AACOG
Alamo Area Council of Governments

North Central Texas Council of Governments

West Central Texas Council of Governments

ENERGY STAR Portfolio Manager Webinar

ENERGY STAR
LEARN MORE AT
energystar.gov

SECO
State Energy Conservation Office

Agenda

Welcome / Introduction – Joaquin Escalante, NCTCOG; Terra Moreno, WCTCOG;
Lyle Hufstetler, AACOG

Purpose of the Webinar and Zero Emissions Building Definition – Joaquin Escalante, NCTCOG

Overview of Portfolio Manager and Demonstration – Charlotte Aitken, EPA

Case Studies
- City of Dallas – Srinivas Vemuri
- City of San Antonio – Andra Nava-Garcia

Additional Resources – Joaquin Escalante, NCTCOG

ENERGY STAR and DOE's National Definition of a Zero Emissions Building

Department of Energy's – National Definition of a Zero Emissions Building

- Part one of criteria released
- At a minimum, a building that achieves zero operational emissions from energy use must be:
  - Energy efficient
  - Free of on-site emissions from energy use
  - Powered solely from clean energy

Supports DOE's Decarbonizing the U.S. Economy by 2050: National Blueprint for the Buildings Sector

- Strategy for reducing building emissions while delivering equity, affordability, and resilience to communities
- 65% by 2035
- 90% by 2050

ENERGY STAR and DOE's National Definition of a Zero Emissions Building

The National Definition of a Zero Emissions Building Part 1: Operational Emissions from Energy Use document provides implementation guidance for existing and new buildings achieve energy efficiency

Below are criteria examples from each building type

- Existing buildings example
  - The building obtains an ENERGY STAR score of 75 or higher
- New buildings example
  - Certified to the most recent effective version of the ENERGY STAR Residential New Construction program or Zero Energy Ready Homes program.

ENERGY STAR® Portfolio Manager® 101

Navigating Portfolio Manager, Adding a New Property and Entering Use Details, and Analyzing Progress

June 20, 2024

Learning Objectives

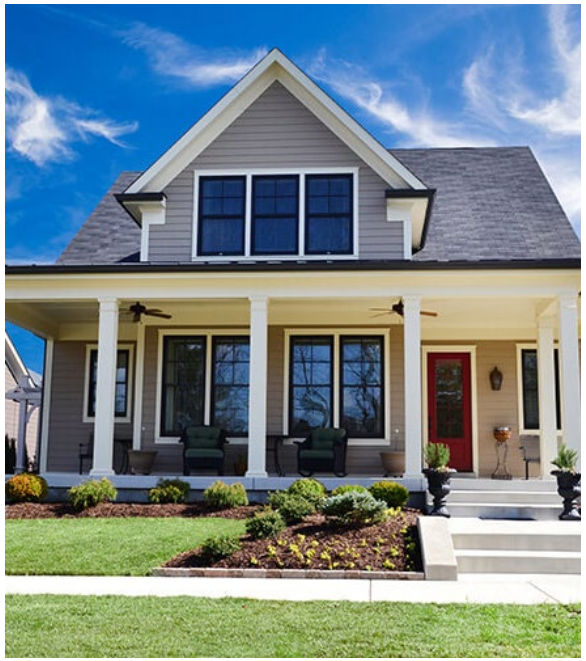
In this session, you will become familiar with EPA's ENERGY STAR® Portfolio Manager® tool and learn how to:

- Navigate Portfolio Manager
- Add a property and enter its use details
- Enter energy, water, and waste & materials data
- Analyze progress using performance documents, charts and graphs and reports

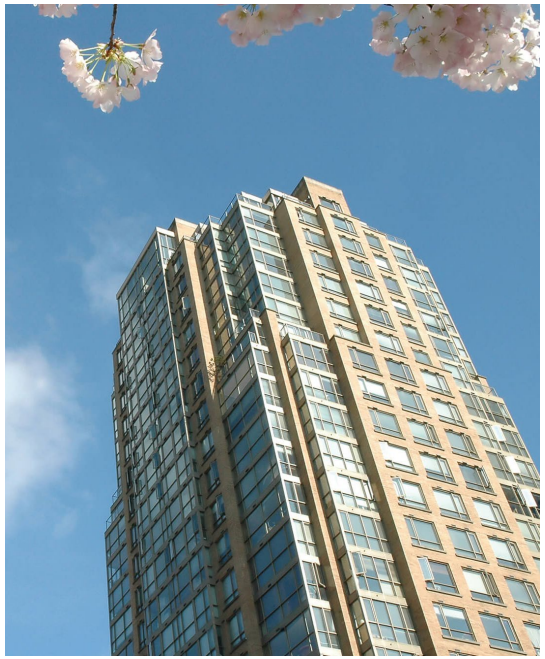
Note: ENERGY STAR also has short 5-minute videos on these introductory topics available for quick view at www.energystar.gov/buildings/training

The biggest little label in energy efficiency

7 billion products



2.7 million new homes



43,000 buildings

270 industrial plants

ENERGY STAR

- 300,000+ buildings last year
- Nearly 25% of all floorspace
- 1,000 properties added every day
- 3 languages – French, Spanish

- 380 third-party tools
- Dozens of state/local benchmarking policies
- One foreign government (Canada)

ENERGY STAR® Portfolio Manager®

Management Tool

Assess whole building energy and water consumption, plus waste

Track green power purchase

Share/report data with others

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

Create custom reports

Apply for ENERGY STAR certification

ENERGY STAR

ENERGY STAR® Portfolio Manager®

Hundreds of metrics, including:

Energy use Source, site, weather normalized, demand

Water use Water use intensity, Water Score (for Multifamily)

Waste & Materials Waste intensity, diversion rate

1-100 ENERGY STAR score

GHG emissions Indirect, direct, total, avoided

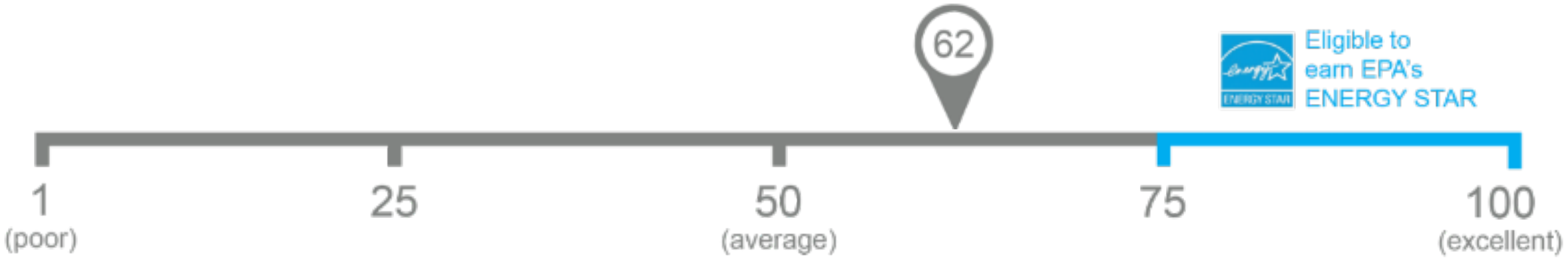
ENERGY STAR

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.	✓	✓	✓
• Compare median of national sample of similar buildings to baseline.	✓		
• Compare normalized national sample of similar buildings to baseline.	✓ (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)		

ENERGY STAR

The 1-100 ENERGY STAR Score



One simple number
understood by ALL stakeholders.

Property types with 1-100 ENERGY STAR scores

Bank Branch

Barracks*

Convenience Stores

Courthouses

Data Centers

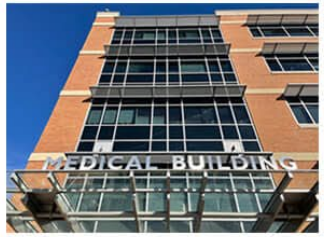
Distribution Centers

Financial Offices

Hospitals

Hotels

K-12 Schools



Medical Offices

Multifamily Housing

Office Buildings

Residence Hall/Dormitory*

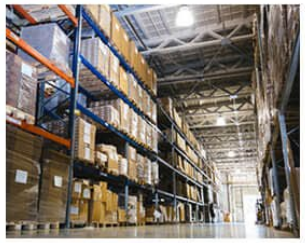
Retail Stores

Senior Living Communities

Single-Family Homes*

Supermarkets

Vehicle Dealerships


Warehouses

Wastewater Treatment Plants*

Wholesale club/ Supercenters

Worship Facilities

To get started in Portfolio Manager you will need:

1. Property information:
   - Primary function
   - Name, address, postal code
   - Year built
   - Gross floor area

2. Property use details, e.g.:
   - Operating hours
   - No. of computers
   - No. of workers, etc.

3. 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 and water
   - Quantity of waste and materials recycled, disposed, donated etc.

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

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

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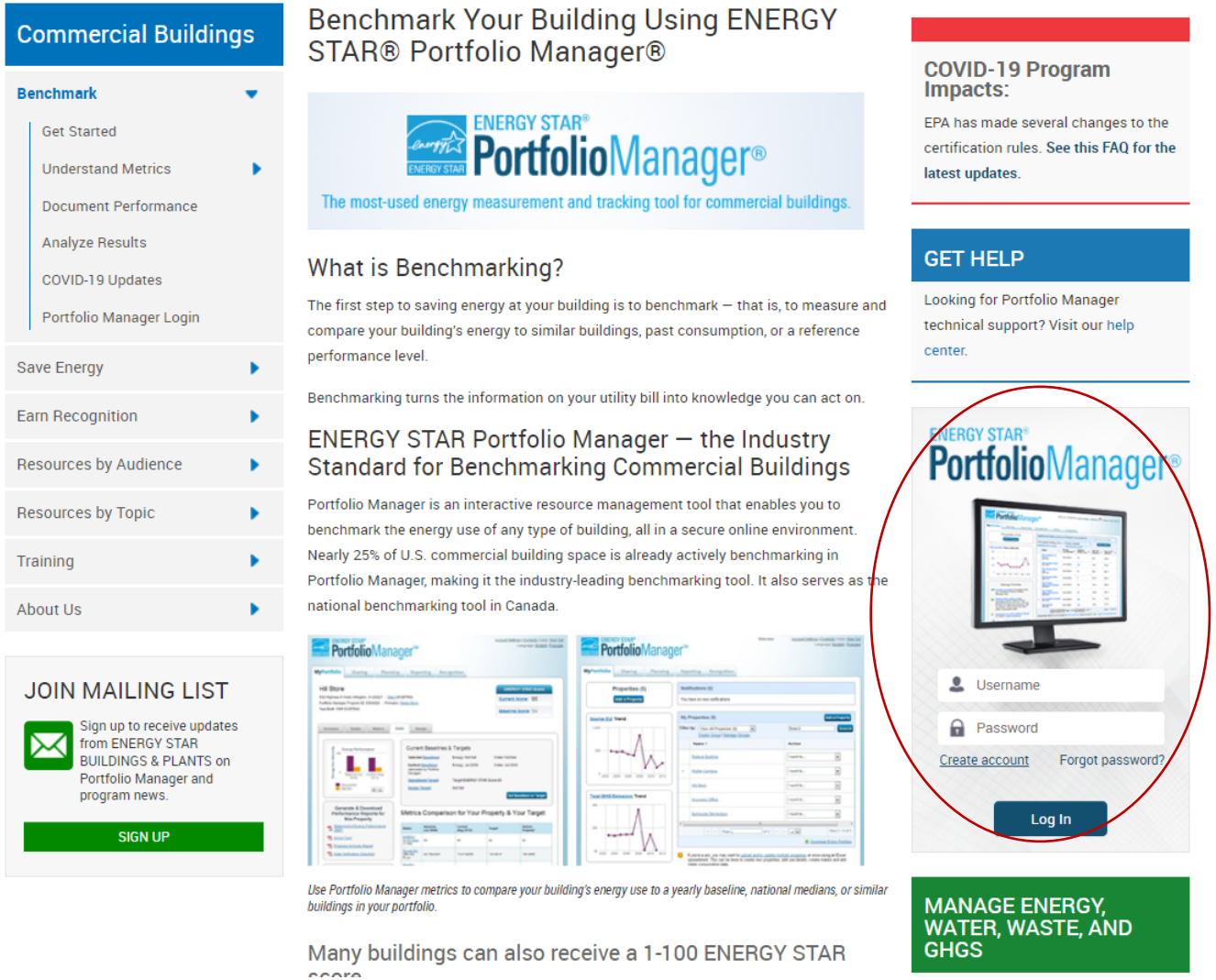
How To

- Navigate Portfolio Manager
- Add a property and enter its use details
- Enter energy, water, and waste & materials data
- Generate reports to assess progress



