

CITY COUNCIL TRANSMITTAL


Patrick Leary, Chief of Staff

Date Received: April 20, 2017

Date sent to Council: April 21, 2017

TO: Salt Lake City Council
Stan Penfold, Chair

DATE: April 13, 2017

FROM: Vicki Bennett

Sustainability Department Director



SUBJECT: Updated Building Benchmarking and Transparency Ordinance

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COUNCIL SPONSOR:

DOCUMENT TYPE: Ordinance

SUMMARY

The Sustainability Department proposes an ordinance which requires municipal facilities and certain large private buildings to be benchmarked annually and for the energy performance rating to be made transparent in the market. This ordinance also encourages voluntary energy tune-ups for less efficient buildings after conducting a utility-sponsored energy tune-up evaluation.

Seven other cities have passed benchmarking policy since the last transmittal report. The Department, at the suggestion of stakeholders, has researched policy implemented in Denver, CO, Minneapolis, MN, Kansas City, MO, and Atlanta, GA. Parts of these policies have been tailored for Salt Lake City.

AMENDMENTS TO PROPOSED ORDINANCE

The following amendments, based on additional feedback from impacted businesses and other stakeholders, were made to the proposed ordinance since the last transmittal on November 17, 2016.

1. Benchmarking requirement
 - Exemptions have been expanded to include numerous building types, including:
 - Places of worship and other tax-exempt properties

- Owners that are unable to obtain utility data from utility provider or tenant (for example, if lease language prohibits sharing of information)
- Buildings under special circumstances that would cause undue hardship to comply

2. Transparency

- Reporting buildings with Energy Star Score 50 and above will be listed *by building name and address*, with publicly posting of Energy Star Scores being *voluntary*
- Submitted building energy performance data will be available upon request for *individual* buildings

3. Energy Tune-Ups

- A tune-up “evaluation” through a utility-sponsored incentive program is required for below-average performing buildings that are eligible for utility incentive programs
- Implementation of the energy tune-up recommendations is no longer required

4. Benchmarking qualifications

- The proposed requirement that building benchmarking submissions be submitted by a “qualified benchmarker” has been removed

6. Violations and Enforcement

- Amendments were made to the violations and enforcement section of the ordinance, removing the reference to City Code Chapter 1.12, allowing for three written notices of noncompliance to be sent to owners, and creating a reasonable fee structure

7. Appeals process

- An appeals process was added to provide a clear process for building owners to utilize to appeal enforcement of the ordinance

8. Delayed compliance dates

- The compliance date for private building **benchmarking** will be pushed back by one year, to May 2019
- The compliance date for private building **transparency** will be pushed back by one year, to May 2020
- The compliance date for private building **tune-up evaluations** will be pushed back by one year, to May 2021

EXPANDED PUBLIC PROCESS

In addition to the extensive public process conducted between February 2016 and May 2016, the Department held seven additional meetings with Elevate Buildings Advisory Group, members of the Downtown Alliance’s Downtown Development Committee, Building Owners and Managers Association (BOMA) Utah, and City Creek LLC. In addition, Director Vicki Bennett met with two legislators to discuss the benchmarking ordinance proposal. Highlights of the feedback received

through these additional meetings are outlined below. A list of meeting attendees is included in the appendix as well as additional letters received.

Stakeholder Advisory Group Meetings – Jan 24, Feb 1

| Primary Issue of Concern | City Response |
|---|---|
| Numerous comments about definitions and key terms | Incorporated recommended terms and definitions Section 18.--.030 (4), (13), (14), (15), (16), (18), (19), (20) |
| Requirement for benchmarking to be conducted by a “qualified benchmarker” | Removed provision for this requirement |
| Concerns with City Code Chapter 1.12 under violations/enforcement section | Incorporated violation/enforcement language; added language creating an appeals process for violations; added language for owners to request that data remain confidential Section 18.--.100 |

Downtown Alliance Meetings – Feb 2, Feb 15, Feb 22

| Primary Issues | City Response |
|--|---|
| Lack of recognition of current energy efficiency leaders | Continue and expand recognition of local building efficiency leaders through annual awards events and ongoing recognition |
| Numerous comments about definitions and key terms | Incorporated recommended terms and definitions |
| Requested exemptions for certain building types, including “places of worship,” tax-exempt buildings, etc. | Incorporated numerous recommended exemptions Section 18.--.020 (3) |
| Requirement for benchmarking to be conducted by a “qualified benchmarker” | Removed provision for this requirement |
| Concern that making energy performance data public will be used to “shame” less efficient buildings | Amended public market transparency concept to promote a list of above-average, high performing buildings while allowing building energy data to be requested on an individual building-by-building basis. Section 18.--.030 (18) and Section 18.--.060 (2) |
| Concerns with City Code Chapter 1.12 under violations/enforcement section | Incorporated violation/enforcement language; added language creating an appeals process for violations; added language for owners to request that data remain confidential Section 18.--.050 (8) |

City Creek – Mar 13

| Primary Issue of Concern | City Response |
|---------------------------------|----------------------|
|---------------------------------|----------------------|

| | |
|--|-----------------------------------|
| Requested exemptions for certain building types, including “places of worship,” tax-exempt buildings, etc. | Incorporated requested exemptions |
|--|-----------------------------------|

BOMA Utah Meeting – Mar 15

| Primary Issues | City Response |
|---|--|
| Felt buildings’ impact on air quality was misrepresented | Clarified air quality statements in ‘WHEREAS’ clauses |
| Concerns with requiring owner to owner transfer of information upon sale would delay closing a deal | Removed requirement - Section 18.--.070 (2) |
| Concerns with penalty amount | Incorporated a cap to the penalty fees Section 18.--.100 |

Utah State Legislators – January

Representative Brad Wilson – Rep. Wilson’s primary feedback was to slow down implementation by staging the phase in to first include buildings 100,000 square feet in size followed by buildings that are 50,000 square feet and 25,000 square feet. He also encouraged the City to promote tune-ups on a voluntary basis. When asked about phasing-in the ordinance starting at 100,000 square foot buildings, local stakeholders didn’t have a strong opinion. The City decided not to make this change.

