

The Beyond Benchmarking Compliance Guide:

How to Complete Beyond Benchmarking Requirements for the San José Building Performance Ordinance

Table of Contents

INTRODUCTION	2
DEFINITIONS	
STEP 1: DETERMINE YOUR BUILDING'S BEYOND BENCHMARKING COMPLIANCE DEADLINE	8
COMPLIANCE SCHEDULE	
EXEMPTIONS	
WATER EFFICIENCY EXEMPTIONS	
Extensions.	10
STEP 3: VERIFY YOU HAVE SUBMITTED BENCHMARKING DATA FOR THE PREVIOUS THREE YEARS	10
STEP 4: DETERMINE YOUR PATHWAY: PERFORMANCE OR IMPROVEMENT?	10
STEP 5: FIND A QUALIFIED SERVICE PROVIDER	12
PERFORMANCE PATHWAY: WHO CAN PERFORM PERFORMANCE VERIFICATION?	12
IMPROVEMENT PATHWAY: WHO CAN PERFORM AN AUDIT, RETROCOMMISSIONING, OR EFFICIENCY IMPROVEMENT MEASURE?	13
FINDING A QUALIFIED SERVICE PROVIDER	
TIPS FOR CHOOSING A SERVICE PROVIDER	15
STEP 6: COMPLETE YOUR PATHWAYS	10
Performance Pathway	16
IMPROVEMENT PATHWAY	16
STEP 7: SUBMIT YOUR REPORTS	2 :
OLIESTIONIS 2	27

Introduction

Under San José's Energy and Water Building Performance Ordinance (BPO), owners of commercial and multifamily buildings over 20,000 square feet (sq ft) are required to benchmark their buildings' energy and water usage and submit that data to the City on an annual basis – a process called "benchmarking"; and establish satisfactory energy and water efficiency at five (5)-year intervals, in a process called "Beyond Benchmarking".

Starting in 2023, building owners will be required to demonstrate either satisfactory building energy and water efficiency or efficiency improvement in annual groups specified by the Ordinance's Beyond Benchmarking components (San José Code of Ordinances, Chapter 17.85.400). If an owner can demonstrate that a covered building meets key performance standards through yearly benchmarking, the owner can then submit a performance verification report. If a building is not able to meet these standards, the owner can perform an energy audit, retrocommissioning or targeted efficiency improvement measures to improve performance. The audit, retrocommissioning or efficiency improvement measures must be performed by a qualified licensed professional.

This guidance document breaks down the steps you need to take to fulfill your building's Beyond Benchmarking requirements. It is a living document that will be updated periodically as the program develops. Please check back on our <u>website</u> for the most up to date version.

For more details, you may read the Ordinance <u>here</u>.

Definitions

The following terminology is used throughout the document and expands upon the definitions in the San Jose Municipal Code Section 17.85.200. The definitions in the Municipal Code are the legal definitions and control over the statements here. For more definitions, refer to our Frequently Asked Questions (FAQ.)

➤ ASHRAE: The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is a global society advancing human well-being through sustainable technology for the built environment. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry.

ASHRAE has developed a set of standards for energy audits that are used by

- governments, companies and engineers. Their 211-2018 Standard for Commercial Building Energy Audits establishes the minimum performance levels for energy audits.
- Assessor Parcel Number (APN): A unique number assigned to a real property by the tax assessor of the property's jurisdiction. The APN is a series of fourteen numbers/digits that are used as a file number to inventory or identify property. Your building's APN can be found on your valuation notice, tax bill, or deed. You can also search for your APN using Santa Clara County's Real Property Search.
- ➤ Audit: An Audit is a complete analysis of a building's energy and/or water efficiency as well as the measures that the building owner can take to make the building more efficient. It provides the specific information necessary for building owners and managers to make informed decisions about capital improvements.
- ➤ **Baseline Year**: A building's first year submitting a benchmarking report, the most recent Performance Verification Report or verification of Improvement Pathway (as applicable), whichever is later.
- ➤ **Benchmarking**: An annual requirement of the Building Performance Ordinance. To input and submit the total energy and water consumed by a building for the previous calendar year and other descriptive information for the building as required by the benchmarking tool ENERGY STAR® Portfolio Manager®. Total energy and water consumption cannot include separately metered uses that are not integral to building operations (example: electric vehicle charging infrastructure).
- ➤ Beyond Benchmarking: A requirement of the Building Performance Ordinance occurring at 5-year intervals. Starting in 2023, buildings covered by the Ordinance will be required to demonstrate either satisfactory building energy and/or water efficiency OR improvement standards. "Satisfactory efficiency" means that a building has met specific standards set in the Ordinance that show above average or improved efficiency. If a building can show that it meets these standards, the owner may submit a Performance Verification Report. If a building is not able to meet these standards, the owner will need to perform an energy audit, retuning, or targeted efficiency upgrade to improve performance. This part of the Ordinance will roll out over a five (5)-year period in

- annual cohorts, with building performance or improvement checks being required every five (5) years after.
- Beyond Benchmarking Compliance Action (Action): A pathway and specific project selected by a building owner, completed at the building to achieve compliance with Beyond Benchmarking requirements. The list of actions includes Audit, Retrocommissioning, Efficiency Improvement Measure, and Performance Verification.
- ➤ Beyond Benchmarking Compliance Schedule (Compliance Schedule): The schedule set forth in the Ordinance that outlines the dates that buildings must comply with the first cycle of Beyond Benchmarking. The compliance schedule bases the deadlines on a building's APN and size. More information can be found in Step 1.
- Compliance Deadline: The date by which a building must fulfill Ordinance requirements.

