

City of San Diego Benchmarking Ordinance





#### City of San Diego Benchmarking Team



**Jonathan Klopp** 

Building Decarbonization Program Coordinator



**Shadi Mosavar** 

Senior Management Analyst



#### Today's Presenter

Robert Carr, LEED AP O+M, LFA, MA SDGBC Education and Project Manager



#### SAN DIEGO GREEN BUILDING COUNCIL



#### MISSION VISION

Inspire, educate and collaborate within our community to transform our built environment toward true sustainability

Our buildings and communities will regenerate and sustain the health and vitality of all life within a generation.



#### Sustainability

# Agenda

- What is Benchmarking and why is it important?
- The City of San Diego's Benchmarking Ordinance
- How to benchmark your building
- Benchmarking resources





## **Upcoming Trainings**

#### **In-Person Training**

- May 2nd at 10:00am 12:00pm
- San Diego Central Library
- Bring your laptop and receive assistance completing the benchmarking process.
- Register <u>here</u>.

#### Webinar #2

- May 13th at 11:00am 12:30pm
- Online
- Overview of benchmarking process, BEAM, Q&A, etc.
- Register <u>here</u>.

Scan the QR code to register



## What is Benchmarking?

Benchmarking is the process of measuring a building's energy use to understand its performance and identify opportunities to reduce building owners' energy expenses.



# What is Benchmarking?

#### Measure Consumption

Energy



**ENERGY STAR® Portfolio Manager®** 



Over Time

Similar Buildings



#### Sustainability



# ENERGY STAR® Portfolio Manager®





#### Properties, Buildings and Meters in Portfolio Manager®





## The Business Case for Benchmarking



By simply measuring your building's consumption, you could reduce energy use an average of

2.4% per year

## Benefits for Building Owners

- Additional locally-focused resources to assist building owners in benchmarking
- Better information about building's operating costs when buying or leasing a property
- Access to actionable information related to energy efficiency retrofit decisions
- Opportunity for building owners to distinguish themselves in the marketplace as energy efficient

# **Economic Impacts of Benchmarking**

An MIT Energy Initiative survey of hundreds of facility managers found:

70% used Portfolio Manager to inform energy efficiency upgrade plans

67% used Portfolio Manager to help justify the cost of an energy efficiency project

# Examples of Energy Efficiency Projects



LED lighting and Controls retrofits



Electrification of HVAC and domestic hot water heating



Building envelope improvements and new glazing

# Building Energy Benchmarking Ordinance Overview



#### Requirements



Applies to buildings 50,000 sq. ft. or greater (with 17+ residential accounts) with some exemptions



Track and report energy use data to the City using ENERGY STAR® Portfolio Manager® annually by June 1.

## Purpose of the Ordinance

- Supports CAP Strategies to reduce residential, commercial, and municipal building energy use
- Aligns with California State Law AB 802 which requires benchmarking for commercial, mixed use and multifamily buildings 50,000 sq. ft. or greater
- Provides the city with the ability to direct funds towards locallybased resources
- Allows the City to build and foster relationships with its building owner and business community



#### **Ordinance Goals**

- Compliance with CAP/State Mandates
- Identify buildings with low energy performance
- Increase energy efficiency of SD building stock
- Identify buildings in Communities of Concern that could be eligible for supporting energy efficiency funding

### Ordinance Exemptions

- Automatic
  - Buildings with more than half their gross floor area used as dedicated lab space or for industrial or manufacturing purposes.
  - Buildings owned by certain governmental agencies
  - Condominiums
- Must File an Exemption
  - Trade Secrets
  - Unable to access whole-building energy data
  - Building been unoccupied for more than half a year or is about to be demolished