Representative Mike Shultz – Rep. Schultz expressed that he did not oppose the benchmarking requirement. He expressed a concern about the requirement to implement energy tune-ups, and encouraged the City to amend the requirement to be limited to requesting a utility-sponsored tune up evaluation, and then leaving it up to the building owner to implement the tune-up recommendations on a voluntary basis. The City implemented this feedback into the revised ordinance.

REMAINING CONCERNS

While some parties representing impacted businesses have continued to express a preference that benchmarking remain completely voluntary, representatives from other impacted businesses and buildings expressed support for improved market transparency of building energy performance. In addition, numerous local community and environmental organizations have continued to voice support for this proposal. The Department recommends adoption of this ordinance as amended through these final stakeholder input meetings. The Department finds that voluntary participation is low as compared to data showing very high compliance rates in cities with similar ordinances. This will help reach the desired impacts of improved efficiency, conservation of natural resources, reduced local air pollution and greenhouse gas emissions in a shorter timeframe without imposing costs. To complement this ordinance the Department will continue ongoing educational events, create a “Benchmarking Resource Center” to assist parties in need of benchmarking assistance, and continue to promote efficiency leaders through events such as annual awards event.

NEXT STEPS

Develop an ad hoc task force to define rules for benchmarking, transparency

Recommended Incentives

There was a strong desire for the City to offer some sort of incentive for those pursuing energy efficiency projects or for those demonstrating high performance. An expedited building permitting process was recommended. “Anything the City can offer” in the form of an incentive would be beneficial.

Many expressed the need to continue promotion and utilization of the C-PACE program to help promote energy efficient projects in major renovations.

Recommended programs for Benchmarking Resource Center (BRC)

Offer programs or courses - Stakeholders would like to see the City partner with industry such as the local Utah Chapter of Building Owners Managers Association, and Salt Lake Community College’s Energy Management program. Courses could include benchmarking certifications, building operator training, or other similar trainings to improve a building’s energy performance.

Preferred vendor list – If building owners or managers want to improve their benchmarking score the BRC could be a resource to find vendors and energy efficiency consultants that will offer competitive pricing and/or discounted pricing.

The previous ordinance transmittal is included as an Appendix for reference.

SALT LAKE CITY ORDINANCE
No. _____ of 2017

(Building Benchmarking and Transparency Ordinance)

An ordinance enacting Chapter 18.____ of the Salt Lake City Code, to improve market transparency and recognition of energy efficient large municipal and private buildings through a requirement for building energy benchmarking and disclosure.

WHEREAS, the City Council finds that enacting the ordinance set forth in Chapter 18.____ furthers the health, safety, or welfare of the citizens of Salt Lake City; and

WHEREAS, with Salt Lake City's projected population increase, energy efficiency of buildings is important for long-term sustainability and conservation of our natural resources is important for long-term utility savings;

WHEREAS, the U.S. Department of Energy and U.S. Environmental Protection Agency recognize that the average commercial building wastes approximately 30% of the energy it consumes;

WHEREAS, energy efficiency is a widely recognized cost-effective strategy to reduce energy waste in buildings, therefore making wise use of energy resources, lowering associated local pollution emissions and greenhouse gas emissions, and lowering utility costs;

WHEREAS, numerous leading businesses and organizations throughout Salt Lake City have demonstrated commitment to benchmarking and implementing energy efficiency improvements and this ordinance seeks to recognize their leadership and encourage greater participation in these best practices;

WHEREAS, as an outcome of *Sustainable Salt Lake: Plan 2015* sustainability goals, Salt Lake City was selected as a participating city in the City Energy Project to further energy efficiency and find solutions to cut energy waste, boost local economies, and reduce pollution.

WHEREAS, according to Envision Utah's *Your Utah Your Future* survey report Salt Lake City residents identify poor air quality as both the number one environmental concern and the area where the least progress is being made and an air pollution-reduction strategy supported by the majority of Utahns, including residents of Salt Lake City, is to, "Retrofit ...buildings to significantly improve their energy efficiency";

WHEREAS, in April 2016, the American Lung Association ranked the Salt lake City-Provo-Orem area as having the 83rd worst annual particle pollution out of 171 monitored metropolitan areas, and as having the 6th worst short-term particle air pollution among 186 monitored metropolitan areas;

WHEREAS, according to the Utah Division of Air Quality, air pollution emissions from commercial buildings make up 3.9% of the total Wasatch Front on a typical winter day or six tons per day of nitrogen oxides (NOx) emissions;

WHEREAS, according to Lawrence Berkeley National Laboratory, building tune-ups represent a highly cost effective strategy to improve building energy efficiency with an average simple payback of 1.1 years; and

WHEREAS, as Utah's capital city, Salt Lake City is taking the lead on implementing this strategy to improve city-wide efficiency through adoption of market-based policies and programs;

WHEREAS, on July 12, 2016, the Salt Lake City Council and Mayor Jackie Biskupski formally adopted a Joint Resolution to transition the Salt Lake City community to 100% renewable electricity sources by 2032, to reduce 80% of Salt Lake City's carbon emissions by 2040, and to achieve these goals through energy efficiency as an important cost-effective measure to achieve these goals;

WHEREAS, recent economic and statistical analyses based on data from other cities across the nation found that building energy benchmarking and transparency policies are strongly correlated to energy savings in large commercial buildings;

NOW, THEREFORE, be it ordained by the City Council of Salt Lake City, Utah:

SECTION 1. New chapter ____, of the Salt Lake City Code shall be, and hereby is enacted to read as follows:

Chapter 18. _____
Commercial Building Benchmarking and Market Transparency

Sections:

- 18. __.010 PURPOSE.**
- 18. __.020 SCOPE.**
- 18. __.030 DEFINITIONS.**
- 18. __.040 SUMMARY OF BUILDING ENERGY PERFORMANCE REQUIREMENTS AND INITIAL COMPLIANCE DATES.**
- 18. __.050 BENCHMARKING AND BENCHMARKING SUBMISSION REQUIRED.**
- 18. __.060 BUILDING ENERGY PERFORMANCE TRANSPARENCY.**
- 18. __.070 PROVIDING BENCHMARKING INFORMATION TO THE PROPERTY OWNER.**
- 18. __.080 TUNE-UP EVALUATIONS REQUIRED.**
- 18. __.090 NOTIFICATION.**
- 18. __.0100 VIOLATIONS AND ENFORCEMENT.**
- 18. __.0110 APPEALS PROCESS.**

18. __.010 PURPOSE.

