

C4 B REFERRAL TO THE FINANCE AND ECONOMIC RESILIENCE COMMITTEE TO DISCUSS/TAKE ACTION ON THE LAND USE AND SUSTAINABILITY COMMITTEE FAVORABLE RECOMMENDATION TO CREATE AN ENERGY BENCHMARKING ORDINANCE, PROGRAM AND ASSOCIATED FUNDING REQUIREMENTS.

Applicable Area:



COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission

FROM: Rickelle Williams, Interim City Manager

DATE: July 24, 2024

TITLE: REFERRAL TO THE FINANCE AND ECONOMIC RESILIENCE COMMITTEE TO DISCUSS/TAKE ACTION ON THE LAND USE AND SUSTAINABILITY COMMITTEE FAVORABLE RECOMMENDATION TO CREATE AN ENERGY BENCHMARKING ORDINANCE, PROGRAM AND ASSOCIATED FUNDING REQUIREMENTS.

RECOMMENDATION

The Administration recommends the Mayor and City Commission refer this item to the Finance and Economic Resilience Committee.

BACKGROUND/HISTORY

On January 25, 2024, the Sustainability Committee adopted a unanimous motion, urging the City to adopt an ordinance that would mandate the benchmarking of energy consumption and greenhouse gas emissions for existing buildings above a certain size threshold.

On February 21, 2024, the Mayor and City Commission referred a discussion (C4 I) to the Land Use and Sustainability Committee to consider adopting a building energy benchmarking ordinance (Attachment A). This item was sponsored by Commissioner Laura Dominguez.

On March 19, 2024, the Land Use and Sustainability Committee discussed adopting a building energy benchmarking ordinance item and directed staff to explore incentives and a policy framework for energy benchmarking.

On June 10, 2024, the Land Use and Sustainability Committee provided a favorable recommendation to create an energy benchmarking ordinance and refer the energy benchmarking software and position estimate to the Finance and Economic Resilience Committee for consideration in the budget process (Attachment B).

ANALYSIS

Benchmarking is an important strategy for measuring and improving the energy and water performance of the largest buildings in a city. For building owners and property managers, the benchmarking process and report allows them to understand their energy usage and water consumption and makes it easier to identify inefficiencies and opportunities to reduce costs. These improvements create a competitive advantage by increasing asset value, enhancing operating margins, and improving tenant retention.

A benchmarking program would further the City's sustainability and resilience goals. The Environment & Sustainability Department is developing the City's first Climate Action Plan (CAP) to prioritize high impact actions to reduce greenhouse (GHG) emissions community-wide, supporting the reduction goal of net-zero GHG emissions by 2050 which the City Commission unanimously adopted on April 21, 2021 through Resolution No. 2021-31664. An energy and water benchmarking ordinance is proposed as a high priority action in the CAP due to its high GHG

emissions reduction potential, additional co-benefits including cost savings, and low complexity for implementation.

Municipalities that have implemented mandatory benchmarking policies have observed a decrease in energy use and corresponding cost savings for building owners. Based on the Miami Beach 2022 community-wide GHG emissions inventory and an Environmental Protection Agency (EPA) study that found an average annual energy savings of 2.4% in an analysis of benchmarked buildings, a benchmarking requirement could reduce emissions by 9,705 MT CO₂e annually citywide. This is equivalent to 62.2 acres of U.S. forests preserved in one year.

It is recommended that a mandatory benchmarking ordinance includes an education period without fees or violations and that implementation is phased, starting with the largest buildings complying in the first year and smaller buildings complying in subsequent years. This provides time for buildings to receive education and learn how to successfully comply with the ordinance. A draft energy and water benchmarking ordinance is included as Attachment C. Implementation of the program is flexible, the first year would not have fees and fines for non-compliance. The ordinance can be refined through public outreach and working with the City Attorney's Office. Although water is traditionally included within an energy benchmarking ordinance, the original referral items was based on energy only. The draft ordinance includes both energy and water as a model ordinance.

A mandatory energy and water benchmarking policy includes the following essential components: annual benchmarking requirement, disclosure requirement, education and outreach, and enforcement. The development and implementation process includes the following tasks:

- Engage the community: Create a website to inform, educate, and inspire action. Notify building owners to their required participation.
- Develop an inventory of covered buildings: Create a covered buildings list working closely with the Property Appraiser and internal City departments, acquire accurate contact information, and continuously maintain the covered buildings list.
- Collect and manage building data: Procure a software platform, improve data quality, and enforce compliance, with no fines for first year of implementation.
- Engage utilities: Engage utilities, like Florida Power and Light (FPL), on implementation and establish access to whole-building data.
- Educate building managers: Create compliance support materials, develop and deliver trainings, establish a help desk, provide annual reports.
- Communicate results: Share data to enable transparency. Analyze data and report the results.

Resources required include a position and software with services to develop and implement the program. This is inclusive of program development, training and education for the community, and direct outreach to buildings—alongside a software platform that would compile and track the benchmarking data submissions.

FISCAL IMPACT STATEMENT

The estimated cost for the first year, including set-up fees, ranges from \$186,000 to \$216,000. Subsequent years may incur an estimated cost of \$125,000. A nominal fee of \$125 could be charged to each building for registration to use the software to offset program costs. The estimate for a full-time position is \$65,000 (salary only).

