate electricity. Energy flexibility and load flexibility are often used interchangeably with demand flexibility.

H. "Department" means the City of Brisbane's Department of Public Works.

I. "Disclosable buildings" means the most current definition of "disclosable buildings" as set forth in state regulations that have ten thousand (10,000) square feet or more of gross floor area.

J. "Distributed Energy Resources (DER)" means distribution-connected distributed generation resources, energy efficiency, energy storage, electric vehicles, and demand response technologies, that are supported by a wide-ranging suite of California Public Utilities Commission policies.

K. "Energy" means electricity, natural gas, steam, heating oil, or other products sold by a utility to a customer of a building, or renewable on-site electricity generation, for purposes of providing heat, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities.

L. "Energy audit" means a systematic evaluation to identify potential modifications and improvements to a building's equipment and systems which utilize energy in order to optimize a building's overall energy performance.

M. "ENERGY STAR® Portfolio Manager" means the United States Environmental Protection Agency's online tool for measuring, tracking, and managing a building's energy, water, and greenhouse gas emission data, and benchmarking the performance of the building.

N. "ENERGY STAR® Certified" means a building which has earned an ENERGY STAR® Score of seventy-five (75) or higher, indicating that it performs better than at least seventy-five percent (75%) of similar buildings nationwide and the data has been verified by a professional engineer or registered architect.

O. "ENERGY STAR® Score" means a number ranging from one to one hundred (100) assigned by the U.S. EPA's Energy Star Portfolio Manager as a measurement of a building's energy efficiency, normalized for a building's characteristics, operations, and weather, according to methods established by the U.S. EPA's ENERGY STAR® Portfolio Manager.

P. "Energy Use Intensity" (EUI) as defined by the U.S. EPA means all energy consumption divided by the gross floor area. A normalized EUI is adjusted for property characteristics, site energy factors and source energy factors as determined by the U.S. EPA's ENERGY STAR® Portfolio Manager.

Q. "Grid-Interactive Efficient Building (GEB)" means an energy efficient building with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and preferences, and cost reductions in a continuous and integrated way.

R. "Gross floor area" means the total building square footage, as measured between the exterior walls of the building(s). Open-air stairwells, breezeways, and other similar areas that are not fully enclosed should not be included in the gross floor area. Gross floor area for a commercial property shall include all finished areas inside the building(s) including supporting areas, lobbies, tenant areas, common areas, meeting rooms, break rooms, atriums (count the base level only), restrooms, elevator shafts, stairwells, mechanical equipment areas, basements, storage rooms. Gross floor area for an industrial property shall include all space within the building(s) at the plant, including production areas, offices, conference rooms, employee break rooms, storage areas, mechanical rooms, stairways, and elevator shafts. Gross floor area for a multifamily property shall include all buildings that are part of a multifamily community or property, including any management offices or other buildings that may not contain living units, all fully-enclosed space within the exterior walls of the building(s), including living space in each unit (including occupied and unoccupied units), interior common areas (e.g. lobbies, offices, community rooms, common kitchens, fitness rooms, indoor pools), hallways, stairwells, elevator shafts, connecting corridors between buildings, storage areas, and mechanical space such as a boiler room.

S. "Industrial property" means a property that is defined by ENERGY STAR® Portfolio Manager as a manufacturing/industrial building used for producing, manufacturing, or assembling goods and includes, but is not limited to, a main production area that has high-ceilings and contains heavy equipment used for assembly line production.

T. "Multifamily property" means any multifamily building that contains two (2) or more residential living units. This includes high-rise buildings (ten (10) or more stories), mid-rise buildings (five (5) to nine (9) stories), or low-rise buildings (one to four (4) stories).

U. "Qualified auditor" means an individual whose job duties do not regularly occur at the property, who possesses such qualifications as determined by the department to perform or directly supervise individuals performing audits and to certify audit reports required by this chapter. A qualified auditor may be a contractor hired by the reporting entity, or an employee of a utility, so long as such person has two (2) or more years of auditing experience and possesses one or more of the following certifications:

1. Accredited certification that has been designated a "Better Buildings Recognized Program" by the U.S. Department of Energy ("DOE") meeting the criteria set forth in the Better Buildings Workforce Guidelines (BBWG) for Building Energy Auditors or Energy Managers;

2. Certified Energy Auditor (CEA) or Certified Energy Manager (CEM), issued by the Association of Energy Engineers (AEE);
3. Certified Facilities Manager (CFM), issued by the International Facility Management Association (IFMA);
4. High Performance Building Design Professional (HBDP) or Building Energy Assessment Professional (BEAP), issued by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE);
5. For audits of multifamily residential buildings only, a Multifamily Building Analyst (MFBA), issued by the Building Performance Institute (BPI);
6. Professional Engineer (PE) registered in the State of California;
7. System Maintenance Administrator (SMA) or System Maintenance Technician (SMT), issued by Building Owners and Managers Institute (BOMI) International; or
8. Additional qualified certifications as the Director of the Department deems appropriate.

V. "Qualified retro-commissioning professional" means an individual whose job duties do not regularly occur at the property, who possesses such qualifications as determined by the department to perform or directly supervise individuals performing the retuning work (i.e. adjusting system control parameters) required by this chapter. A qualified retro-commissioning professional may be a contractor hired by the reporting entity or an employee of a utility so long as such person has two (2) or more years of commissioning or retuning experience and possesses one or more of the following certifications:

1. Accredited Commissioning Process Authority Professional (ACPAP) approved by the University of Wisconsin;
2. Accredited certification that has been designated a "Better Buildings Recognized Program" by the Department of Energy meeting the criteria set forth in the Better Buildings Workforce Guidelines (BBWG) for Building Commissioning Professionals;
3. Certified Building Commissioning Professional (CBCP) or Existing Building Commissioning Professional (EBCP), issued by the Association of Energy Engineers (AEE);
4. Certified Commissioning Professional (CCP), issued by the Building Commissioning Association (BCA);
5. Certified Commissioning Authority (CxA) or Certified Commissioning Technician (CxT), issued by the AABC Commissioning Group (ACG);
6. Certified professional certified by the National Environmental Balancing Bureau (NEBB);
7. Commissioning Process Management Professional (CPMP), issued by American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE);
8. Professional Engineer (PE) registered in the State of California; or
9. Additional qualified certifications as the Director of the Department deems appropriate.

W. "Reporting Year" means the year in which a benchmarking or other report is submitted, based on the prior calendar year's data. For instance, for Reporting Year 2023, a building owner will submit energy and water data for calendar year 2022 (January 1 – December 31) with a deadline of May 15, 2023.

X. "Retro-commissioning" means a systematic process for optimizing existing systems relating to building performance through the identification and correction of deficiencies in such systems.

Y. "Retro-commissioning measures" means work relating to retro-commissioning such as repairs, maintenance, adjustments, changes to controls or related software, or operational improvements that optimize a building's energy and/or water performance.

Z. "Retrofit Measures" means upgrades or alterations of building systems involving the installation of energy and/or water efficiency and DER technologies that reduce energy and/or water consumption and improve the efficiency of such systems.

AA. "Solar thermal system" means the process of utilizing energy from the sun through the use of collectors to produce heat for a variety of applications including, but not limited to, heating water, providing process heating, space heating, absorption cooling and any combination of such applications.