Energystar.gov/portfoliomanager

Create a username and password, then log in

ENERGY STAR

Navigate Portfolio Manager

4 portfolio level tabs

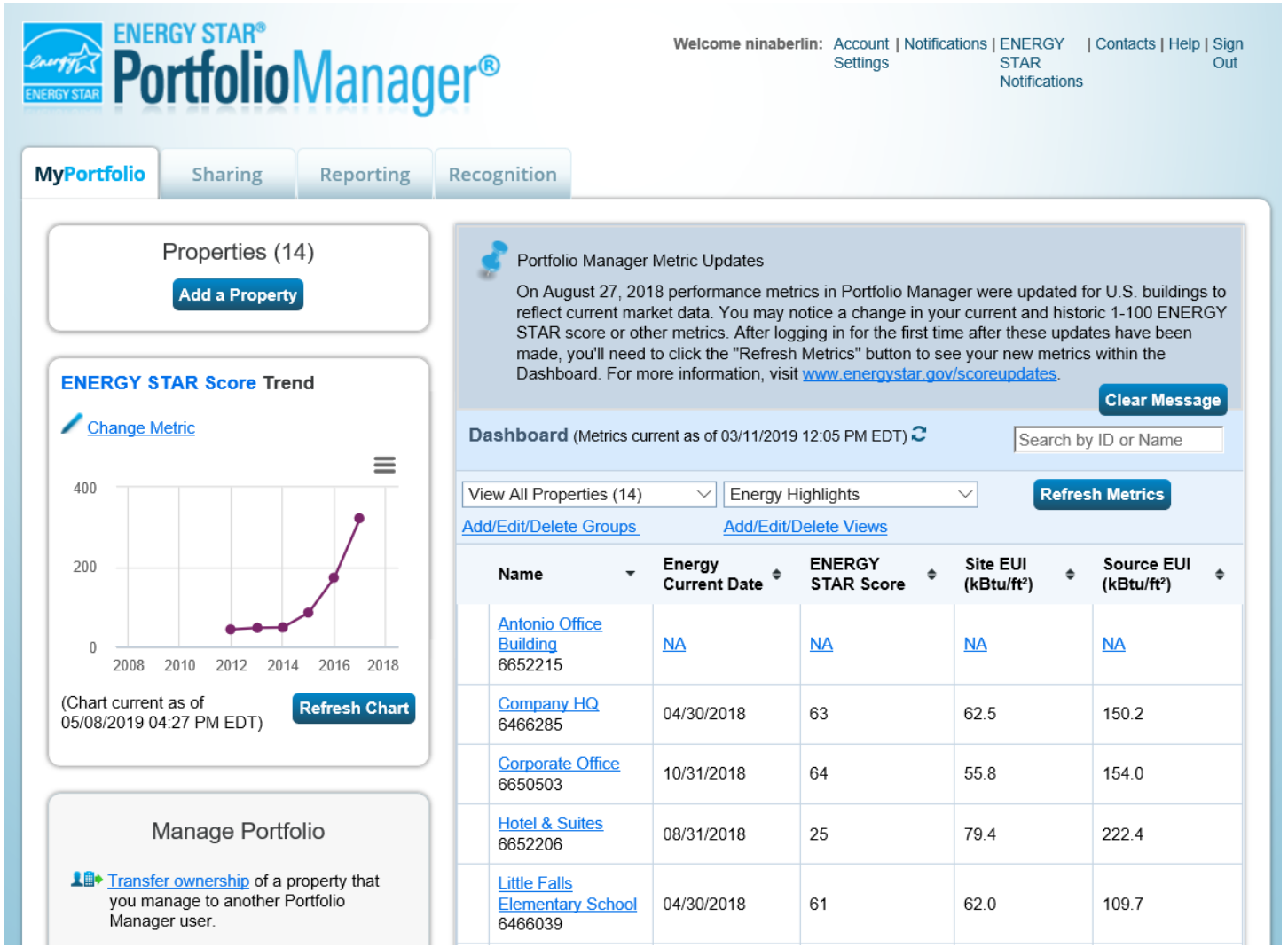
7 property level tabs

Intuitive navigation – multiple ways to get to the same place

ENERGY STAR

Navigate Portfolio Manager

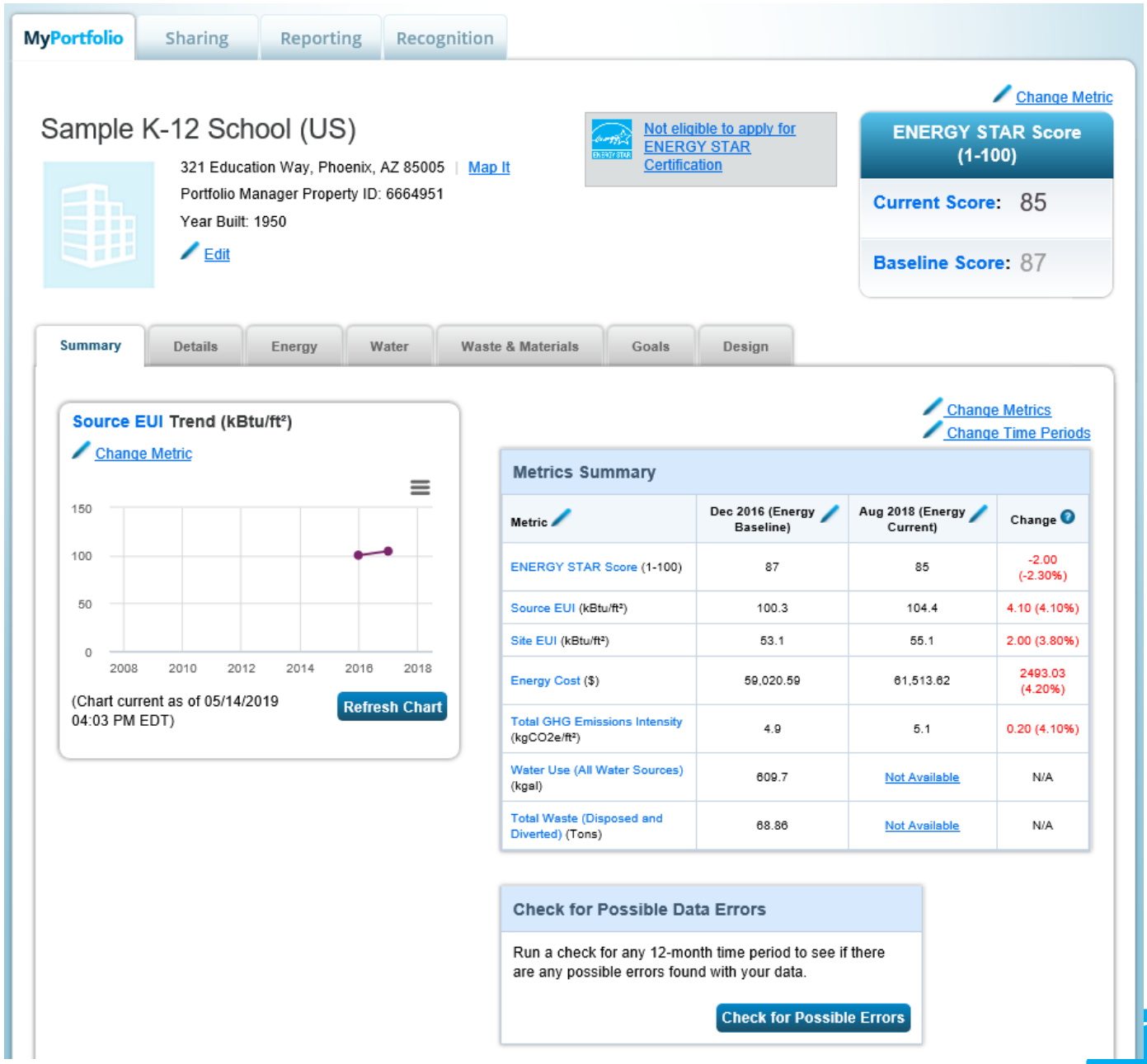
Portfolio level view



ENERGY STAR

Navigate Portfolio Manager

Property level view



How To

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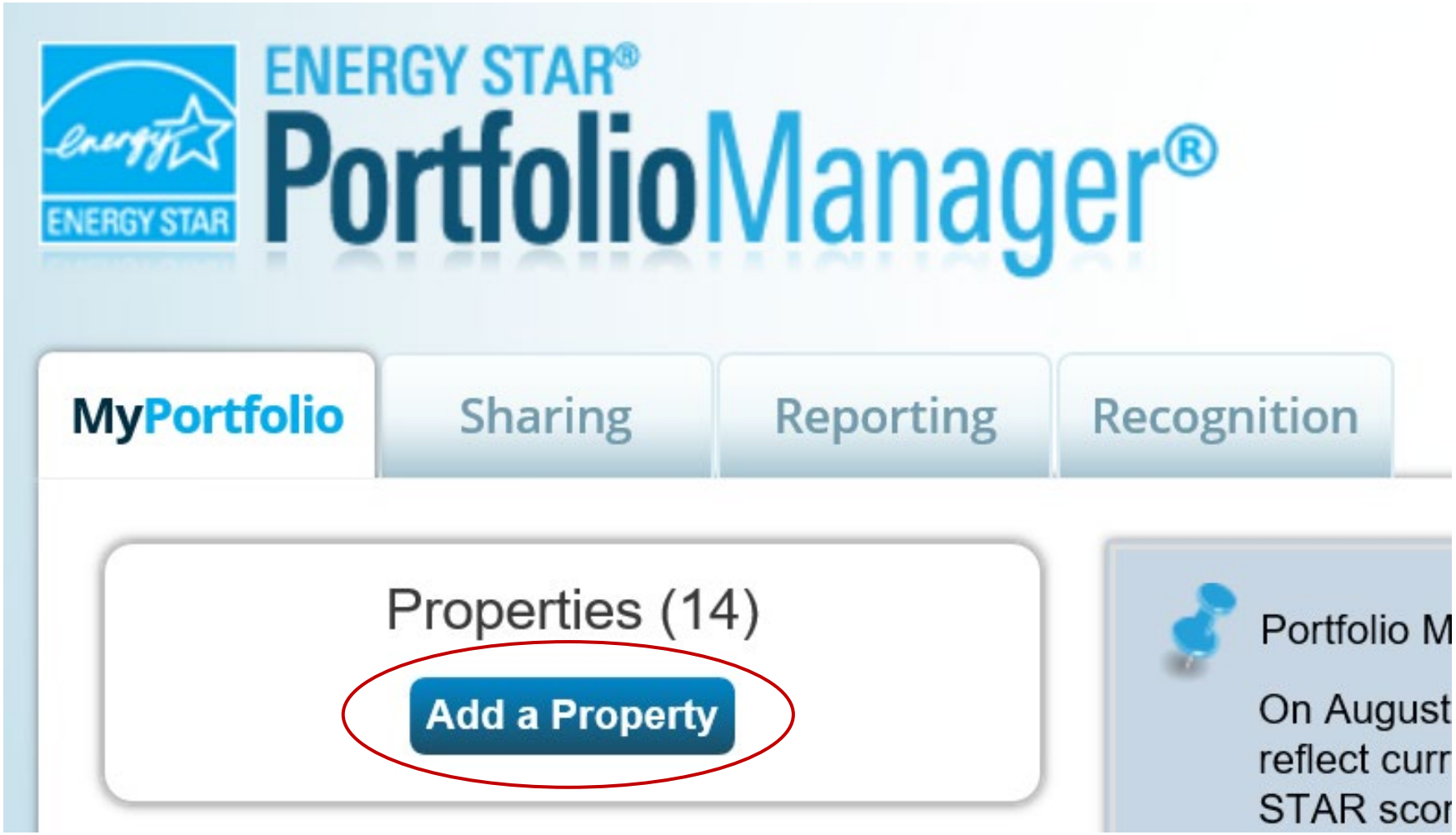
Add a Property

