



Building Energy Performance Policy

FAQ

The Building Energy Performance Program (BEPP) – more commonly referred to as “Building Tune-ups” – was [signed into law](#) by Mayor Kenney in late 2019. The Office of Sustainability created a [BEPP webpage](#) where you can find more information about this program, including [regulations](#), [workbooks](#), instructions, and more. Please use this FAQ for additional information.

Background and Overview	3
What is a Building Tune-up?	3
Why is the City requiring Building Tune-ups?	3
Which buildings must comply?	3
Which buildings do not have to comply?	3
Can I comply with BEPP now?	3
What are my compliance options?	3
When must my building complete a Building Tune-up?	4
When must my building demonstrate High Performance or seek exemption?	4
Can I comply before my building’s compliance deadline?	4
Am I eligible for an extension if my building’s compliance deadline is 2022 or later?	4
What if my building doesn’t comply by the required deadline?	4
I’m a building owner with a large portfolio of properties – do I have to abide by the same compliance deadlines?	4
When do I have to submit the BEPP Large Portfolio Compliance Plan?	5
Do I still have to report my building’s energy and water use through the City’s Benchmarking ordinance?	5
Compliance – Building Tune-Up	6
What constitutes a Building Tune up?	6
What systems will need to be assessed during a tune-up?	6
What guidelines should be used for a tune-up?	6
Is sampling allowed?	6
What if my Assessment Elements are located in tenanted spaces?	7

How do multiples buildings with shared energy meters comply?	7
What is exempt from tune-up assessments and corrective actions?	7
Will I have to take corrective actions on everything found during the assessment?	7
Will I have to replace a large piece of equipment, such as a boiler or a chiller?	7
Who can conduct the tune-up assessment?	8
Who can undertake the corrective actions included in the assessment findings?	8
My compliance period does not occur this year. Can I still conduct a tune-up?	8
Compliance – High Performance Pathway.....	9
How can I demonstrate my building is a high performer?	9
Are there any prerequisites for high-performance pathways?	9
When do I have to demonstrate high performance to avoid conducting a tune up?	9
Does it matter when my building met the requirements of a high-performance pathway option?	9
My building is old and it will never perform to high standards. Does that mean I can't comply?	9
Is there any more information on these high-performance options or details on specifically how my building can comply through the high-performance pathway?	10
Are there any COVID-19-related accommodations for the high-performance pathways?	10
Are there any other extensions granted for the high-performance pathways?	10
Qualified Tune-Up Specialists	11
What does it mean to be a qualified tune-up specialist?	11
How does one become a qualified tune-up specialist?	11
Can a tune-up specialist be an in-house employee?	11
Do I have to reapply to remain a qualified tune-up specialist over time?	11
Additional Questions and Resources	12
Who can I go to with questions about the policy, or to generally stay informed about it?	12
Glossary of Terms.....	12

Background and Overview

What is a Building Tune-up?

A building tune-up is a review of energy systems, controls, and maintenance practices, along with minor tweaks to bring them up to a good state of performance. On average, these tweaks result in 10–15% annual energy savings for a building. They also provide a more comfortable space for tenants and reduce greenhouse gas emissions (GHG) and pollutants which have negative impacts on public health and safety.

Why is the City requiring Building Tune-ups?

Commercial building energy use accounts for more than 15% of Philadelphia’s GHG emissions. To meet Mayor Kenney’s recent goal of carbon neutrality by 2050, we must reduce emissions from all sources, including our built environment. Building Tune-ups will advance the savings found through the Philadelphia Building Energy Benchmarking Program by turning energy performance knowledge into action.

Which buildings must comply?

All non-residential buildings with indoor floor space of at least 50,000 square feet (sq. ft.), including but not limited to:

- Mixed-use buildings in any mixed-use zoning classification with nonresidential use greater than 50,000 sq. ft.;
- Industrial and manufacturing facilities; and
- Temporary lodgings, including but not limited to hotels, motels and short-term rental facilities, or any other use in which occupants are primarily transient and not utilizing the premises as a primary residence.