 In this document, the compliance deadline refers to the date that a covered building is required to provide documentation of having already met, or being actively in process of meeting, Beyond Benchmarking requirements.
- ➤ Covered Building (Building): For the sake of this guide, "Building" means the building or property that is covered by the Ordinance under one San José Building ID and includes at least 20,000 sq ft of indoor space served by shared utility meter(s). Refer to the Ordinance for more detailed definitions of a Covered Property, Nonresidential Building and Residential Building.
- ➤ Efficiency Improvement Measure: A project that is implemented at a Building to reduce the amount of energy or water used to perform a function. Implementing efficiency improvement measures is one of the three actions that a building can pursue to complete the Improvement Pathway. See Step 6 & 7 for more information.
- ➤ ENERGY STAR Score (Score): A value generated by the EPA's ENERGY STAR® Portfolio Manager® that scores a building's efficiency compared to other similar buildings in similar climate zones. Scores range from one (1) and 100, with a score of one (1) being the least efficient and a score of 100 being the most efficient. Buildings that receive a score of 75 or higher are eligible to complete the Performance Pathway for compliance

- with the Ordinance. Buildings with scores of 75 or above are also eligible to apply for ENERGY STAR Certification.
- Energy Use Intensity (EUI): A measure of a building's energy efficiency. The energy consumed per square foot of a building per year, as calculated by ENERGY STAR® Portfolio Manager® by dividing the total energy consumed (in kBtu) by the building in one year by the total gross floor area (in square feet) of the building. Also referred to as Site Energy Use Intensity.
 - Weather Normalized Site EUI: EUI that has been adjusted (or normalized) based on the building's <u>climate zone</u>. This allows a building to compare its true energy efficiency with buildings located in other climate zones and with different energy demands.
- ➤ Gross Floor Area (GFA): the total property square footage, as measured between the exterior walls of the building(s). This includes all areas inside the building(s), including supporting areas. Please refer to questions seven (7) and eight (8) in our Beyond Benchmarking FAQ for more information on GFAs and directions on how to find your buildings. Licensed Professional: A service provider that holds a professional certification or designation, such as a Professional Engineer, and/or is licensed to perform certain projects.
- Locally Calculated Mean: The mean (average) of a specified set of data points, derived from buildings covered by San José's Building Performance Ordinance (BPO). For example: the locally calculated mean for water use intensity was computed from data obtained through BPO report submissions.
- ➤ Multifamily: A building designed for occupation by more than one family/household.

 For the purposes of this Ordinance, multifamily refers to residential buildings with five or more residential units.
- ➤ Ordinance: The City of San José Energy and Water Building Performance Ordinance, as established in the San José Municipal Code Chapter 17.85.

- ➤ Owner: An individual or entity possessing title to a building; The board of directors, in the case of a cooperative apartment corporation; or an agent authorized to act on behalf of any of the above.
- ➤ Parent-Child Relationship: A method within ENERGY STAR® Portfolio Manager® of benchmarking a campus or multiple building IDs that accounts for shared meters and/or a campus dynamic.
- Parent Property: The primary property and its associated San José Building ID of a Parent-Child Relationship. The "parent" usually represents an entire campus or complex, and each "child" represents an individual building on the campus or tenant space in the complex.
- ➤ Performance Verification Report: A report that provides summary statistics on a building's energy and water use, including metrics that document the building's satisfactory energy and/or water use efficiency. The report also includes property use details, contact information & a section for a licensed professional to verify the data. A Performance Verification Report is required for compliance with the Performance Pathway of the Ordinance.
- Qualified Auditor: A professional qualified to perform a building energy audit for compliance with the Ordinance. See Step 4 for more information.
- ➤ Qualified Retrocommissioning Professional: A professional qualified to perform RCx to a building for compliance with the Ordinance. See Step 4 for more information.
- ➤ Retrocommissioning (RCx): A form of commissioning for existing buildings.