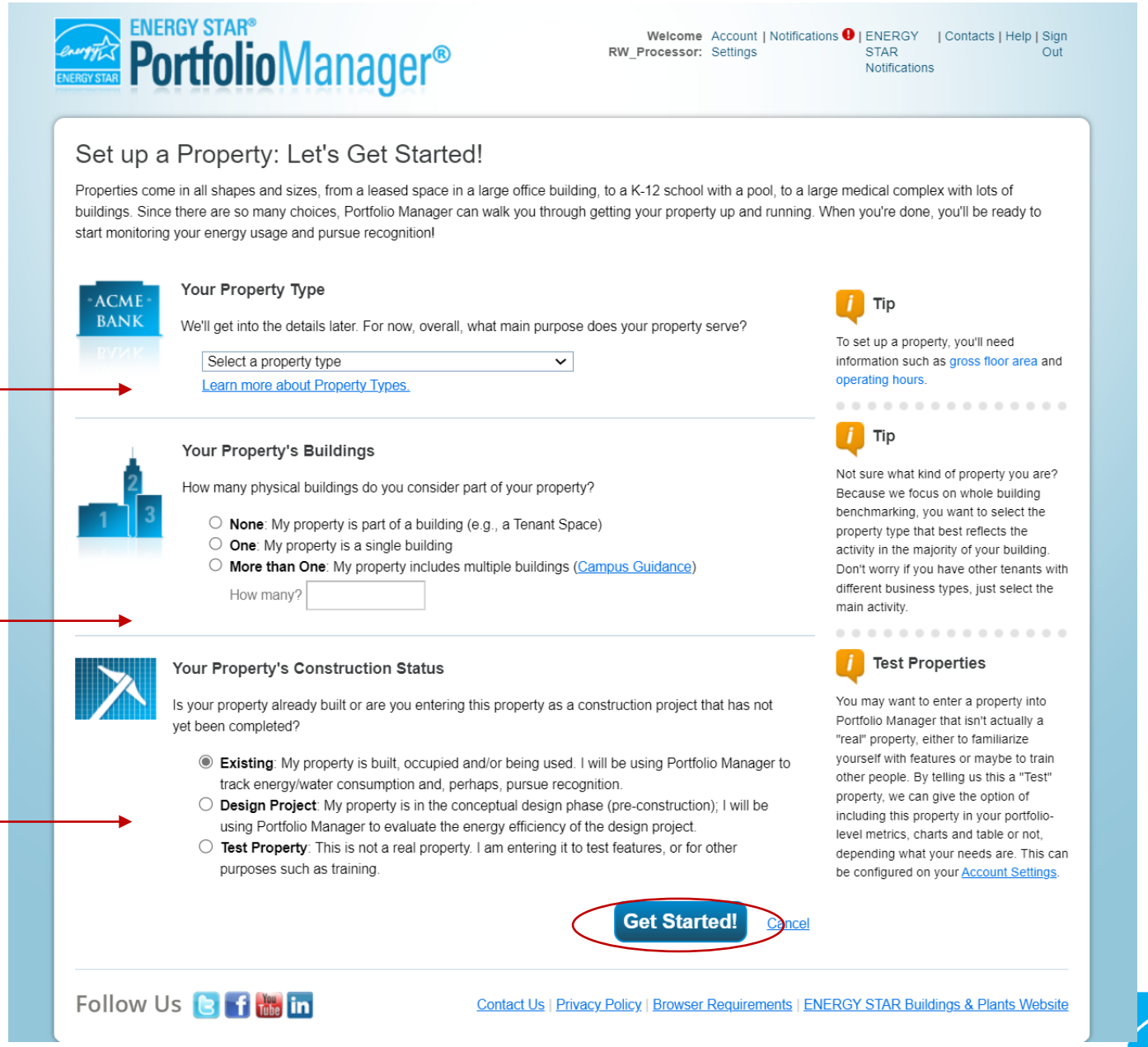


Add a Property: Existing

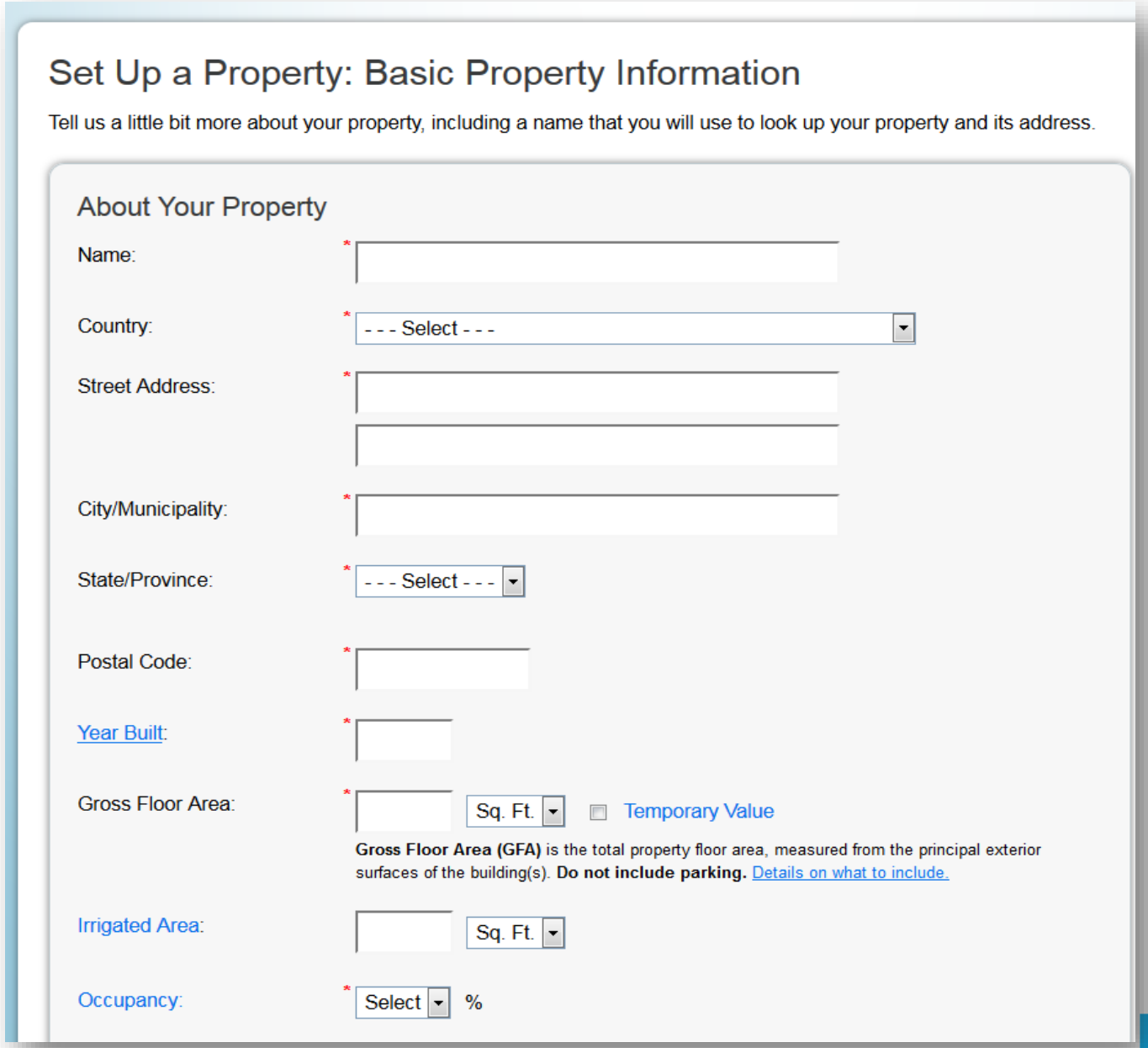
Select property type

Select number of buildings

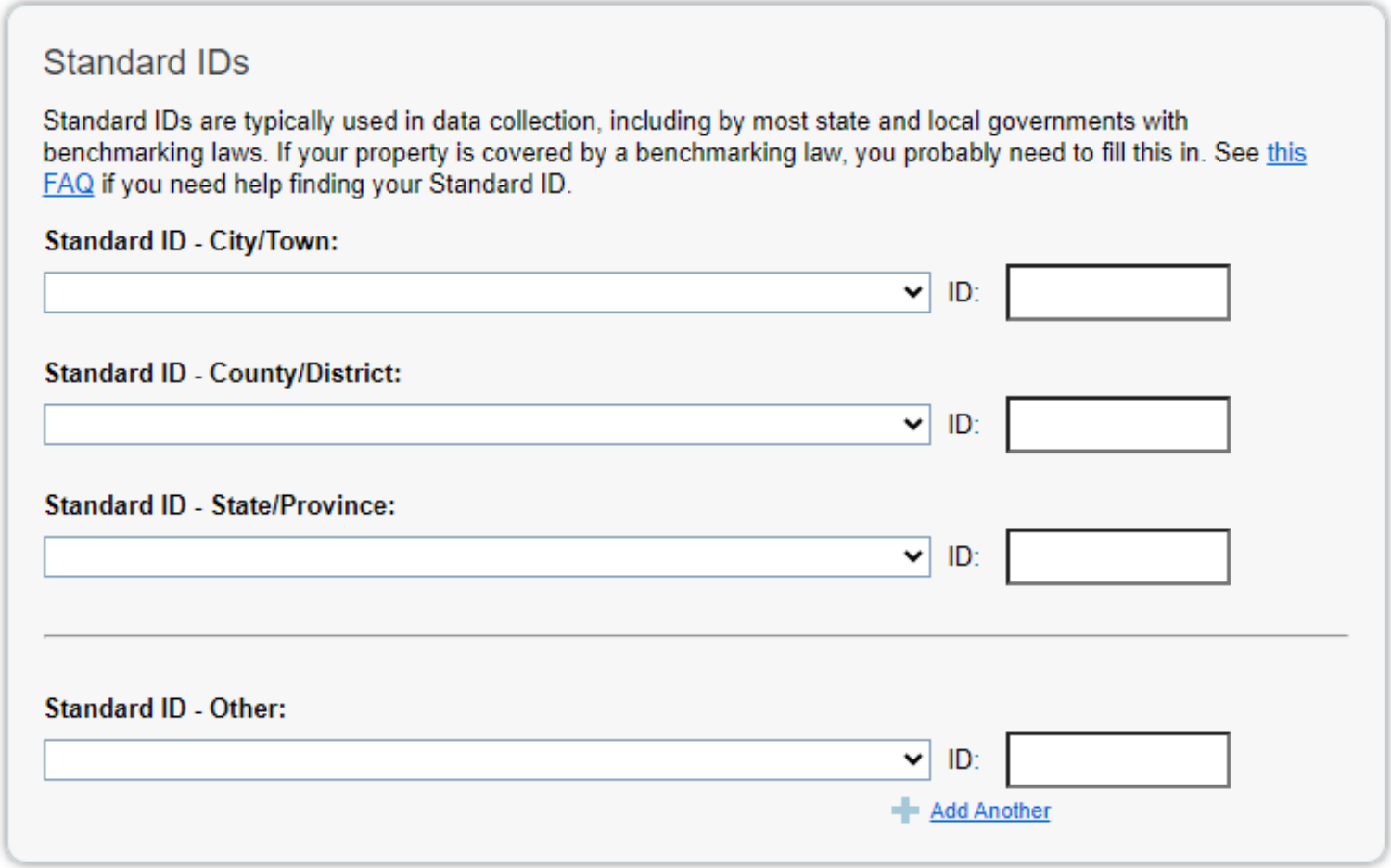
Select construction status



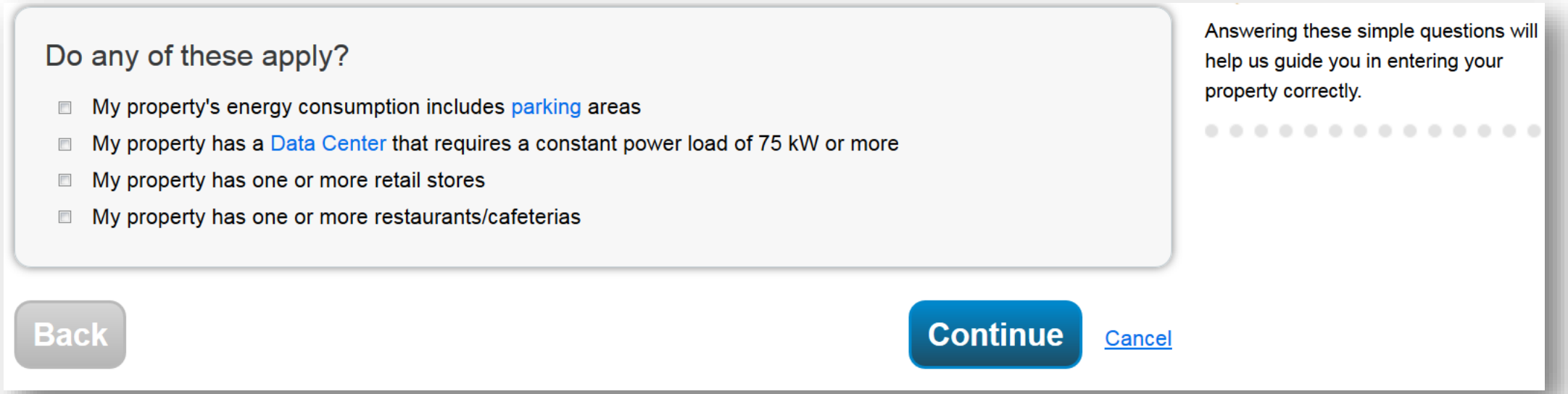
Entering Basic Property Information



Entering Basic Property Information

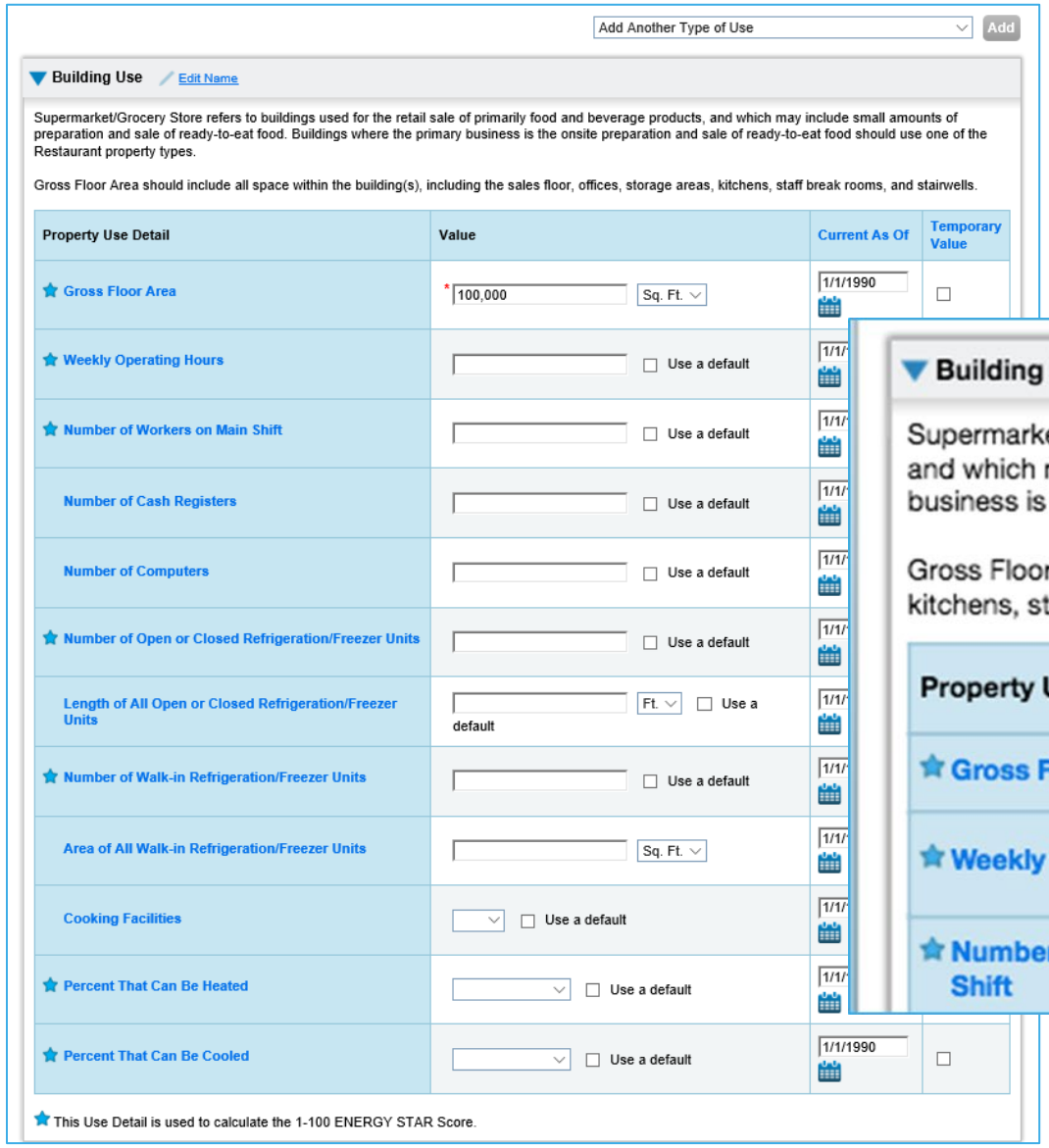


