





City of Brisbane Benchmarking Webinar

June 6, 2019

We will begin shortly!

Agenda

- Goals of the Benchmarking Primer
- Program Introduction
- Benchmarking 101
- Basics of ENERGY STAR Portfolio Manager
- CA Building Energy Benchmarking Program
 & Local Ordinances
- Next Steps
- Q&A



Goals of the Benchmarking Primer

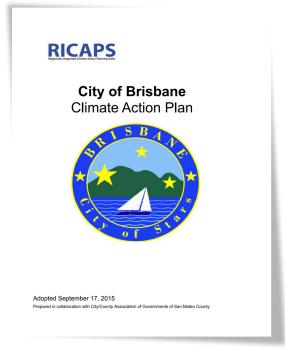
- 1. Develop foundational knowledge of benchmarking
- 2. Participation in Brisbane Building Efficiency Program
- 3. Attendance at Engagement Workshop #2: June 12, 6-7:30 p.m. at the DoubleTree, Brisbane





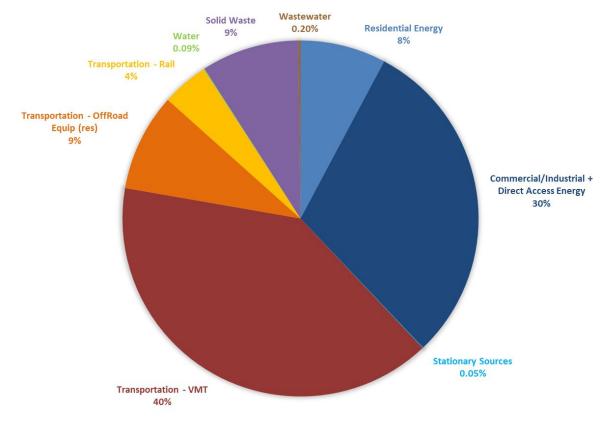


Project Introduction

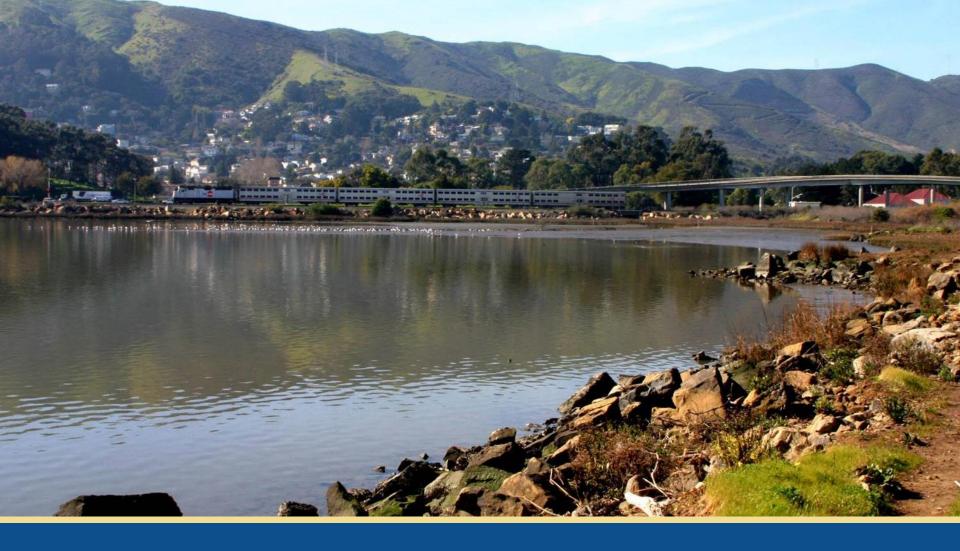




Brisbane 2015 Community GHG Inventory









Benchmarking 101

Benchmarking: Getting on the Scale

Benchmarking is the first step in understanding your building; it's setting a baseline.



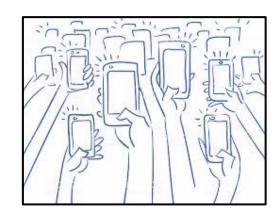


How to Think About Benchmarking

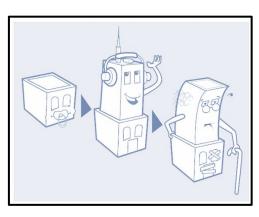
It's all about **Comparisons**



Self



Peers



Scenarios

These identify opportunities to save and help document those savings



Benchmarking...