Year 1 estimate: \$281,000

Year 2 and ongoing estimate: \$190,000

Does this Ordinance require a Business Impact Estimate?
(FOR ORDINANCES ONLY)

The Business Impact Estimate (BIE) was published on . See BIE at:
<https://www.miamibeachfl.gov/city-hall/city-clerk/meeting-notice/>

FINANCIAL INFORMATION

IN DEVELOPMENT

CONCLUSION

The Administration recommends the Mayor and City Commission refer this item to the Finance and Economic Resilience Committee.

Benchmarking is an important strategy for measuring and improving the energy and water performance of the largest buildings in a city. To create an effective and successful benchmarking program with both environmental and economic advantages for the City of Miami Beach, the property owner and stakeholders, the prioritization of resources is required. Funding needs include the software with services required for buildings to participate and a position to launch and manage the program. If the Committee concurs, next steps include a motion to the full City Commission for funding prioritization within the budget process.

Applicable Area

Citywide

Is this a “Residents Right to Know” item, pursuant to City Code Section 2-17?

Yes

Is this item related to a G.O. Bond Project?

No

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify the name of lobbyist(s) and principal(s):

Department

Environment and Sustainability

Sponsor(s)

Commissioner Laura Dominguez

Co-sponsor(s)



City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

Item 16.
COMMITTEE MEMORANDUM

TO: Land Use and Sustainability Committee

FROM: Rickelle Williams, Interim City Manager

DATE: June 10, 2024

**TITLE: CONSIDER ADOPTING A BUILDING ENERGY BENCHMARKING ORDINANCE
FOR GREENHOUSE GAS EMISSIONS**

HISTORY:

On January 25, 2024, the Sustainability Committee adopted a unanimous motion, urging the City to adopt an ordinance that would mandate the benchmarking of energy consumption and greenhouse gas emissions for existing buildings above a certain size threshold.

On February 21, 2024, the Mayor and Commission referred a discussion (C4 I) to the Land Use and Sustainability Committee to consider adopting a building energy benchmarking ordinance. This item was sponsored by Commissioner Laura Dominguez.

On March 19, 2024, the Land Use and Sustainability Committee discussed adopting a building energy benchmarking ordinance item and directed staff to explore incentives and a policy framework for energy benchmarking.

ANALYSIS:

Energy and water benchmarking is the practice of assessing and analyzing the energy and water use of a building and then comparing it to the building's past performance, similar buildings, or modeled simulations of a reference building at a certain standard. Benchmarking a building's energy use over time provides a mechanism for comparing energy use and related emissions, identifying opportunities for energy conservation improvements, and measuring performance of building upgrades. Energy benchmarking is an important strategy for measuring and tracking the energy performance of the largest buildings in a city. For building owners and property managers, benchmarking allows them to understand their energy usage and water consumption and makes it easier to identify inefficiencies and opportunities to reduce costs.

The City of Miami Beach has already taken steps to reduce energy consumption and greenhouse emissions. In addition to compiling an annual greenhouse gas (GHG) emissions inventory, which provides a breakdown of the GHG emissions community-wide and from government operations, the City has implemented several projects to reduce GHG emissions for municipal operations and adopted policies to mitigate the effects of climate change community wide. The City's efforts have focused on the sectors which are the greatest contributors of GHG emissions: energy consumption in buildings, transportation, and solid waste.

The Environment & Sustainability Department is currently working on the City's first Climate Action Plan (CAP). The goal of the CAP is to prioritize actions in these three sectors to reduce GHG emissions community-wide, in order to reach the City's emissions reduction goal of net-zero GHG emissions by 2050 which the City Commission unanimously adopted on April 21, 2021 through Resolution No. 2021-31664. One of the proposed actions in the draft CAP that has been identified as high priority is a building energy benchmarking policy. An energy and water benchmarking ordinance was identified as a high priority action due to its high GHG emissions reduction potential, additional co-benefits including cost savings, and low complexity for implementation.

The City of Miami Beach currently tracks electricity consumption of all City buildings, street lighting, and other electric utility accounts through EnergyCAP, an electric utility management platform. EnergyCAP is a repository of all electric utility bill data and provides features for tracking, analyzing, reporting, managing and archiving energy use. The platform helps to identify savings and issues, such as bill anomalies and changes in usage. The electricity data captured through EnergyCAP would support the energy benchmarking of municipal buildings.

Benchmarking Policies

Local and state governments have established benchmarking and disclosure policies as a tool to reduce greenhouse gas emissions and improve the energy efficiency of buildings that make up a majority of the whole building footprint in their communities. Most benchmarking ordinances are mandatory and some include a voluntary period before full implementation. In addition, some municipalities have launched voluntary programs to encourage energy and water benchmarking.

Benchmarking policies include the following essential components: annual benchmarking requirement, disclosure requirement, and enforcement. Policies may also include periodic re-tuning and/or retro-commissioning requirements. Re-tuning, or retro-commissioning, is the process of restoring and maximizing the efficiency of a building by auditing and tuning up all its major components, including heating, ventilation, and air conditioning (HVAC) systems, lighting systems, the building envelope, and central plant, if applicable. Benchmarking policies require buildings that meet certain thresholds to comply with all requirements. These thresholds are defined using building characteristics including building use types and building square footage. For example, some benchmarking ordinances require all buildings over a certain area to benchmark their energy and water consumption while other policies only require commercial, residential and/or public properties over a certain area to benchmark.