BB. "Solar photovoltaic" means a technology that uses a semiconductor to convert sunlight directly into electricity.

CC. "Stationary Battery Electric Storage System (BESS)" means a rechargeable energy storage system consisting of electrochemical storage batteries, battery chargers, controls, and associated electrical equipment designed to provide electrical power to a building, designed for service in a permanent location.

DD. "U.S. EPA Water Score" means a number ranging from one to one hundred (100) assigned by the U.S. EPA's ENERGY STAR® Portfolio Manager, and available to existing multifamily properties with twenty (20) or more units, as a measurement of a whole building's water use, normalized for that building's characteristics, operations, and weather, according to the methods established by the U.S. EPA's ENERGY STAR® Portfolio Manager.

EE. "Water audit" means a systematic evaluation to identify potential modifications and improvements to a building's equipment and systems which utilize water in order to optimize a building's overall water performance.

FF. "Water Use Intensity" (WUI) as defined by the U.S. EPA means all water consumption divided by the gross floor area (not including parking or irrigated area) and is not adjusted for any of the building use details (number of workers, weekly hours, etc.)."

**Section 2: Section 15.77.070 of the Brisbane Municipal Code is revised to read as follows:**

**"15.77.070 - Beyond benchmarking performance path.**

A. Owners of properties that are highly efficient, have demonstrated increased efficiency, or have adopted distributed energy resources may establish satisfactory energy and water efficiency by providing the documentation described below to the department in such a form as required by the department that demonstrates the following:



1. The building is new and has been occupied for less than five (5) years from its first compliance due date, based on its temporary certificate of occupancy or certificate of occupancy; or has achieved one or more of the energy standards and one or more of the water standards as set forth below for at least three (3) of the five (5) calendar years preceding the building's compliance due date.

2. Energy standards: The building has the latest version of the Leadership in Energy and Environmental Design (LEED™) existing buildings operations and maintenance certification; or qualified auditor or retro-commissioning professional certified at least at least one of the following:

a. The building has received an ENERGY STAR® score of eighty (80) or greater from the U.S. EPA; or

b. The building has improved its ENERGY STAR® score by twenty (20) points or more relative to its performance during the baseline year; or

c. The building has a weather normalized site energy use intensity as calculated by the benchmarking tool that is twenty-five percent (25%) below the calculated median for that property type; or

d. The building has reduced its weather normalized site energy use intensity by at least twenty percent (20%) relative to its performance during the baseline year.

3. If a building has installed one or more of the following distributed energy resources (DERs):

a. Solar Photovoltaic. An onsite solar photovoltaic system has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational. The greater of the two (2) following options satisfy the solar photovoltaic measure:

i. A minimum amount of solar photovoltaic capacity of five (5) kilowatts per Brisbane Municipal Code Section 15.82.050; or

ii. Sufficient capacity must be installed to offset equal to or greater than twenty percent (20%) of their annual electricity consumption, as calculated by ENERGY STAR® Portfolio Manager, or otherwise determined by the city department.

b. Stationary Electric Storage. An onsite stationary battery electric storage system (BESS) has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.

c. Grid-interactive Efficient Building (GEB). The building currently has the ability to interact with the distribution system operator's grid to optimize its energy consumption and/or dispatch. GEBs are energy efficient buildings with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and preferences, and cost reductions in a continuous and integrated way.

d. Decarbonized Building. The building is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations. Through a combination of the above strategies, demonstrate through EPA Portfolio Manager that the building is decarbonized in the current reporting year.

4. Water standards: A qualified auditor or qualified retro-commissioning professional has certified at least one of the following:

- a. The building has received a U.S. EPA water score of eighty (80);
- b. The building has improved its U.S. EPA water score by twenty (20) points or more relative to its performance during the baseline year;
- c. The building has reduced its water use intensity by at least twenty percent (20%) relative to its performance during the baseline year.
- d. The building has a water use intensity that is twenty-five percent (25%) below the calculated median for that property type as determined by the Department.

B. If a building has achieved both energy and water standards, the property owner is only required to submit an ENERGY STAR® performance verification report for that reporting year. If the building only meets one of the standards, the property owner shall submit a performance verification report for the satisfactory standard and shall comply with this section by completing one of two (2) prescriptive pathway options for the unmet standard as set forth in subsection G of section 15.77.080.

C. After the establishment of a DOE-recognized standard for a water auditor, the director may adopt the qualifications of the DOE-recognized standard with modifications as the director deems to be appropriate.”

**Section 3: Section 15.77.080 of the Brisbane Municipal Code is revised to read as follows:**

**“15.77.080 - Beyond benchmarking prescriptive path.**

A. If a building does not meet performance standards set forth in 15.77.070, a property owner shall meet the requirements of this chapter through one of two (2) alternative means:

1. For properties between ten thousand (10,000) and thirty-nine thousand nine hundred ninety-nine (39,999) square feet:
  - a. Conducting an asset score full report described in Section 15.77.080 B; and either
  - b. Performing retro-commissioning described in Section 15.77.080 D; or
  - c. Adopting improvement measures described in subsection F of Section 15.77.080; or
  - d. Adopting a green lease as described in subsection H of Section 15.77.080.

2. For properties forty thousand (40,000) square feet and more:

- a. Conducting a minimum of an ASHRAE audit Level II audit described in Section 15.77.080 B (Level III audits are also acceptable); and either
- b. Performing retro-commissioning described in Section 15.77.080 D; or
- c. Adopting efficiency and/or DER Improvement Measures described in subsection F of Section 15.77.080; or
- d. Adopting a green lease as described in subsection H of Section 15.77.080.

B. Energy and Water Audit Standards. Energy and water auditing standards shall comply with both of the following:

1. Energy Auditing.

Energy audits required by this chapter shall meet or exceed either the Department of Energy (DOE) asset score standards, American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Level II audit standards in conformance with the ASHRAE Standard 211-2018 (or latest version) "Standard for Commercial Building Energy Audits" and shall be performed under the direct supervision of a qualified auditor or qualified retro-commissioning professional. The DOE audit template shall be used to transmit data to the city for compliance with energy auditing and retro-commissioning. The city will publish an audit template on the building energy asset score website with standardized data collection fields to capture information about base energy systems and recommended retrofit opportunities. Section 15.77.080 A describes the applicability of each of the following audit standards based on gross floor area:

a. Asset Score Full.

- i. Collect building data: Use the data collection form "full" input mode version to gather information about the building's physical characteristics.
- ii. Review the data collection priority map to help focus on the most important building data given the building's use type and climate zone.
- iii. Enter the data on the audit template supplied on the DOE asset score website for the Brisbane Building Efficiency Program.

b. ASHRAE Level II Audit.

- i. Energy audits required by this chapter shall meet or exceed Level II audit standards in conformance with the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 211-2018 "Standard for Commercial Building Energy Audits" and shall be performed under the direct supervision of a qualified auditor.