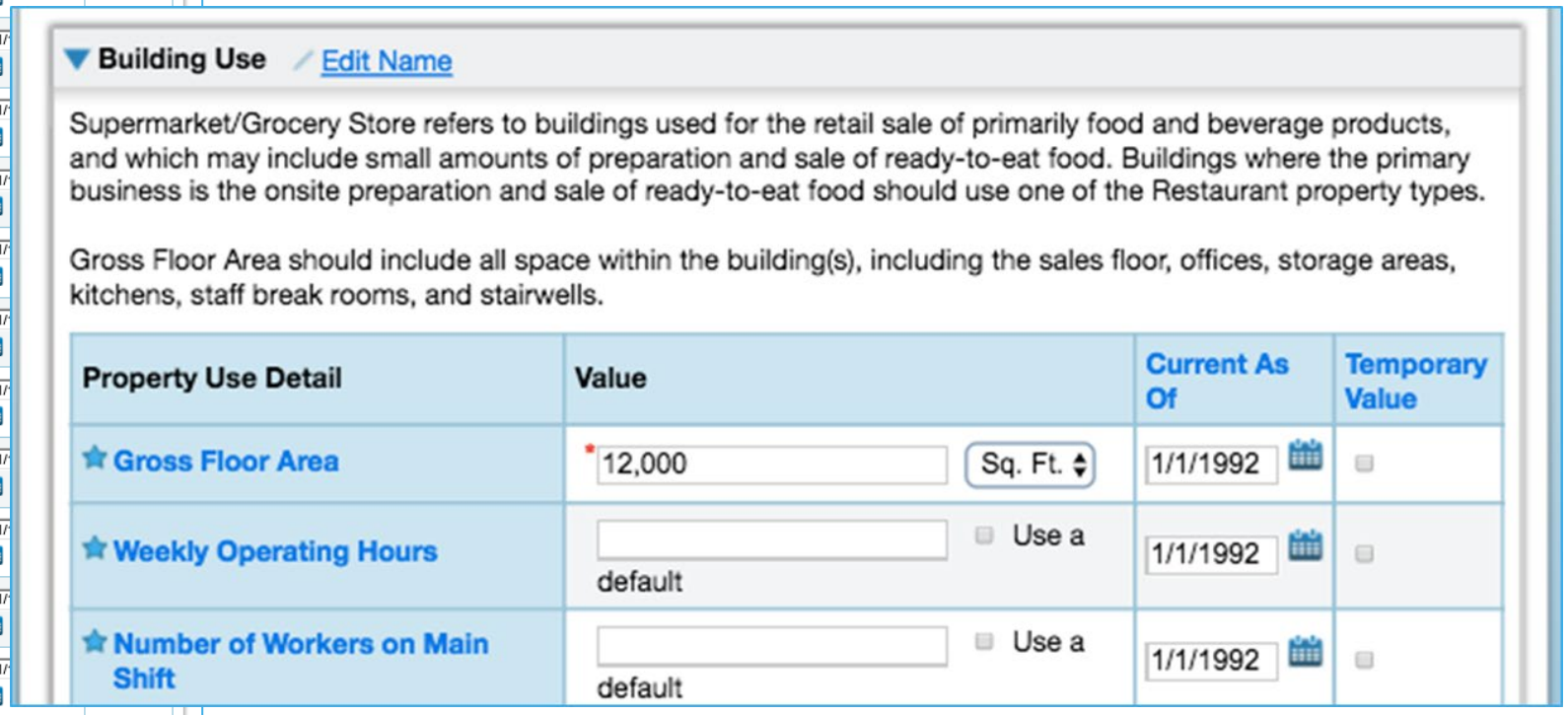
Check the statements that apply



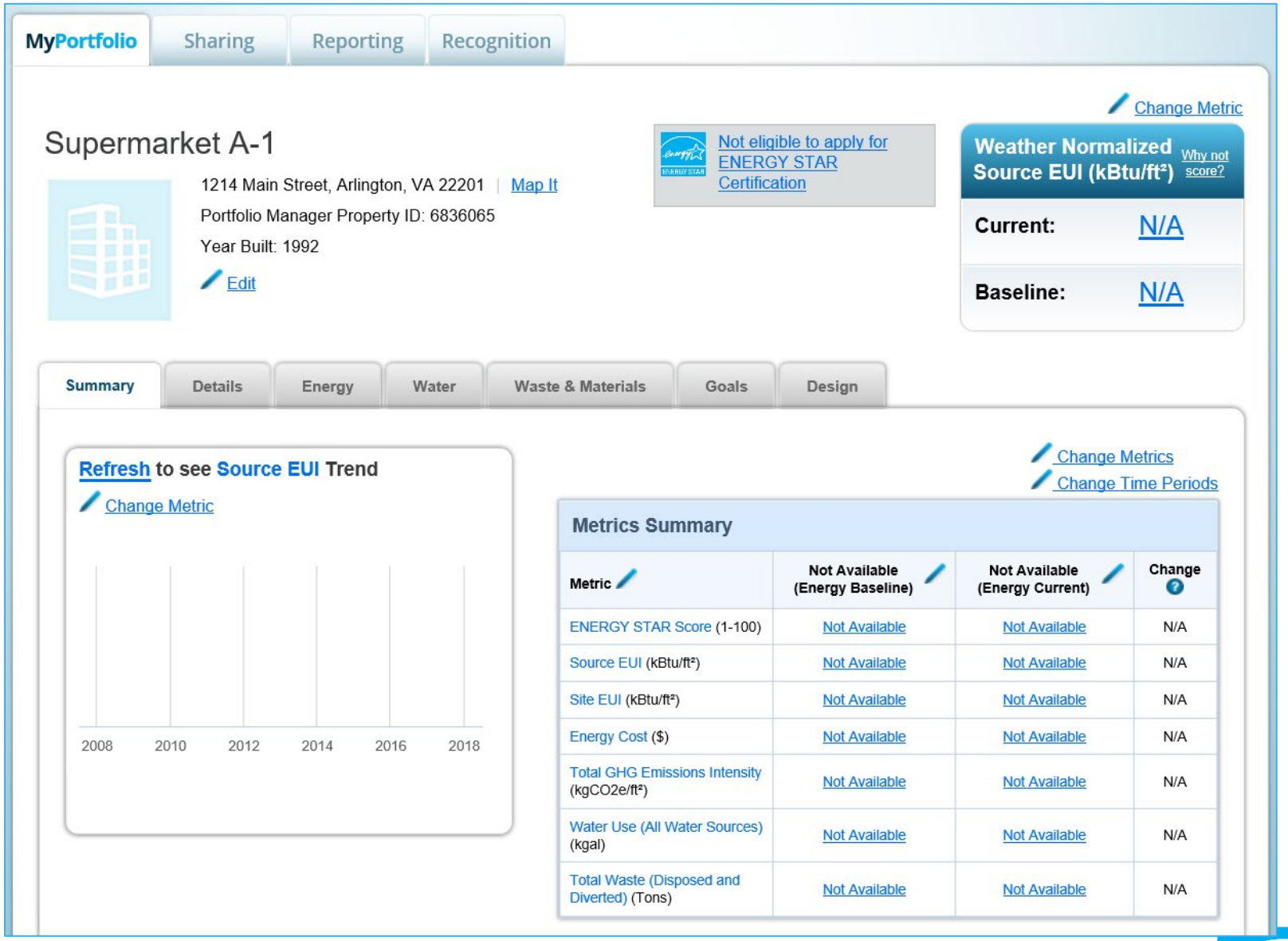
These use details will change depending on the property type you specify.

Enter Values for Property Use Details





Property Summary Tab



How To

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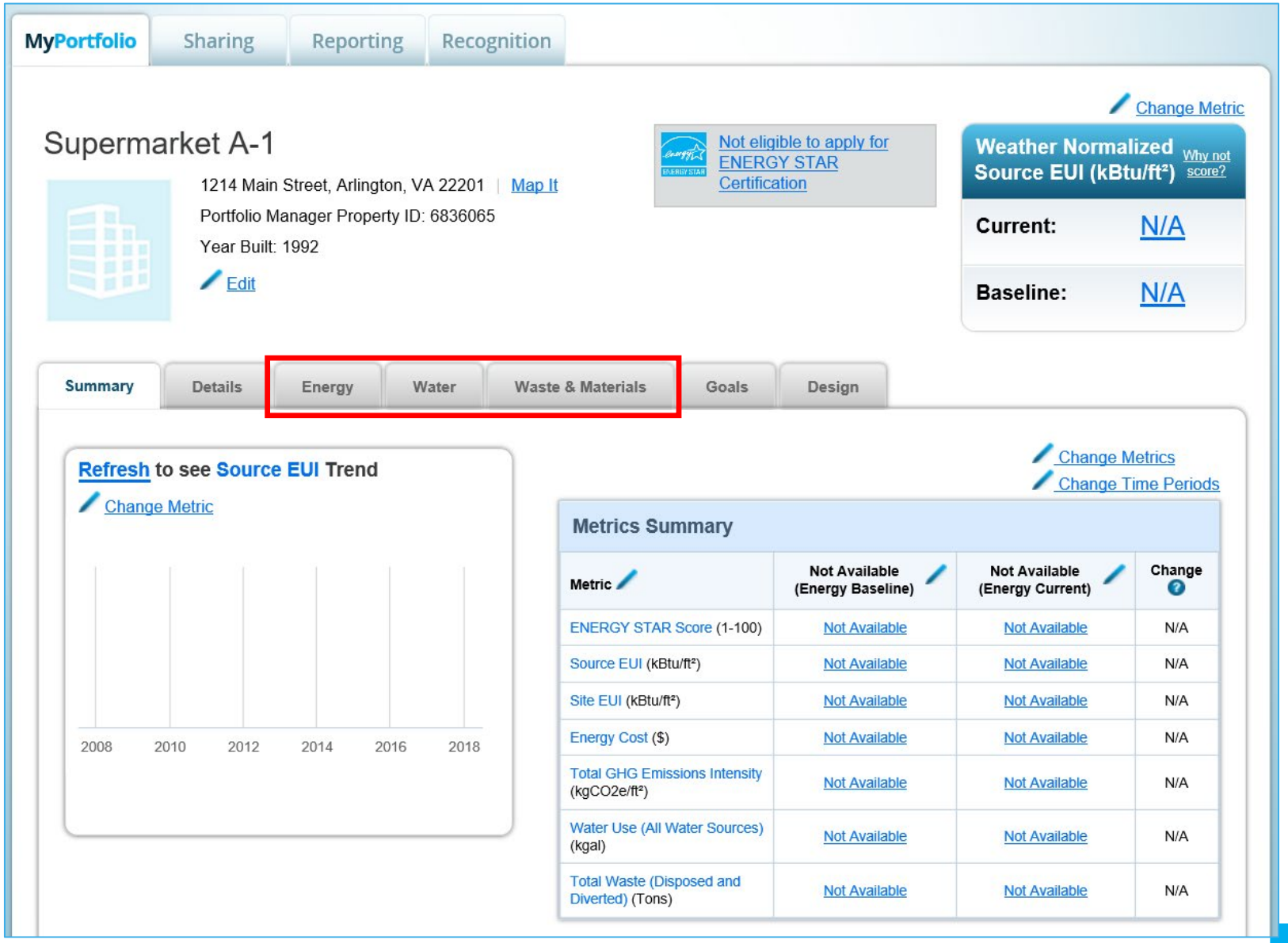
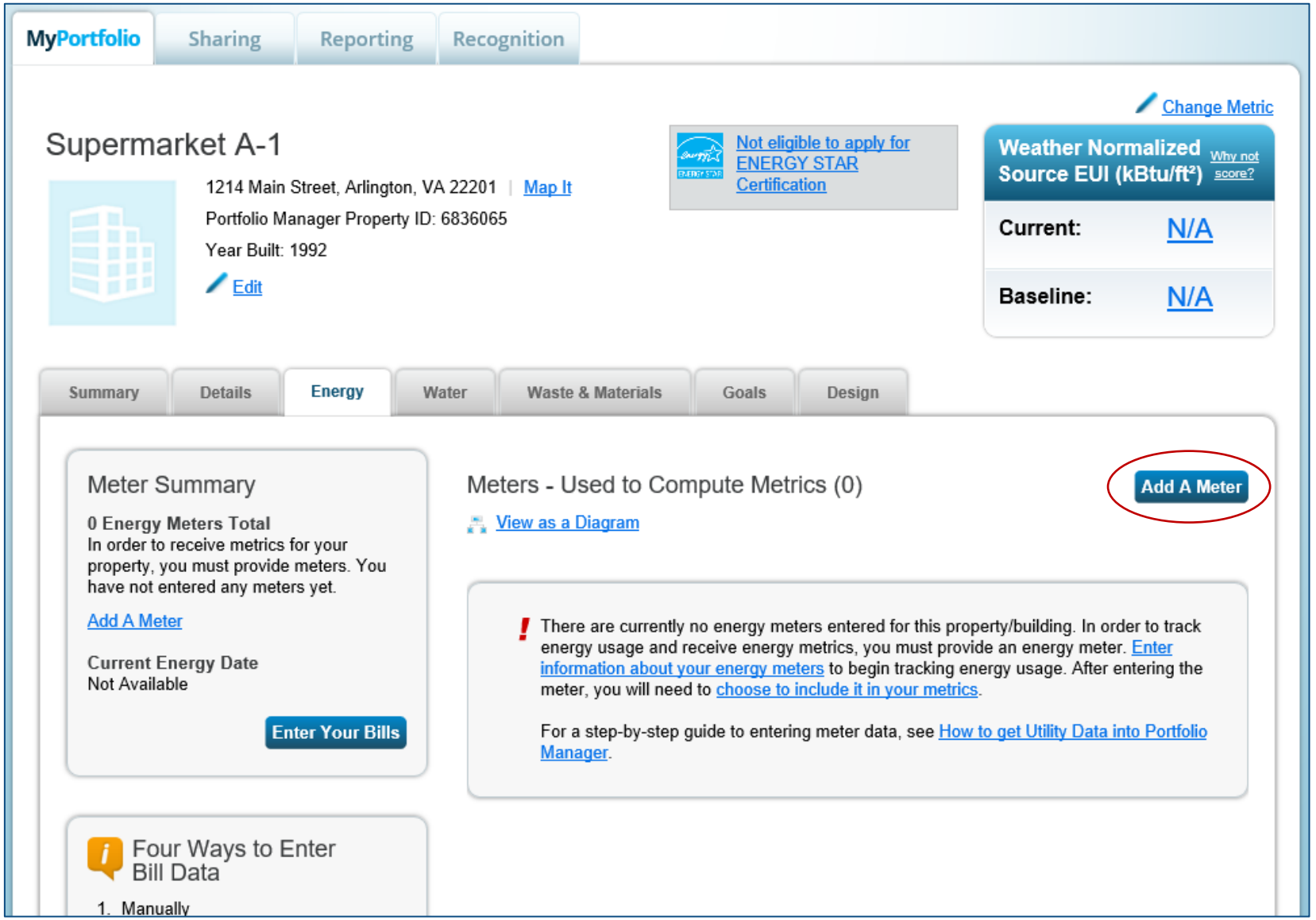
Meters Tabs