An analysis of building square footage has already been conducted. The following data of buildings in Miami Beach was analyzed and provided by Miami-Dade County based on their 2019 study of buildings throughout the county. Their analysis found that buildings 20,000 square feet and larger comprised only two percent of the total number of buildings but accounted for 43 percent of the total floor space across all buildings in Miami-Dade County. A third-party analysis by Autocase showed that the estimated electricity, natural gas, and water savings from a policy implemented at that threshold would provide significant positive outcomes at the building and overall community levels.

Miami Beach Building Analysis

Phase	Size threshold	Building count	Square footage	-
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1	200,000 square feet or larger	152	99,349,547	-
2	Between 200,000 and 100,000 square feet	82	11,640,523	-
3	Between 100,000 and 50,000 square feet	157	10,517,245	-
4	Between 50,000 and 20,000 square feet	481	14,687,212	
	Total	872	136,194,528	

The study found that there were 872 buildings in Miami Beach that are 20,000 square feet or larger. The following provides a breakdown by building type.

Main category	Subcategory	Building count	Square footage
Total		872	136,194,528
Multifamily (condo)		469	90,028,053
Hotel or motel		139	15,035,983
Commercial		125	6,344,095
Institutional		69	18,881,191
	<i>Municipality</i>	36	15,388,868
	<i>Hospital</i>	5	1,906,752
	<i>Board of instructions</i>	7	502,065
	<i>Religious</i>	11	400,900
	<i>Educational/scientific</i>	6	411,772
	<i>County</i>	1	25,565
Office		33	2,440,461
Transportation/utility		14	560,014
Vacant		9	248,748
Park/Conservation		8	318,872
Industrial		6	193,667

More than 50% of the buildings that are 20,000 square feet or larger are multifamily buildings. The next largest share of buildings is hotels at 16% and then commercial buildings at 14%.

The building stock in Miami Beach totals about 238,452,014 square feet. Based on the 2022 greenhouse gas (GHG) emissions inventory, the emissions due to energy consumption in buildings and the built environment was 707,995 metric tons of carbon dioxide equivalents (MT CO₂e). It can be estimated that buildings in Miami Beach emitted about 0.003 MT CO₂e per square foot on average, annually. The U.S. Environmental Protection Agency (EPA) found an average annual energy savings of 2.4% in an analysis of benchmarked buildings. Therefore, a benchmarking requirement for buildings above 20,000 square feet could reduce emissions by 9,705 MT CO₂e citywide. For perspective, that is equivalent to 62.2 acres of U.S. forests preserved in one year.

Mandatory Benchmarking Program Summary

The City of Miami Beach has always been on the leading edge of sustainability and has the opportunity to join other leaders in the country, and two cities in Florida (Orlando and Miami), to implement a benchmarking policy. Becoming an early adopter of a benchmarking policy would also benefit buildings in Miami Beach by providing time before any regional requirements are implemented to learn how to benchmark and comply. The City of Miami is the only neighboring municipality that has implemented an energy and water benchmarking policy and could provide a framework for the implementation of a similar policy. In June 2021, the City of Miami adopted a building energy and water consumption benchmarking and retuning ordinance. To streamline regional requirements and facilitate compliance for building owners and property managers, a mandatory policy should reflect regional benchmarking requirements.

The City of Miami's benchmarking ordinance requires commercial and multifamily buildings 20,000 square feet and above to benchmark their electricity, natural gas, and water consumption every year. The City of Miami imposes fines of \$250 per day for a first-time offense or \$500 per day for a repeat violation of their ordinance. Their ordinance went into effect in a phased approach, as follows:

- Buildings 100,000 square feet or larger: initial compliance required by June 30, 2022
- Buildings between 50,000 and 99,999 square feet: initial compliance required by June 30, 2023
- Buildings between 20,000 and 49,999 square feet: initial compliance required by June 30, 2024

In the City of Miami, the implementation of their benchmarking ordinance requires one full staff person to manage this program and one part-time staff person to support. The City of Miami procured Touchstone IQ as the energy and water benchmarking solutions provider, which provides the software platform for the data processing and tracking, along with support for a help desk. The cost of the software program was an estimated \$500,000 and includes technical support for building owners and managers. We requested a proposal from Touchstone IQ, based on 800 buildings, to receive an estimated cost for the benchmarking software and help center management. The initial year would also include set-up fees and cost about \$186,000 to \$216,500, depending on the add-on options selected. This estimated cost is based on the number of buildings in the city that are 20,000 square feet and above. This threshold can be adjusted, as needed, and this estimated cost may shift accordingly.