2. Water Auditing.

Water audits shall be performed in accordance with industry standard practices, including the latest version of the DOE Water Audit Guidance for Commercial Buildings or ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies, unless the department directs

the use of the latest version of ASHRAE Standard 230 the existing building commissioning process (EBCx process), and under the direct supervision of a qualified auditor or qualified retro-commissioning professional. The water audit of the base building systems shall include, at a minimum, the following:

- a. Potable water distribution systems;
- b. Landscape irrigation systems;
- c. Water reuse systems; and
- d. Water features.

C. Energy and Water Audit Report. A report of the energy and water audit, completed and signed by a qualified auditor, shall be maintained by the property owner as required in Section 15.77.090. The report shall meet the requirements of subsection 15.77.080 B and shall include, at a minimum, the following:

- 1. The date(s) that the audit and retro-commissioning were performed;
- 2. Identifying information on the auditor and retro-commissioning provider;
- 3. Information on the base building systems and equipment;
- 4. A list of all retrofit measures that can reduce energy use and/or cost of operating the building, costs of each measure, and an estimate of the energy savings associated with each measure;
- 5. A list of all retrofit measures that can reduce water use and/or cost of operating the building; costs of each measure; and an estimate of the water savings associated with each measure;
- 6. Functional performance testing reports;
- 7. Operational training conducted;
- 8. Inventory of existing, planned, or desired electric vehicle (EV) charging stations on the property;
- 9. Inventory of existing, planned, or desired solar photovoltaic, solar water heating, other energy generation equipment;
- 10. Inventory of existing, planned, or desired stationary battery electric storage system or other energy storage equipment;
- 11. Inventory of existing, planned or desired building energy end-use electrification retrofits including electrical panel upgrades;
- 12. Inventory of existing, planned or desired water systems and equipment; and
- 13. Acknowledgment that an asset score full, or ASHRAE Level II audit was conducted.

D. Energy and Water Retro-Commissioning Standards.

1. Energy retro-commissioning shall be performed in accordance with industry standard practices, including the latest version of ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies. The department may consider updating the ASHRAE Guideline 0.2 with ASHRAE Standard 230 the existing building commissioning process (EBCx process) once the standard has been voted and approved by ASHRAE. These activities shall be conducted under the direct supervision of a qualified retro-commissioning professional. The retro-commissioning of base building systems shall include, at a minimum, the following:

- a. Heating, ventilation, air conditioning (HVAC) systems and controls;
- b. Indoor lighting systems and controls;
- c. Exterior lighting systems and controls;
- d. Water heating systems;
- e. Renewable energy systems;
- f. Stationary electric battery storage systems;
- g. Electric vehicle charging equipment; and
- h. Demand flexibility systems.

2. Water retro-commissioning shall be performed in accordance with industry standard practices, including the latest version of ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies, unless the department directs the use of the latest version of ASHRAE Standard 230 the existing building commissioning process (EBCx process), and under the direct supervision of a qualified retro-commissioning professional. The water retro-commissioning of the base building systems shall include, at a minimum, the following:

- a. Potable water distribution systems;
- b. Landscape irrigation systems;
- c. Water reuse systems; and
- d. Water features.

E. Energy and Water Retro-Commissioning Report. A report of the energy and water retro-commissioning, completed and signed by a qualified retro-commissioning professional, shall be maintained by the property owner as required in Section 15.77.090. The report shall meet the requirements of Subsection 15.77.080 D and shall include, at a minimum, the following:

- 1. The date(s) that the retro-commissioning was performed;
- 2. Identifying information on the retro-commissioning provider;
- 3. Information on the base building systems and equipment;
- 4. All the retro-commissioning process activities undertaken and retro-commissioning measures completed;

5. Functional performance testing reports; and
6. Operational training conducted.

F. Improvement Measures. A property owner may comply with the requirements of this chapter for any unmet standard by demonstrating two (2) of the following corresponding efficiency improvement measures—one energy-related measure and one water-related measure listed below—were completed and by submitting an improvement measures report within the time set forth in Section 15.77.100.

1. Energy-related Improvement Measures.

- a. Energy efficiency improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize energy efficiency in base building systems, decarbonized buildings, and building electrification. An owner may submit a request to the department to add measures not contained in the published list that are identified by a qualified auditor or retro-commissioning professional. Examples of energy systems include, but are not limited to:

- i. Space heating and cooling.
- ii. Ventilation.
- iii. Building envelope measures such as insulation, air sealing and window upgrades.
- iv. Water heating.
- v. Lighting.
- vi. Cooking.
- Vii. Refrigeration.
- viii. Office equipment and computing.
- ix. Other loads.

- b. Distributed energy resource improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize decarbonized buildings and building electrification. Examples of energy systems include, but are not limited to:

- i. Solar Photovoltaic. An onsite solar photovoltaic system has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.
- li. Stationary Electric Storage. An onsite stationary battery electric storage system (BESS) has been installed in accordance with the California Building

Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.

iii. Grid-interactive Efficient Building (GEB). GEBs are energy efficient buildings with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and preferences, and cost reductions in a continuous and integrated way that is currently operational.

iv. Electric Vehicle (EV) charging infrastructure. Electric vehicle charging infrastructure has been installed on the building site.

v. Decarbonized Building. A building that is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations. Through a combination of the above strategies, demonstrate through EPA Portfolio Manager that the building is decarbonized.

## 2. Water-related Improvement Measures.

a. Water efficiency improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize water efficiency. Examples of energy systems include, but are not limited to:

i. Installation of plumbing such that all systems in the building are in compliance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational;

ii. Installation of outdoor landscaping and irrigation such that all systems on the property are in compliance with Brisbane Municipal Code Chapter 15.70, Water Conservation in Landscaping in effect at the time of the compliance cycle;

iii. Installation of a greywater system in accordance with California Code of Regulations, Title 24, Sections 1502.6, 1502.10.3, or as amended and in effect at the time of installation and currently operational;

iv. Installation of insulation on all hot water pipes in accessible building locations; or

v. Participation in approved water utility retrofit program (e.g. taken advantage of rebate or incentive programs for upgrades).

G. Improvement Measures Report. A report of the improvement measures implemented shall be submitted to the department and maintained by the property owner as required in Section 15.77.090. The report shall be submitted with sufficient supporting data including receipts or other proof of compliance and shall include, at a minimum, the following:

1. Descriptions of the measures including the date(s) that the improvement measures were implemented;

2. Identifying information on the person implementing the improvement measures;
3. Information on the base building systems and equipment; and
4. A list of all improvement measures that can reduce energy or water use and the cost of operating the building, and the costs of each measure.

H. Green Lease Attestation. A property owner may submit a letter of attestation that its lease or other rental agreement for the building contains sustainability or environmental provisions specifically related to energy and water as part of the agreement (a "green lease"). At a minimum, the owner shall provide reasonable evidence that the agreement includes provisions for:

1. Energy and water cost pass through requirements that do not exceed the actual reduction in building operating costs for the tenant;
2. Operational clauses that support overall energy and water reductions on the property; and
3. Reporting clauses that allow the owner and tenant to share data necessary to comply with this chapter.

I. Required Submittal to the Department.

1. For each building subject to this chapter, the property owner shall submit to the department an energy and water audit and report as described in Section 15.77.080 D, or proof of meeting one of the exemptions, in accordance with the schedule set forth in Section 15.77.100.
2. For each building subject to this chapter, the property owner shall submit to the department, in accordance with the schedule set forth in Section 15.77.100, one of the following:
  - a. An energy and water retro-commissioning report as described in Section 15.77.080 E;
  - b. An improvement measures report as described in Section 15.77.080 G; or
  - c. A green lease attestation as described in Section 15.77.080 H.”