Which buildings do not have to comply?

- All non-residential buildings of less than 50,000 square feet;

- Residential buildings including residence halls, dormitories, and other non-transient large lodging places; and
- Parking lots and parking garages, or the portions of otherwise-Covered Buildings thereof used for parking.

Can I comply with BEPP now?

Yes. The compliance reporting templates and resources are created through feedback from the building stakeholder community. These resources provide an easy way to share required compliance materials with OOS. **These [materials are currently posted online](#) for building owners to reference. Please visit our [program resources page](#) for the latest version of these documents.**

Note: These are living documents and small edits may be made throughout the course of the program based on feedback we receive from reporting. If you have any questions about these workbooks, please email tuneups@phila.gov.

What are my compliance options?

Buildings have a choice between three compliance pathways:

- Conduct a Building Tune-up (see *Compliance – Building Tune-Up* section) or;
- Demonstrate high performance of your building (see *Compliance – High Performance Pathway* section);
- Receive an exemption. These are applicable where:
 - Your building received its initial certificate of occupancy within 3 years of the scheduled tune-up date
 - Your building is scheduled to be demolished within one year of the date of the scheduled tune-up

- Such other factors as determined by the OOS to justify an exemption

When must my building complete a Building Tune-up?

Buildings will be required to 1) have a tune-up specialist conduct an assessment, 2) implement the corrective actions raised by the assessment, and 3) submit to OOS a report detailing the results of the assessment and corrective actions by the following schedule:

- **September 30, 2022:** Buildings over 100,000 sq. ft.
- **September 30, 2023:** Buildings with 70,000 sq. ft. to 99,999 sq. ft.
- **September 30, 2024:** Buildings with 50,000 sq. ft. to 69,999 sq. ft.
- 2025 – Break
- **September 30, 2026** – Buildings over 200,000 sq. ft.
- **September 30, 2027** – Buildings with 200,000 sq. ft. to 99,999 sq. ft.

After compliance with the BEPP legislation in accordance with the schedule above, all covered buildings will be required to repeat the tune-up compliance process five years after their initial compliance deadline.*

*Buildings over 200,000 sq. ft. will be required to conduct a Tune-Up in 4 years, due to COVID-19 related delays.

When must my building demonstrate High Performance or seek exemption?

If a building owner is seeking to comply by demonstrating high-performance, or seeking an exemption through the receipt of initial certificate of occupancy, or scheduled demolition - that building must report by the following schedule:

- **April 4, 2022:** Buildings over 100,000 sq. ft.
- **April 3, 2023:** Buildings with 70,000 sq. ft. to 99,999 sq. ft.
- **April 3, 2024:** Buildings with 50,000 sq. ft. to 69,999 sq. ft.

Can I comply before my building's compliance deadline?

Yes, but submitted building tune-up reports must cover inspections and corrective actions completed no earlier than two years prior to the scheduled tune-up date.

Am I eligible for an extension if my building's compliance deadline is 2022 or later?

Potentially. OOS, through its director, may grant an extension upon a showing of “good cause”. The legislation states that “good cause” may include: 1) occupancy of less than 50% of a building's rentable floor area or 2) a burden that is disproportionate to the value of the building. But, there is no guarantee that an extension will be granted – even for these aforementioned reasons.

- OOS will not consider extension requests for 2022 until 180 days prior to the compliance deadline (e.g. April 3, 2022.)
- If an extension request is denied, a tune-up must be completed within one year of the notice of rejection.

What if my building doesn't comply by the required deadline?

Buildings that do not meet the compliance requirements by the deadline will be subject to a fine of \$2,000. Further, additional fines will be imposed if noncompliance extends beyond 30 days following the deadline. These are daily fines of \$500 that will be levied until compliance is achieved.

I'm a building owner with a large portfolio of properties – do I have to abide by the same compliance deadlines?

Not necessarily. Building owners have the option of working with OOS to develop an alternative compliance schedule if they own either:

- 20 or more covered buildings or

- Cumulative floor area in covered buildings of at least 5,000,000 sq. ft.