 Commissioning is the process of ensuring that a new building's systems are designed, installed, functionally tested, and capable of being operated and maintained according to the owner's operational needs. RCx is the same systematic process applied to existing buildings that have never been commissioned to ensure that their systems can be operated and maintained according to the owner's needs.
- San José Building ID (building ID): A unique identifying number provided to every Covered Building that is used by City Staff for compliance tracking purposes; each has seven (7) digits in the following format: XXXX-X-XX (For example, 9999-0-00). All

- submitted exemption and extension forms, benchmarking and Beyond Benchmarking reports, and general Ordinance correspondence must be submitted with a San José Building ID. A building's ID may be found on the Covered Buildings List on our <u>website</u> and will be posted on the Beyond Benchmarking Compliance Schedule.
- > Service Provider: A person that offers energy or water efficiency services.
- > **Standard**: The standards set in the Ordinance for energy efficiency and a standard for water efficiency. The two utility types have separate standards from each other.
- ➤ Title 24: A collection of energy standards for California buildings, designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings. The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years by working with stakeholders in a public and transparent process.
- ➤ Water Score: US EPA Water Score means a number ranging from one (1) to 100 assigned by the US EPA's ENERGY STAR® Portfolio Manager®, and available to existing multifamily properties with twenty (20) or more units, as a measurement of a whole property's water use, normalized for that property's characteristics, operations, and weather.
- ➤ Water Use Intensity: The water consumed per square foot of a building per year, as calculated by EPA's ENERGY STAR® Portfolio Manager® by dividing all water sources by the building's gross floor area, excluding parking and irrigated area.

Step 1: Determine Your Building's Beyond Benchmarking Compliance Deadline

The first step is to check our Beyond Benchmarking Compliance Schedule (Compliance Schedule) to find your building's deadline for fulfilling Beyond Benchmarking compliance requirements, which can be found on the Beyond Benchmarking webpage. Each building has a different deadline for when they must either have requirements planned or fulfilled. The schedule was set based on two (2) factors:

- Last digit of a building's assessor parcel number (APN)
 - o If your building falls on multiple parcels, your building's compliance deadline will correlate with the primary APN we have on file. Check the Covered Building List on our website to find your building's listed APN.
 - If your campus is benchmarked using a Parent-Child Relationship, your Parent Property's APN will determine your place in the Compliance Schedule.
- Gross Building Floor Area (GFA) of the building

Courtesy notices will also be sent out each year to the group of buildings (cohort) that have the next compliance deadline, approximately six months in advance of the May 1 deadline. If you do not receive a notice and believe you should have or are unsure of when your building is required to comply by, please check the published Compliance Schedule on our website or the general compliance schedule in the tables below. **However, you are responsible for meeting the deadlines even if you do not receive a City notice.**

GENERAL BEYOND BENCHMARKING COMPLIANCE SCHEDULE:

PROPERTIES ≥ 50,000 SQUARE FEET

Last digit of APN	First compliance due date	Subsequent compliance due
		dates
0	May 1, 2023	Every 5 years thereafter
1	May 1, 2023	Every 5 years thereafter
2	May 1, 2024	Every 5 years thereafter
3	May 1, 2024	Every 5 years thereafter
4	May 1, 2025	Every 5 years thereafter
5	May 1, 2025	Every 5 years thereafter
6	May 1, 2026	Every 5 years thereafter
7	May 1, 2026	Every 5 years thereafter
8	May 1, 2027	Every 5 years thereafter
9	May 1, 2027	Every 5 years thereafter

PROPERTIES 20,000 SQUARE FEET - 49,999 SQUARE FEET

Last digit of APN	First compliance due date	Subsequent compliance due dates
0	May 1, 2024	Every 5 years thereafter
1	May 1, 2024	Every 5 years thereafter
2	May 1, 2025	Every 5 years thereafter
3	May 1, 2025	Every 5 years thereafter
4	May 1, 2026	Every 5 years thereafter
5	May 1, 2026	Every 5 years thereafter
6	May 1, 2027	Every 5 years thereafter
7	May 1, 2027	Every 5 years thereafter
8	May 1, 2028	Every 5 years thereafter
9	May 1, 2028	Every 5 years thereafter

Step 2: Determine Whether Your Building Qualifies for a Beyond Benchmarking Exemption

All exemption and extension requests must be made via our digital Beyond Benchmarking exemption and extension forms available on our Beyond Benchmarking webpage.

Exemptions: Exemption requests must be submitted by April 1st annually. Your building may qualify for an exemption from Beyond Benchmarking if:

- Building is zoned as exclusively industrial. You may check your building's zoning designation on the <u>San José Permit Site</u>. Zoning designations that qualify a building for exemption are:
 - HI (Heavy Industrial),
 - o LI (Light Industrial), or
 - IP (Industrial Park), where over 50% of the gross floor area is used for exclusively industrial, manufacturing or research and design. Supporting documentation showing a floor plan with a breakdown of the uses must be included in the exemption request.
- Building is under 20,000 square feet.
 - Please note that meter configurations and property use type are used to determine the boundaries of a Covered Building. Any contiguous and/or adjacent indoor building space served by a common utility meter will be used to determine the building's GFA. For example: an apartment complex composed of 1) three residential buildings that are individually 5,000 square feet and 2) one common area building that is 5,000 square feet, that are all served by a single utility meter, is considered one "building." Therefore, if the entire complex has

- over 20,000 sq ft of gross floor area, neither it nor its individual buildings will qualify under this exemption reason.
- Please review the definition of a Covered Building before submitting an exemption under this reason. You may refer to the Definitions section of this document for more information.

