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## AN ORDINANCE TO REQUIRE ENERGY BENCHMARKING IN CERTAIN CITY OF ST. LOUIS COMMERCIAL, INSTITUTIONAL AND MULTIFAMILY BUILDINGS

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### Summary of Proposed City of St. Louis Energy Benchmarking Ordinance

Reducing energy use in buildings through energy efficiency measures has an array of benefits that range from job creation and utility bill savings to environmental benefits and improved health conditions for people in the community. The City of St. Louis Sustainability Plan identified programs that result in energy efficiency as a key sustainability objective in realizing these many benefits.<sup>i</sup> Building owners and operators are usually the ones making the decision whether to implement efficiency measures; an energy benchmarking ordinance ensures that the owners and operators of the largest buildings in St. Louis have the energy information they need to make informed decisions. Requiring large building to benchmark and report their energy use on an annual basis has been shown to be an effective driver of behavioral, operational and capital improvements to building energy performance.

### The Benchmarking Process

Benchmarking is a critical first step in determining how best to reduce unnecessary energy use in buildings. Buildings are responsible for nearly 80 percent of greenhouse gas emissions in the City of St. Louis. What's more, a relatively small number of large buildings represent most of these emissions and the associated energy use. According to the U.S. Environmental Protection Agency (EPA), 30 percent of the energy in buildings is used inefficiently or unnecessarily.<sup>ii</sup>

Benchmarking means measuring a building's energy use and comparing it to that of similar buildings. Making this information publicly available will allow owners and occupants to understand how their building's energy performance compares to that of their peers, as well as identify the extent of the opportunity available for improvement.

A building owner, manager, or his/her staff can benchmark using free software, incurring no cost other than the individual's time. The EPA provides the free online tool, ENERGY STAR Portfolio Manager, as well as a number of free benchmarking training tools. This tool has already been used to benchmark more than 450,000 buildings, nationwide, including about half of the commercial floor space in the country.

The City of St. Louis and its partners plan to provide in-person trainings, offer a support desk for benchmarking questions and conduct one-on-one follow-up with owners requesting assistance.

### The Covered Buildings

After a preparatory phase, the energy benchmarking ordinance will require municipal, institutional, commercial, and multifamily residential buildings of at least 50,000 square feet to track and report their energy and water usage annually using ENERGY STAR Portfolio Manager. The City of St. Louis Building Division will implement and enforce the ordinance. Exemptions for compliance are available for buildings that meet specific criteria that prevent their participation in benchmarking.

## Timeline

The program is phased in by building ownership:

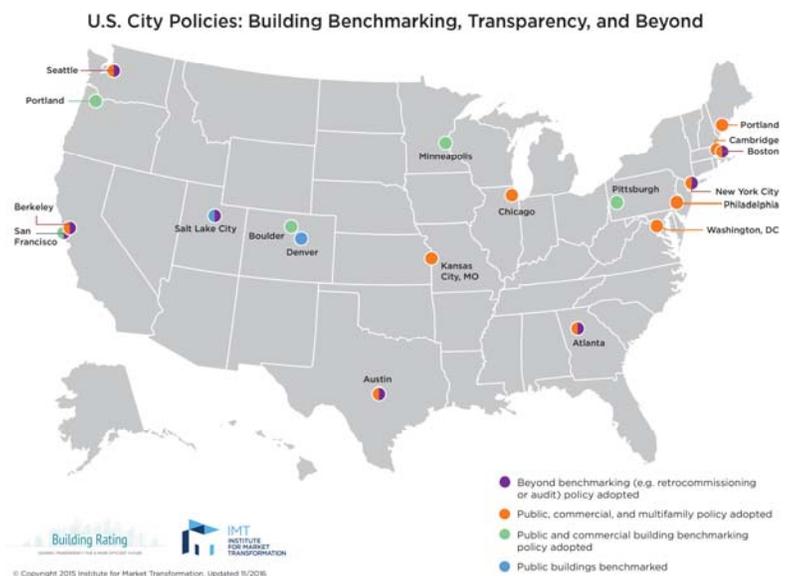
- All municipal buildings of at least 50,000 square feet must comply no later than March 31, 2018 and each August 1 thereafter.
- Owners of non-municipal buildings (institutional, commercial, and multifamily residential) of at least 50,000 square feet must comply no later than August 1, 2018 and each August 1 thereafter.

## Benefits of an Energy Benchmarking Ordinance

- Building owners and managers can take operational and behavioral actions and implement energy efficiency measures that result in **lower operational costs**. Having the requisite information is key to making these informed choices. Studies have found that required benchmarking can motivate building owners and managers to take actions that result in annual energy use reductions of 1-2 percent across the building stock.<sup>iii</sup>
- Policymakers and utilities can **better identify useful policies, programs and financial incentives**, and target them more effectively to segments of the market with the greatest opportunities for energy savings.
- Citywide, a required benchmarking policy can lead to **job creation, reduced pressure on the electricity grid and improved air quality**. As interest in building efficiency increases, jobs from the implementation of efficiency measures, including energy audits, retrocommissioning and energy retrofits are likely to result. By reducing unnecessary energy use, utilities are under less pressure to provide power at the busiest hours of the day in the most populated areas. Reduction in electricity demand can help address regional air quality issues, which have positive implications for air quality related health concerns, such as asthma. Building efficiency improvements at the individual level can also help improve indoor air quality.<sup>iv</sup>

## Additional Resources

Resources, guidance, and further information on the City of St. Louis benchmarking ordinance are available by contacting the City of St. Louis Building Commissioner at 314-622-3318 or the City of St. Louis Sustainability Director at [WernerC@stlouis-mo.gov](mailto:WernerC@stlouis-mo.gov).



\*Orlando, FL, passed a benchmarking ordinance on December 5, 2016 and is not yet reflected on this map.

<sup>i</sup> [City of St. Louis Sustainability Plan](#)

<sup>ii</sup> U.S EPA, ENERGY STAR program. "Useful Facts and Stats." <https://www.energystar.gov/buildings/about-us/facts-and-stats>

<sup>iii</sup> New York City was one of the first cities to implement benchmarking in 2009, and several studies since have shown impressive market impacts and energy savings from efficiency improvements. For example, see ACEEE's *Measuring Energy Savings from Benchmarking Policies in New York City* at [http://aceee.org/files/proceedings/2016/data/papers/9\\_988.pdf](http://aceee.org/files/proceedings/2016/data/papers/9_988.pdf).

<sup>iv</sup> For more on asthma rates in St. Louis and the relationship to energy and climate change, see NRDC's *Sneezing and Wheezing* report at <https://www.nrdc.org/sites/default/files/sneezing-report-2015.pdf>. The benefits of energy efficiency improvements for indoor air quality are well-documented and more can be found at ACEEE's website, <http://aceee.org/topics/indoor-air-quality>.