Large Portfolio Owners seeking alternative schedule(s) for compliance will submit the [BEPP Large Portfolio Compliance Plan for review](#).

I'm a building owner with a large portfolio of properties – do I have to hire a third-party Tune-Up Specialist?

If you have someone on staff that meets the Tune-Up Specialist requirements (7 years' experience; CEM or PE) and has been approved by OOS, they can conduct the Tune-Up. However, if the employee(s) produces Tune-Up Reports for more than 85% of the owner's total covered square footage, the owner must conduct a subsequent quality assurance audit to be completed by a third-party Specialist.

When do I have to submit the BEPP Large Portfolio Compliance Plan?

Alternative compliance plans will not be accepted until 270 days prior to a building's compliance deadline (e.g.

January 4, 2022 if the building must comply by September 30, 2022.

OOS will respond to Compliance Plans within thirty (30) days. If the OOS Director requests additional information, that information shall be submitted in full within thirty (30) days of the date of the Director's written response.

Compliance plans may be amended in subsequent years.

Do I still have to report my building's energy and water use through the City's Benchmarking ordinance?

Yes. All buildings previously subject to the benchmarking ordinance will still have to comply annually by reporting energy and water use. BEPP requires that data entered in ENERGY STAR Portfolio Manager is verified by the Building Tune-Up Specialist. This requires [sign-off within Portfolio Manager](#).

Compliance – Building Tune-Up

What constitutes a Building Tune up?

A tune up is comprised of two parts:

- An assessment (i.e. an inspection) of the building and its systems and
- Corrective actions (i.e., repairs) to resolve issues identified during the assessment. These corrective actions will all be “minor repairs”, which is defined as “low-cost repairs to existing equipment such that the scope of work does not require permits from the Departments of Licenses and Inspections.”

What systems will need to be assessed during a tune-up?

Base building systems must be assessed including “systems or subsystems of a building that use energy or impact energy consumption including building envelope, the HVAC (heating ventilating and air conditioning) systems, conveying systems, domestic hot water systems and electrical lighting systems.” This assessment will involve:

- Bill analysis: examine and verify energy and water data and perform basic billing analysis.
- Sensors: examine for proper operation and appropriate location.
- Schedules: examine schedules of all equipment for actual daily, weekly, holiday, and seasonal schedules; determine optimal schedules.
- Set points: examine setpoints for all zones and equipment.
- Outside air control: calculate ventilation requirements, measure actual ventilation rates, and determine optimal ventilation delivery and control.
- Equipment controls: determine optimal equipment controls for energy efficient operations.
- Maintenance check: check for common maintenance items that impact energy usage.

- Design issues: identify design issues leading to a high energy use such as missing insulation, mission controls, large leaks, unbalanced systems, critical zones.
- Lighting: identify outdated lighting technologies, over-lit spaces, and areas needing lighting controls.
- Domestic plumbing system: determine maintenance needs.

Detailed requirements for each area of assessment may be found in the [Tune-up Workbook](#).

What guidelines should be used for a tune-up?

Tune-up reports should be completed using the [Tune-up Workbook](#). The Tune-Up Instructions tab, contains overarching guidelines to follow.

Is sampling allowed?

Some Assessment Elements do allow for sampling, but not all.

Sampling may be applied to assessing multiple pieces of repetitive, identical, minor equipment (e.g. fan coils, plumbing fixtures, or lighting sensors on the same schedules). Where a sampling is permitted, the Tune-Up Specialist can conduct a randomized inspection of at least 15% of that element, or a representative sample of each zone throughout the entire building, unless otherwise noted in the “Inspection Overview”. Sampling should NOT be applied for major systems (e.g. chillers, boilers, air handling units). Within the “Sampling Approach” column, the Tune-Up Specialist must note the number of elements included in the random inspection, the total number of elements in the building (can be estimated), and the number of floors (as a % of total) on which an element was inspected.