The purpose of this chapter is to promote long-term economic development in Salt Lake City through the enhanced energy efficiency of existing commercial buildings, and to reduce local air pollution and greenhouse gas emissions resulting from energy consumption in such buildings through increased energy efficiency, by requiring certain non-residential buildings to benchmark and report energy consumption and investigate opportunities to implement cost-effective building energy tune-ups. Promoting and recognizing efficient buildings will contribute to a cleaner environment and a more efficient use of energy resources.

18. __.020 SCOPE.

The provisions of this chapter apply to buildings and building owners as follows:

- A. All buildings owned by the city, that are not used for residential purposes, wastewater reclamation plants, or for heavy manufacturing purposes as defined in chapter 21A.62.040, with 3,000 square feet or more of Gross Floor Area; provided, however, no building with less than 22,000 square feet of Gross Floor Area shall be subject to the provisions of Section 18. __.090.
- B. All other Governed Buildings or campuses of buildings within Salt Lake City's geographic boundaries, where one or more buildings are comprised of at least 25,000 square feet of Gross Floor Area. To the extent a Governed Building contains elements or uses that are not included within the definition of a Governed Building under this ordinance, the square footage of Gross Floor Area of such elements or uses shall be excluded from the square

footage of Gross Floor Area of such building and shall not be considered a part of the Governed Building for purposes of this ordinance.

C. Exemptions

1. Governed Buildings that are new construction and the Certificate of Occupation was issued less than two years prior to the applicable deadlines; or
2. Governed Buildings that do not have a Certificate of Occupation or temporary Certificate of Occupation for all 12 months of the calendar year being benchmarked; or
3. Governed Buildings where a full demolition permit has been issued for the prior calendar year, provided that demolition work has commenced, some energy-related systems have been compromised, and legal occupancy is no longer possible at some point during the calendar year being benchmarked; or
4. Governed Buildings, including individual buildings or structures, that do not receive utility services; or
5. Any of the following: a property or building that is not assessed ad valorem real property taxes by Salt Lake County, houses of worship, apartments, agricultural storage facilities and greenhouses, buildings used for heavy manufacturing purposes as defined in chapter 21A.62.040, oil and gas production facilities, buildings that contain a movie/television/radio production studios, soundstages, broadcast antennae, data center, or trading floor that together exceed 10% of Gross Floor Area;

D. Governed Buildings do not include properties owned by state or federal government.

18.030 DEFINITIONS.

A. "Base Building Systems" means a building assembly made up of various components that serve a specific function and that are controlled and operated by the Owner or designee, including:

1. The building envelope;
2. The HVAC (heating ventilating and air conditioning) systems;
3. Conveying systems;
4. Electrical and lighting systems;
5. Domestic hot water systems;

- B. “Benchmark” means to track and report the total energy consumed for a Governed Building for the previous calendar year and other descriptive information for such building as captured by the Benchmarking Tool. Total energy consumption may not include separately metered uses that are not integral to building operations, such as broadcast antennas and electric vehicle charging stations.
- C. “Benchmarking Submission” means a subset of:
1. Information input into the Benchmarking Tool; and
 2. Benchmarking information generated by the Benchmarking Tool.
- D. “Benchmarking Tool” means the Energy Star Portfolio Manager or any replacement tool adopted by the U.S. Environmental Protection Agency, and any substantially similar tool approved by the Director.
- E. “Building ID Number” means the identification number that is unique to a Governed Building.
- F. “Building Management System” means a computer-based system that monitors and controls a building’s mechanical and electrical equipment, such as HVAC, lighting, power, fire, and security systems, including an energy management system, incorporating interior temperature sensors and a central processing unit and controls, which are used to monitor and control gas, steam and oil usage, as applicable.
- G. “City Property” means all buildings owned by the city, that are not used for residential purposes, wastewater reclamation plants, or for heavy manufacturing purposes as defined in Chapter 21A.62.040.
- H. “Department” means the Salt Lake City Department of Sustainability.
- I. “Director” means the Director of the Salt Lake City Department of Sustainability.
- J. “Energy Star Score” means the 1-100 numeric rating generated by the Energy Star Portfolio Manager tool.
- K. “Energy Star Portfolio Manager” means the tool developed and maintained by the U.S. Environmental Protection Agency to track and assess the relative energy performance of buildings nationwide.
- L. “Financial Hardship” means a property that:
1. Had arrears of property taxes or water or wastewater charges that resulted in the property’s inclusion, within the prior two years, on the city’s annual tax lien sale list;
or

2. Has a court appointed receiver in control of the property due to financial distress; or
3. Is owned by a financial institution through default by the borrower; or
4. Has been acquired by a deed in lieu of foreclosure; or
5. Has a senior mortgage subject to a notice of default.

M. "Governed Building" means all stand-alone and enclosed buildings used or occupied for a commercial use, including:

1. Banking/financial services;
2. Stand-alone data centers;
3. Education (including K-12, daycare, pre-school, vocational school);
4. Entertainment/public assembly (including convention centers, gyms, movie theaters, performing arts, meeting halls, recreation centers);
5. Food sales and services (including restaurants, supermarkets, grocery stores, convenience stores);
6. Healthcare (including hospitals, medical offices, senior care communities, assisted living and nursing care);
7. Lodging (including hotels, motels);
8. Mixed use;
9. Offices;
10. Retail (including retail goods establishments, retail service establishments, department stores, mass merchandising stores, specialty stores, exterior and interior retail malls and shopping centers);
11. Technology/science (including data centers and research facilities);
12. Warehouses, distribution, and package delivery facilities;

N. "Gross Floor Area" means all gross floor area, which is the area included within the exterior walls of a building or portion thereof, including mezzanines, enclosed interior balconies, enclosed porches, basement floor area, penthouses, attic space having headroom of seven feet (7') or more, and interior connected floor area devoted to accessory uses. Gross Floor Area does not include balconies, patios, crawl spaces, courts, convertible indoor/outdoor space, parking or loading areas, and covered walkways.