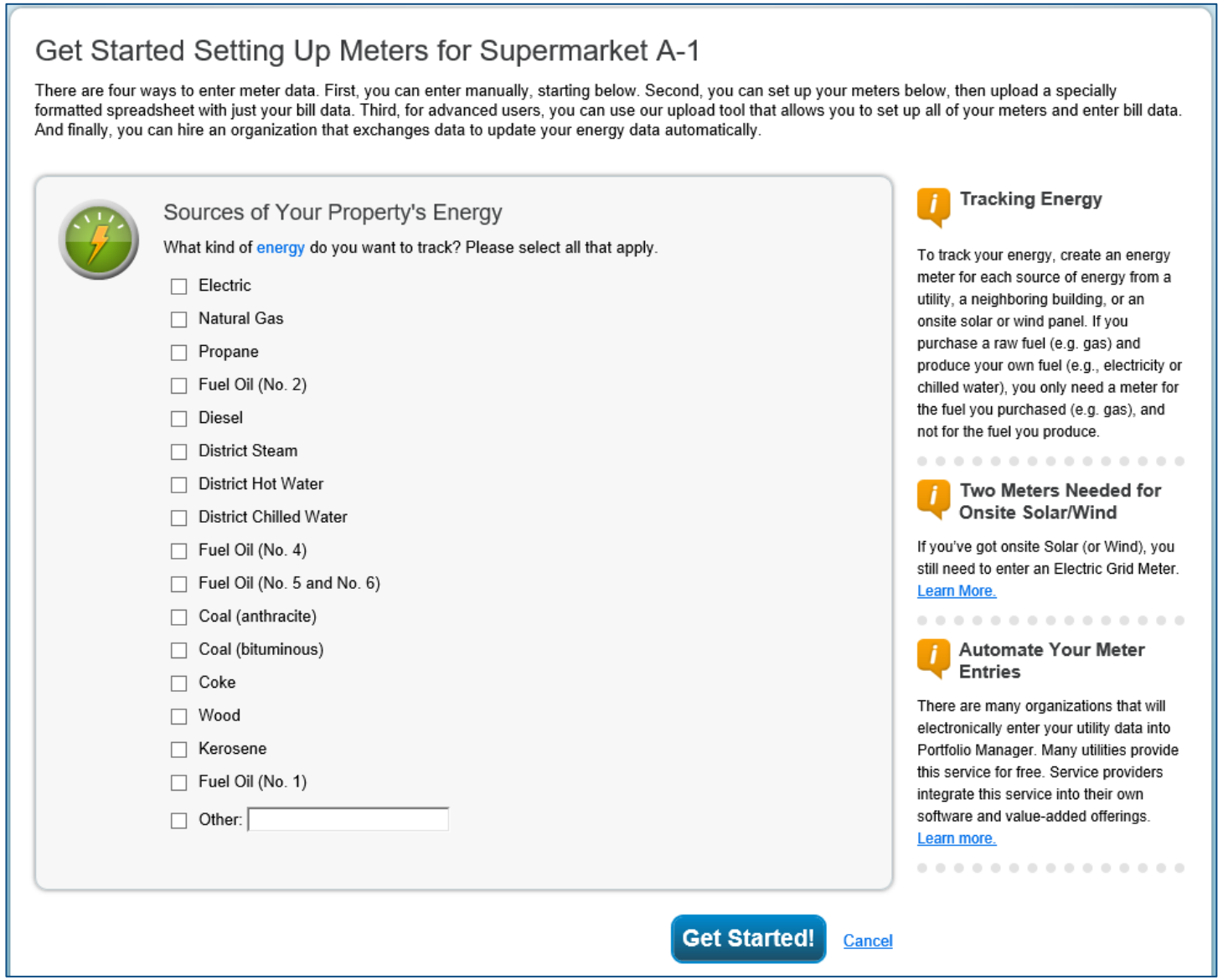


ENERGY STAR

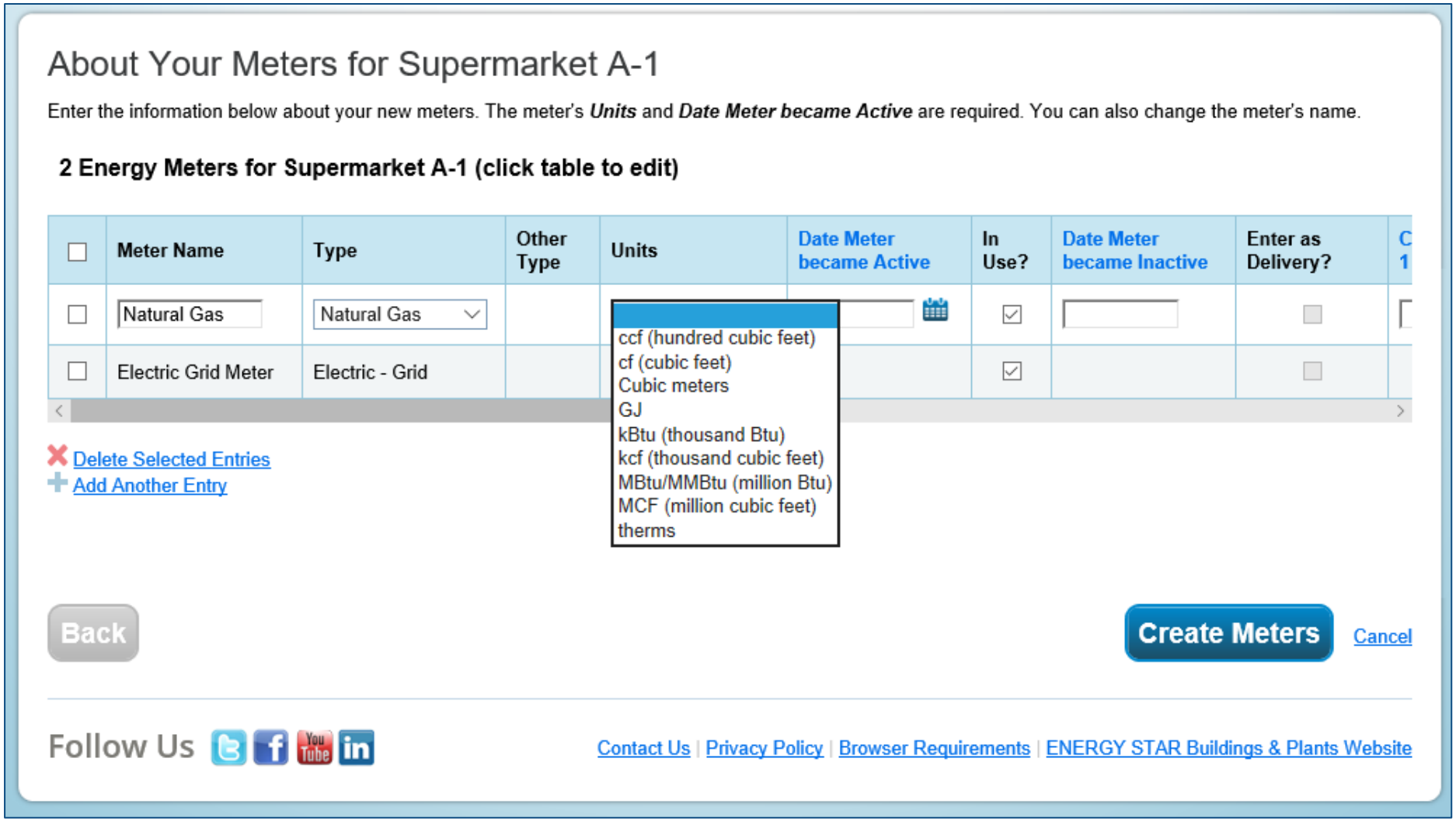
Energy Tab


MyPortfolio
Sharing
Reporting
Recognition
Change Metric
Supermarket A-1
1214 Main Street, Arlington, VA 22201 | Map It
Portfolio Manager Property ID: 6836065
Year Built: 1992
Edit
Not eligible to apply for ENERGY STAR Certification
Weather Normalized Source EUI (kBtu/ft²) Why not score?
Current: N/A
Baseline: N/A
Summary
Details
Energy
Water
Waste & Materials
Goals
Design
Meter Summary
0 Energy Meters Total
In order to receive metrics for your property, you must provide meters. You have not entered any meters yet.
Add A Meter
Current Energy Date
Not Available
Enter Your Bills
Meters - Used to Compute Metrics (0)
View as a Diagram
Add A Meter
There are currently no energy meters entered for this property/building. In order to track energy usage and receive energy metrics, you must provide an energy meter. Enter information about your energy meters to begin tracking energy usage. After entering the meter, you will need to choose to include it in your metrics.
For a step-by-step guide to entering meter data, see How to get Utility Data into Portfolio Manager.
Four Ways to Enter Bill Data
1. Manually

Entering Additional Information



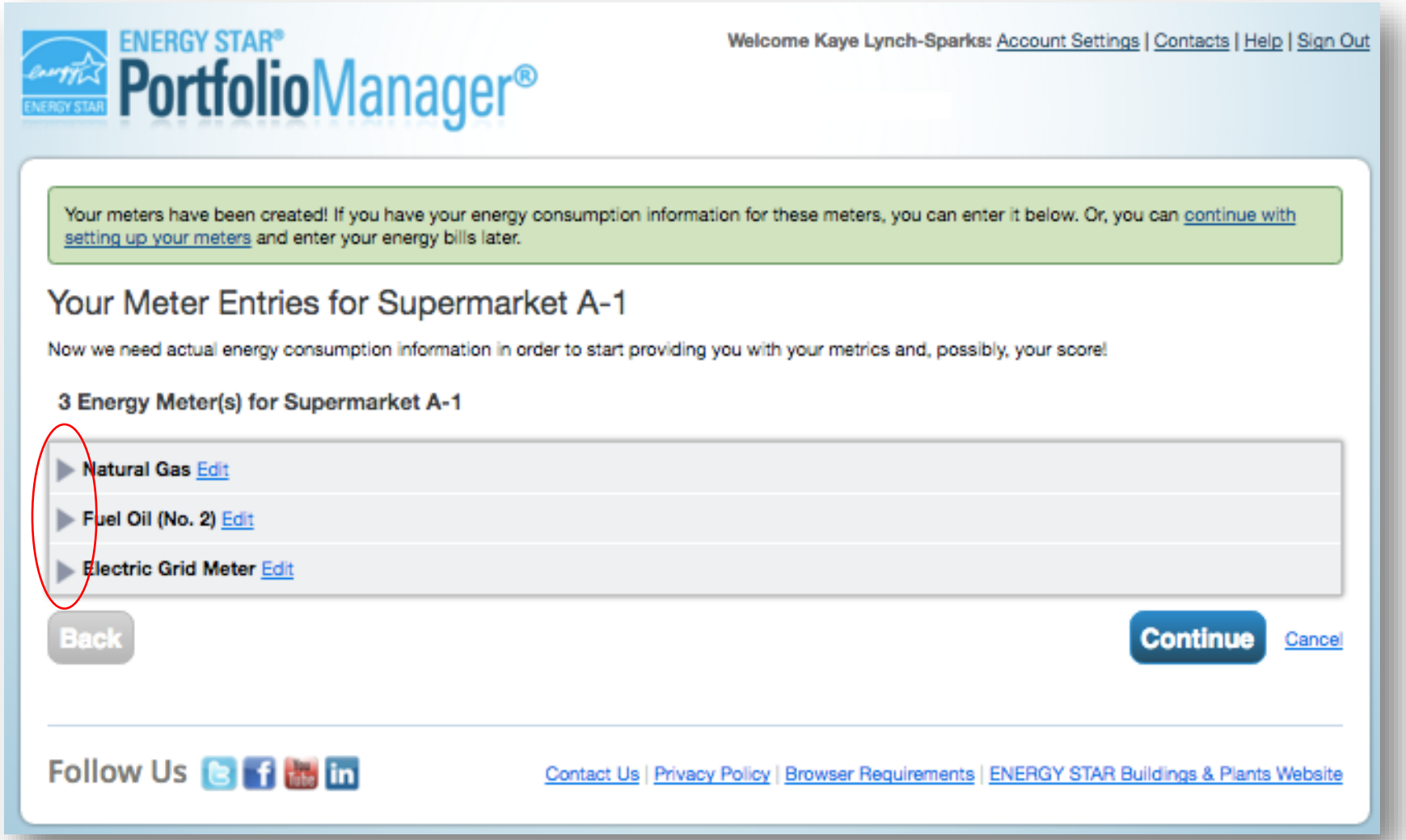
About Your Meters



ENERGY STAR

Add Energy Consumption Information

Expand meter by clicking arrow



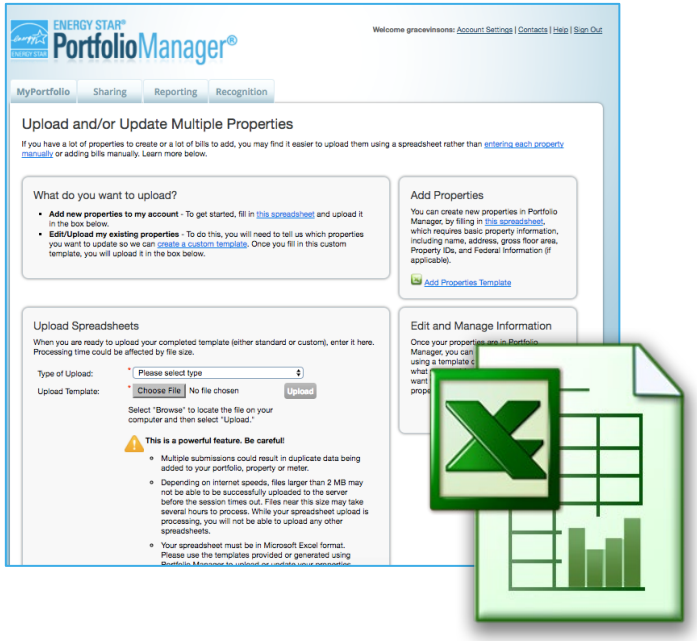
ENERGY STAR

Get Data Into Portfolio Manager

Choose the best data management method.