Water Efficiency Exemptions: Your covered building may qualify for an exemption from Beyond Benchmarking *only* for water efficiency if the building is:

- Residential,
- Under 50,000 square feet, and
- Not sub-metered for water use.

Extensions: We offer extensions of up to 180 days and encourage you to apply if you need additional time to fulfill requirements. **Extension requests must be submitted by May 1**st annually.

Step 3: Verify You Have Submitted Benchmarking Data for the Previous Three Years

To qualify for the Performance Pathway, most buildings' owners must have already submitted three years of complete, accurate benchmarking data prior to their Beyond Benchmarking due date. Even if you decide to take the Improvement Pathway, you will need complete benchmarking data for comparison purposes in future cycles. Having incomplete or erroneous benchmarking reports will delay or prevent your property from falling into compliance and will automatically place your building in the Improvement Pathway. The one exception to this rule is if the building is new and has been occupied for less than five years from its first compliance due date (refer to "New Building" under Step 4).

To submit prior years' benchmarking reports, or re-submit reports with corrections, please visit our <u>website</u>. Past year reporting links can be found under section **NEED TO COMPLY FOR PREVIOUS YEARS?**

Step 4: Determine Your Pathway: Performance or Improvement?

Every building covered by the Ordinance is required to comply with Beyond Benchmarking by completing one of two pathways for both energy and water:

A. Performance Pathway: for properties that satisfy established energy and/or water efficiency standards. This step requires data verification of prior years'

- benchmarking reports by a licensed professional and the submission of a Performance Verification Report.
- **B.** Improvement Pathway: if a property is unable to meet established energy and/or water efficiency standards, the owner must implement one of three actions for each unmet standard, and submit a corresponding report authored by a licensed professional:
 - 1. Audit, conducted by a Qualified Auditor
 - 2. Retrocommissioning (RCx), conducted by a Qualified Retrocommissioning Professional
 - 3. Two (2) Targeted Efficiency Improvement Measures, selected from a preapproved list, installed in accordance with California Building Standards Code (California Code of Regulations, <u>Title 24</u>)

Meeting the Performance Pathway:

A building qualifies for the Performance Pathway for energy and/or water if it meets the following criteria:

- New Building: The building is new and has been occupied for less than five years from
 its first compliance due date, based on its Temporary Certificate of Occupancy or
 Certificate of Occupancy. Supporting documentation in the form of an electronic copy of
 the original Certificate must be included in the performance verification report.
- Energy: The building has achieved one or more of the following standards for at least two of the three calendar years preceding it's Beyond Benchmarking deadline:
 - Holds a current Leadership in Energy and Environmental Design (LEED™) Existing Buildings Operations and Maintenance v4 Certification;
 - Has received an ENERGY STAR Score of 75 or greater;
 - Has improved its ENERGY STAR Score by fifteen points or more relative to its performance during the baseline year;
 - Has a weather normalized site Energy Use Intensity as calculated by the ENERGY STAR® Portfolio Manager® that is twenty-five percent (25%) below the calculated mean for that property type; or
 - Has reduced its weather normalized site Energy Use Intensity by at least fifteen percent (15%) relative to its performance during the baseline year.
- Water: The building has achieved one or more of the water standards for at least two of the three calendar years preceding it's Beyond Benchmarking deadline:
 - Has a Water Use Intensity that is 25% below the locally calculated mean for that property type;
 - Has reduced its Water Use Intensity by at least 15% relative to its performance during the baseline year;

- (Multifamily Only) Has received a US EPA Water Score of 75 from the US EPA; or
- (Multifamily Only) Has improved its US EPA Water Score by fifteen points or more relative to its performance during the baseline year.

Please note that in order to complete the Performance Pathway for both energy and water, your building must meet efficiency standards for both utility types. If your building meets one standard but not the other, you may need to complete a different pathway for each utility type. If your building has achieved efficiency standards for both energy and water, you may have your benchmarking data verified by a licensed professional and submit a single Performance Verification Report for both utilities. If your building only meets one standard, you may complete the Performance Pathway for the met standard and you must complete the Improvement Pathway for the unmet standard.

Steps 5 and 6 of this document contain more details and guidance on how to complete each pathway. For definitions of Site Energy Use Intensity, ENERGY STAR Score and other metrics listed above, please review the Definitions section of this document.

Step 5: Find A Qualified Service Provider

Once you have decided on the action(s) that you will pursue for compliance, you will need to find a service provider to complete the work. The Ordinance contains minimum qualifications for service providers, and it is your responsibility to ensure that the consultant you have chosen has the necessary background. As a courtesy, the City has published a List of Qualified Service Providers who responded to a Request for Information. The most up to date list can be found on the Beyond Benchmarking webpage. However, the City makes no representations about the providers on the list, so please confirm that all of the provider's qualifications are up to date, maintained, and that you determine they meet your needs. You may also select any other provider that meets the qualifications required by the Ordinance.

Performance Pathway: Who Can Perform Performance Verification?