- O. "Heavy Manufacturing" means the same as defined in chapter 21A.62.040.
- P. "Occupancy" means the physical occupancy of a unit or space by an occupant or a Tenant.
- Q. "Owner" means any of the following:
1. An individual or entity possessing title to a Governed Property;
 2. The net lessee in the case of a property subject to a triple net lease with a single Tenant;
 3. The lessee in the case of a building with a single Tenant subject to a net lease with a term of at least forty-nine years, inclusive of all renewal options;
 4. The board of managers in the case of a nonresidential condominium;
 5. An agent or party duly authorized to act on behalf of the owner.
- R. "Persistent Commissioning" means an ongoing process of comparing data obtained through the Building Management System with analytic models; identifying problematic sensors, controls and equipment; and resolving operating problems, optimizing energy use and identifying retrofits for existing buildings.
- S. "Shared Benchmarking Information" means any descriptive information identifying Governed Buildings with Energy Star scores above 50, and any portions of the Submitted Benchmarking Information that Owner elects to be posted publicly on the Department's website.
- T. "Submitted Benchmarking Information" means whole-building information generated by the benchmarking tool and descriptive information about the Governed Building and its operational characteristics, which is submitted to the Department. The information shall be limited to:
1. Descriptive information
 - a. Property address;
 - b. Primary use type;
 - c. Gross Floor Area;
 2. Output information
 - a. Site electricity consumption (kWh);

- b. Site natural gas consumption (therms);
 - c. Site energy use intensity (site EUI);
 - d. Weather normalized source energy use intensity (source EUI);
 - e. Total annual greenhouse gas emissions;
 - f. Water use per gross square foot (if available);
 - g. The Energy Star Score, where available; and
3. Comparable information based on updates/revisions to Energy Star Portfolio Manager.
- U. “Tenant” means a person or entity occupying or holding possession of all or a portion of real property, or all or a portion of a Governed Building pursuant to a rental or lease agreement.
- V. “Tune-Up Evaluation” means a utility sponsored retro-commissioning process that systematically evaluates Base Building Systems and identifies improvements to achieve optimal building performance. This includes planning, investigation, and documentation to optimize operation, maintenance and performance of the facility and/or its Base Building Systems and assemblies.
- W. “Tune-Up Evaluation Report” means a report certified by the Tune-Up Professional demonstrating that a Tune-up Evaluation was conducted through a utility-sponsored tune-up incentive program.
- X. “Tune-Up Professional” means an individual or entity approved or utilized by local utilities to provide tune-up evaluation services or who possesses other substantially similar credential to perform a Tune-Up Evaluation required by this ordinance.

18. __.050 SUMMARY OF BUILDING ENERGY PERFORMANCE REQUIREMENTS AND FIRST COMPLIANCE DATES.

| Properties | Submitted Benchmarking Information Due | Shared Benchmarking Information Made Publically Available | Date when first Tune-Up Evaluation Report must be filed | Frequency of Tune-Up Evaluation |
|--|--|---|---|--------------------------------------|
| City Property | May 1, 2018 | Sept. 1, 2018 | May 1, 2020 | Prior to Dec. 31 of every fifth year |
| Governed Building (50,000 square feet of Gross | May 1, 2019 | Sept. 1, 2020 | May 1, 2021 | Prior to Dec. 31 of every fifth year |

| | | | | |
|--|-------------|---------------|-------------|--------------------------------------|
| Floor Area or larger) | | | | |
| Governed Building (25,000 square feet of Gross Floor Area or larger) | May 1, 2020 | Sept. 1, 2021 | May 1, 2022 | Prior to Dec. 31 of every fifth year |

18.060 BENCHMARKING AND BENCHMARKING SUBMISSION REQUIRED.

A. Governed Buildings and City Properties shall be Benchmarked annually for the previous calendar year according to the following schedule:

1. Each City Property shall be benchmarked no later than May 1, 2018, and every May 1 thereafter.
2. Each Governed Building with a gross floor area of 50,000 square feet or more shall be benchmarked no later than May 1, 2019, and every May 1 thereafter.
3. Each Governed Building with a gross floor area of 25,000 square feet or more shall be benchmarked no later than May 1, 2020, and every May 1 thereafter.

B. Below is a summary table of the first Benchmarking Submission compliance dates:

| Properties | Benchmarking Submission by Building Owner |
|--|---|
| City Property | May 1, 2018 |
| Governed Building (50,000 square feet of Gross Floor Area or larger) | May 1, 2019 |
| Governed Building (25,000 square feet of Gross Floor Area or larger) | May 1, 2020 |

C. Benchmarking shall be performed and/or verified by the Owner.

D. Before making a Benchmarking Submission the Owner shall run all automated data quality checker functions available within the benchmarking tool, and shall correct all missing or incorrect information identified.

E. If the current Owner receives notification from the City that any information reported as part of the Benchmarking Submission is inaccurate or incomplete, the information so reported shall be amended in the benchmarking tool by the Owner and the Owner shall provide an updated Benchmarking Submission to the Director within 60 days of the notification.