Manual entry

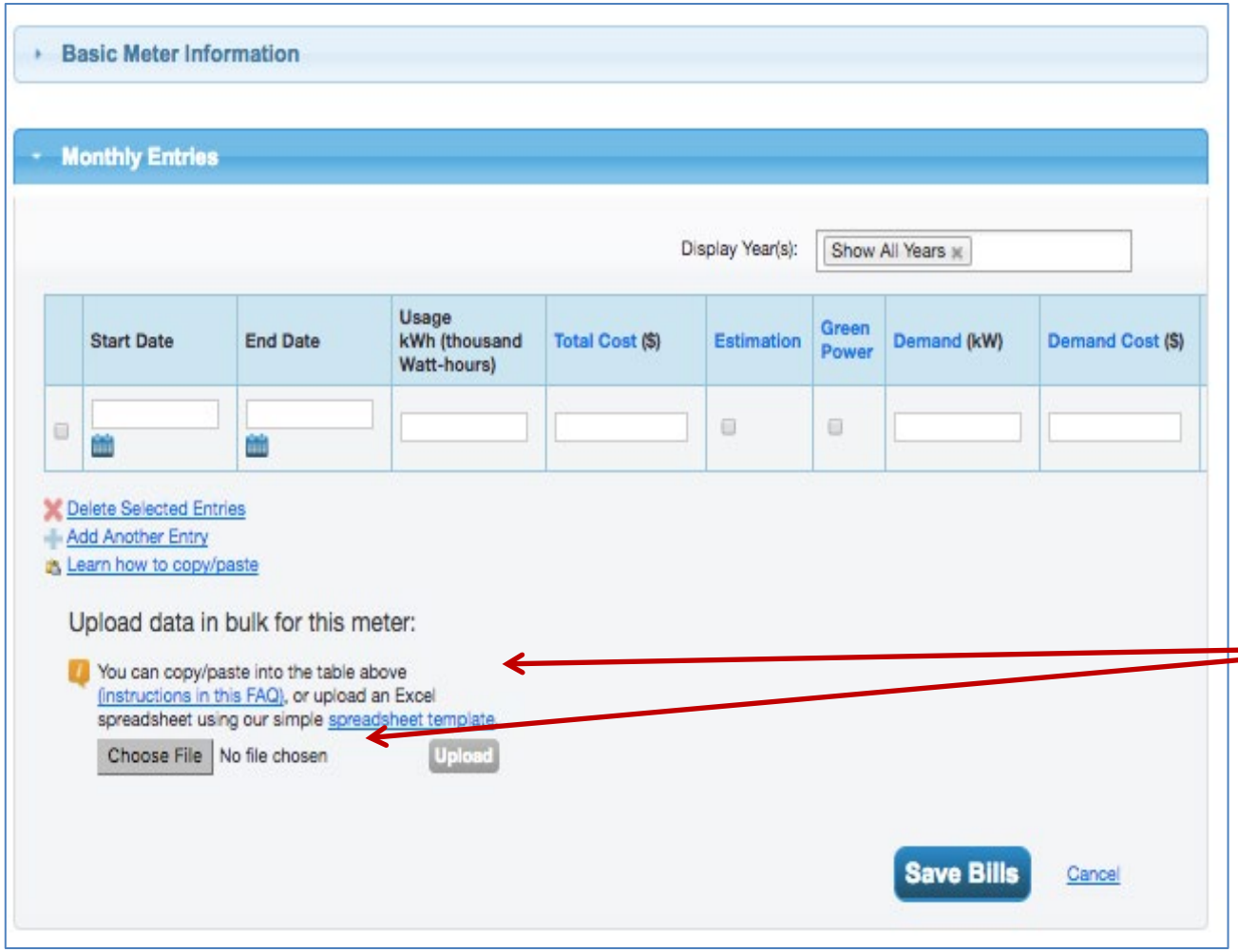
Spreadsheet upload



Web services

Add Meter Entries and Fill in Data

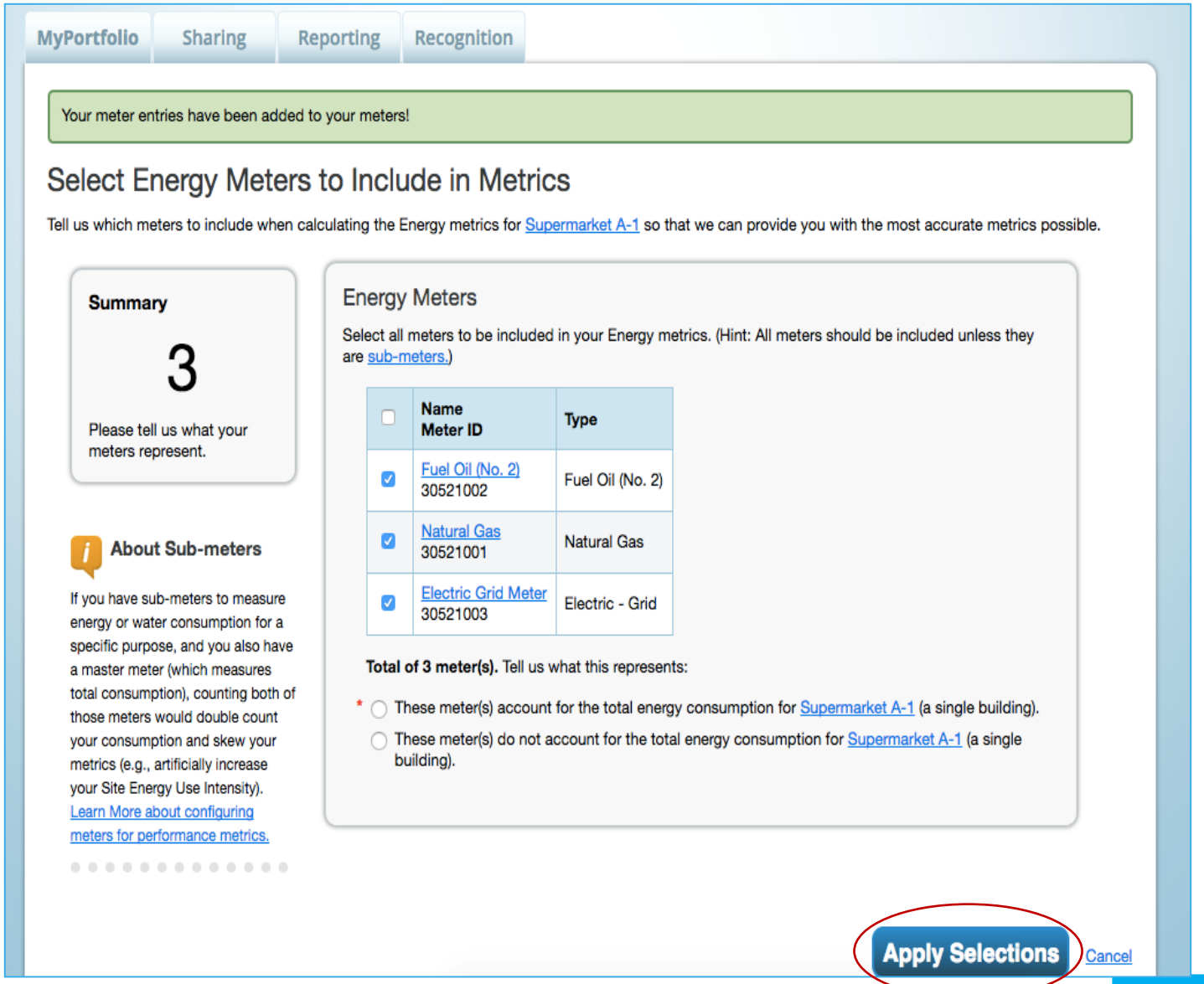
Add another entry



How To Guide: Electric Demand Tracking https://www.energystar.gov/buildings/tools-and-resources/how_track_electric_demand_portfolio_manager.

Use a spreadsheet to upload or copy and paste

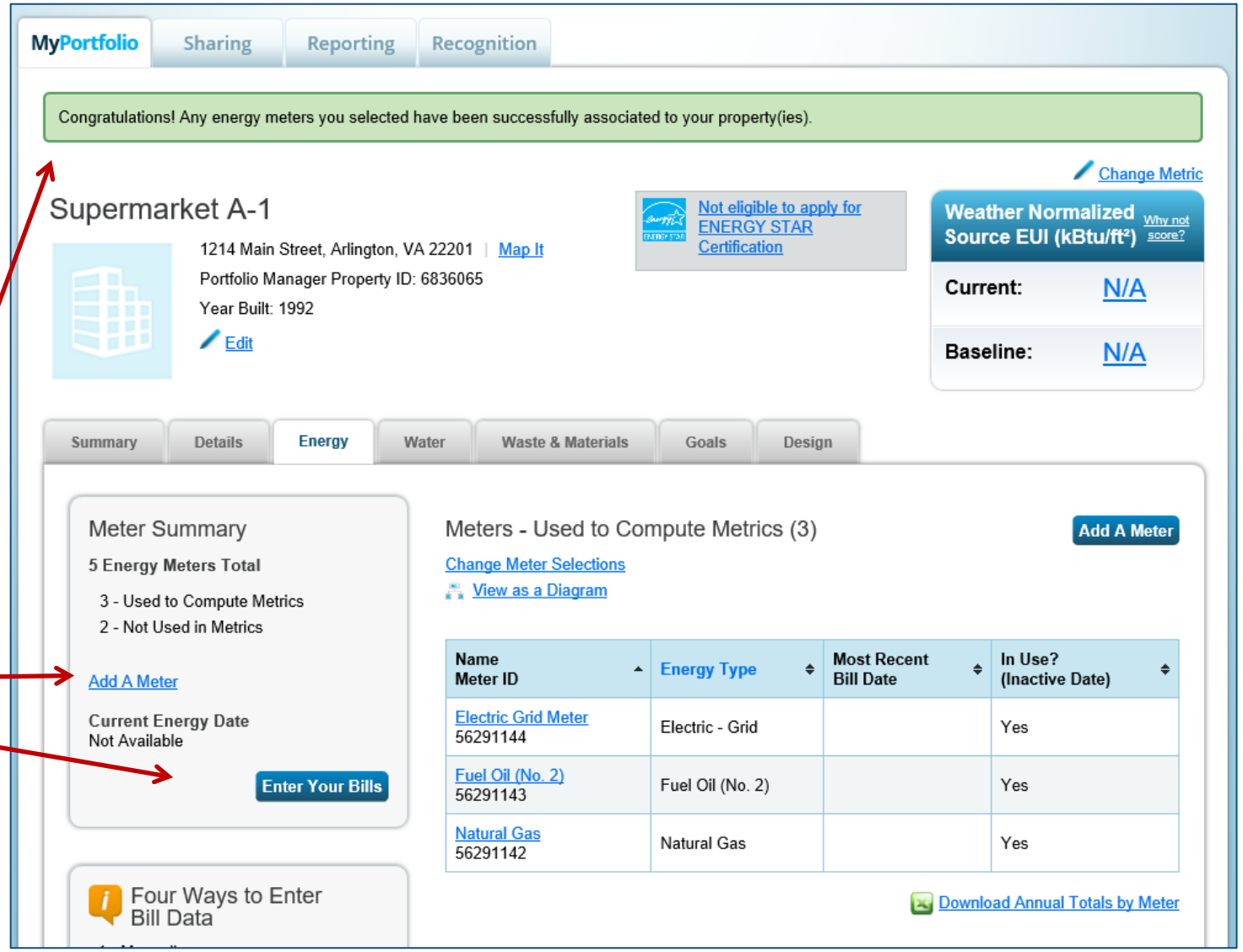
Meters to Add to Total Consumption



Energy Meters Tab: Meters Added and Displayed

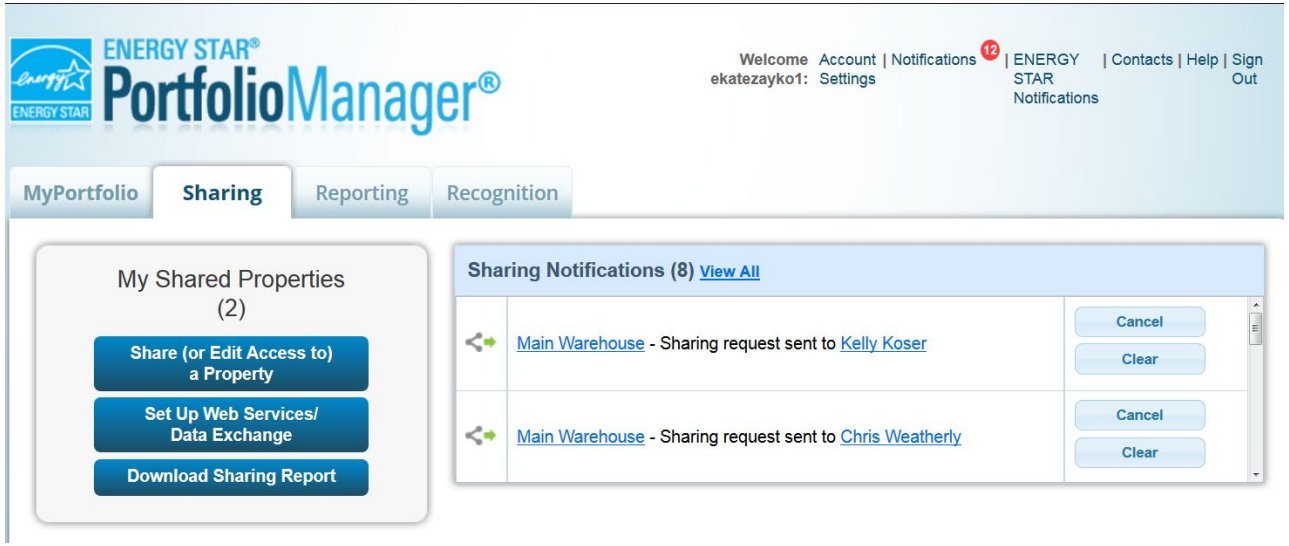
Notification

Add or update bills



Get Data In: ENERGY STAR Web Services

- Some energy service companies and utilities exchange data with Portfolio Manager to:
  - Manage building and utility data for customers
  - Access the ENERGY STAR score and other performance metrics
- To use web services, "**connect**" and "**share**" your properties with your web service provider from the Sharing tab

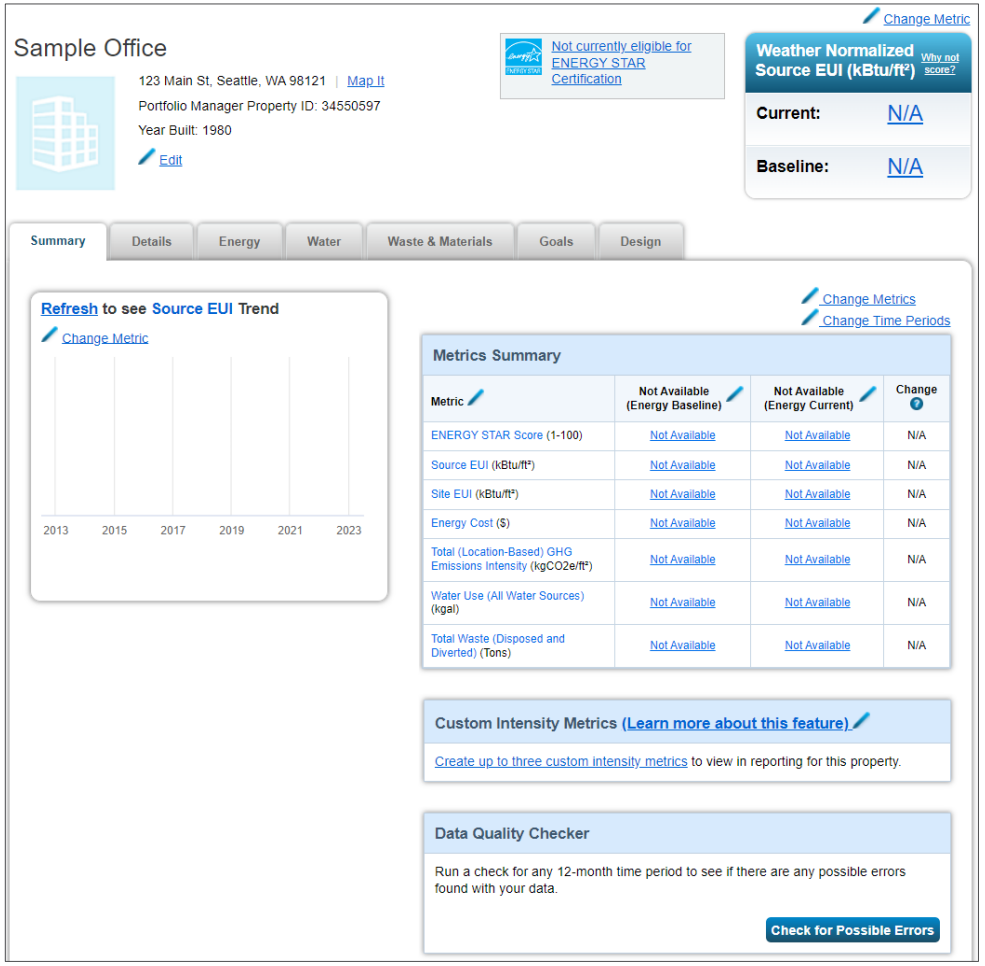


Address Data Quality Alerts

- Portfolio Manager includes built-in features to help users input data correctly, such as:
  - Alerts
  - Tips
  - Easily accessible definitions
- Intended to help catch common data entry mistakes