If you are completing the Performance Pathway, you will need to hire a licensed professional to verify that your building meets ordinance-established efficiency criteria, and that your benchmarking data is both accurate and complete. The licensed professional must have the following qualifications at the time that the verification is provided:

- Two (2) or more years of relevant experience, specifically in verifying building benchmarking data;
- Eligible to work in San José; and
- Possesses one of the following certifications:
 - A California Licensed Professional Engineer (PE)
 - A California Licensed Architect

- A Qualified Auditor (definition below)
- A Qualified Retrocommissioning Professional (definition below)

Improvement Pathway: Who Can Perform an Audit, Retrocommissioning, or Efficiency Improvement Measure?

A service provider that may perform an Audit, Retrocommissioning or Targeted Efficiency Improvement Measures for the purposes of the Ordinance is a person that is qualified to complete a given Beyond Benchmarking action; produce a report; verify that the project and any associated follow up actions were completed; and submit the Improvement Pathway form, with project report included, to the City of San José.

A. Qualified Energy Auditor

- Job duties do not regularly occur at the building being audited
- Two (2) or more years of relevant Auditing experience
- Eligible to work in San José
- Possess one of the following certifications at the time that the Audit is performed:
 - An accredited certification that has been designated a "<u>Better Buildings</u>
 <u>Recognized Program</u>" by the U.S. Department of Energy ("DOE") meeting the
 criteria set forth in the Better Buildings Workforce Guidelines (BBWG) for
 <u>Building Energy Auditors or Energy Managers</u>
 - o A Professional Engineer (PE) registered in the State of California
 - Certified Energy Auditor (<u>CEA</u>) or Certified Energy Manager (<u>CEM</u>), issued by the Association of Energy Engineers (AEE)
 - Certified Facilities Manager (<u>CFM</u>), issued by the International Facility Management Association (IFMA)
 - System Maintenance Administrator (<u>SMA</u>) or System Maintenance
 Technician (<u>SMT</u>), issued by Building Owners and Managers Institute (BOMI)
 International
 - High Performance Building Design Professional (<u>HBPD</u>) or Building Energy Assessment Professional (<u>BEAP</u>), issued by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
 - (Multifamily residential buildings only) a Multifamily Building Analyst (MFBA), issued by the Building Performance Institute (BPI)

B. Qualified Energy Retrocommissioning Professional

- Job duties do not regularly occur at the building being re-commissioned
- Two (2) or more years of relevant retrocommissioning experience
- Eligible to work in San José

- Possess one of the following certifications at the time that the Retrocommissioning is performed:
 - An accredited certification that has been designated a "<u>Better Buildings</u>
 <u>Recognized Program</u>" by the Department of Energy meeting the criteria set
 forth in the Better Buildings Workforce Guidelines (BBWG) for Building
 Commissioning Professionals;
 - A Professional Engineer (<u>PE</u>) registered in the State of California;
 - Certified Commissioning Professional (<u>CCP</u>), issued by the Building Commissioning Association (BCA);
 - Certified Commissioning Authority (<u>CxA</u>) or Certified Commissioning Technician (<u>CxT</u>), issued by the AABC Commissioning Group (ACG);
 - Certified Building Commissioning Professional (<u>CBCP</u>), issued by the Association of Energy Engineers (AEE);
 - Retrocommissioning or Commissioning <u>Certified Professional</u>, certified by the National Environmental Balancing Bureau (NEBB);
 - Building Commissioning Professional (<u>BCxP</u>), issued by American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE);
 - Accredited Commissioning Process Authority Professional (<u>CxAP</u>) approved by the University of Wisconsin
 - A Qualified Commissioning Process Provider (QCxP) certification is a pre-requisite to earning a CxAP.

C. Professional qualified to perform water audits, water retrocommissioning or efficiency improvement measures

- Two (2) or more years of relevant experience
- Eligible to work in San José
- Familiarity and/or work performed in accordance with California Building Standards Code (California Code of Regulations, <u>Title 24</u>) requirements in effect at the time of the compliance cycle
- Possesses one of the following certifications:
 - A California licensed engineer (PE)
 - Additional qualified certifications as the City of San José deems appropriate including:
 - American Water Works Association Water Use Efficiency Practitioner
 - (Landscapes and Irrigated Areas Only) Certified Landscape Irrigation Auditor (CLIA), issued by the Irrigation Association
 - (Landscapes and Irrigated Areas Only) Qualified Water Efficient Landscaper (QWEL), issued by EPA WaterSense or one of their affiliates

- (Landscapes and Irrigated Areas Only) Water Management Certification from the California Landscape Contractors Association
- (Landscapes and Irrigated Areas Only) Landscape Industry Certification from the California Landscape Contractors Association

Finding A Qualified Service Provider

The resources below can be used to help you find a service provider that is qualified to perform an audit, RCx, efficiency improvement measures or data verification.