To support the implementation of an energy and water benchmarking ordinance, a nominal fee of \$125 could be charged for processing of the benchmarking data submissions. Based on the number of buildings in the city that are 20,000 square feet and above, about 800 buildings would need to benchmark. The nominal fee of \$125 paid by 800 buildings totals \$100,000 collected to help cover the cost of the software required to process and track the benchmarking data. This type of fee structure could be customized to the needs of the City. For example, the City could cover the cost the first year and have participants cover that fee for ensuing years. Another example would be to require commercial properties above a certain size to benchmark in the first year while providing an incentive for voluntary participation for other property types, and then charge a nominal fee and require benchmarking for all properties in subsequent years.

Touchstone IQ is a platform focused on energy regulatory compliance and has specific modules for governments to execute benchmarking policies end-to-end. As part of the services they deliver for the City of Miami, Touchstone IQ provides a help center support to answer emails and requests from building users, offer customer service training and tools, and provide one-on-one appointment tools. The cost for these services depends on the number of buildings that would

need to comply with a given benchmarking ordinance, along with the licensing fee for the software and any additional add-on features. Touchstone IQ also tracks non-compliance along with other information about buildings that must comply with their ordinance.

Compliance mechanisms and strategies can be crafted to best suit the building stock characteristics and community needs. The structure for enforcing benchmarking requirements can be tailored to the type of buildings, with one structure for commercial properties and one structure for residential properties. Some municipalities issue a one-time fine while other municipalities issue an accruing fine until a building owner complies. For example, the City of Atlanta (GA) imposes a \$1,000 fine each year of non-compliance. The City of Chicago issues a \$100 fine for the first violation and \$25 per day for continued non-compliance. The City of Boulder (CO) imposes a fine of \$0.0025 per square foot up to \$1,000 per day of non-compliance.

Some municipalities utilize other tools for enforcement that are not fee-based. The State of New Jersey (NJ) makes compliance with benchmarking a prerequisite for participation in any of the NJ Board of Public Utility programs, as well as utility energy efficiency programs. The City of Minneapolis, MN may consider failure to comply within 45 days of written notice a good cause for the denial, suspension, revocation, or refusal to issue a rental license, certificate of commercial building registration, or business license. The City of Pittsburgh, PA publicly lists covered buildings that do not comply on the city website as being non-compliant. Some municipalities even enforce through harsher penalties such as Kansas City, MO which may proceed with a civil suit. One option that can be explored is having different enforcement structures for different types of buildings, such as having fines for commercial buildings and an alternative enforcement mechanism for residential buildings.

One important factor for the success of a benchmarking policy is ensuring data quality. This includes the availability of whole building data and ensuring that data that is submitted is accurate. A platform, such as Touchstone IQ, would be necessary to ensure data quality and flag data points that are outliers. Such a platform would also be beneficial to facilitate the process of requesting whole building data. The City's electric utility, Florida Power and Light (FPL) does not currently provide whole building data to building owners but it has established a pilot program for properties in the City of Miami that must comply with the benchmarking requirement. A similar arrangement would be required for buildings in Miami Beach.

A draft benchmarking ordinance, as requested by the Committee, is included at Attachment A.

Voluntary Program Summary

There are some examples of local governments that have implemented voluntary benchmarking programs, including Miami-Dade County, FL; New Orleans, LA; British Columbia, CA; and Rochester, Roseville, and St. Paul, MN. These programs rely on incentives to encourage buildings to benchmark their energy and water consumption. Although incentives are offered, the compliance rate for voluntary programs is typically low. Low participation leads to less useful data since a limited number of data points are collected. This decreases the overall success of a benchmarking program because of the constrained analysis to determine the efficacy of GHG reduction achieved through the benchmarking program.

Common incentives provided through voluntary benchmarking programs include:

- Virtual workshops that cover topics such as energy efficiency, water efficiency, and no- and low-cost upgrades.

- Technical assistance from experts including help with benchmarking utilizing the Energy Star Portfolio Manager platform.
- Peer-to-peer networking which provides the opportunity for participants to learn about successes and lessons learned from other participating buildings.
- Prizes for select buildings such as a building energy and water audit.

Another option is for the City of Miami Beach is to promote an existing voluntary program. Miami-Dade County has an existing voluntary program, Building Energy 305 (BE305), so the City of Miami Beach could promote this existing program and provide additional resources to participating buildings throughout the city.

Miami-Dade County's BE305 Challenge focuses on improving building performance and reducing operational costs for large buildings. Incentives include free trainings, educational opportunities from industry experts, peer-to-peer networking, public recognition, and the opportunity to win free building energy and water audits. There is an annual awards ceremony to recognize participants. There are currently 146 buildings representing 37.8 million square feet of floor space in 14 municipalities and the Unincorporated Municipal Service Area (UMSA) participating in the program. A total of 12 buildings in Miami Beach have signed up for the BE305 Challenge, including two (2) municipal buildings.

Interested buildings can register for the BE305 Challenge by completing the interest form found on the [BE305 Information Hub](#). Information requested include building owner contact information, building size, building age, and type of large equipment used. Once a participant has registered their building(s), they can participate in workshops and receive technical assistance to benchmark their building(s). Participants that complete energy and water benchmarking for their registered building(s) share that data with Miami-Dade County through Energy Star Portfolio Manager and are then eligible to win one of the building energy and water assessments. At the end of each cohort, participants are invited to an award ceremony to celebrate the accomplishments of the cohort.