**Section 4: Section 15.77.100 of the Brisbane Municipal Code is revised to read as follows:**

**“15.77.100 - Schedule for compliance.**

A. Schedule for Benchmarking Report Compliance. A property owner shall submit to the department an annual benchmarking report in compliance with Section 15.77.050 according to the following schedule:

1. For properties owned by the city with a gross floor area of two thousand (2,000) square feet or more, the city must complete and submit the initial benchmarking report annually on or before May 15, beginning in 2020.
2. For all other properties subject to this chapter, the property owner must complete and submit the initial benchmarking report annually on or before May 15, beginning in 2021.

B. Schedule for Beyond Benchmarking Compliance for Performance and Prescriptive Paths. A property owner must comply with Section 15.77.060 once every six (6) years, based on the building type



(commercial, industrial or multi-family) which will be published on the city website for each building subject to this chapter under Section 15.77.060.

1. For commercial— Submit performance verification report or evidence of contract with qualified profession to complete energy and water audit for prescriptive path by May 15, 2023, or Year 1 of the cycle. The completed audit must be submitted by July 15 of the same year.

	Baseline	Calendar Evaluation Year Data to be compared against Baseline	Year 1 – (Reporting Year) - Performance Verification Report or Audit due	Year 3 – Check-in	Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due
Cycle 1	2020	2022	2023	2025	2027
Cycle 2	2022	2028	2029	2031	2033
Cycle 3	2028	2034	2035	2037	2039

2. For industrial and multifamily— Submit performance report or evidence of contract with qualified profession to complete energy and water audit for prescriptive path by May 15, 2024 or Year 1 of the cycle. The completed audit must be submitted by July 15 of the same year.

	Baseline	Calendar Evaluation Year Data to be compared against Baseline	Year 1 – (Reporting Year) - Performance Verification Report or Audit due	Year 3 – Check-in	Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due
Cycle 1	2020	2022	2023	2025	2027
Cycle 2	2022	2028	2029	2031	2033
Cycle 3	2028	2034	2035	2037	2039

3. For any newly constructed buildings receiving a certificate of occupancy less than five (5) years before the start (Year 0) of the cycle, the property owner shall comply with Sections 15.77.060, 15.77.070 and/or 15.77.080 at the time of the next cycle corresponding to the property type.

C. Timing of Audit and Retro-Commissioning. Except as otherwise provided in subsection 15.77.060 B, a property owner shall complete the audits and retro-commissioning within five (5) years of a building's compliance due date.

D. Early Compliance Pilots. The city may launch a voluntary early compliance pilot program to test the reporting infrastructure and refine the reporting requirements. The pilot program may begin prior to the reporting deadline in this Section 15.77.100.

E. Time Extensions. A property owner may be granted up to three (3) extensions of sixty (60) days each to file any submittal required by this chapter provided satisfactory proof is made to the department that one of the following conditions applies:

1. The property is under financial or legal distress, as verified by recent financial statements, legal filings and other relevant documents showing one or more of the following:

- a. The property is under the control of a court-appointed receiver as a result of financial distress;
- b. The property is owned by a financial institution as a result of borrower default;
- c. The property has been acquired by a financial institution via deed in lieu of foreclosure;
- d. The property is encumbered by a senior mortgage subject to a notice of default;
- e. The property is an asset subject to probate proceedings;
- f. The property is subject to a State of California Board of Equalization (BOE) Welfare Property Tax Exemption and the cost of complying with the reporting requirements will exceed or significantly deplete existing cash flow. The property owner must provide proof of a BOE-issued organizational clearance certificate and, where the property owner is a limited partnership, provide a supplemental clearance certificate.

2. The property owner, or tenant if applicable, is unable to timely comply due to substantial hardship. Substantial hardship shall mean circumstances by some verifiable level of adversity or difficulty from which the department determines a property owner, or tenant if applicable, would not be able reasonably to satisfy the obligations of this chapter.

3. Fifty percent (50%) or more of the gross floor area occupied by tenant(s) in the building has a lease ending within one year of the compliance deadline and the lease is not being renewed.

F. Notification. The department shall notify the property owner at least forty-five (45) days prior to the due dates specified in subsections A and B of this Section 15.77.100.”

**Section 5: CEQA Determination**

Introduction and adoption of this Ordinance is not subject to further review under the California Environmental Quality Act (CEQA) because it is a continuing administrative activity of the City, namely, general policy and procedure making and therefore it is not a “project” under CEQA. CEQA Guideline, Section 15378 (b) (2).

**Section 6: Effective Date.**

This Ordinance shall be effective thirty days after its final passage and adoption.

\* \* \* \*

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the \_\_\_\_\_ day of \_\_\_\_\_, 2023, by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

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Madison Davis, Mayor

ATTEST:

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Ingrid Padilla, City Clerk

APPROVED AS TO FORM:

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Thomas R. McMorrow, City Attorney

**Proposed Amendments to Chapter 15.77 - BUILDING EFFICIENCY PROGRAM**

**15.77.040 - Definitions.**

The following words and phrases, whenever used in this chapter, shall be construed as defined in this section unless the context indicates otherwise. Words and phrases not defined here shall be construed as defined in BMC Chapters 15.08, 15.70, 15.80, 15.81, and 15.82.

A. "Base building systems" means the systems and subsystems of a building that use or distribute energy and/or water and/or impact the energy and/or water consumption, including the building envelope; the heating, ventilating and air-conditioning (HVAC) systems; air conveying systems; electrical and lighting systems; domestic hot water systems; water distribution systems; plumbing fixtures and other water-using equipment; landscape irrigation systems and water features; energy generation and storage equipment; and electric vehicle charging infrastructure. Base building systems shall not include:

1. Systems or subsystems owned by a tenant or for which a tenant bears full maintenance responsibility, that are within the tenant's leased space and exclusively serve such leased space, and for which the tenant pays all the energy and water bills according to usage and demand as measured by a meter or sub-meter.
2. Systems or subsystems owned by a residential unit owner that exclusively serve the residential unit of that owner.