- San José's List of Qualified Service Providers: a list of Qualified Auditors and Retrocommissioning Professionals. The service providers on this list have undergone an official Request For Information (RFI) process stating that they meet the ordinance's specified requirements for the qualifications needed to perform audits and/or retrocommissioning for compliance with the Ordinance. The City of San José's Environmental Services Department does not endorse any service provider on the list and does not assume any liability in connection with the use of the list of qualified service providers. Please visit the Beyond Benchmarking webpage for the most up to date version of the list.
- <u>EPA ENERGY STAR List of Licensed Professionals</u> (Professional Engineers and Registered Architects): You can use this tool to search for licensed professionals who have experience verifying benchmarking data.
- Or hire your own professional who meets the listed minimum qualifications.
 - Note: Professionals selected that are not on San José's List of Qualified Service Providers will need to provide the City documentation showing their qualifications and proof of possessing a valid San José Business License prior to submitting a report on behalf of a covered building owner.

Tips for Choosing A Service Provider

- Speak with at least two (2) three (3) providers before selecting one.
- Ask for resumes, proof of certification(s), and references
- Provide a list of the Ordinance qualifications and receive written confirmation that they meet the standards
- Ask for information on the types of buildings that they have completed projects for to determine their experience matches your project. For example, if you operate a 200,000 square foot apartment complex, a provider that only has experience working on 50,000 square foot office buildings may not be the best fit.

- Ask for examples of ASHRAE Level II Audit, Retrocommissioning, or other relevant reports that service providers have completed in the past.
- Make sure that the auditor, retrocommissioning professional or other licensed professional meets the minimum qualifications identified by the ordinance and are performing the required project type(s) within your building's required deadline.

Step 6: Complete Your Pathways

Performance Pathway

Once you've hired someone to verify your benchmarking data (see Step 4 for guidance on finding a service provider), you will need to have the licensed professional verify your benchmarking data, complete a Performance Verification Report, and submit the report via our online compliance form.

- The service provider must review your building's benchmarking data and sign the Performance Verification Report, confirming that all your benchmarking data is complete and accurate.
- If you are completing the Performance Pathway for both energy and water, you may submit one Performance Verification Report and form.
- All forms will be located online and will be made available by March 1, 2023.

Improvement Pathway

An Owner can meet the improvement pathway by one of three ways: (1) conducting an audit; (2) performing retrocommissioning; or (3) adopting efficiency improvement measures. Each of these will be discussed below.

Below, you will find a list of Improvement Pathway actions and associated requirements. Improvement Pathway requirements that are consistent among all pathway options are as follows:

- **Project Completion:** Buildings must complete a minimum of one of the three actions for each unmet standard. If you are unable to meet efficiency standards for both energy and water, you must complete the improvement pathway for each.
- Project Timeline: The action must have been completed no earlier than five years prior
 to the building's Beyond Benchmarking deadline. At a minimum, the action must be
 planned, and a service provider selected, by the building's Beyond Benchmarking
 deadline.
 - If the project has not been completed by the deadline, you must submit documentation showing that the project has been permitted and/or contracted.
 The action must then be completed at the building prior to its next Beyond

- Benchmarking compliance deadline, which will fall five (5) years after the first deadline. Note that the uncompleted action may not be used for meeting compliance in future cycles should the building require further improvement action(s).
- If documentation is submitted showing that an action is planned but has not been completed by the deadline, the compliance status for the building will be marked as **Pending – Project Underway.** It will not be marked into compliance until the action has been completed and an Improvement Pathway form has been submitted to the City.
- Record Keeping: it is <u>required</u> that the building owner maintains records related to benchmarking, audits, retrocommissioning, and efficiency improvement measures that were completed for compliance with the Ordinance. Records must be maintained for a minimum of five years. When a building is sold, copies of the records must be given to the new owner.
- Reporting: Once the selected action has been completed, an Improvement Pathway
 form containing the project report and signed by the service provider must be
 submitted to the City.
 - Forms will be located online and will be made available by March 1, 2023.
 - o <u>Report criteria may be different for each action.</u> Please see Step 7 for report requirements and refer to the ordinance for more information.

Improvement Pathway 1: Energy and Water Audit

An Audit is a complete analysis of a building's energy and/or water efficiency and includes the measures that a building owner can take to make the building more efficient. An audit provides the specific information necessary for building owners and managers to make informed decisions about capital improvements.

- For more information on audits, refer to our Beyond Benchmarking FAQ, located on the Beyond Benchmarking webpage.
- If you choose to pursue an audit for your building, it must be performed by a qualified auditor or a licensed professional with equivalent experience, as outlined above in Step 5.

Below are the energy and water audit requirements, as outlined in Section <u>17.85.420A</u> (Improvement Pathway 1: Audit) of the ordinance. See Step 7 for a list of audit report requirements.

- Energy Audit: An energy audit performed for compliance with Beyond Benchmarking must meet or exceed the following:
 - Level Two (2) 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 (latest edition at the time the Audit is initiated); or
- An Energy assessment or Audit offered by the utilities serving the property, provided that the potential savings opportunities related to all Energy sources are evaluated.
- Water Audit: The Water Audit required by this Chapter shall be performed in accordance
 with industry standard practices. Until such time as a third party verifiable water auditing
 process is developed and endorsed by a professional building association, governmental
 entity, or academic institution, and as approved by the Director of the Department, Water
 Audit of the Base Building Systems shall include, at a minimum, the following:
 - Potable water distribution systems;
 - Landscape irrigation systems;
 - Water reuse systems; and
 - Water features.