F. EXCEPTIONS:

1. Governed Buildings whose average Occupancy throughout the calendar year for which benchmarking is required is less than sixty percent (60%); or
 2. Governed Buildings under Financial Hardship; or
 3. Due to special circumstances unique to the applicant's facility and not based on a condition caused by actions of the applicant, strict compliance with provisions of this ordinance would cause undue hardship or would not be in the public interest; or
 4. An Owner is unable to benchmark due to the failure of either a utility provider or a Tenant (or both) to report the information necessary for the Owner to complete any benchmarking submittal requirement.
- G. For properties qualifying for these exceptions, the Owner shall file documentation, in such form and with such certifications as required by the Director, with the Department in the year prior to the due date for the Benchmarking Submission, establishing that the Governed Building qualifies for such an exception.
- H. A randomly-selected subset of Benchmarking Submission not to exceed 10% of the total Benchmarking Submissions completed in a given year may be subject to verification by the city. Such reviews shall be conducted in a way so as to preserve the anonymity of individual properties and shall be conducted at no cost to the Owner.
- I. An Owner may make a claim of confidentiality for any Submitted Benchmarking Information pursuant to the limitations under state law.

18.__.070 BUILDING ENERGY PERFORMANCE TRANSPARENCY.

- A. The city shall make accessible to the public the Shared Benchmarking Information for the previous calendar year.
1. For each Governed Building with a Gross Floor Area of 50,000 square feet or more, on or about September 1, 2020, and on or about each September 1 thereafter.
 2. For each Governed Building with a Gross Floor Area of 25,000 square feet or more, on or about September 1, 2021, and each September 1 thereafter.
- B. The Department may, upon request, make available the Submitted Benchmarking Information for the previous calendar year for an individual City Property or Governed Building.

18.__.080 PROVIDING BENCHMARKING INFORMATION TO THE PROPERTY OWNER.

- A. Each Tenant occupying a Governed Building shall, within 60 days of a request by the Owner and in a form to be determined by the Director, provide all information that cannot otherwise

be acquired by the Owner and that is needed by the Owner to comply with the requirements of this ordinance.

18. __.090 TUNE-UP EVALUATIONS REQUIRED.

- A. Tune-up evaluations are required for Governed Buildings and City Properties that are eligible for participation in a utility-sponsored tune-up incentive program, as determined by the utility offering the incentive program and that have an Energy Star Score of 49 and below. Implementation of tune-up measures in addition to evaluations is encouraged but not required.
- B. The Owner shall conduct a Tune-Up Evaluation of the Base Building Systems of a qualifying Governed Building and file a Tune-Up Evaluation Report prior to December 31 of the year in which the tune-up evaluation is being performed. The initial reporting year shall be determined by the last digit of the property's tax ID number as illustrated below, and subsequent tune-up evaluation shall be completed and tune-up evaluation Reports filed every fifth year thereafter:

| Last digit of tax ID number | 50,000 square feet & above of Gross Floor Area | 25,000 square feet & above of Gross Floor Area |
|-----------------------------|--|--|
| 0 | 2021 | 2022 |
| 1 | 2021 | 2022 |
| 2 | 2022 | 2023 |
| 3 | 2022 | 2023 |
| 4 | 2023 | 2024 |
| 5 | 2023 | 2024 |
| 6 | 2024 | 2025 |
| 7 | 2024 | 2025 |
| 8 | 2025 | 2026 |
| 9 | 2025 | 2026 |

- C. The Owner shall submit the Tune-Up Evaluation Report to the city.
- D. EXCEPTIONS: Tune-Up Evaluations are not required if any of the following are met:
1. If the Governed Building is less than 5 years old; or
 2. If a registered design professional or Tune-Up Professional certifies that:
 - a. The Governed Building has an Energy Star Score of 50 or above for the year prior to the first tune-up due date or for at least two of the three years preceding the due date of the Governed Building's Tune-Up Evaluation Report.

- b. There is no Energy Star rating for the building type and Owner submits documentation that the Property's energy performance is better than the energy performance of an average building of its type for two of the three years preceding the due date of the Governed Building's Tune-Up Report.
 - c. The Governed Building has received certification under the most recent LEED 2009 rating system for Existing Buildings or Operation and Maintenance, or Existing Buildings Version 4 rating system or future iterations of LEED published by the U.S. Green Building Council or other substantially similar rating systems for existing buildings, for at least two of the three years preceding the due date for the Governed Building's Tune-Up Evaluation Reports.
 - d. The Governed Building has performed a Tune-Up Evaluation within the past 5 years prior to the Tune-Up Evaluation due date.
- 3. If the Governed Building has a Persistent Commissioning program in place.
 - 4. For properties qualifying for these exceptions, the Owner shall file documentation, in such form and with such certifications as required by the Director, with the Department in the year prior to the due date for the Tune-Up Report, establishing that the Governed Building qualifies for such an exception.
- E. A randomly-selected subset of Tune-Up Evaluation Reports not to exceed 10% of the total Tune-Up Evaluation Reports completed in a given year may be subject to verification by the city. Such reviews shall be conducted in a way so as to preserve the anonymity of individual properties and shall be conducted at no cost to the Owner.

18.__.90 NOTIFICATION.

- A. Between January 1 and March 1 of each year during which an Owner is required to provide a Benchmarking Submission, the Director shall notify these Owners of their obligation to Benchmark performance for the previous calendar year through whatever means the Director so chooses.

18.__.100 VIOLATIONS AND ENFORCEMENT.

- A. If the Director determines that an Owner has failed to comply with the requirements of this ordinance or the Owner submits incomplete or false information, the Director may issue up to three written notices of noncompliance to the Owner, allowing Owner to cure such noncompliance within 90 days after each notice of violation. After the third written notice of violation, the Director may impose a fine of up to \$500 per violation thereafter not exceeding a total of \$1,000 annually.

18.__.110 APPEALS PROCESS.

- A. Any Owner affected by the Director's determination related to that Owner's property regarding enforcement of this ordinance may request, within thirty (30) days of Owner's written notification of the Director's determination, in writing filed with the Department, an appeal hearing before the board of appeals and examiners, established under this Chapter.

SECTION 2. Effective Date. This Ordinance shall become effective on the date of its first publication.

Passed by the City Council of Salt Lake City, Utah, this _____ day of _____, 2017.

CHAIRPERSON

ATTEST AND COUNTERSIGN:
Salt Lake City Recorder's Office

CITY RECORDER

Transmitted to Mayor on _____.

Mayor's Action: _____ Approved. _____ Vetoed.