Optional best practice suggestions include:

- *Evaluating the operations and control performance data over a roughly two-week timeframe to capture conditions during all occupancy levels.*

- *Capture performance data during full heating and/or cooling season, rather than shoulder seasons when the equipment may be shut down or not operating at full capacity.*

What if my Assessment Elements are located in tenanted spaces?

No tenant of a covered building may deny reasonable access to a building owner or a tune-up specialist for purposes of compliance, unless the Office of Sustainability provides an exemption for legitimate security concerns.

How do multiples buildings with shared energy meters comply?

Tune-Up Workbooks are required for each individual building, even if they share a primary heating or cooling system such as a central plant. When filling out Building Information in the Tune-Up Workbook or High Performance Workbook, please identify the other building(s) by listing their Name and Portfolio Manager ID. Please included any other identifying features in the Additional Building Notes section.

What is exempt from tune-up assessments and corrective actions?

The following are exempt from assessment and corrective actions during a tune-up:

- Tenant-owned systems
 - Although tenant systems are exempt, we strongly encourage you to engage tenants on efficiency considerations and to have them reduce their energy use through all possible means.
- Condominium or cooperative units
- Systems that serve only a tenant's leased space
- Industrial processes
 - Where a Covered Building utilizes an inefficient system of operation, the owner may be exempt from Corrective Action for

adequate cause. This includes, but is not limited to:

- Public health reasons – including but not limited to alterations to ventilation and outside air percentage recommended by ASHRAE or the CDC to reduce transmission of diseases during health emergencies - or specific uses.
 - For example, building management teams are increasing ventilation to minimize transmission rates, which may cause higher energy use to condition the outside air. A normal tune-up procedure may recommend lowering ventilation rates. In lieu of the recommendation to lower ventilation rates, a specialist may evaluate outside air dampers controls and sensors to ensure the building owners can properly control ventilation rates. ASHRAE also has guidance on ventilation strategies under COVID-19 conditions, the commercial guidance can be found [here](#).
- A valid reason does not include personal preference, and OOS reserves the right to reject any exemptions. The Specialist shall sign-off on the exemption and its reasoning, and include it in the Description of Extenuating Circumstances column of the workbook or analogous section of the report.

Will I have to take corrective actions on everything found during the assessment?

No. There will be both required and voluntary corrective actions. This is specified in the [Tune-up Workbook](#).

Will I have to replace a large piece of equipment, such as a boiler or a chiller?

A building is **not required** to replace a major piece of equipment to comply with BEPP. We do, however, encourage your building to consider installing the most efficient equipment possible, especially as it could potentially allow your building to comply with BEPP through the high-performance pathway option related to energy use reduction.

Who can conduct the tune-up assessment?

The assessment must be supervised by a “qualified tune-up specialist”, which is currently defined as a licensed Professional Engineer or Certified Energy Manager. This specialist will provide the building owner with a signed assessment report setting out findings and recommendations regarding each of the required assessment elements. The Office of Sustainability may establish other qualification requirements for tune-up specialists through the regulations. All “qualified tune-up specialists” must be approved by OOS.

Who can undertake the corrective actions included in the assessment findings?

In-house staff or contracted service providers can complete the corrective actions. The qualified tune-up specialist must verify the work and ensure it fulfills the assessment recommendations.

My compliance period does not occur this year. Can I still conduct a tune-up?

Buildings owners can complete their assessments and corrective actions **no earlier than two years** prior to the scheduled compliance deadline.

Compliance – High Performance Pathway

How can I demonstrate my building is a high performer?

Currently, the legislation lists the following options for demonstrating high performance:

- ENERGY STAR certification (75 or greater)
- Gold rating under USGBC's LEED for Building Operations and Maintenance v4
- Net-Zero Energy Certification
- Participation in utility retro-commissioning program
- Demonstrated energy savings of at least 15%
- Conducted an energy audit no less stringent than the ASHRAE Level II standard and implemented all the no-cost/low-cost energy efficiency measures, defined as providing a simple payback of three years or less, identified in the audit.
- Demonstrated ongoing commissioning/monitoring
- Low site EUI

Additional alternative compliance pathways may be included in the rules and regulations or upon determination by the Director of the Office of Sustainability.