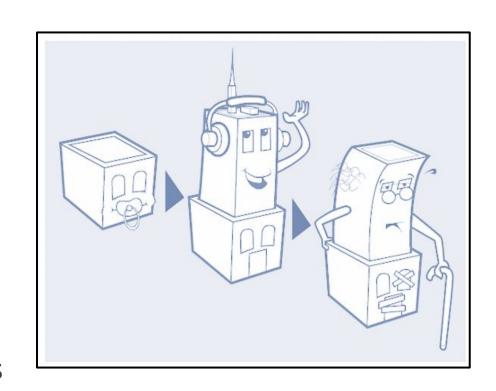
Getting To Know Buildings

Like people, buildings

- Get older
- Are diverse
- Need care

Therefore,

- Their parts break down
- They have unique needs
- They require upgrades

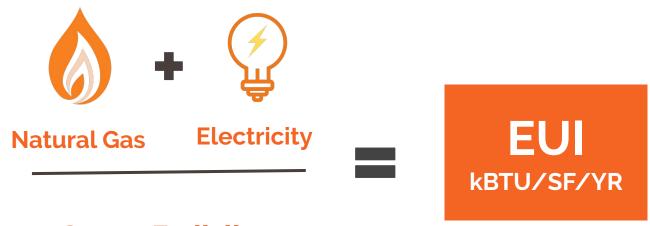




Benchmarking Metrics

It's all about energy and cost:

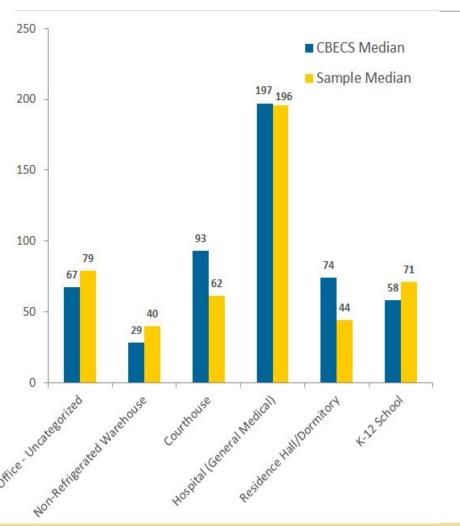
- Energy Use Intensity (EUI) = Energy/SF/Year
- Energy Cost Intensity (ECI) = Cost/SF/Year







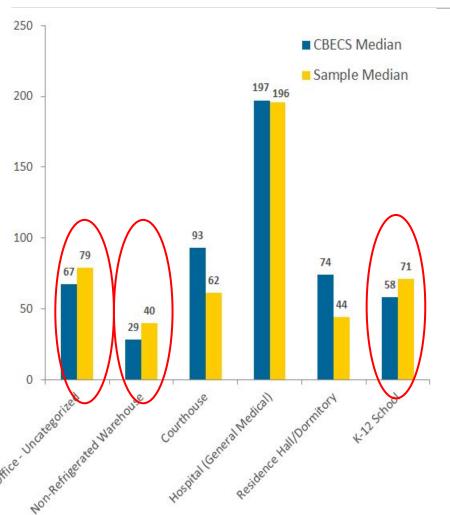
Drilling Down: Benchmarking Metrics



Energy Use Intensity (EUI)

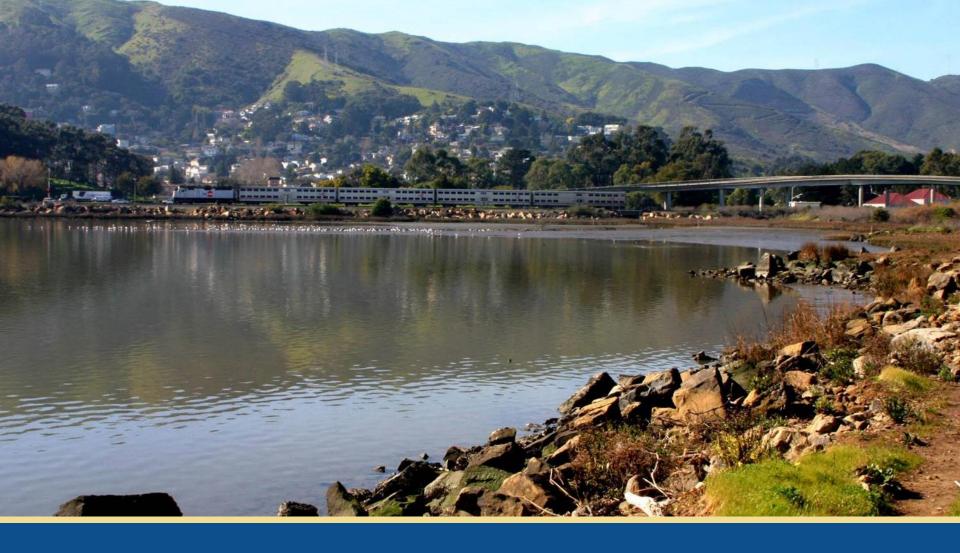
- Different by building type
- Different by building age
- Affected by other factors (ex: weather)
- e.g. Hospital in this portfolio has 2x EUI of office