MAYOR

CITY RECORDER

(SEAL)

Bill No. _____ of 2017.
Published: _____.

| | |
|--|--------------------------|
| APPROVED AS TO FORM: Salt Lake City Attorney's Office | |
| Date | <u>4/20/17</u> |
| Sign | <u>Megan J. DePaulis</u> |
| Megan J. DePaulis Senior City Attorney | |

CITY COUNCIL TRANSMITTAL

Patrick Leary, Chief of Staff

Date Received: _____

Date sent to Council: _____

TO: Salt Lake City Council
James Rogers, Chair

DATE: Nov 6, 2016

FROM: Vicki Bennett
Sustainability Department Director

SUBJECT: **Benchmarking and Market Transparency for Clean Air Ordinance**

STAFF CONTACT: Vicki Bennett
Sustainability Department Director
801-535-6540
Vicki.Bennett@slcgov.com

COUNCIL SPONSOR:

DOCUMENT TYPE: Ordinance

RECOMMENDATION: Adopt the Benchmarking and Market Transparency for Clean Air Ordinance into the *Salt Lake City Code*

BUDGET IMPACT: The Department of Sustainability (Department) does not anticipate a significant budget impact. Existing 1-1.5 FTE's will manage implementation and education, and additional grant funding may be secured to provide additional technical support.

BACKGROUND/DISCUSSION:

Issue Origin

1. **Air quality** is an urgent health and economic issue for our community. According to the Utah Department of Air Quality, 39% of our wintertime air pollution comes from area sources (homes, buildings, restaurants). Commercial building heating comprises approximately 10% of area source emissions. No single "silver bullet" strategy exists to reduce area sources of emissions to improve local air quality. Many actions are needed and reducing energy waste in large commercial buildings represents one important strategy.
2. **Salt Lake City leadership and innovation** have been demonstrated in the Joint Resolution between the Council and Mayor on July 2016 with ambitious renewable energy and carbon reduction goals. Implementing energy efficiency is the most cost-effective way, and is a necessary step towards meeting the City's emission reduction goal. This benchmarking and transparency ordinance is as effective as installing 3 kW solar arrays on 50% of Salt Lake City's single-family homes.
3. **Economic development** continues to be a priority for Salt Lake City. More companies, including those from the technology and outdoor recreation sectors, have adopted corporate social responsibility goals that often include a requirement for energy efficient buildings and

office space. This ordinance will help the City compete in the region for attracting business expansion and relocation by making it possible for companies to identify energy efficient buildings in the local market, while addressing corporate air quality concerns.

4. **Incentives and resources** are an ongoing topic of conversation and research in the Department of Sustainability. This ordinance dovetails and leverages existing energy efficiency incentives offered by Rocky Mountain Power and Questar Gas. The Department will continue to evaluate potential City-level incentives through additional stakeholder input. Possible incentives may include expedited permitting or building permit fee waivers. The Department also plans to partner with local organizations such as Salt Lake Community College and ASHRAE Utah to provide technical assistance to building representatives.
5. **Voluntary programs** such as the annual Mayor's Skyline Challenge has helped build great partnerships with private building owners and managers, but lack the participation levels needed to transform the market. Out of the roughly 1,900 large commercial buildings in Salt Lake City, only 2% have participated in the challenge. Other voluntary energy efficiency programs across the nation show similar results. The Department will continue and expand efforts to provide highly-visible and prestigious recognition for top performing buildings. For example, 2016 award winners were highlighted in the Downtown Alliance Fall/Winter 2016 magazine.
6. **Other ordinance considerations** included requiring cyclical energy audits and building upgrades for low performing buildings were presented through the stakeholder engagement process. While the Department believes these requirements would result in significant energy savings, they have not been included in the proposed ordinance due to the concerns raised in the stakeholder process about potential financial burden they may place on building owners. Energy audits and building upgrades will instead be promoted through voluntary programs using financing programs like C-PACE (Property Assessed Clean Energy financing).

SUMMARY

The Sustainability Department proposes an ordinance which requires owners of large buildings (City buildings above 22,000 ft² and commercial buildings above 25,000 ft²) to annually benchmark energy data using EPA's *free* Energy Star Portfolio Manager tool and share Energy Star Scores and data with the City. The proposed ordinance requires owners to perform tune-ups (Retro- or Re-commissioning) of buildings with Energy Star Scores that are below average, and which qualify for one of the utility incentive programs. The City will have the Energy Star Scores of all benchmarked buildings available for review, thus providing "transparency" of building energy performance to the marketplace.

Benchmarking

Benchmarking is a well-established, industry recognized, first step towards decreasing energy waste. Using EPA's Energy Star Portfolio Manager, the energy used by the building is compared to the average for similar types of buildings, and considers weather, building use, occupancy, and size. The building is then given an "Energy Star Score" ranging from 0 to 100, where 50 is considered average. It is common to see ratings and labels for numerous consumer products, like fuel economy ratings for vehicles and nutrition labels for prepared foods. Energy Star Scores provides a nationally standardized rating for buildings, which are currently unavailable in the market.

Transparency

Market transparency, or publishing the Energy Star Scores for large commercial buildings in Salt Lake City, can help buyers, tenants, businesses, landlords, and the public identify energy efficient buildings, and spur market competition for building efficiency improvements. Market transparency can also assist with attracting corporate expansion and relocation to Salt Lake City

by making it easy for companies with internal policies to lease space to identify Energy Star Certified buildings.

Tune-Ups

One highly cost-effective strategy for reducing energy consumption in commercial buildings is to “tune-up” the building energy systems and controls. Conducting a building energy tune-up (also called re-commissioning or retro-commissioning) is an industry-recognized best practice for reducing energy consumption in commercial buildings. Energy tune-ups improve a building's operations and maintenance procedures to enhance overall performance *without* requiring any expensive capital improvements. A building's control system is used to optimize the energy used in the space.

Commercial buildings with an Energy Star Score below 50 (below average) will be required to perform a tune-up through utility incentive programs. Buildings that are ineligible for the utility incentives are exempt from this requirement. Tune-ups will be required every five years until the building achieves an Energy Star Score of 51 or higher. City departments will be required to tune-up buildings every five years starting in 2020.

