



# BUILDING ENERGY SAVINGS PROGRAM

The City of Madison is proposing a new Building Energy Savings Program (BESP) to help large commercial building owners and managers identify ways to save energy and money, and reduce carbon pollution. Large commercial buildings have complicated energy management systems, and hidden issues in the way they are running can waste a lot of energy. BESP ensures all owners of large commercial buildings are taking common sense steps to keeping their buildings running as intended.

## Program Basics

The program would require two things:

1. **Annual Energy Benchmarking** – Energy benchmarking is simply measuring and tracking annual energy use. We don't manage what we don't measure. This information helps building owners and managers make more informed decisions to save energy and money.

The program will require non-residential commercial buildings 25,000 sq. ft. and larger to benchmark their energy use once a year, and provide the one-page summary report to the City. No special skills are required to do this, and it takes a few hours per year to complete.

2. **Periodic Building Tune-ups** – Like tuning up a car or bike, building tune-ups check and adjust a building's existing systems, like lighting and HVAC, to make sure they are operating at their best. Tune-ups catch un-noticed issues that waste energy and result in 12% energy savings on average. The savings come from simple fixes to existing systems – like adjusting schedules and settings on heating and air conditioning. Tune-ups do not require anyone to install new systems or replace any functional equipment.

The program will require non-residential commercial buildings 50,000 sq. ft. and larger to tune-up and report results to the city every four years. With the right training, building facilities staff or outside contractors can do this work. The program also allows many ways an owner can get a waiver by showing they've already done a similar body of work.

To support building owners and managers, City staff will provide the following program services:

3. **Training and Support** – The City will provide free trainings and a Help Desk to ensure building owners and managers have the information they need to easily and successfully benchmark and tune-up their buildings.
4. **Customized Reports for Building Owners** – The City will provide building owners with customized reports that help them understand how their building is doing and what options they may be interested in to improve efficiency, based on what they've learned.

## What is NOT Required

BESP aims for good information about, and good management of, existing building energy systems. The benchmarking component does NOT require buildings to reach a prescribed level of energy use, and the tune-ups component does NOT require replacement or upgrade of any functional equipment.

## Why is this Important?

The City of Madison has strong goals for climate protection, and we all need to do our part. Experts say the world must cut carbon pollution nearly in half by 2030 – seven years from now – to stave off the most catastrophic impacts of climate change.

There are two main sources of carbon pollution in Madison – transportation and buildings. We must take action on both. When it comes to buildings, large commercial buildings use a disproportionate amount of energy because of their size and complexity. That’s why it is so important to pay attention to their energy use and how they are running to avoid wasting energy.

After considering many options through engagement with our community, the City pursued this program design because energy benchmarking and tune-ups are low-cost actions that pay for themselves quickly and can save people money through energy bill savings. And cutting energy waste means cutting carbon pollution. This program could have the same impact to carbon pollution as removing 18,000 or more cars from the road.

## Additional Information

**Building Sizes.** The Energy Benchmarking applies to non-residential buildings that are 25,000 square feet or larger. Building tune-ups apply to non-residential buildings that are 50,000 square feet or larger. For context some sample building sizes are listed below.



Example 1: 28,521 square feet



Example 2: 51,655 square feet

**Program Phase-In.** The BEBP program will phase in over time, and there are no requirements in 2023. If adopted benchmarking will be phased in over three years (2024 to 2026). The largest buildings would begin in June 2024, medium in June 2025, and smallest in June 2026. As a reminder, this takes just a few hours to complete.

Building tune-ups also phase in by building size, with the largest buildings going first. The largest buildings would be required to complete their first tune-up by October 2025 and the remainder by October 2026.

**Flexibility.** There is flexibility throughout the program to make it as easy as possible for each building owner to choose a path that makes the most sense for them. If building owners already have very efficient buildings, or are taking a different type of action to improve their efficiency, that can count as a tune-up in many cases. If a building owner has many buildings and needs more time to complete the work, the program allows for that. If a building is mostly vacant, they can get a waiver from taking action that year.