Are there any prerequisites for high-performance pathways?

Yes. An owner may only follow a high-performance pathway if the building has been compliant with the City's Benchmarking Policy for the two (2) consecutive years preceding its Tune-Up Compliance Date.

Applications shall be made on a Workbook provided by the Office and shall include (1) the proposed high-performance pathway; (2) evidence for this qualification; and (3) all items listed in the "Data Requirements" section of the Workbook, except for the Specialist's information. No exemption shall be granted as of right.

When do I have to demonstrate high performance to avoid conducting a tune up?

Your building must demonstrate that it meets a high-performance pathway **at least six (6) months** prior to the compliance deadline.

Does it matter when my building met the requirements of a high-performance pathway option?

Yes. For the ENERGY STAR certification option, your building must have been certified in the year prior to its compliance deadline. For the Low Site EUI option, your building must demonstrate a Low Site EUI for at least 2 of the 3 preceding calendar years prior to the deadline. For the remaining options, your building must have met the requirements at most three years prior to the compliance deadline.

My building is old and it will never perform to high standards. Does that mean I can't comply?

No. It just means that complying through the tune-up pathway may be more appropriate (see *Compliance – Building Tune-Up* section). Any building can undergo a tune-up assessment – regardless of age, energy use, or other characteristics. The corrective actions required as a result of a tune-up assessment will be specific to your building and its existing systems, which means that you'll be able to comply with the policy. You may also choose to conduct an ASHRAE level II Energy Audit. We encourage all buildings to look for opportunities to go beyond the tune-up pathway and consider undertaking measures that will both lead to significant efficiency improvements and enable compliance through the high-performance pathway.

Is there any more information on these high-performance options or details on specifically how my building can comply through the high-performance pathway?

Yes. Each high-performance pathway has specific submission requirements outlined in the associated workbook. The [High Performance Workbook may be found here](#).

Are there any COVID-19-related accommodations for the high-performance pathways?

Yes, for ENERGY STAR Certification.

- A 2019 ENERGY STAR Certification will be accepted for buildings with a Compliance Deadline in 2021 and 2022 to be exempt from the tune-up requirement.
- This provision shall expire on December 31, 2022.

Are there any other extensions granted for the high-performance pathways?

Yes. Building owners pursuing the active optimization pathway may, upon application and no sooner than 180

days prior to the Compliance Deadline and approval by OOS, receive an extension of no more than two years from the Compliance Deadline to implement the Active Optimization and collect relevant data.

- Extension applications under this subsection include:
 - Description of the type of program;
 - Systems to be actively optimized;
 - Timeline for launch and data qualification; and
 - Verification by a person possessing Specialist qualifications.

For building owners pursuing the 15% energy savings pathway may request a non-guaranteed one-year extension to submit the required documentation. No sooner than 180 days prior to the Compliance Deadline, the owner shall provide in writing and in a form acceptable to the OOS, evidence sufficient to the OOS that the building will meet the exemption requirement, and if the application fails the Covered Building shall conduct a Tune-up within one year of the date of its exemption denial.

Qualified Tune-Up Specialists

What does it mean to be a qualified tune-up specialist?

An individual must be either a licensed Professional Engineer or Certified Energy Manager to qualify as a Specialist. A specialist must also demonstrate at least seven (7) years of combined education and experience with commercial building operations and/or building energy management.

How does one become a qualified tune-up specialist?

By submitting the above credentials via an [application](#) provided by the Office of Sustainability, that shall include, but is not limited to, a resume proving necessary education and experience and documentation of licensure and/or certification.

Can a tune-up specialist be an in-house employee?

Specialists must be third-party contractors of the building owner(s), and not employees.