Impact

There are an estimated 1,900 commercial buildings in Salt Lake City that are 25,000 square feet or larger. By focusing on the largest buildings, this ordinance is able to effect 82% of the total square footage, while only impacting 26% of the total buildings by count. This square footage threshold was selected intentionally to impact a high percent of building space yet only a small percentage of buildings. Once fully implemented, the complete benchmarking/transparency and tune-up ordinance is estimated to have the following impacts:

- Cut energy expenses among all large buildings by \$27.8 million per year,
- Reduce NOx emissions by 98 tons per year, and
- Lower carbon emissions from SLC's large buildings by 13%.¹

Cost & Savings of Benchmarking – Benchmarking a building's energy consumption is free, requiring an estimated 2-8 hours of staff time to create a building profile and 1-2 hours to update the data annually. Once the profile is set up commercial buildings in Salt Lake City can enroll in Rocky Mountain Power's and Questar Gas' free automated benchmarking programs that will keep the benchmarking profile updated on a monthly basis.² The Department estimates that this strategy will reduce energy costs by over \$9.6 million annually and reduce NOx emissions by 29 tons per year when the ordinance is fully implemented.

Cost & Savings of Energy Tune-ups – It costs about \$0.30 per square foot to conduct an energy tune-up, usually paying for itself in about one year. This represents \$13,500 for a 45,000 square foot building. However, Rocky Mountain Power and Questar Gas currently offer incentives that typically offset most of cost of energy tune-ups. The Department of Sustainability estimates that this strategy will reduce energy costs by over \$18.2 million annually and reduce NOx emissions by 69 tons per year when then ordinance is fully implemented.

A 2011 Lawrence Berkeley National Laboratory analysis of 561 existing commercial buildings that underwent energy tune-ups realized a median whole-building energy savings of 16 percent, with a median payback time of 1.1 years. This means that the cost of retro-commissioning is recuperated in 1.1 years on average, with the benefits in cost savings from the building tune-up lasting several

¹ Salt Lake City Department of Sustainability estimate based on current commercial building stock assessment

² Rocky Mountain Power's automated benchmarking was launched in October 2015 (<https://www.rockymountainpower.net/benchmarking>); Questar Gas's program is expected to be launched in December 2016

years longer.³ When utility-sponsored incentive programs are included in the cost analysis, the simple payback can be as low as 3 to 4 months.⁴

More detailed cost-benefit information of benchmarking, transparency, and tune-ups is provided in Appendix A.

Implementation

Compliance requirements will be phased in. First, City buildings will be required to benchmark energy data (and Energy Star Scores will be published), followed by commercial buildings larger than 50,000 ft², and lastly commercial buildings larger than 25,000 ft².

Incremental Phase-in of Ordinance

| | Year | | | | |
|--|-------------------------------------|------|------------------------------|------------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Building Type | 2017 | 2018 | 2019 | 2020 | 2021 |
| Municipal Facilities | Benchmarking (annual) | | | | |
| All best practices in place first year for facilities as small as 3k ft ² | Energy Transparency (annual) | | | | |
| | Tune-ups (every 5 years) | | | | |
| | Upgrades (ongoing) | | | | |
| | Building operator training (annual) | | | | |
| | | | | | |
| Private Buildings (50k ft ² +) | 1 year delay Benchmarking (annual) | | | | |
| Best-practices phased-in beginning in 2018 | 2 year delay | | Energy Transparency (annual) | | |
| | 3 year delay | | | Tune-ups (every 5 years) | |
| Private Buildings (25k ft ² +) | 2 year delay Benchmarking (annual) | | | | |
| Best-practices ordinance begins phased-in beginning in 2019 | 3 year delay | | | Energy Transparency (annual) | |
| | 4 year delay | | | | Tune-ups (every 5 years) |

The Department will monitor benchmarking and transparency compliance through a streamlined online process. Utility incentive reports will be collected by the Department and used to verify energy tune-ups. The Department will issue written notices to building owners. No penalty or fine structure is being proposed at this time.

NEXT STEPS

Council Action – The Department recommends the Council adopt the Benchmarking and Market Transparency for Clean Air Ordinance. This market-based ordinance is presented as a result of months of public engagement, expert stakeholder input, and industry feedback.

Following the adoption of the ordinance the Department will convene an industry task force that will work with the Director or appointee to further refine the implementation strategy and explore possible incentives the City may provide. The Department will also seek additional grant funding to provide more technical assistance to building owners, operators and managers. Furthermore, the Department will work with partners to expand efforts to provide positive, high-profile public recognition of efficient commercial buildings and building efficiency leaders.

³ Mills, E. 2011. "Commissioning: Capturing the Potential." *ASHRAE Journal*. February 2011
<http://evanmills.lbl.gov/pubs/pdf/ashrae-commissioning-mills.pdf>

⁴ Presentation by Sanjiv Devnani at Elevate Building Advisory Group, May 2016

PUBLIC PROCESS

A comprehensive timeline of public engagement activities is included in Appendix B, and is summarized below:

Key Stakeholder and Industry Engagement

Six, professionally facilitated, 2-hour long advisory group meetings were held over a four month period, with an average of 40 participants. Participants represented various industries including commercial real estate, air quality, energy engineering, facility management, and utilities. In depth feedback was received on energy efficiency best practices and how the City could help accelerate these practices. Participants are listed in Appendix B.

The Department presented to the Downtown Alliance and met one-on-one with individuals from: the LDS Church, Goldman Sachs, Zion's Bank, Hines Corporation, Price Real Estate, Nexant, and Rocky Mountain Power.

Utah Clean Energy assisted with outreach to key stakeholders and met with numerous groups, including BOMA Utah, Zions Bank, Intermountain Healthcare, ASHRAE Utah, USGBC Utah, Utah AFL-CIO, Utah Mechanical Contractors Association, IFMA Utah, Packsize, Jacobsen Construction, and Envision Utah.