Drilling Down: Benchmarking Metrics



Observations

- Blue = National average
- Yellow = Actual building
- Offices, warehouses and K-12 schools use more energy than national average
- The other buildings use the same or less than national average



Basics of ENERGY STAR Portfolio Manager



ENERGY STAR Portfolio Manager

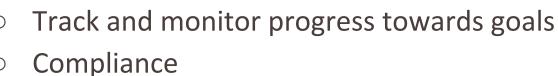
What is ENERGY STAR?

- Launched in 1999
- Joint Program between Department of Energy + Environmental Protection Agency
- No cost, interactive energy management tool

Why and how we use ENERGY STAR?

- Assess building performance
- Benchmarking properties







ENERGY STAR Portfolio Manager

Benchmarked in Portfolio Manager

- 21+ billion sf
- 185,000 buildings
- 25% of total building market







ENERGY STAR Portfolio Manager

Fuel Efficiency: MPG





Is 18 MPG high or low for an automobile?

Energy Efficiency: EUI





Is the EUI of 80 kBtu/SF/YR high or low for a building?



To get started in Portfolio Manager you will need

1. At a Minimum

Property information:

- Name, Address, Postal code
- Primary function
- Year built
- Gross floor area
- Occupancy %
- 12 months of energy consumption data (utility meters)

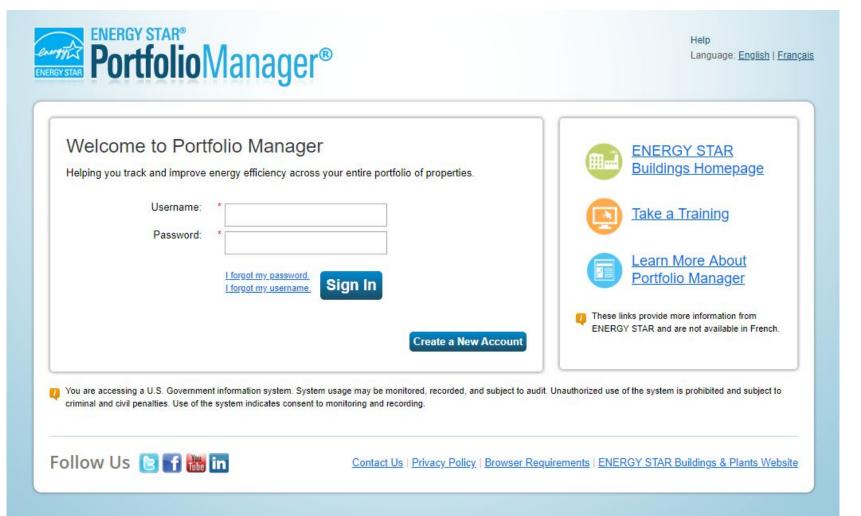
2. For Even Better Benchmarking

Property use details:

- Operating hours
- No. of computers
- No. of workers, etc.



Energystar.gov/portfoliomanager







CA Building Energy Benchmarking Program & Local Ordinances



CA Building Energy Benchmarking Program (AB 802)

- State of California passed Assembly Bill 802 (AB 802) in Oct. 2015
- **Scope:** Provides building owners access to their building energy use data from utilities to track consumption in their buildings
- Purpose: Help building owners, tenants, and others better understand the energy consumption of their buildings through standardized energy use metrics

Owners of certain buildings in California that have a gross floor area of **50,000**

square feet or greater are required to benchmark

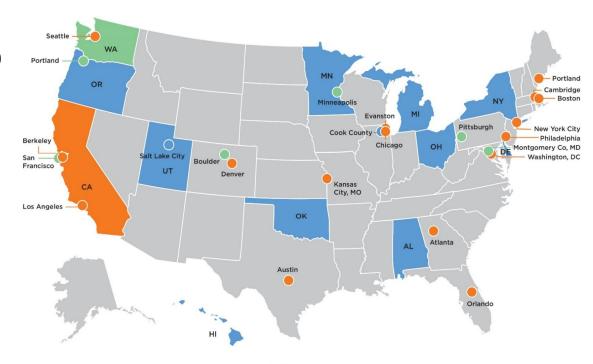
Visit energy.ca.gov/benchmarking to learn more