<u>Improvement Pathway 2: Energy and Water Retrocommissioning (RCx)</u>

Retrocommissioning (RCx) is a form of commissioning. Commissioning is a process that ensures building systems are designed, installed, functionally tested, and capable of being operated and maintained according to the owner's operational needs. RCx is the same systematic process applied to existing buildings that have never been commissioned to ensure that their systems can be operated and maintained according to the owner's needs. With a typical payback period of less than three years, RCx has shown to be one of the most cost-effective means of improving energy efficiency in commercial buildings.

- For more information on RCx, refer to our Beyond Benchmarking FAQ, located on the Beyond Benchmarking webpage.
- If you choose to pursue RCx, it must be performed by a qualified retrocommissioning professional or a professional with equivalent experience, as outlined above in Step 5.

Below are the RCx requirements, as outlined in Section <u>17.85.420B</u> (Improvement Pathway 2: Retrocommissioning) of the ordinance. See Step 7 for a list of RCx report requirements.

- Energy Retrocommissioning: Energy RCx performed for compliance with Beyond Benchmarking must meet or exceed the following requirements:
 - Must be performed in accordance with industry standard practices, including ASHRAE Guideline 0.2, Commissioning Process for Existing Systems and Assemblies, and other standards as defined by the City of San José's Environmental Services Department.
 - The RCx of the Base Building Systems must ensure that all systems are maintained, cleaned and repaired, HVAC temperature and humidity set points and setbacks are appropriate, operating schedules reflect major space

occupancy patterns and the current facility requirements, and that all operating parameters are adjusted to achieve efficient operations; and

- Must include, at minimum, the following:
 - Heating, ventilation, air conditioning (HVAC) systems and controls;
 - Indoor lighting systems and controls;
 - Water heating systems; and
 - Renewable Energy systems.
- Water Retrocommissioning: Water RCx performed for compliance with Beyond Benchmarking must meet or exceed the following requirements:
 - Must be performed in accordance with industry standard practices, such as ASHRAE Guideline 0.2, Commissioning Process for Existing Systems and Assemblies, or and other standards as defined by the City of San José's Environmental Services Department.
 - The RCx of the Base Building Systems must include, at minimum, the following:
 - Potable water distribution systems;
 - Landscape Irrigation Systems;
 - Water Reuse Systems; and
 - Water Features.

Improvement Pathway 3: Energy and Water Efficiency Improvement Measures

An Efficiency Improvement Measure is an action that is implemented to reduce the amount of energy or water used to perform a function. There are many different types of efficiency improvement measures, such as switching out less efficient appliances for more efficient models or implementing a demand response program to encourage a reduction in energy use through behavior change.

- This option is ideal for buildings that do not have a central heating and cooling (HVAC) system.
- If you choose to pursue this action, efficiency improvement measures must be completed by a licensed professional that meets the established minimum requirements, as outlined in EFFICIENCY IMPROVEMENT REQUIREMENTS below.
- You must complete a minimum of two (2) efficiency improvement measures for each unmet standard.
 - If you have chosen to complete measures for both energy and water, you must complete two (2) for energy and two (2) for water, totaling four (4) measures.
 - If you have chosen to complete measures for only one of the two utilities (energy OR water,) you must complete two (2) for the chosen utility.
- This option requires you to provide information on the base building systems and equipment, a list of all Efficiency Improvement Measures that can reduce energy or

water use, associated cost savings, and the costs of each measure. This information can be gathered through an ASHRAE Level I Audit.

EFFICIENCY IMPROVEMENT REQUIREMENTS

Below are the Efficiency Improvement Measures that may be performed for compliance with this pathway, as outlined in Section <u>17.85.420C</u> (Improvement Pathway 3: Efficiency Improvement Measures) of the ordinance. See Step 7 for a list of Efficiency Improvement Measure report requirements.

• Energy Efficiency Improvement Measures

- Installation of common area and exterior lighting fixtures in accordance with California Building Standards Code (California Code of Regulations, Title 24) requirements in effect at the time of the compliance cycle;
- Installation of domestic hot water heater in accordance with California Building Standards Code (California Code of Regulations, Title 24) requirements in effect at the time of the compliance cycle;
- Replacement of all refrigerators on the property to ENERGY STAR® Certified models;
- o Replacement of all gas stoves on the property to electric induction stoves;
- Replacement of all gas water heaters on the property to electric heat pump or tankless water heaters;
- Installation of a smart thermostat;
- Installation of a solar thermal heating/cooling system;
- Enrollment in a Department-approved utility demand response program;
- Installation of insulation on all hot water pipes in accessible property locations;
- Participation in a Department-approved Energy utility retrofit program (e.g., taken advantage of rebate or incentive programs for upgrades).