Concerns Raised by Industry

Building Managers and Owners Association (BOMA) of Utah - supports benchmarking, transparency, and tune-ups on a voluntary basis rather than through an ordinance. Letters of opposition and concern have been received from BOMA Utah and several of its individual members, which are included in Appendix C.

Advisory Group Participants – have expressed concerns about “shaming” low performing buildings with publicly available data.

Industry Energy Efficiency Experts – have expressed caution about the technicalities of requiring tune-ups for low performing buildings, since even above-average buildings sometimes save a lot of energy through tune-ups.

These concerns have been considered and are being addressed in several ways. First, the Department finds that data shows that benchmarking policies help the market function effectively and lower energy use in buildings by increasing awareness of energy efficient buildings. Where voluntary programs typically only enroll 2% of commercial buildings, cities with similar policies have 70-90% compliance rates. Second, while building data will be made transparent to the public in an accessible format such as a spreadsheet, list, or a map, the City will continue to recognize and award leaders. The Department is committed to providing highly-visible, positive recognition of energy efficient buildings through continuing an annual awards event and other means, and will assist low performing buildings with access to financial and technical resources and tools. Finally, the Department is addressing technical concerns expressed about the energy tune-up requirement by working closely with utilities and only requiring tune-ups for buildings eligible for utility incentives.

A detailed report summarizing the recommendations from the Key Stakeholder engagement process is included in Appendix C.

Industry Support

Letters of support for the adoption of the ordinance have been received from the following organizations, and are included in Appendix C:

| | |
|---------------------------------|--|
| Energy Efficiency Professionals | ETC Group, Sustainable Values Inc., Architectural Nexus, PACE equity, Siemens |
| Industry Associations | ASHRAE Utah, US USGBC Utah, Polyisocyanurate Insulation Manufacturers Association (PIMA), National Electrical Manufacturers Association (NEMA), |
| Labor Organizations | UTAH AFL-CIO, Utah Mechanical Contractors Association (UMCA) |
| Public Interest Community | HEAL Utah, Utah Moms for Clean Air, Breathe Utah, Utah Clean Energy, Western Resource Advocates, Southwest Energy Efficiency Project (SWEEP), Utah Physicians for a Healthy Environment (UPHE) |
| Local Businesses | Liberty Heights Fresh, Renewable Tech Ventures, Black Diamond, XMission, BacGen, Uinta Brewing Company, Legrand |

Public Engagement

The Department published a survey on Open City Hall in April 2016. Over a 4.5 week period, 259 responses were collected with 67.9% in favor of requiring commercial buildings to benchmark. In addition, over 98% of responses show support for making energy performance visible to the public with about 1/2 of the responses supporting delayed publication of energy data while building energy improvements are being undertaken.

A member of the Department along with a representative of either Breathe Utah or American Lung Association presented at 11 community councils educating citizens about the association between buildings and air quality. The conceptual policy was presented and residents were directed to the Open City Hall survey.

City Departments

Sustainability staff met with individuals from several City departments and divisions, including: Economic Development, Building & Licensing Services, Civic Engagement, Facilities Management, and Engineering to discuss the ordinance and impacts.

Concerns were raised by Economic Development about creating additional requirements which could be seen as a barrier to attracting new businesses. Due to concerns raised, requirements that are potentially more expensive such as energy efficiency audits and upgrades were not included in the final proposed ordinance and will be promoted voluntarily. In addition the Department of Sustainability will develop an implementation plan that makes benchmarking simple and helps Salt Lake City compete with economic competitor cities, including Kansas City, Portland, and San Francisco, which have shown leadership in implementing similar ordinances and are showing consistent energy savings.

LIST OF APPENDICES

- A. Cost-Benefit Information
- B. Public Process Reports and Timeline
- C. Additional Public Comments
- D. Ordinance Implementation Plan

APPENDIX – MEETING ATTENDEES

Advisory Group Meeting – Jan 24

Spencer Loock – UPMA
Curtis Clark – Model Insights
Kevin Emerson – Utah Clean Energy
Scott Dwire – Nexant
Craig Cardall – CBRE
Ashley Miller – Breathe Utah
Theddi W Chappell – Sustainable Values, Inc.
Amir Haskic – USGBC
David Griffin – Arch/Nexus
Sarah Wright – Utah Clean Energy
Alyssa Kay – SLCC
Brett Parry – ASHRAE, Wasatch Controls

Advisory Group Meeting – Feb 1

Ed Tallerico – BOMA Utah
Clay Monroe – Rocky Mountain Power
Justin Farnsworth – BOMA Utah
Jordan Larson – Varex Imaging
Bob Askerlund – SLCC
Kevin Emerson – Utah Clean Energy
Kristeen Schumacher – SLCDPU
Alene Bentley – Rocky Mountain Power
Matt Cekher – Cushman Wakefield Commerce
Reid Oliver – Energy Management Corp.
Grant Sperry – XMISSION

Downtown Alliance Meeting Feb 2

Linda Wardell – City Creek Properties
Bruce Lyman – City Creek Reserve
Bruce Bingham – Hamilton Partners
Charles Anderson – LDS Church
JR Howa – Internet Properties
Craig Cardall - CBRE
Peter Makowski – SLC Economic Development
Jason Mathis – Downtown Alliance
Jesse Dean – Downtown Alliance

Downtown Alliance Meeting Feb 22

Bruce Lyman
Bruce Bingham
Charles Andreson

Loyal Hulme – Kirton McConkie
Jesse Dean – Downtown Alliance

City Creek – Mar 13

David Litvack – Salt Lake City, Deputy Chief of Staff
Mark Gibbons – Property Reserve, Inc.
Matt Baldwin – City Creek Reserve, Inc.

BOMA Utah – March 15

Spencer Loock – Utah Property Management Associates, LLC
Cris Day - Utah Property Management Associates, LLC
Craig Cardall - CBRE
David Robertson - CBRE
Shelli Menegos – BOMA, Utah
Gary Bullock – Millrock Development
Justin Farnsworth – Newmark Grubb ACRES
Chloe Gehrke – Vectra Management Group
J Bruce Reading – Scalley Reading