#### Timeline for Benchmarking Program

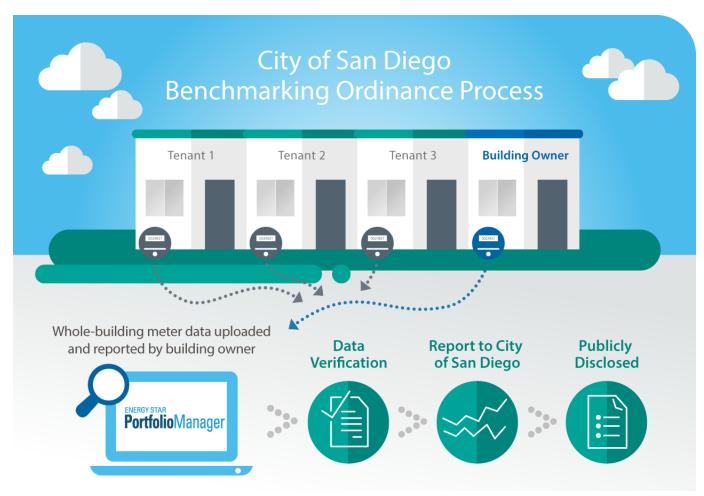
May 1, 2024: Exemption Request Deadline

June 1, 2024: Deadline for all reported data to the City

September 1, 2024: Building owners receive energy scorecards



#### Compliance Process





# Data Collected Descriptive Information

- Property address
- County
- Year built
- Primary use type
- Gross floor area
- Latitude and longitude
- Property or building name, if any
- Property floor area (building and parking)
- Open "comments" field for the building Owner or Owner's Agent to provide additional information about the building

- ENERGY STAR Portfolio Manager Property ID
- Percentage of space occupied (Occupancy)
- Number of occupants
- Number of buildings (if served by one common Energy meter without submetering)



#### Data Collected

#### **Output Information**

- ENERGY STAR score, for eligible buildings
- Monthly and/or annual site Energy use by Energy type
- Monthly and/or annual weathernormalized site and/or source energy use intensity
- Monthly and/or annual peak electricity demand

- Total annual greenhouse gas emissions
- Monthly and/or annual Site energy use intensity
- Compliance or noncompliance with this ordinance.

# Getting to Know Portfolio Manager®



#### Sustainability





Assess whole building energy consumption. Optionally include water and waste.



Track changes in energy, greenhouse gas emissions, and cost over time



Track green power purchase



Create custom reports



Share and report data with others



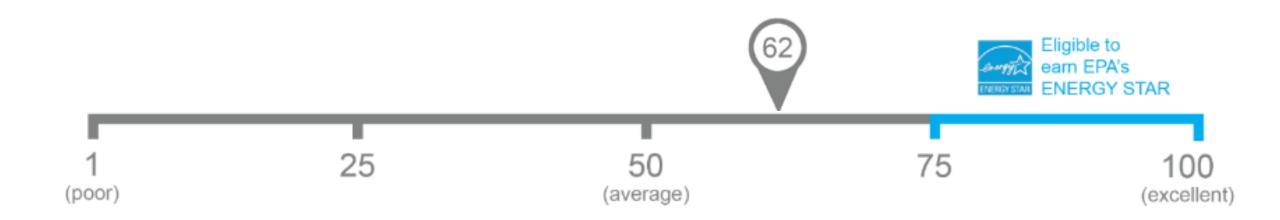
Apply for ENERGY STAR certification



# Benchmarking is the process of comparing use to gain valuable perspective about building performance

Use Portfolio Manager to:	Energy	Water	Waste & Materials
Establish a baseline:	✓	✓	✓
• Compare current use to baseline over time.	✓	✓	✓
<ul> <li>Compare median of national sample of similar buildings to baseline.</li> </ul>	✓		
<ul> <li>Compare normalized national sample of similar buildings to baseline.</li> </ul>	✓ (ENERGY STAR 1-100 Score)	✓ (Multifamily 1-100 Score)	
Set target reduction goal.	✓		
Compare properties in portfolio to each other.	✓	✓	✓
Apply for recognition (eligible space types).	✓ (ENERGY STAR Certification)		IEDCV CTAD®
Portfolio Manager®			

#### The 1-100 ENERGY STAR Score



One simple number understood by ALL stakeholders.