Feedback was provided by a Miami Beach BE305 participant that the technical assistance received through the program was the most beneficial part of the program. The participant's condo building in Miami Beach took advantage of available rebates such as: updating water fixtures with rebates from Miami-Dade County and receiving an irrigation system audit through the UF/IFAS program. In addition, the participant's building was one of the selected buildings to receive an energy and water assessment. An energy and water assessment is a comprehensive inspection, survey and analysis of energy and water consumption of a building.

Miami-Dade County estimates \$100,000 for technical assistance for its BE305 Challenge program to provide two (2) to three (3) trainings and eight (8) building energy and water assessments for each cohort. Participating buildings throughout the county are eligible to win one of the limited building energy and water assessments each cohort cycle.

Potential incentives for buildings in Miami Beach to benchmark their energy and water use include prioritizing funding to provide technical assistance to assist with benchmarking, prioritizing funding to provide energy and water assessments, providing technical assistance to help buildings apply for existing rebate programs and other incentives, showcasing buildings that are benchmarking on the City website, and providing a discount for City fees.

Incentives Research

The Committee has requested staff to explore a reduction in cost incentive, for example through Business Tax Receipt (BTR) savings. The City of Miami Beach currently has 1,329 multi-family residential buildings registered with a BTR. The City currently generates approximately \$140,000 annually from apartment building BTR tax revenues. A reduction of 5% in our BTR taxes for the 643 apartment buildings, would result in a credit of \$7,000 in total for these multi-family residential dwellings. The City generates approximately \$162,000 from annual Fire Fees billed on BTR renewals. A reduction of 5% in our Fire Fees for condominiums and apartment buildings would result in a credit of \$8,100 in total for these multi-family residential dwellings. These savings are minimal and may not be the best incentive for participation in a benchmarking program.

The success of voluntary benchmarking programs depends on participation from interested buildings. Based on feedback from other municipalities and a participant in BE305, the largest incentive for buildings to participate is the availability of beneficial technical assistance. Mandatory policies have a greater impact across a community because buildings are required to benchmark so the data captured represents a more significant portion of the entire building stock. Furthermore, mandatory policies that are implemented, managed, and tracked through platforms such as Touchstone IQ receive the highest rates of compliance and provide cities with the most accurate data to gather a better understanding of energy and water use throughout their building stock.

While Miami-Dade County's BE305 Challenge is a voluntary program, the County is working on developing a benchmarking ordinance which would require buildings 20,000 square feet and larger to benchmark their electricity, natural gas, and water consumption every year. This ordinance would apply to all municipalities in addition to unincorporated areas. There is no timeline for when the County's ordinance would be adopted, but the City of Miami Beach could become a regional leader and early adopter by implementing a benchmarking ordinance. In addition, this would benefit buildings in Miami Beach by providing time before a countywide ordinance is implemented to learn how to benchmark and comply. Further considerations such as a grace period with no enforcement could equip buildings in Miami Beach to comply with future requirements.

CONCLUSION:

This information is presented to the members of the Land Use and Sustainability Committee for discussion. To create an effective and successful benchmarking program with both environmental and economic advantages for the City of Miami Beach and the property owner and management community, the prioritization of resources are required. The Administration recommends funding the software required for buildings to participate in the program and a position to launch and manage the program. If the Committee concurs, next steps include a motion to the full City Commission for funding prioritization within the budget process.

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?

Yes

Does this item utilize G.O. Bond Funds?

No



Departments

Environment & Sustainability

Strategic Connection

Environment & Infrastructure - Reduce greenhouse gas emissions and heat.

ATTACHMENTS:

Description		Type
	Referral Memo from 2.21.24 Commission	Memo
	Draft Benchmarking Ordinance	Other

This draft ordinance is for discussion purposes only.

BUILDING ENERGY AND WATER CONSUMPTION BENCHMARKING

Sec. XX-XX. Building Energy and Water Consumption Benchmarking Ordinance ("Ordinance").

Intent. This Article shall be known and may be cited as the City of Miami Beach's ("City") Building Energy and Water Consumption Benchmarking Ordinance and is intended to allow a data-based approach to analyze future energy needs, improve future usages, eliminate waste, and reduce costs.

Sec. XX-XX. Definitions. Unless otherwise expressly stated, the following terms shall, for the purpose of this Article, have the meanings indicated in this Section:

Aggregated, Whole-Building Data means energy or water data that has been summed for an entire property, which may include a single occupant or a group of separately metered tenants.

Base Building Systems mean the systems or subsystems of a building that use or distribute energy, water, impact energy, and/or water consumption, including, but not limited to the building's envelope as well as its HVAC systems, conveying systems, electrical and lighting systems, on-site generation systems, domestic hot water systems, water distribution systems, plumbing fixtures and other water-using equipment, and landscape irrigation systems and water features, including fountains and excluding systems or subsystems that operate industrial applications or processes or any systems or subsystems in a multifamily residential building appurtenant only to the specific dwelling unit for which the occupant of that unit bears responsibility for its maintenance and such usage is measured by a meter or submeter.

Benchmark means to input and submit the total energy and water consumed for a property for the previous calendar year and other descriptive information for such property as required by the Benchmarking Tool. Total energy and water consumption shall not include separately metered uses that are not integral to building operations as determined by the Director.