Water Efficiency Improvement Measures

- Installation of plumbing such that all systems on the property are in compliance with California Building Standards Code (California Code of Regulations, Title 24) requirements in effect at the time of the compliance cycle;
- Installation of outdoor landscaping and irrigation such that all systems on the property are in compliance with San José Municipal Code Chapter 15.11, Water Efficient Landscape Standards for New and Rehabilitated Landscaping in effect at the time of the compliance cycle;
- Installation of a greywater system in accordance with California Code of Regulations, Title 24, Sections 1502.6, 1502.10.3, or as amended;
- Installation of insulation on all hot water pipes in accessible property locations;
- Participation in approved water utility retrofit program (e.g., taken advantage of rebate or incentive programs for upgrades).

Step 7: Submit Your Reports

Once you have completed your Beyond Benchmarking pathway, you will need to submit documentation to the City for compliance.

- The City will begin accepting compliance reports on March 1st of the building's deadline year two (2) months before your compliance deadline. The building's performance verification or improvement pathway actions may be completed earlier, however.
- Verify you have a confirming email. A successful submission will generate an email confirmation. If you do not receive a confirmation email, this may indicate that your submission did not go through.
- City staff will review Beyond Benchmarking submissions in the order they are received.
 Currently there is no specific timeline for the review process, as each submission is
 unique. Staff will contact you when the review is complete; please do not contact staff
 unless you have been unable to successfully submit your report (See "Verify you have a
 confirming email" above).
- The City will report the results of its review by email. The City will either confirm compliance with Beyond Benchmarking or outline errors within the submission and a timeline for correction.
- You are required to maintain all Beyond Benchmarking related records for a minimum of five (5) years, and/or to transfer these records to the new owner if the building is sold, as outlined in Section 17.85.500 of the ordinance.
- All forms will be located online and will be made available no later than March 1, 2023.

Performance Pathway: Submit your Performance Verification Report to the City. The service provider that completed the data verification must sign the Performance Verification Compliance Form (located on the Beyond Benchmarking webpage), attesting to the quality and completeness of the work they performed.

Improvement Pathway: Submit an Improvement Pathway Compliance Form (located on the Beyond Benchmarking webpage), to the City. You must attach your Level II Audit report, RCx report, or Energy Efficiency Measure Report, and any other supporting documentation to your submission. The service provider that completed the project(s) must sign the form, attesting to the quality and completeness of the work they performed.

Details on what each report must contain at a minimum can be found below:

- Audit Report: A report of the Audit, completed and signed by Qualified Auditor, shall be submitted to the City and maintained by the Owner as required in Section 17.85.500.
 The report shall meet the requirements of Section 17.85.410 and shall include, at a minimum, the following:
 - The date(s) that the Audit was performed;
 - Identifying information on the auditor;

- Information on the Base Building Systems and equipment;
- A list of all Retrofit Measures that can reduce Energy or Water use, or cost of operating the property, costs of each measure, and an estimate of the Energy and/or Water savings associated with each measure;
- Acknowledgment that an ASHRAE Level Two (2), or alternate approved assessment or audit was conducted; and
- Identification of existing electric vehicle charging stations, equipment, and infrastructure, as defined in Article 625 of the California Electric Code, including:
- Number of existing electrical charging stations; and
- Number of "EV Capable" parking spaces as defined in California Green Building Standards (CalGreen) Sections 5.106.5.3.3 (Non-residential) and 4.106.4.2 (Residential) or as thereafter amended; or if no "EV Capable" parking spaces are present, number of 40-ampere minimum branch circuit capacity within the nearest circuit panel to existing parking spaces.
- Retrocommissioning Report: A RCx report, completed and signed by a Qualified Retrocommissioning Professional, must be submitted to the City of San José and maintained by the Owner as required in the ordinance. The report must meet the requirements of the ordinance, and must include, at a minimum, the following:
 - The date(s) that the RCx was performed;
 - o Identifying information for the RCx provider;
 - Information on the Base Building Systems and equipment both before and after the RCx; and
 - All the RCx process activities undertaken, and RCx Measures completed.
- Efficiency Improvement Measures Report: A report of the Efficiency Improvement
 Measures implemented must be submitted to the City of San José and maintained by
 the Owner as required in the ordinance. The report must be submitted with sufficient
 supporting data including receipts or other proof of compliance and must include, at a
 minimum, the following:
 - Descriptions of the measures including the date(s) that the Efficiency Improvement Measures were implemented;
 - Identifying information on the person implementing the Efficiency Improvement Measures;
 - Information on the Base Building Systems and equipment; and
 - A list of all Efficiency Improvement Measures that can reduce energy or water use and the cost of operating the property, and the costs of each measure.

Questions?

If you have questions about Beyond Benchmarking or your specific building, please contact us; we're here to help.

• Review: Beyond Benchmarking Frequently Asked Questions (found on the Beyond Benchmarking webpage)

• Website: http://sjenvironment.org/beyond-benchmarking

• Email: <u>benchmarking@sanjoseca.gov</u>

• Phone: (408) 975-2540

Thank you for complying with the San José Energy and Water Building Performance Ordinance!