#### Getting started in Portfolio Manager

- 1 Property information:
  - Primary function
  - Name, address, postal code
  - Year built
  - Gross floor area
- Property use details including
  - Operating hours
  - Number of computers
  - Number of workers, etc.

- At least 12 mos. of consumption data for resources you want to track:
  - Property-specific utility bills for all purchased and on-site generated energy

Use Portfolio Manager's <u>data collection worksheet</u> to gather data upfront for your property type/s

https://portfoliomanager.energystar.gov/pm/dataCollectionWorksheet





#### Four main steps to reporting your data

- 1. Learning to Navigate Energy Start Portfolio Manager(ESPM)
- 2. Adding your buildings in ESPM
- 3. Requesting energy data from SDG&E
- Connecting your ESPM account/buildings with the City of San Diego Sustainability Department



# Adding a Property in ENERGY STAR® Portfolio Manager®

#### How to Manually Add Your Data to ESPM



#### Four main steps to reporting your data

- 1. Learning to Navigate Energy Start Portfolio Manager(ESPM)
- 2. Adding your buildings in ESPM
- 3. Requesting energy data from SDG&E
- 4. Connecting your ESPM account/buildings with the City of San Diego Sustainability Department



### Requesting Data from SDG&E

- In 2018, SDG&E launched an integrated benchmarking data request portal
- This portal is used for requesting both non-aggregated data and AB 802 regulated aggregated data
- Streamlines the process for data requests and obtaining authorizations
- Learn more at <u>SDGE.com/benchmarking</u>

## How to request data from SDGE



#### Requesting Data from SDG&E

# Non-aggregated Data Request

Provides individual meter's monthly data

Requires account number, meter number, and last bill amount

Would need an LOA to access tenant meters' data

Requested through SDG&E's website

# Aggregated Data Request

Provides whole-building's monthly meter data (gas and electric)

Must meet account aggregation thresholds (3+ commercial only)

Data for ALL meters in a building—even tenants!

Requested through SDG&E's website

#### AB 802: Data Access

- Utilities must provide aggregated whole-building energy use data to building owners upon request starting Jan 1, 2017
- Building owner does NOT need permission from tenant when there are:
  - 3 or more accounts (all commercial)
  - 5 or more accounts (1+ residential accounts)
- For buildings with fewer tenants, utility may be asked to verify it has tenant permission to provide the building owner data

# Aggregated Data

- Can request whole-building energy consumption data from utility for prior year
- Commercial buildings need 3+ utility accounts to request data
- Multifamily buildings need 5+ utility accounts
- You can still request this data even if you aren't required to report under AB 802!



#### Four main steps to reporting your data

- 1. Learning to Navigate Energy Start Portfolio Manager(ESPM)
- 2. Adding your buildings in ESPM
- 3. Requesting energy data from SDG&E
- 4. Connecting your ESPM account/buildings with the City of San Diego Sustainability Department



## How to Add City As A "Contact"

Note: You must share your building data with the City of San Diego's Sustainability Department to complete the compliance process