Benchmarking Submission means a subset of information input into the Benchmarking Tool and Benchmarking information generated by the

Benchmarking Tool as determined by the Director. Benchmarking Tool means the U.S. Environmental Protection Agency's ("EPA") ENERGY STAR® Portfolio Manager, or any additional or alternative tool adopted by the Director, used to track and assess the energy and water use of certain properties relative to similar properties.

Covered Private Property means a property, other than a covered City property, or any property owned or operated by Miami-Dade County, the State of Florida, or the Federal government with a building or buildings that exceed 20,000 square feet of Gross Floor Area.

Covered Public Property means a property with a building or buildings that exceed 20,000 square feet of Gross Floor Area and is owned, leased, or managed by the City and where the City regularly pays all or part of the annual energy and/or water bills.

Covered Property means any Covered Public Property or Covered Private Property except for any property with a single-family home or duplex, a solely residential multi-family building of five (5) units or less, or any building with an industrial use per designated Standard Industrial Classification (SIC) codes 20 through 39.

This draft ordinance is for discussion purposes only.

Department means the City's XX Department. Director means the Director of the City's XX Department or designee.

Energy means electricity, natural gas, steam, or other product sold by a utility to a customer of a property or renewable on-site electricity generation for purposes of providing heating, cooling, lighting, water heating, or for powering or fueling other end-uses as recorded in the Benchmarking Tool.

ENERGY STAR® Score means the 1-100 numeric rating generated by the ENERGY STAR® Portfolio Manager tool as a measurement of a building's energy efficiency.

ENERGY STAR® Portfolio Manager means the tool developed and maintained by the EPA to track and assess the relative energy performance of buildings.

Financial Hardship (of a property) means that a property:

1. Had arrears of property taxes or special assessments that resulted in the issuance of a tax certificate against the property within the prior two (2) years;
2. Has a court appointed receiver in control of the asset due to financial distress;
3. Is owned by a financial institution through default by the borrower;
4. Has been acquired by a deed in lieu of foreclosure; or
5. Has a senior mortgage subject to a notice of default.

Gross Floor Area means Floor Area as defined in Article XX, Section XX of Ordinance No. XX of the City of Miami Beach, Florida, as amended.

Shared Benchmarking Information means information generated by the Benchmarking Tool and descriptive information about the physical property and its operational characteristics, which is shared with the public. The information, as defined by the ENERGY STAR® Portfolio Manager glossary, includes, but is not limited to, descriptive information such as the property's address, primary use, Gross Floor Area, number of floors, number of years the property has been ENERGY STAR® Certified, and the last approval date, if applicable, as well as energy-related output information such as site and source energy use intensity, weather normalized site and source energy use intensity, the ENERGY STAR® score, where available, total annual greenhouse gas emissions, monthly energy use by fuel type, indoor water use and water use intensity (consumption per gross square foot), outdoor water use (where available), total water use, the property's ENERGY STAR® Water Score, where available, and any other general comments required to explain said ENERGY STAR® Scores.

System or Subsystem means a building assembly made up of various components that serve a specific function including but not limited to exterior walls, windows, doors, roofs, ceilings, floors, lighting, piping, ductwork, insulation, Heating, Ventilation, and Air Conditioning ("HVAC") system equipment or components, electrical appliances, and plumbing appliances.

Utility means an entity that distributes and/or sells natural gas, electric, water, or thermal energy services for buildings.

Sec. XX-XX. Applicability. This Ordinance shall apply to all new and existing Covered Properties in accordance with the initial compliance timetable set forth in Sec. XX-XX of the City Code so long as the Benchmarking Tool as selected by the Director remains free to use by members of the general public.

Commented [BA1]: Should this be included in the Ordinance?

Commented [BJ2R2]: Let's keep

This draft ordinance is for discussion purposes only.

Sec. XX-XX. Procedures. The owner of each Covered Property shall collect and enter data for the previous calendar year into the Benchmarking Tool. Unless otherwise defined in this Ordinance, the owner of each Covered Property shall input all data into the Benchmarking Tool in a manner that conforms to latest guidance provided by the EPA for use of the Benchmarking Tool. Whole-building utility data for the property's energy and water use shall be compiled using one or more of the following methods:

- (a) Obtaining Aggregated, Whole-Building Data from a utility company;
- (b) Collecting data from all tenants for nonresidential properties; or
- (c) Reading a master meter.

If the owner of a Covered Property does not otherwise have access to whole-building energy and water data, such property owner shall request Aggregated, Whole-Building Data from each utility that provides energy or water service to the property and that has made aggregated utility data available to owners before the reporting date of that calendar year. When a Utility does not provide whole-building energy or water data, the owner of a Covered nonresidential property shall request energy and water data from tenants or occupants.

Each non-residential tenant located in a Covered Property shall, within thirty (30) 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.

When the owner of a Covered Property receives notice that a nonresidential tenant intends to vacate a space within such property and the Utilities do not provide Aggregated, Whole-Building Data, the owner shall request information relating to such tenant's energy and water use for any period of occupancy relevant to the owner's obligation to Benchmark.

When a Covered Property changes ownership, the previous owner shall provide the new owner with all information needed to Benchmark for the period during which the previous owner was in possession of the property.