Neighboring California & U.S. Benchmarking Local Ordinances

- San Francisco
- Berkeley
- San Jose



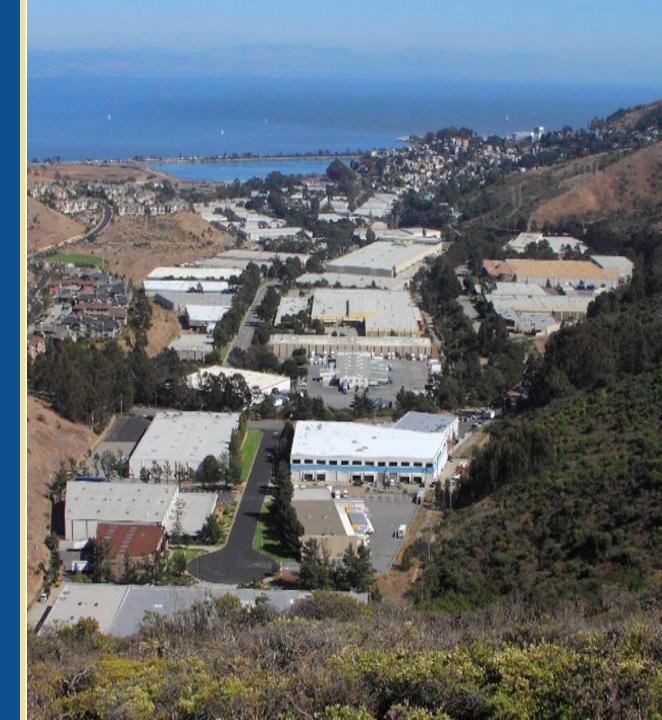




- Public, commercial, and multifamily building benchmarking policy adopted
- Public and commercial building benchmarking policy adopted
- Public buildings benchmarked



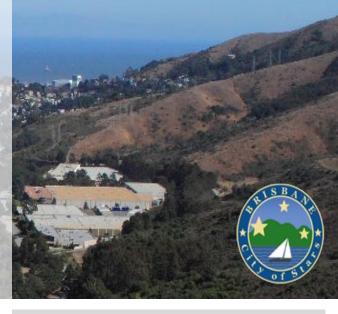
Questions?





Brisbane Building Efficiency Program

Learn about your City's new efficiency program and make your voice heard at upcoming events!



The City of Brisbane is developing a Building Efficiency Program which addresses energy and water use in existing commercial buildings and aims to help make them more efficient. This has the impact of saving owners money, improving the safety and comfort of our building stock, and reducing emissions that are driving climate change. A robust public engagement effort was launched to accompany the development of the Program, including stakeholder outreach at each milestone. An initial engagement workshop was held in April to collect feedback from key stakeholders.

Now building owners and community members are again invited to join in a second workshop to learn about updates and provide input that will shape the Program, and they will have an opportunity to participate in a Benchmarking Primer Webinar to learn more about the concepts introduced.

Learn more and register to attend upcoming events at **brisbaneca.org/building-efficiency-program**.

BENCHMARKING PRIMER WEBINAR

June 6, 10:00 am - 11:00 am

If you're new to benchmarking or just need a refresher, this webinar will set you up for a more technical conversation at the workshop.

STAKEHOLDER WORKSHOP #2

June 12, 6:00 pm - 7:30 pm DoubleTree by Hilton, 5000 Sierra Point Parkway, Brisbane

This workshop will focus on gathering input on benchmarking and auditing requirements from impacted parties; commercial building owners are highly encouraged to attend. Refreshments will be provided.

This work is supported by a Bay Area Air Quality Management District Climate Protection Grant and is anticipated to run through October when an ordinance will be presented to Council for consideration and adoption. To learn more, please visit brisbaneca.org/building-efficiency-program or contact Adrienne Etherton at aetherton@brisbaneca.org or 415-508-2118.

Thank you!

Contact:

Adrienne Etherton

aetherton@brisbaneca.org

415.508.2118

Visit: brisbaneca.org/building-efficiency-program