B. "Baseline year" means the calendar year that a building shall use as its past energy and water usage year when comparing to its "reporting ~~data~~-year" usage. For the ~~first~~-beyond benchmarking cycle 1, the baseline year is the first year of in-compliance benchmarking, which is the calendar year data of 2020 ~~(the first year of mandatory benchmarking data)~~, reported in 2021 unless reporting was not completed that year or had unresolved data quality issues. In subsequent beyond benchmarking cycles, the baseline year resets to the calendar year reported-evaluated in the previous beyond benchmarking cycle. The following table reflects the data and baseline years for a typical commercial property during the first three (3) beyond benchmarking cycles:

~~Due Date, Reporting Data Year, Baseline Year~~

~~May 1, 2023, Calendar year 2022, Calendar year 2020~~

~~May 1, 2028, Calendar year 2027, Calendar year 2022~~

~~May 1, 2033, Calendar year 2032, Calendar year 2027~~

	<u>Baseline</u>	<u>Calendar Year Data to be evaluated against Baseline</u>	<u>Year 1 – (Reporting Year) Performance Verification Report or Audit due</u>	<u>Year 3 – Check-in</u>	<u>Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due</u>
<u>Cycle 1</u>	<u>2020</u>	<u>2022</u>	<u>2023</u>	<u>2025</u>	<u>2027</u>
<u>Cycle 2</u>	<u>2022</u>	<u>2028</u>	<u>2029</u>	<u>2031</u>	<u>2033</u>
<u>Cycle 3</u>	<u>2028</u>	<u>2034</u>	<u>2035</u>	<u>2037</u>	<u>2039</u>

- C. "Benchmarking report" means a report, generated by ENERGY STAR® Portfolio Manager, summarizing the annual energy and water performance of a building.
- D. "Commercial property" means a property that is defined by ENERGY STAR® Portfolio Manager with the exception of the property types listed on Portfolio Manager as multifamily or manufacturing/industrial plants. Commercial property includes warehouses and distribution centers.
- E. "Covered building" means the current definition of "covered building" as set forth in state regulations.
- F. "Decarbonized building" means any building that is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations.
- G. "Demand flexibility" means the capability provided by building controls or distributed energy resources to reduce, shed, shift, modulate or generate electricity. Energy flexibility and load flexibility are often used interchangeably with demand flexibility.
- H. "Department" means the City of Brisbane's Department of Public Works.
- I. "Disclosable buildings" means the most current definition of "disclosable buildings" as set forth in state regulations that have ten thousand (10,000) square feet or more of gross floor area.
- J. "Distributed Energy Resources (DER)" means distribution-connected distributed generation resources, energy efficiency, energy storage, electric vehicles, and demand response technologies, that are supported by a wide-ranging suite of California Public Utilities Commission policies.
- K. "Energy" means electricity, natural gas, steam, heating oil, or other products sold by a utility to a customer of a building, or renewable on-site electricity generation, for purposes of providing heat, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities.
- L. "Energy audit" means a systematic evaluation to identify potential modifications and improvements to a building's equipment and systems which utilize energy in order to optimize a building's overall energy performance.
- M. "ENERGY STAR® Portfolio Manager" means the United States Environmental Protection Agency's online tool for measuring, tracking, and managing a building's energy, water, and greenhouse gas emission data, and benchmarking the performance of the building.
- N. "ENERGY STAR® Certified" means a building which has earned an ENERGY STAR® Score of seventy-five (75) or higher, indicating that it performs better than at least seventy-five percent (75%) of similar buildings nationwide and the data has been verified by a professional engineer or registered architect.
- O. "ENERGY STAR® Score" means a number ranging from one to one hundred (100) assigned by the U.S. EPA's Energy Star Portfolio Manager as a measurement of a building's energy efficiency, normalized for a building's characteristics, operations, and weather, according to methods established by the U.S. EPA's ENERGY STAR® Portfolio Manager.

P. "Energy Use Intensity" (EUI) as defined by the U.S. EPA means all energy consumption divided by the gross floor area. A normalized EUI is adjusted for property characteristics, site energy factors and source energy factors as determined by the U.S. EPA's ENERGY STAR® Portfolio Manager.

Q. "Grid-Interactive Efficient Building (GEB)" means an energy efficient building with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and preferences, and cost reductions in a continuous and integrated way.

R. "Gross floor area" means the total building square footage, as measured between the exterior walls of the building(s). Open-air stairwells, breezeways, and other similar areas that are not fully enclosed should not be included in the gross floor area. Gross floor area for a commercial property shall include all finished areas inside the building(s) including supporting areas, lobbies, tenant areas, common areas, meeting rooms, break rooms, atriums (count the base level only), restrooms, elevator shafts, stairwells, mechanical equipment areas, basements, storage rooms. Gross floor area for an industrial property shall include all space within the building(s) at the plant, including production areas, offices, conference rooms, employee break rooms, storage areas, mechanical rooms, stairways, and elevator shafts. Gross floor area for a multifamily property shall include all buildings that are part of a multifamily community or property, including any management offices or other buildings that may not contain living units, all fully-enclosed space within the exterior walls of the building(s), including living space in each unit (including occupied and unoccupied units), interior common areas (e.g. lobbies, offices, community rooms, common kitchens, fitness rooms, indoor pools), hallways, stairwells, elevator shafts, connecting corridors between buildings, storage areas, and mechanical space such as a boiler room.

S. "Industrial property" means a property that is defined by ENERGY STAR® Portfolio Manager as a manufacturing/industrial building used for producing, manufacturing, or assembling goods and includes, but is not limited to, a main production area that has high-ceilings and contains heavy equipment used for assembly line production.

T. "Multifamily property" means any multifamily building that contains two (2) or more residential living units. This includes high-rise buildings (ten (10) or more stories), mid-rise buildings (five (5) to nine (9) stories), or low-rise buildings (one to four (4) stories).

U. "Qualified auditor" means an individual whose job duties do not regularly occur at the property, who possesses such qualifications as determined by the department to perform or directly supervise individuals performing audits and to certify audit reports required by this chapter. A qualified auditor may be a contractor hired by the reporting entity, or an employee of a utility, so long as such person has two (2) or more years of auditing experience and possesses one or more of the following certifications:

1. Accredited certification that has been designated a "Better Buildings Recognized Program" by the U.S. Department of Energy ("DOE") meeting the criteria set forth in the Better Buildings Workforce Guidelines (BBWG) for Building Energy Auditors or Energy Managers;
2. Certified Energy Auditor (CEA) or Certified Energy Manager (CEM), issued by the Association of Energy Engineers (AEE);
3. Certified Facilities Manager (CFM), issued by the International Facility Management Association (IFMA);

4. High Performance Building Design Professional (HBDP) or Building Energy Assessment Professional (BEAP), issued by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE);
5. For audits of multifamily residential buildings only, a Multifamily Building Analyst (MFBA), issued by the Building Performance Institute (BPI);
6. Professional Engineer (PE) registered in the State of California;
7. System Maintenance Administrator (SMA) or System Maintenance Technician (SMT), issued by Building Owners and Managers Institute (BOMI) International; or
8. Additional qualified certifications as the Director of the Department deems appropriate.

V. "Qualified retro-commissioning professional" means an individual whose job duties do not regularly occur at the property, who possesses such qualifications as determined by the department to perform or directly supervise individuals performing the retuning work (i.e. adjusting system control parameters) required by this chapter. A qualified retro-commissioning professional may be a contractor hired by the reporting entity or an employee of a utility so long as such person has two (2) or more years of commissioning or retuning experience and possesses one or more of the following certifications:

1. Accredited Commissioning Process Authority Professional (ACPAP) approved by the University of Wisconsin;
2. Accredited certification that has been designated a "Better Buildings Recognized Program" by the Department of Energy meeting the criteria set forth in the Better Buildings Workforce Guidelines (BBWG) for Building Commissioning Professionals;
3. Certified Building Commissioning Professional (CBCP) or Existing Building Commissioning Professional (EBCP), issued by the Association of Energy Engineers (AEE);
4. Certified Commissioning Professional (CCP), issued by the Building Commissioning Association (BCA);
5. Certified Commissioning Authority (CxA) or Certified Commissioning Technician (CXT), issued by the AABC Commissioning Group (ACG);
6. Certified professional certified by the National Environmental Balancing Bureau (NEBB);
7. Commissioning Process Management Professional (CPMP), issued by American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE);
8. Professional Engineer (PE) registered in the State of California; or
9. Additional qualified certifications as the Director of the Department deems appropriate.

