



Building Tune-Ups Policies

WHAT IS IT?

A tune-ups policy is a building energy policy that identifies and implements operational improvements to energy and water efficiency that impact occupant comfort, equipment reliability, and energy usage. For the most-part, these improvements are relatively low-cost and simple. Examples of operational improvements include changes to thermostat set points, scheduling equipment off, calibrating critical control sensors, optimizing outside air use for economizer cooling, or adjusting lighting or irrigation schedules.

A tune-up includes a detailed evaluation and analysis of areas of opportunity. Similarly, tune-ups are like commissioning, but with less-rigorous documentation and functional testing. The evaluation and analysis list a building system's problems, solutions, potential benefits, and costs to fix said problems. The City of Seattle's definition of a tune-up includes (a) an inspection of building systems to identify operational or maintenance issues; (b) corrections to operational issues identified in the inspection that have quick paybacks; and (c) a report to the City Office of Sustainability & Environment summarizing issues identified and actions taken.

WHY IS IT IMPORTANT?

- Tune-ups are a policy tool for cities to reduce greenhouse gas emissions through their building stock by requiring owners to identify energy and water waste within their buildings and make the necessary corrections to operations and maintenance systems (O&M) and reduce inefficient use. Corrections are beneficial to building owners because they deliver increased energy and utility bill savings and can enhance tenant comfort. Research indicates a tune-up averages 10-15% energy savings and typically pays back in 2-3 years from utility bill savings.
- While tune-ups do not require the same strict energy goals of a Building Performance Standard, they do offer ways for existing buildings in a City to become more efficient. Additionally, tune-ups policies can provide a way for cities to collect information on their building stocks. Building system data can be invaluable in identifying future energy savings opportunities through targeted building system upgrades and strategizing for more-aggressive building energy policies.

BENEFITS



Identifies improvement opportunities and requires improvement actions so that building owners and operators can invest in professionally-recommended, cost-saving energy conservation measures and performance upgrades.



Fine-tunes a building's system to reduce energy and water waste, mitigate greenhouse gases, and increase utility savings.



Provides data collection from tune-ups assessments and helps the City to better-understand its building stock and energy systems. Collected information can be used to tailor other building policies and incentives to what building owners and their energy systems need.



Creates jobs for energy service providers to meet the demand induced by a tune-ups assessment and recommended energy conservation measures.

HOW CAN COMMUNITIES IMPLEMENT THIS POLICY?

Step one is to identify existing incentives for tune-ups, or even energy audits and retro-commissioning. For example, many utilities offer these services at subsidized rates. When possible, Cities should create a policy framework that leverages these pre-existing incentives.

Cities can identify which buildings will be covered under a tune-ups policy and start a system for recording information about covered buildings, their owners, and the details that will be uncovered from tune-ups assessments. For example, this information could be collected through robust reporting software or integrate with preexisting information systems. Cities should prepare for a high level of specificity in the data that will be required from building owner—the more specific the policy, the more its results will align with expectations.

Cities benefit from engaging the energy service providers (ESPs) that will carry out the assessments and upgrades required of a City's tune-ups policy. By including ESPs in policy and resource development and working with existing workforce development programs, a City can align a tune-ups policy's intended goals with realistic actions and resources. Involved ESPs can help to iterate and refine compliance tools like tune-up worksheets and workbooks, identify appropriate required and recommended energy conservation measures (ECMs), and impact the overall effectiveness of a tune-ups policy. Because of this, Cities should establish credential or license requirements for ESPs, to ensure quality tune-ups work. Additionally, Cities should develop ways to develop whatever workforce capacity cannot be met by the preexisting workforce, through training programs, local technical colleges, working with professional associations, etc.

Communities interested in this policy should understand that it will require an Ordinance development and a Director's (or Taskforce's) Rule. The Ordinance itself specifies basic parameters of legislation, schedules for compliance, definition of actions required to comply, who is required to comply, penalties for non-compliance, and authorizes director to adopt further rules that further detail compliance, among other things. The Director's or Taskforce's Rule develops details of the high-level requirements in the Ordinance.