Sec. XX-XX. Duty to Report Benchmarking.

For every Covered Property subject to this Chapter, the owner shall annually submit to the Director an energy and water Benchmarking report in an electronic format as established by the Director by the date specified in Sec. XX-XX of the City Code.

The information included in the annual Energy and Water Benchmarking Report shall include, at a minimum, the Shared Benchmarking Information for the previous calendar year.

The owner of each Covered Property shall enter data into the Benchmarking Tool such that that the energy and water Benchmarking report shall be based on an assessment in the Benchmarking Tool of the aggregated total energy and water consumed by the whole property for the entire calendar year being reported.

Before submitting a Benchmarking Submission, the owner shall run all automated data quality checker functions available within the Benchmarking Tool and shall verify that all data has been accurately entered into the Benchmarking Tool. In order for the Benchmarking report to be considered in compliance with this Ordinance, the owner shall correct all missing or incorrect

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information as identified by the Benchmarking Tool prior to submitting the Benchmarking report to the Director.

Where the current owner learns that any information reported as part of the Benchmarking Submission is inaccurate or incomplete, the owner shall amend the information so reported within the Benchmarking Tool and shall provide the Director with an updated Benchmarking Submission within thirty (30) days of learning of the inaccuracy.

Sec. XX-XX. Benchmarking Requirements.

- (a) The owner of a Covered Property shall ensure that for each such property, a Benchmarking report is generated, completed, and submitted to the Director annually.
- (b) The Benchmarking reports for each Covered Property shall be due by the dates as defined in the following table. Subsequent Benchmarking reports for each Covered Property shall be due by [TBD] of each year thereafter.

Size (Gross Floor Area)	Initial Compliance Required by:
Buildings 100,000 square feet or larger	TBD
Buildings between 50,000 and 99,999 square feet	TBD
Buildings between 20,000 and 49,999 square feet	TBD

Sec. XX-XX. Benchmarking Exemptions.

- (a) Benchmarking is not required for a Covered Public Property for the current reporting year if the owner submits documentation with the Director establishing that the property has met one of the following conditions:
 - 1. The property does not have a Certificate of Occupancy or Temporary Certificate of Occupancy for all 12 months of the calendar year being Benchmarked;
 - 2. A demolition permit for the entire building was issued for the calendar year being Benchmarked, provided that demolition work has commenced and legal occupancy was no longer possible prior to end of that year;
 - 3. The property did not receive energy or water services for the entire calendar year to be Benchmarked; or
 - 4. The Covered Property had average physical occupancy of less than fifty percent (50%) throughout the calendar year for which Benchmarking is required.
- (b) Benchmarking is not required for a Covered Private Property for the current reporting year if an owner submits documentation with the Director, in such form and with such evidence as required by the Director, establishing that the property has met one of the following conditions:
 - 1. It meets any of the exemptions defined for a Covered Public Property;
 - 2. The Director determines that due to special circumstances unique to the applicant's facility and not based on a condition caused by actions of the

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applicant, strict compliance with provisions of this Ordinance would cause undue hardship or would not be in the public's interest;

3. The owner notifies the Director that the property is under Financial Hardship and provides proof of the same; or

Commented [AB3]: Should this be kept?

4. The Covered Property may be exempted from electricity Benchmarking if more than fifty percent (50%) of Gross Floor Area is used for residential purposes and:

Commented [BJ4R4]: Let's keep

i. The property is not master metered or the owner does not have access to master meters or other means to obtain whole-building electricity data; and

ii. The serving electric utility provides written notice that it does not provide data aggregation services or access to whole-building utility data or that such data is not available for the requested building. Once such services are available from the Utility as determined by the Director, such properties will no longer be exempt from Benchmarking requirements and shall file initial Benchmarking reports in the first required reporting year following such data availability.

Commented [BJ5]: For review with Amy

(c) Any entity or owner requesting an exemption from Benchmarking shall submit an Annual Benchmarking Exemption Request form to the Director by [TBD] in the year for which the exemption is being requested. Any exemption granted will be limited to the Benchmarking Submission for which the request was made and does not extend to past or future submittals.

(d) For each reporting year in which an owner files a request for an exemption, the Director shall determine whether that exemption is approved. Appeal of a determination that a property is not exempt shall be made within XX (XX) days of such determination to a review committee comprised of XX. The review committee, acting by majority vote, shall either affirm the Director's denial or reverse his/her denial and grant the requested exemption.

Sec. XX-XX. Sharing of Data.

- (a) The Director shall make available on a publicly accessible website the Shared Benchmarking Information as defined in Sec. XX-XX for the previous Calendar Year for each Covered Property.
- (b) The Shared Benchmarking Information for each Covered Property shall be made available to the public beginning one (1) year after each such property is first required to submit a Benchmarking report.
- (c) The Director will determine if any Benchmarking shared summary data shall be excluded from publishing because it is not in the public interest.
- (d) The City may provide non-anonymized data from Benchmarking submissions to any Utility serving a Covered Property or to any federal, State, County, or City-managed Energy efficiency program, provided that the data will be used only for purposes of targeting incentives provided through energy and water efficiency programs and

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provided that the City has first obtained the Covered Property owner's written or electronic permission to share the data with the Utility or energy efficiency program. Where the property owner's permission can be granted electronically through acceptance of a default option, the City shall provide a clearly delineated option for owners of Covered Properties to choose to opt out of granting this permission.