W. "Reporting Year" means the year in which a benchmarking or other report is submitted, based on the prior calendar year's data. For instance, for Reporting Year 2023, a building owner will submit energy and water data for calendar year 2022 (January 1 – December 31) with a deadline of May 15, 2023.

~~X~~. "Retro-commissioning" means a systematic process for optimizing existing systems relating to building performance through the identification and correction of deficiencies in such systems.

~~XY~~. "Retro-commissioning measures" means work relating to retro-commissioning such as repairs, maintenance, adjustments, changes to controls or related software, or operational improvements that optimize a building's energy and/or water performance.

~~YZ~~. "Retrofit Measures" means upgrades or alterations of building systems involving the installation of energy and/or water efficiency and DER technologies that reduce energy and/or water consumption and improve the efficiency of such systems.

~~ZAA~~. "Solar thermal system" means the process of utilizing energy from the sun through the use of collectors to produce heat for a variety of applications including, but not limited to, heating water, providing process heating, space heating, absorption cooling and any combination of such applications.

~~AABB~~. "Solar photovoltaic" means a technology that uses a semiconductor to convert sunlight directly into electricity.

~~BBCC~~. "Stationary Battery Electric Storage System (BESS)" means a rechargeable energy storage system consisting of electrochemical storage batteries, battery chargers, controls, and associated electrical equipment designed to provide electrical power to a building, designed for service in a permanent location.

~~CCDD~~. "U.S. EPA Water Score" means a number ranging from one to one hundred (100) assigned by the U.S. EPA's ENERGY STAR® Portfolio Manager, and available to existing multifamily properties with twenty (20) or more units, as a measurement of a whole building's water use, normalized for that building's characteristics, operations, and weather, according to the methods established by the U.S. EPA's ENERGY STAR® Portfolio Manager.

~~DD EE~~. "Water audit" means a systematic evaluation to identify potential modifications and improvements to a building's equipment and systems which utilize water in order to optimize a building's overall water performance.

~~EEFF~~. "Water Use Intensity" (WUI) as defined by the U.S. EPA means all water consumption divided by the gross floor area (not including parking or irrigated area) and is not adjusted for any of the building use details (number of workers, weekly hours, etc.).

~~(Ord. No. 644, § 1, 12-12-19)~~

#### **15.77.070 - Beyond benchmarking performance path.**

A. Owners of properties that are highly efficient, have demonstrated increased efficiency, or have adopted distributed energy resources may establish satisfactory energy and water efficiency by providing the documentation described below to the department in such a form as required by the department that demonstrates the following:

1. The building is new and has been occupied for less than five (5) years from its first compliance due date, based on its temporary certificate of occupancy or certificate of occupancy; or has achieved one or more of the energy standards and one or more of the water standards as set



forth below for at least three (3) of the five (5) calendar years preceding the building's compliance due date.

2. Energy standards: The building has the latest version of the Leadership in Energy and Environmental Design (LEED™) existing buildings operations and maintenance certification; or qualified auditor or retro-commissioning professional certified at least at least one of the following:

a. The building has received an ENERGY STAR® score of eighty (80) or greater from the U.S. EPA; or

b. The building has improved its ENERGY STAR® score by twenty (20) points or more relative to its performance during the baseline year; or

c. The building has a weather normalized site GHG-energy use intensity as calculated by the benchmarking tool that is twenty-five percent (25%) below the calculated mean median for that property type; or

d. The building has reduced its weather normalized site GHG-energy use intensity by at least twenty percent (20%) relative to its performance during the baseline year.

3. If a building has installed one or more of the following distributed energy resources (DERs):

a. Solar Photovoltaic. An onsite solar photovoltaic system has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational. The greater of the two (2) following options satisfy the solar photovoltaic measure:

i. A minimum amount of solar photovoltaic capacity of five (5) kilowatts per Brisbane Municipal Code Section 15.82.050; or

ii. Sufficient capacity must be installed to offset equal to or greater than twenty percent (20%) of their annual electricity consumption, as calculated by ENERGY STAR® Portfolio Manager, or otherwise determined by the city department.

b. Stationary Electric Storage. An onsite stationary battery electric storage system (BESS) has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.

c. Grid-interactive Efficient Building (GEB). The building currently has the ability to interact with the distribution system operator's grid to optimize its energy consumption and/or dispatch. GEBs are energy efficient buildings with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and preferences, and cost reductions in a continuous and integrated way.

d. Decarbonized Building. The building is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations. Through a combination of the above

strategies, demonstrate through EPA Portfolio Manager that the building is decarbonized in the current reporting year.

4. Water standards: A qualified auditor or qualified retro-commissioning professional has certified at least one of the following:

- a. The building has received a U.S. EPA water score of eighty (80);
- b. The building has improved its U.S. EPA water score by twenty (20) points or more relative to its performance during the baseline year;
- c. The building has reduced its water use intensity by at least twenty percent (20%) relative to its performance during the baseline year.

d. The building has a water use intensity that is twenty-five percent (25%) below the calculated median for that property type as determined by the Department.

B. If a building has achieved both energy and water standards, the property owner is only required to submit an ENERGY STAR® performance verification report for that reporting year. If the building only meets one of the standards, the property owner shall submit a performance verification report for the satisfactory standard and shall comply with this section by completing one of two (2) prescriptive pathway options for the unmet standard as set forth in subsection G of section 15.77.080.

C. After the establishment of a DOE-recognized standard for a water auditor, the director may adopt the qualifications of the DOE-recognized standard with modifications as the director deems to be appropriate.

~~(Ord. No. 644, § 1, 12-12-19)~~

#### **15.77.080 - Beyond benchmarking prescriptive path.**

A. If a building does not meet performance standards set forth in 15.77.070, a property owner shall meet the requirements of this chapter through one of two (2) alternative means:

1. For properties between ten thousand (10,000) and thirty-nine thousand nine hundred ninety-nine (39,999) square feet:

- a. Conducting an asset score full report described in Section 15.77.080 B; and either
- b. Performing retro-commissioning described in Section 15.77.080 D; or
- c. Adopting improvement measures described in subsection F of Section 15.77.080; or
- d. Adopting a green lease as described in subsection H of Section 15.77.080.

2. For properties forty thousand (40,000) square feet and more:

- a. Conducting a minimum of an ASHRAE audit Level II audit described in Section 15.77.080 B (Level III audits are also acceptable); and either
- b. Performing retro-commissioning described in Section 15.77.080 D; or

c. Adopting efficiency and/or DER Improvement Measures described in subsection F of Section 15.77.080; or

d. Adopting a green lease as described in subsection H of Section 15.77.080.