However, a building owner may only use its employee(s) as specialists if:

- The owner is a Large Portfolio Owner, and the employee received approval from the Director pursuant to these regulations; and
- If the employee, or a combination of the owner's employees, produce(s) Tune Up Reports for greater than eighty-five percent (85%) of that owner's total covered square footage in any Compliance Year, the owner conducts a subsequent quality-assurance audit of the completed work by a third-party Specialist; and
- That Specialist shall submit his or her own report. For every portfolio of Covered Buildings, the Specialist shall randomly select Assessment Elements to inspect, but shall inspect each Assessment Element at least once. Each report

shall state (1) which Assessment Elements were reviewed; (2) whether each Assessment Element had been properly addressed; (3) if not addressed, a satisfactory explanation as to why; and (4) a signed assessment that either the building owner complied in good faith or did not, with an optional explanation; and

- If the results from these quality assurance audits demonstrate significant deficiencies – as defined by the Director - the Director may require the Large Portfolio Owner to (1) reduce the percentage threshold for requiring a quality assurance audit in future Compliance Years; (2) require a certain percentage of Tune-up inspections be conducted by a third-party, and/or (3) disallow in-house staff from conducting future Tune-ups.

OOS reserves the right to reject any third-party Report, or request more information

Building owners other than Large Portfolio Owners may petition the Director of OOS in writing to conduct a Tune-up with employees. The petitioner must demonstrate a hardship in hiring a third-party Specialist, such as financial hardship, to the satisfaction of OOS. If the Director provides this exception, the employee must demonstrate the appropriate qualifications for acting as a Specialist.

Do I have to reapply to remain a qualified tune-up specialist over time?

No but OOS may reject, or revoke, Tune-up approval at any time if an applicant is found to have provided false, misleading, or otherwise untrue information to the Office, or if the City conducts a quality-assurance assessment and finds errors in a Specialist's work and/or reporting that, to the determination of the Office, contains significant error.

Additional Questions and Resources

Who can I go to with questions about the policy, or to generally stay informed about it?

For immediate questions, to be informed when the public comment period opens for the rules and regulations, to get general updates about the policy, or to learn more about opportunities to be involved, please contact tuneups@phila.gov.

Glossary of Terms

- **Active Optimization** – Ongoing maintenance of building systems by the owner or his or her designee, either through computerized or manual protocols, that determines on a consistent basis compliance with Tune Up protocols.
- **Assessment Element** – an individual facet of a Tune-Up, to be noted on the provided report template and used in assessing the compliance with these regulations and their enabling ordinance.
- **Base Building System** - shall have the meaning as set forth more fully in Section 9-3403 of the Philadelphia Code.
- **Benchmarking Policy** – Benchmarking Policy shall have the definition as set forth in Section 9-3402 of the Philadelphia Code.
- **Building tune-up report** – shall mean a document summarizing the energy and water performance issues identified during an initial inspection and those issues which were subsequently resolved through corrective action.
- **Compliance Deadline** – the calendar date by which a given Covered Building must submit a Tune-up report satisfactory to OOS.
- **Compliance Plan** – The alternative compliance schedule set forth by Large Portfolio Owners, where applicable.
- **Compliance Year** – the three hundred sixty five (365) day period comprising the Compliance Deadline and the preceding three hundred sixty four (364) days.
- **Corrective action** - shall mean adjustments and minor repairs to existing building energy and water equipment.
- **Covered building** - shall mean any non-residential building with indoor floor space of at least 50,000 square feet.
- **Director** - shall mean the Director of the Office of Sustainability or his/her assign(s).
- **Large Portfolio Owner** – the owner(s) of record of either (1) twenty (20) or more Covered Buildings, or (2) any number of Covered Buildings with a cumulative floor area of five million (5,000,000) square feet or more.”
- **Minor repairs** - shall mean low-cost repairs to existing equipment such that the scope of work does not require permits from the Departments of Licenses and Inspections.
- **Qualified tune-up specialist** - shall mean a licensed Professional Engineer or Certified Energy Manager and shall meet such other qualifications as the Office of Sustainability may establish through regulations.
- **Tune-up** – Inspection by a Specialist and subsequent appropriate Corrective Actions to increase a Covered Building’s energy efficiency.