- (e) The City may disclose any data from Benchmarking Submissions to a third party for academic or other non-commercial research purposes provided that such data is anonymized.
- (f) All third parties receiving data from Benchmarking submissions shall sign a non-disclosure agreement with the City stipulating terms for acceptable use of the data, including assurances that such data shall not be disclosed to other entities, before receiving such data.

Sec. XX-XX. Annual Report and Analysis.

- (a) The Director shall make available on a publicly accessible website and update annually the following information:
 - 1. No later than [TBD], a report on the Benchmarking of all available Covered Properties, including an assessment of accuracy and issues affecting accuracy, summary energy and water consumption statistics, trends observed, and an assessment of changes across the portfolio over time; and
 - 2. No later than [TBD], a report on the Benchmarking of all available Covered Properties, including an assessment of compliance rates, an assessment of accuracy and issues affecting accuracy, summary energy and water consumption statistics, trends observed, and an assessment of changes across the portfolio over time.
- (b) Nothing in this Ordinance shall prevent the Director from including all such information in a combined annual energy and water efficiency report covering the progress of all the City's energy and water efficiency ordinances and programs.

Sec. XX-XX. Enforcement.

- (a) It shall be unlawful for any entity or person to fail to comply with the requirements of this Ordinance or misrepresent any material fact in a document required to be prepared or shared by this Ordinance.
- (b) If the Director determines that a property owner has failed to report Benchmarking information as required under this Ordinance or the owner has submitted incomplete or false Benchmarking information, the Director may refer the owner for enforcement as set forth in Chapter X, Article X of the City Code, titled "XX," and may be brought for further proceedings before the Code Enforcement Board. A property owner in violation of this Article may be fined \$XX.00 per day for a first-time offense or \$XX.00 per day for a repeat violation of this Article. The City may also avail itself of any other legal remedy available and the use of one enforcement option shall not preclude the use of another.

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DRAFT

MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Commissioner Laura Dominguez
DATE: February 21, 2024

SUBJECT: REFERRAL TO THE LAND USE AND SUSTAINABILITY COMMITTEE TO
CONSIDER ADOPTING A BUILDING ENERGY BENCHMARKING
ORDINANCE FOR GREENHOUSE GAS EMISSIONS.

ANALYSIS

Please place on the February 21, 2024 agenda a referral to the Land Use and Sustainability Committee to consider adopting a Building Energy Benchmarking Ordinance for greenhouse gas emissions.

At its January 25, 2024 meeting, the City's advisory Sustainability Committee adopted a unanimous motion, urging the City to adopt an ordinance that would mandate the benchmarking of energy consumption and greenhouse gas emissions for existing buildings above a certain size threshold within the City. This benchmarking process would involve collecting and analyzing data on energy usage and emissions, providing valuable insights into the performance of buildings and identifying opportunities for improvement. The collected data would provide the groundwork for the implementation of enforcement mechanisms in the future, such as mandatory energy efficiency upgrades or emissions reduction targets.

Buildings are a significant source of greenhouse gas emissions and energy consumption, making them a crucial focal point for sustainability initiatives. By adopting a Building Energy Benchmarking Ordinance, the City has an opportunity to demonstrate leadership in sustainability and take meaningful steps towards reducing our carbon footprint.

SUPPORTING SURVEY DATA

N/A

FINANCIAL INFORMATION

N/A

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?

Does this item utilize G.O. Bond Funds?

No

No

Legislative Tracking

Commissioner Laura Dominguez

ATTACHMENTS:

Description

- ▣ Sustainability Committee Motion

City of Miami Beach Sustainability Committee

Members

Isaiah Mosley • Michael DeFilippi • Johann Moore • Maria J Algarra • Sophie Ringel • Katie Luddy

TO: Honorable Mayor Steven Meiner and Members of the City Commission
FROM: Isaiah Mosley, Sustainability Committee Chair
DATE: January 26, 2024
SUBJECT: Sustainability Committee Motions

Dear Honorable Mayor and City Commission,

The Sustainability Committee met on January 25, 2024 and passed the motions below:

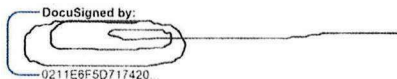
The Sustainability Committee recommends that the Mayor and City Commission request that the waste hauler contractor that is selected for the franchise agreement contract with the City doubles the funding that is currently provided for environmentally focused non-profit community organizations. In addition, the Sustainability Committee recommends that the City identify other funding opportunities through state or federal agencies to apply for grants for community organizations focused in sustainability and climate change work.

Motion passed: 5 - 0.

The Sustainability Committee urges the Mayor and City Commission to adopt an ordinance which would benchmark greenhouse gas emissions and energy consumption (with an eye to source carbon reduction) of existing buildings above a set threshold across the city to collect data, in advance of implementing an enforcement mechanism that requires the reduction of energy consumption.

Motion passed by acclamation.

Sincerely,

DocuSigned by:

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Isaiah Mosley
Chair, Sustainability Committee