B. Energy and Water Audit Standards. Energy and water auditing standards shall comply with both of the following:

1. Energy Auditing.

Energy audits required by this chapter shall meet or exceed either the Department of Energy (DOE) asset score standards, American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Level II audit standards in conformance with the ASHRAE Standard 211-2018 (or latest version) "Standard for Commercial Building Energy Audits" and shall be performed under the direct supervision of a qualified auditor or qualified retro-commissioning professional. The DOE audit template shall be used to transmit data to the city for compliance with energy auditing and retro-commissioning. The city will publish an audit template on the building energy asset score website with standardized data collection fields to capture information about base energy systems and recommended retrofit opportunities. Section 15.77.080 A describes the applicability of each of the following audit standards based on gross floor area:

a. Asset Score Full.

- i. Collect building data: Use the data collection form "full" input mode version to gather information about the building's physical characteristics.
- ii. Review the data collection priority map to help focus on the most important building data given the building's use type and climate zone.
- iii. Enter the data on the audit template supplied on the DOE asset score website for the Brisbane Building Efficiency Program.

b. ASHRAE Level II Audit.

- i. Energy audits required by this chapter shall meet or exceed Level II audit standards in conformance with the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 211-2018 "Standard for Commercial Building Energy Audits" and shall be performed under the direct supervision of a qualified auditor.

2. Water Auditing.

Water audits shall be performed in accordance with industry standard practices, including the latest version of [the DOE Water Audit Guidance for Commercial Buildings or](#) ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies, unless the department directs the use of the latest version of ASHRAE Standard 230 the existing building commissioning process (EBCx process), and under the direct supervision of a qualified auditor or qualified retro-commissioning professional. The water audit of the base building systems shall include, at a minimum, the following:

- a. Potable water distribution systems;
- b. Landscape irrigation systems;
- c. Water reuse systems; and
- d. Water features.

C. Energy and Water Audit Report. A report of the energy and water audit, completed and signed by a qualified auditor, shall be maintained by the property owner as required in Section 15.77.090. The report shall meet the requirements of subsection 15.77.080 B and shall include, at a minimum, the following:

1. The date(s) that the audit and retro-commissioning were performed;
2. Identifying information on the auditor and retro-commissioning provider;
3. Information on the base building systems and equipment;
4. A list of all retrofit measures that can reduce energy use and/or cost of operating the building, costs of each measure, and an estimate of the energy savings associated with each measure;
5. A list of all retrofit measures that can reduce water use and/or cost of operating the building; costs of each measure; and an estimate of the water savings associated with each measure;
6. Functional performance testing reports;
7. Operational training conducted;
8. Inventory of existing, planned, or desired electric vehicle (EV) charging stations on the property;
9. Inventory of existing, planned, or desired solar photovoltaic, solar water heating, other energy generation equipment;
10. Inventory of existing, planned, or desired stationary battery electric storage system or other energy storage equipment;
11. Inventory of existing, planned or desired building energy end-use electrification retrofits including electrical panel upgrades;
12. Inventory of existing, planned or desired water systems and equipment; and
13. Acknowledgment that an asset score full, or ASHRAE Level II audit was conducted.

D. Energy and Water Retro-Commissioning Standards.

1. Energy retro-commissioning shall be performed in accordance with industry standard practices, including the latest version of ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies. The department may consider updating the ASHRAE Guideline 0.2 with ASHRAE Standard 230 the existing building commissioning process (EBCx process) once the standard has been voted and approved by ASHRAE. These activities shall be conducted

under the direct supervision of a qualified retro-commissioning professional. The retro-commissioning of base building systems shall include, at a minimum, the following:

- a. Heating, ventilation, air conditioning (HVAC) systems and controls;
- b. Indoor lighting systems and controls;
- c. Exterior lighting systems and controls;
- d. Water heating systems;
- e. Renewable energy systems;
- f. Stationary electric battery storage systems;
- g. Electric vehicle charging equipment; and
- h. Demand flexibility systems.

2. Water retro-commissioning shall be performed in accordance with industry standard practices, including the latest version of ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies, unless the department directs the use of the latest version of ASHRAE Standard 230 the existing building commissioning process (EBCx process), and under the direct supervision of a qualified retro-commissioning professional. The water retro-commissioning of the base building systems shall include, at a minimum, the following:

- a. Potable water distribution systems;
- b. Landscape irrigation systems;
- c. Water reuse systems; and
- d. Water features.

E. Energy and Water Retro-Commissioning Report. A report of the energy and water retro-commissioning, completed and signed by a qualified retro-commissioning professional, shall be maintained by the property owner as required in Section 15.77.090. The report shall meet the requirements of Subsection 15.77.080 D and shall include, at a minimum, the following:

1. The date(s) that the retro-commissioning was performed;
2. Identifying information on the retro-commissioning provider;
3. Information on the base building systems and equipment;
4. All the retro-commissioning process activities undertaken and retro-commissioning measures completed;
5. Functional performance testing reports; and
6. Operational training conducted.

F. Improvement Measures. A property owner may comply with the requirements of this chapter for any unmet standard by demonstrating two (2) of the following corresponding efficiency improvement

measures—one energy-related measure and one water-related measure listed below—were completed and by submitting an improvement measures report within the time set forth in Section 15.77.100.

1. Energy-related Improvement Measures.

a. Energy efficiency improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize energy efficiency in base building systems, decarbonized buildings, and building electrification. An owner may submit a request to the department to add measures not contained in the published list that are identified by a qualified auditor or retro-commissioning professional. Examples of energy systems include, but are not limited to:

- i. Space heating and cooling.
- ii. Ventilation.
- iii. Building envelope measures such as insulation, air sealing and window upgrades.
- iv. Water heating.
- v. Lighting.
- vi. Cooking.
- Vii. Refrigeration.
- viii. Office equipment and computing.
- ix. Other loads.

b. Distributed energy resource improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize decarbonized buildings and building electrification. Examples of energy systems include, but are not limited to:

- i. Solar Photovoltaic. An onsite solar photovoltaic system has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.
- li. Stationary Electric Storage. An onsite stationary battery electric storage system (BESS) has been installed in accordance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational.
- lii. Grid-interactive Efficient Building (GEB). GEBs are energy efficient buildings with smart technologies characterized by the active use of distributed energy resources to optimize energy use for grid services, occupant needs and

preferences, and cost reductions in a continuous and integrated way that is currently operational.

iv. Electric Vehicle (EV) charging infrastructure. Electric vehicle charging infrastructure has been installed on the building site.

v. Decarbonized Building. A building that is highly energy-efficient and produces onsite or procures carbon-free renewable energy in an amount sufficient to offset the annual carbon emissions associated with operations. Through a combination of the above strategies, demonstrate through EPA Portfolio Manager that the building is decarbonized.

## 2. Water-related Improvement Measures.

a. Water efficiency improvement measures will be provided by the department six (6) months before the compliance deadline on the city website and will continually be updated thereafter. The list of measures will include opportunities that prioritize water efficiency. Examples of energy systems include, but are not limited to:

i. Installation of plumbing such that all systems in the building are in compliance with the California Building Standards Code (California Code of Regulations, Title 24) in effect at the time of installation and currently operational;

ii. Installation of outdoor landscaping and irrigation such that all systems on the property are in compliance with Brisbane Municipal Code Chapter 15.70, Water Conservation in Landscaping in effect at the time of the compliance cycle;

iii. Installation of a greywater system in accordance with California Code of Regulations, Title 24, Sections 1502.6, 1502.10.3, or as amended and in effect at the time of installation and currently operational;

iv. Installation of insulation on all hot water pipes in accessible building locations; or

v. Participation in approved water utility retrofit program (e.g. taken advantage of rebate or incentive programs for upgrades).