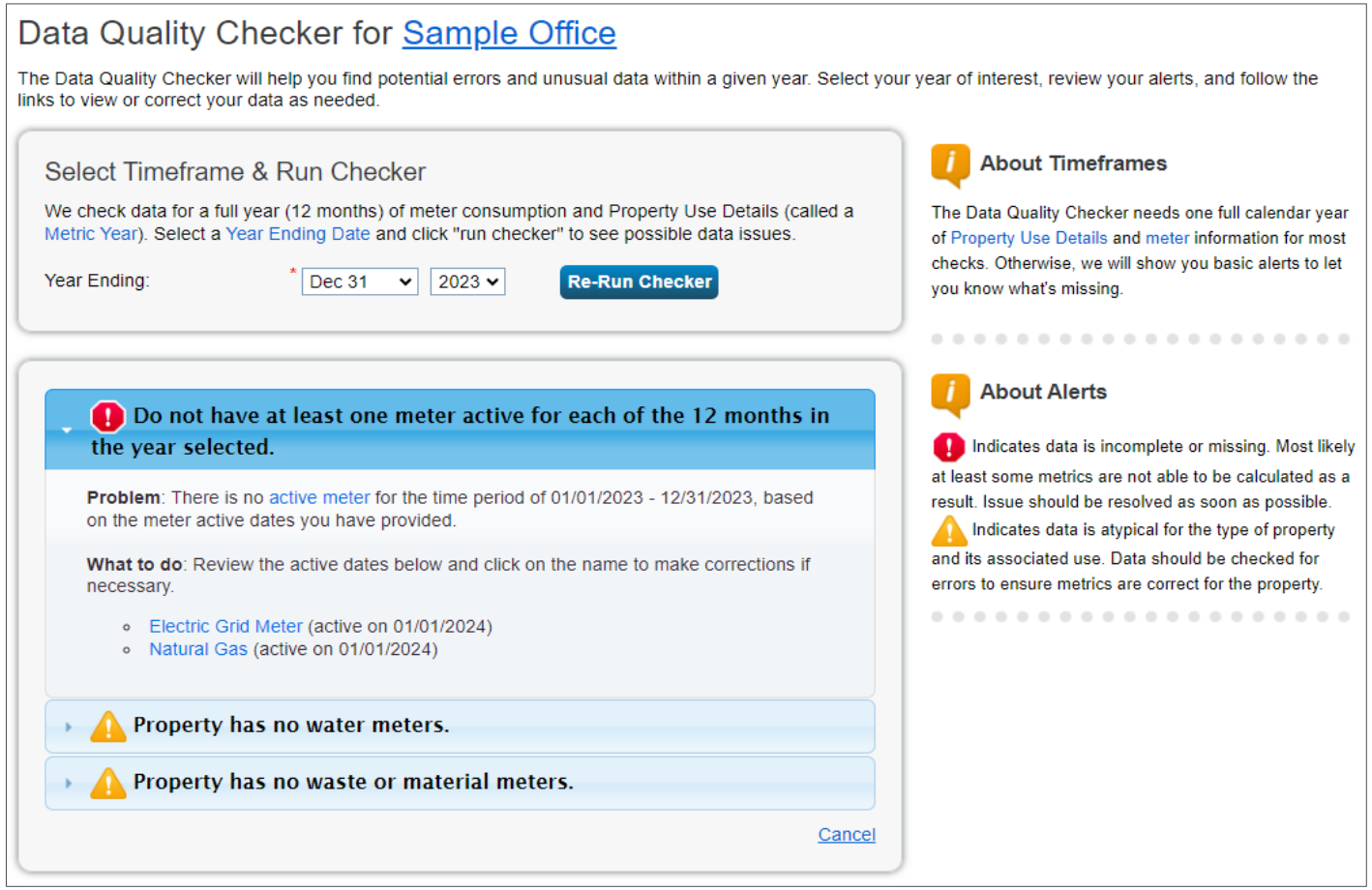
Using the Data Quality Checker

- You can use Portfolio Manager's Data Quality Checker at any time to run a quick analysis on the data you have entered for a given building.
- On the Summary Tab, locate the Data Quality Checker box and click **Check for Possible Errors**.
- The Data Quality Checker will check data for one full year at a time.



Using the Data Quality Checker

- Portfolio Manager will present all found errors in your property data in dropdowns for each issue.
- In addition to identifying the problem, steps are provided to fix the issue.



ENERGY STAR

How To

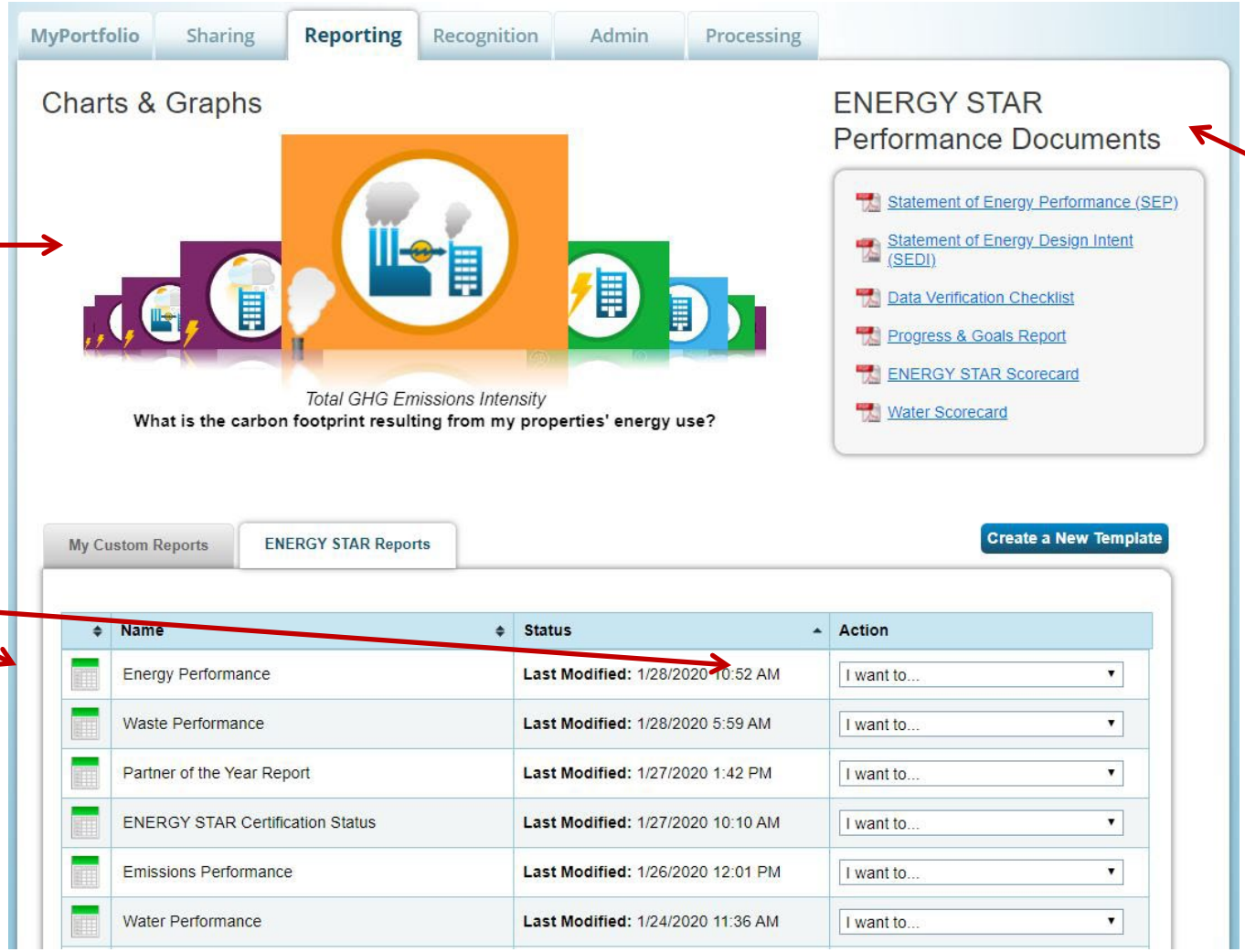
- Navigate Portfolio Manager
- Add a property and enter its use details
- Enter energy, water, and waste & materials data
- Generate reports to assess progress

Reporting Tab

Choose from pre-set chart & graph options

Create and generate templates & reports

Download performance documents



Performance Documents

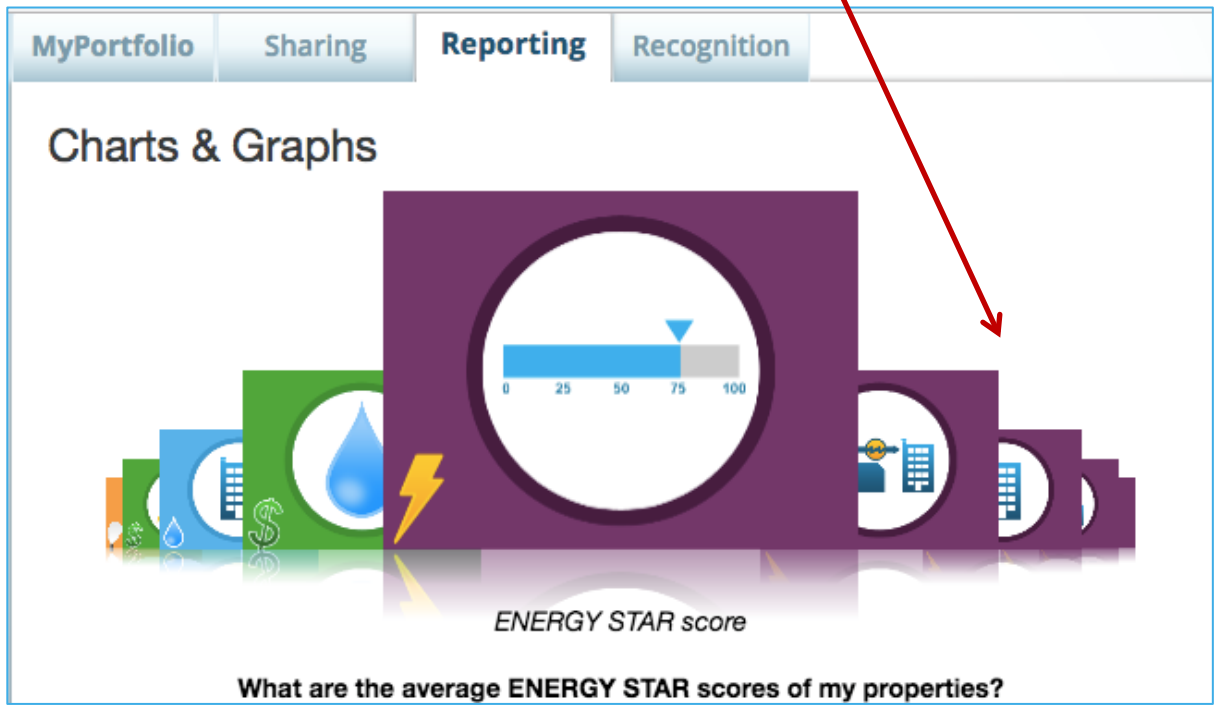
ENERGY STAR Performance Documents

- Statement of Energy Performance (SEP)
- Statement of Energy Design Intent (SEDI)
- Data Verification Checklist
- Progress & Goals Report
- ENERGY STAR Scorecard
- Water Scorecard

Charts and Graphs

- Source EUI
- Site EUI
- ENERGY STAR score
- Weather normalized source EUI
- Weather normalized site EUI
- Total GHG emissions intensity
- Energy cost intensity
- Indoor water intensity
- Indoor water cost intensity
- Building emissions report

Scroll through to see
available Charts & Graphs.



Charts and Graphs

MyPortfolio | Sharing | **Reporting** | Recognition | Admin | Processing

Charts & Graphs

Weather Normalized Source EUI

How much total primary fuel would be required by my properties, under average weather conditions?

ENERGY STAR Performance Documents

- Statement of Energy Performance (SEP)
- Statement of Energy Design Intent (SEDI)
- Data Verification Checklist
- Progress & Goals Report
- ENERGY STAR Scorecard
- Water Scorecard

Data Requests from Others | My Reports and Templates | **ENERGY STAR Reports**

Create a New Template

Name	Status	Action
Performance Highlights	**Last Modified:** 6/16/2022 12:25 PM	I want to...
ENERGY STAR Certification Status	**Last Modified:** 6/16/2022 11:35 AM	I want to...
Building Emissions Calculator Import	**Last Modified:** 6/16/2022 10:14 AM	I want to...
Waste Performance	**Last Modified:** 6/16/2022 10:11 AM	I want to...

Create and generate templates & reports

ENERGY STAR

ENERGY STAR Recognition

ENERGY STAR NextGen™
CERTIFIED BUILDING | 2024
EMPOWERING A CLEAN ENERGY FUTURE

ENERGY STAR® TenantSpace™

DESIGNED TO EARN THE ENERGY STAR

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.