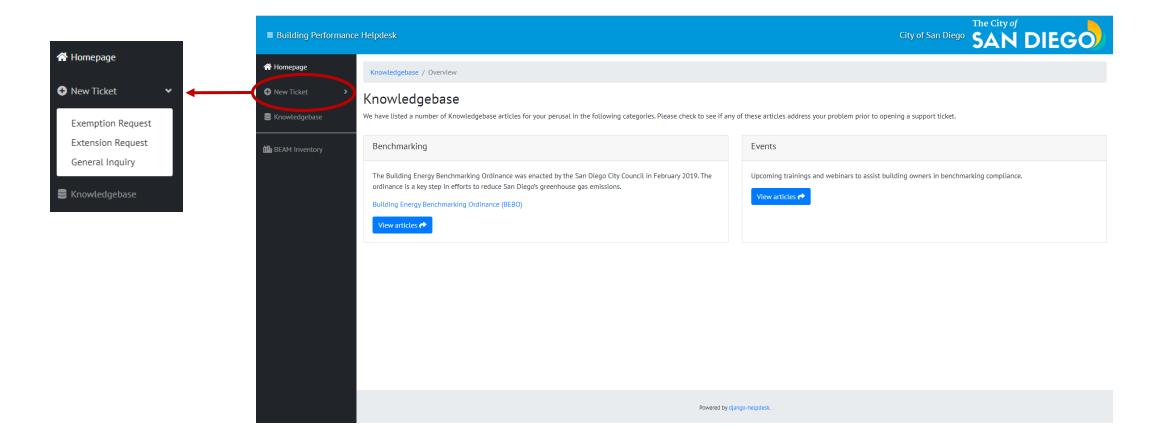
# New Benchmarking Platform: BEAM

#### What is BEAM?

- A platform the City will use to manage/analyze the data from all benchmarked buildings
- Help Desk with knowledge base of FAQs
- Ticket submittal system
  - Request Exemption or Extension
  - Ask a question

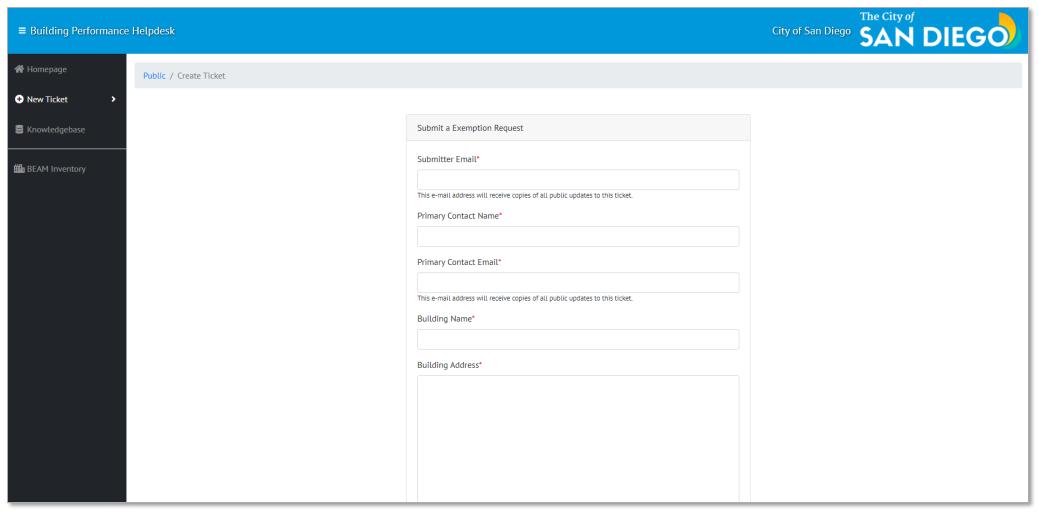


#### Submitting a Ticket





# Complete Form and Submit



## How do I set up my BEAM account?

- Not required, but recommended
- Use this link to create an account and login.

https://sandiego.beam-portal.org/helpdesk/

## Next Steps

Access resources, sign-up for notifications, and report your data all at <a href="mailto:SanDiego.gov/Benchmark">SanDiego.gov/Benchmark</a>

Questions or Comments? Contact <a href="mailto:Benchmarkingsupport@sandiego.gov">Benchmarkingsupport@sandiego.gov</a>



## **Upcoming Trainings**

#### **In-Person Training**

- May 2nd at 10:00am 12:00pm
- San Diego Central Library
- Bring your laptop and receive assistance completing the benchmarking process.
- Register <u>here</u>.

#### Webinar #2

- May 13th at 11:00am 12:30pm
- Online
- Overview of benchmarking process, BEAM, Q&A, etc.
- Register <u>here</u>.

Scan the QR code to register

#### Additional Resources

- Assembly Bill 802 Benchmarking
   Program
- <u>City of San Diego's Benchmarking</u>
   <u>Website</u>
  - Instructional Videos on how to submit your data

- Portfolio Manager Help
  - Learn about Portfolio Manager
  - Take or view a training
  - Search FAQs
  - Ask a question
  - Check the glossary

# Thank You!

**Questions?** 

Email us at

Benchmarkingsupport@sandiego.gov