G. Improvement Measures Report. A report of the improvement measures implemented shall be submitted to the department and maintained by the property owner as required in Section 15.77.090. The report shall be submitted with sufficient supporting data including receipts or other proof of compliance and shall include, at a minimum, the following:

1. Descriptions of the measures including the date(s) that the improvement measures were implemented;
2. Identifying information on the person implementing the improvement measures;
3. Information on the base building systems and equipment; and
4. A list of all improvement measures that can reduce energy or water use and the cost of operating the building, and the costs of each measure.

H. Green Lease Attestation. A property owner may submit a letter of attestation that its lease or other rental agreement for the building contains sustainability or environmental provisions specifically related to energy and water as part of the agreement (a "green lease"). At a minimum, the owner shall provide reasonable evidence that the agreement includes provisions for:

1. Energy and water cost pass through requirements that do not exceed the actual reduction in building operating costs for the tenant;
2. Operational clauses that support overall energy and water reductions on the property; and
3. Reporting clauses that allow the owner and tenant to share data necessary to comply with this chapter.

I. Required Submittal to the Department.

1. For each building subject to this chapter, the property owner shall submit to the department an energy and water audit and report as described in Section 15.77.080 D, or proof of meeting one of the exemptions, in accordance with the schedule set forth in Section 15.77.100.
2. For each building subject to this chapter, the property owner shall submit to the department, in accordance with the schedule set forth in Section 15.77.100, one of the following:
  - a. An energy and water retro-commissioning report as described in Section 15.77.080 E;
  - b. An improvement measures report as described in Section 15.77.080 G; or
  - c. A green lease attestation as described in Section 15.77.080 H.

~~(Ord. No. 644, § 1, 12-12-19)~~

#### **15.77.100 - Schedule for compliance.**

A. Schedule for Benchmarking Report Compliance. A property owner shall submit to the department an annual benchmarking report in compliance with Section 15.77.050 according to the following schedule:

1. For properties owned by the city with a gross floor area of two thousand (2,000) square feet or more, the city must complete and submit the initial benchmarking report annually on or before May 15, beginning in 2020.
2. For all other properties subject to this chapter, the property owner must complete and submit the initial benchmarking report annually on or before May 15, beginning in 2021.

B. Schedule for Beyond Benchmarking Compliance for Performance and Prescriptive Paths. A property owner must comply with Section 15.77.060 once every ~~five (5)~~six (6) years, based on the ~~federal-unique building identifier (UBID)~~building type (commercial, industrial or multi-family) which will be published on the city website for each building subject to this chapter under Section 15.77.060.

1. For commercial— Submit performance verification report or evidence of contract with qualified profession to complete energy and water audit for prescriptive path by May 15, 2023 or Year 1 of the cycle. The completed audit must be submitted by July 15 of the same year.

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	<u>Baseline</u>	<u>Calendar Year Data to be evaluated against Baseline</u>	<u>Year 1 – (Reporting Year) Performance Verification Report or Audit due</u>	<u>Year 3 – Check-in</u>	<u>Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due</u>
<u>Cycle 1</u>	<u>2020</u>	<u>2022</u>	<u>2023</u>	<u>2025</u>	<u>2027</u>
<u>Cycle 2</u>	<u>2022</u>	<u>2028</u>	<u>2029</u>	<u>2031</u>	<u>2033</u>
<u>Cycle 3</u>	<u>2028</u>	<u>2034</u>	<u>2035</u>	<u>2037</u>	<u>2039</u>

2. For industrial and multifamily— Submit performance report or evidence of contract with qualified profession to complete energy and water audit for prescriptive path by May 15, 2024 or Year 1 of the cycle. The completed audit must be submitted by July 15 of the same year.

	<u>Baseline</u>	<u>Calendar Year Data to be evaluated against Baseline</u>	<u>Year 1 – (Reporting Year) Performance Verification Report or Audit due</u>	<u>Year 3 – Check-in</u>	<u>Year 5 – RCx Report, Improvement Report, or Green Lease Attestation due</u>
<u>Cycle 1</u>	<u>2020</u>	<u>2023</u>	<u>2024</u>	<u>2026</u>	<u>2028</u>
<u>Cycle 2</u>	<u>2023</u>	<u>2029</u>	<u>2030</u>	<u>2032</u>	<u>2034</u>
<u>Cycle 3</u>	<u>2029</u>	<u>2035</u>	<u>2036</u>	<u>2038</u>	<u>2040</u>

3. For any newly constructed ~~commercial or multifamily~~ buildings receiving a certificate of occupancy ~~after May 15, 2018, or industrial buildings after May 15, 2019~~ less than five (5) years before the start of the cycle, the property owner shall comply with Sections 15.77.060, 15.77.070 and/or 15.77.080 at the time of the next ~~reporting~~ cycle corresponding to the property type ~~(e.g. 2028 or 2029)~~.

C. Timing of Audit and Retro-Commissioning. Except as otherwise provided in subsection 15.77.060 B, a property owner shall complete the audits and retro-commissioning within five (5) years of a building's compliance due date.

D. Early Compliance Pilots. The city may launch a voluntary early compliance pilot program to test the reporting infrastructure and refine the reporting requirements. The pilot program may begin prior to the reporting deadline in this Section 15.77.100.

E. Time Extensions. A property owner may be granted up to three (3) extensions of sixty (60) days each to file any submittal required by this chapter provided satisfactory proof is made to the department that one of the following conditions applies:

1. The property is under financial or legal distress, as verified by recent financial statements, legal filings and other relevant documents showing one or more of the following:
  - a. The property is under the control of a court-appointed receiver as a result of financial distress;
  - b. The property is owned by a financial institution as a result of borrower default;
  - c. The property has been acquired by a financial institution via deed in lieu of foreclosure;

d. The property is encumbered by a senior mortgage subject to a notice of default;

e. The property is an asset subject to probate proceedings;

f. The property is subject to a State of California Board of Equalization (BOE) Welfare Property Tax Exemption and the cost of complying with the reporting requirements will exceed or significantly deplete existing cash flow. The property owner must provide proof of a BOE-issued organizational clearance certificate and, where the property owner is a limited partnership, provide a supplemental clearance certificate.

2. The property owner, or tenant if applicable, is unable to timely comply due to substantial hardship. Substantial hardship shall mean circumstances by some verifiable level of adversity or difficulty from which the department determines a property owner, or tenant if applicable, would not be able reasonably to satisfy the obligations of this chapter.

3. Fifty percent (50%) or more of the gross floor area occupied by tenant(s) in the building has a lease ending within one year of the compliance deadline and the lease is not being renewed.

F. Notification. ~~For buildings with compliance dates of May 1, 2021 or later, t~~he department shall notify the property owner ~~at least three (3) months~~forty-five (45) days prior to the due dates specified in subsections A and B of this Section 15.77.100.

~~(Ord. No. 644, § 1, 12-12-19)~~