US EPA ENERGY STAR CHALLENGE FOR INDUSTRY

ENERGY STAR

Extra Help

- **Visit www.energystar.gov/buildingshelp**
  - Extensive list of FAQs
  - Online form to submit technical questions or comments
- **Additional Portfolio Manager training resources available at: www.energystar.gov/buildings/training**
  - Step-by-step documents (PDF)
  - Access to recorded trainings and short videos
  - Information on upcoming trainings
- **Ask the Expert**
  - Wednesdays at 12:00 noon ET. It's an open Q&A session for Portfolio Manager questions.
  - https://energystar-mesa.force.com/PortfolioManager/s/article/When-are-the-Ask-The-Expert-webinars-1600088554111
- **Register for regular webinars at: http://esbuildings.webex.com**
- **Portfolio Manager Technical Reference Series: https://www.energystar.gov/buildings/tools-and-resources?f0=im_field_select_primary_category:1522**

ENERGY STAR

City of Dallas

Energy Management & Energy Benchmarking Program for City Buildings

June 20, 2024

Srinivas Vemuri, PhD, PE, CEM®
Senior Program Manager
Building Services Department

Presentation Overview

- Background
- Energy Benchmarking
- Outcome

Background

- City approximately has 3,000+ active electricity accounts
- For FY2022-23 electricity usage for entire City operations was approximately 684,000 MWh at an energy cost of approximately $55M
- Building Services Department maintains approximately 500+ City-owned buildings
- Approximately 200 City buildings contribute to 80%+ energy usage out of 500+ City buildings

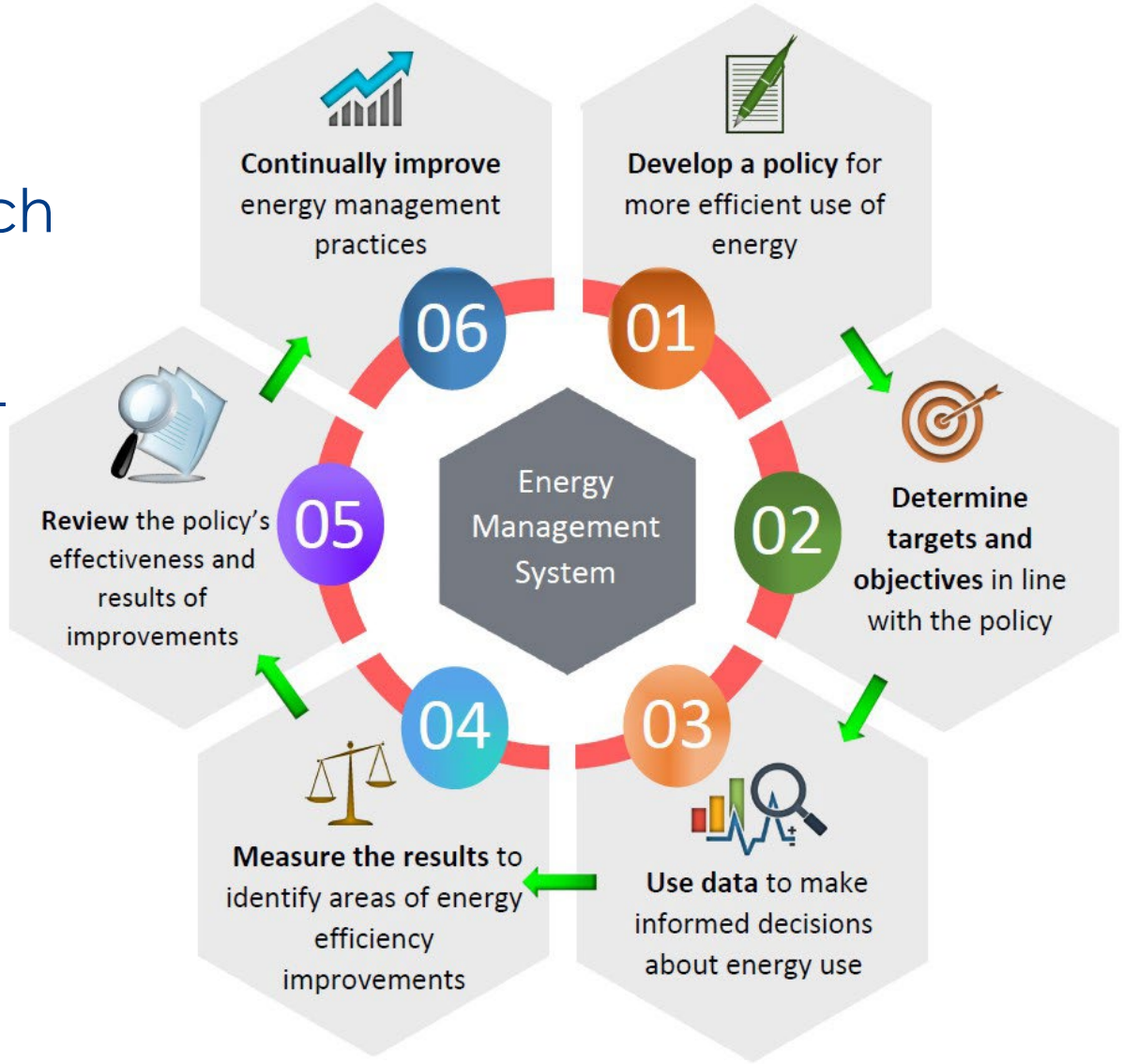
Background

- April 10, 2019, City Council adopted the Green Energy Policy (CR 19-0484) documenting the City of Dallas' commitment to:
    - Use clean and efficient energy
    - Purchase 100 percent renewable energy
    - Promote renewable energy projects and partnerships that reduce environmental impacts

Background

Energy Management System

- Systematic and iterative approach to intentional energy decisions
- Largely based on plan-do-check-act model
- Anticipated results:
  - Reduced environmental footprint (reduced energy consumption/ increased renewable energy generation)
  - Reduced energy costs



Background

- Overarching energy goals and mandates
    - In 2020, Dallas City Council approved a "Comprehensive Environmental and Climate Action Plan (CECAP)" to reduce City of Dallas greenhouse gas emissions by 43% below 2015 levels by 2030 and 100% by 2050 to achieve carbon neutrality.

Energy Benchmarking

Energy Benchmarking using EPA ENERGY STAR Portfolio Manager

- Benchmarking energy consumption of City facilities to help identify underperforming facilities and prioritize energy conservation measures
- Currently 195 City facilities (6.5 million sf), majority of the public facing facilities, have been benchmarked for energy usage
- Target is to benchmark energy usage for 200 City facilities

Outcome

Some key outcomes form Energy Benchmarking data

- Energy/solar audits completed for 45 City facilities which were prioritized based on EUI data from energy benchmarking
- Completed approximately $2M in renewable energy & energy efficiency projects at 6 City facilities based on energy/solar audit data
- $6M in renewable energy & energy efficiency projects currently in design/programming phase at 10 City facilities based on energy/solar audit data
- Received approximately $190k in Oncor incentives for completing renewable energy & energy efficiency projects
- Publishing annual energy reports

ENERGY STAR Portfolio Manager Webinar

June 20, 2024

Presented by: Andra Nava-Garcia,

Office of Sustainability

CITY OF SAN ANTONIO TEXAS

ENERGY STAR Portfolio Manager

SUSTAINABILITY

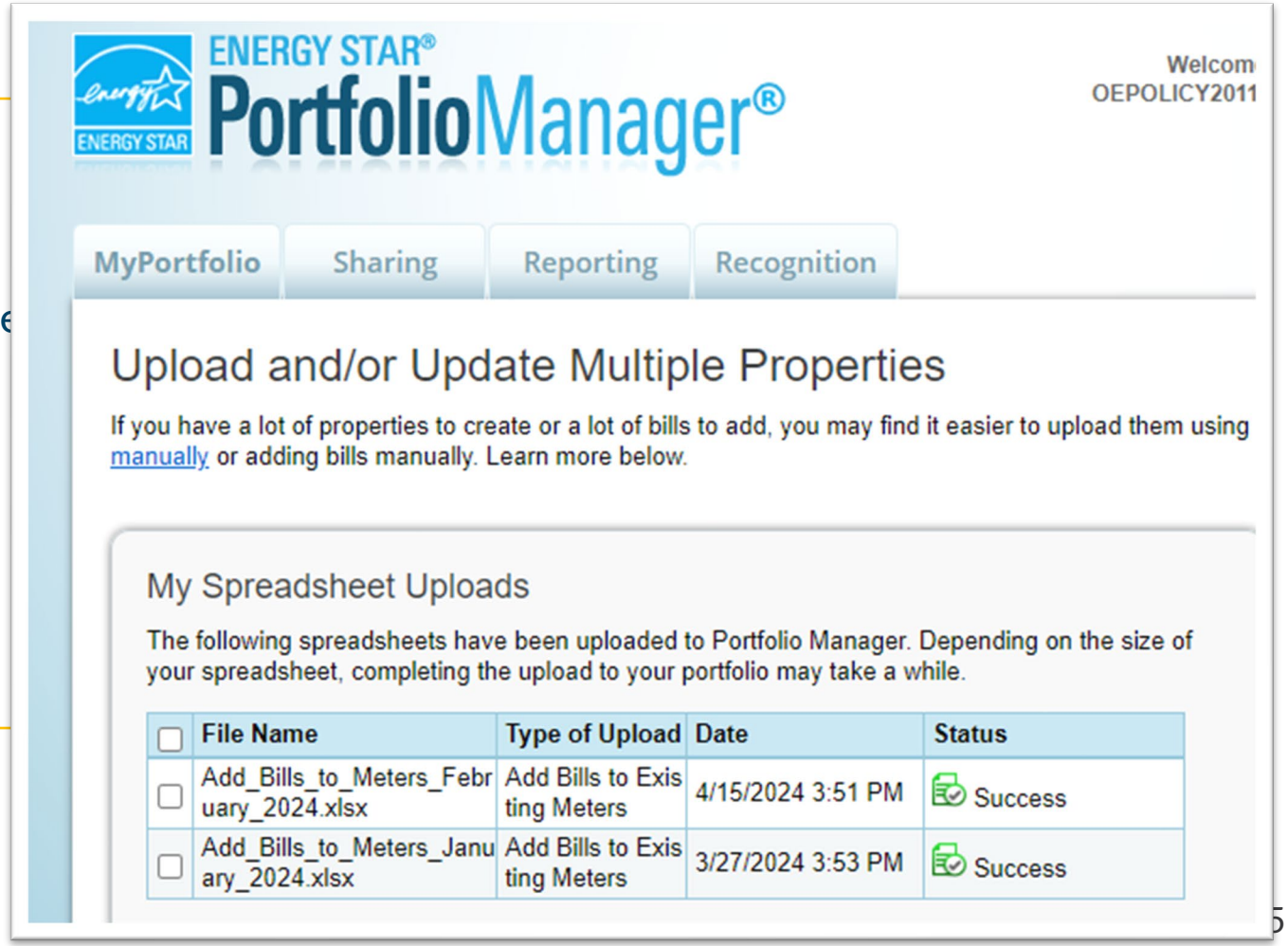
General Information

- 2011
- 270+ Municipal facilities (Libraries, Offices, Convention Center, Retail, Fire & Police Stations, Warehouses, Parking, Data Centers, Pre-school/Daycare centers, etc.)
- 12,600,000 (sq. feet)
- Energy benchmarking

ENERGY STAR Portfolio Manager

Best Practices

- Upload Data Using Spreadsheet Template
- Regular data updates and audits
- Monthly uploads



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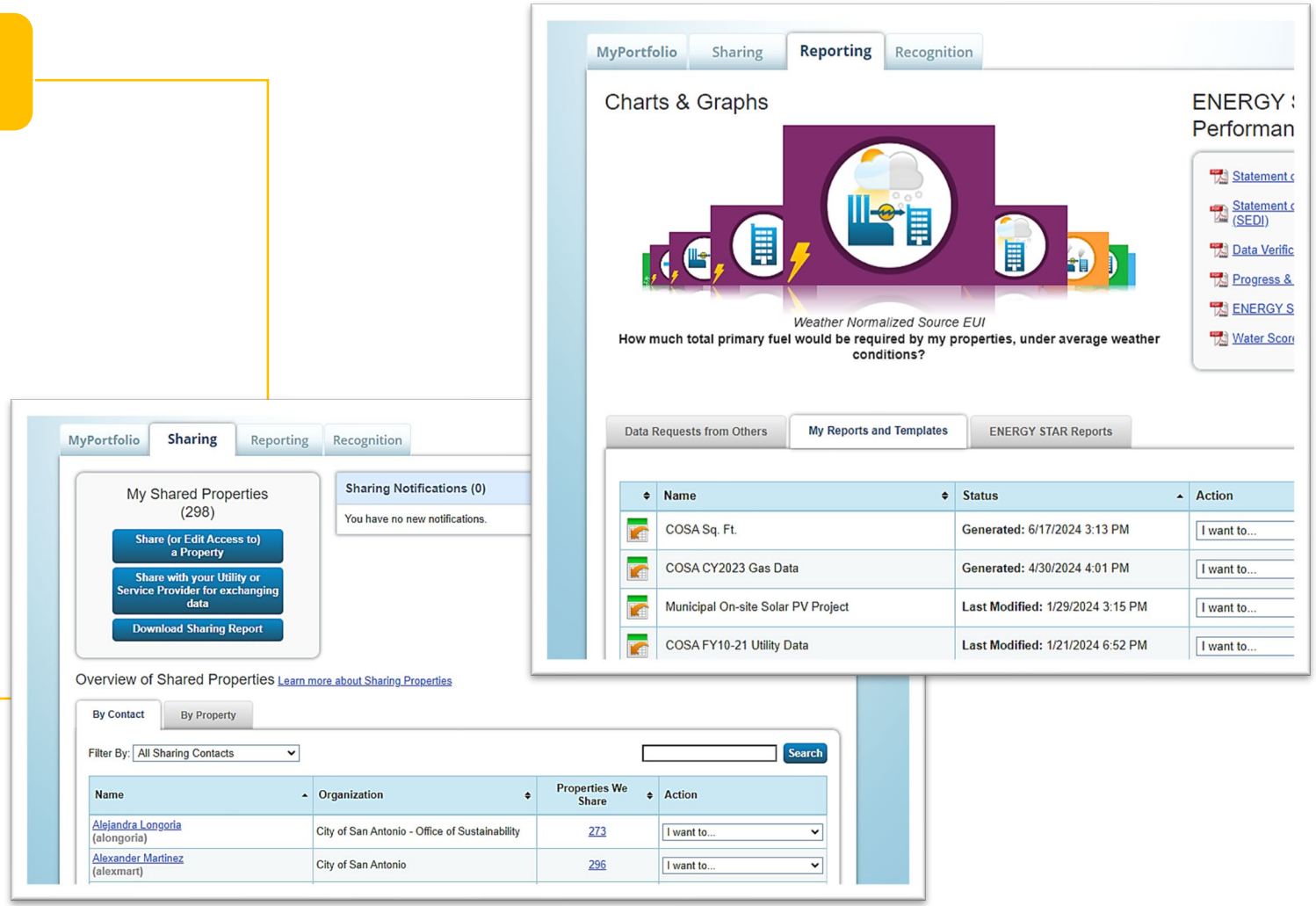
Benefits

- Track building performance
- Reports and Templates
- Sharing (centralized platform)



Energy Star Trainings

Energy STAR offers free trainings on energy usage and emissions. Be sure to check out the “Training” page on the Energy STAR website to learn more and access these free webinars and guides.

Access the trainings at this link or by scanning the QR code below:

https://www.energystar.gov/buildings/training

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