



# TX SECO ENERGY STAR Portfolio Manager Regional Benchmarking Session

Presenter

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Learn more at [energystar.gov](http://energystar.gov)

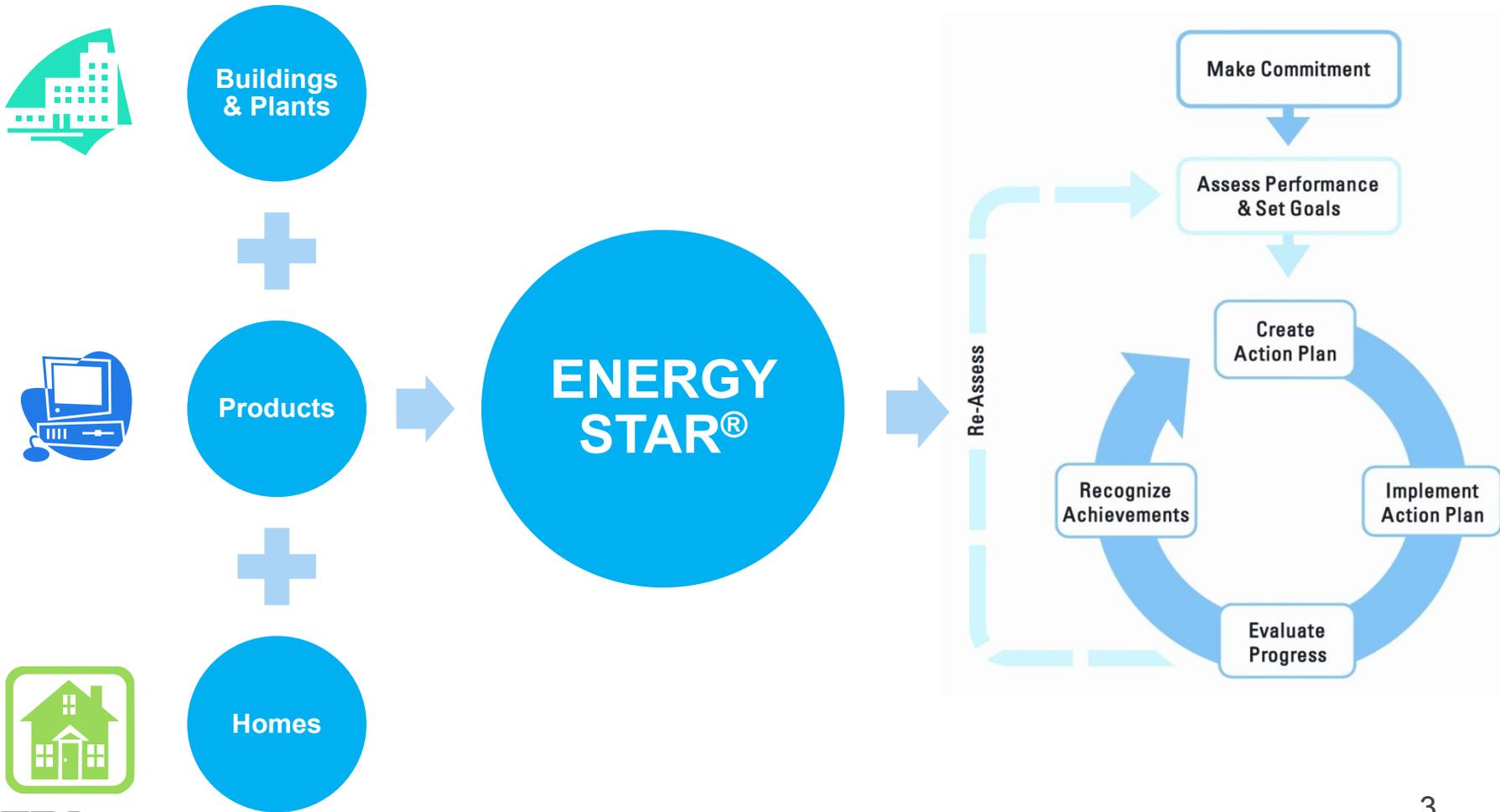
# Learning Objectives

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- In this session, you will become familiar with EPA's ENERGY STAR® Portfolio Manager® tool, learning:
  - Statewide benchmarking
    - Portfolio Manager Account Structure
    - Portfolio Manager Account Naming Protocol
    - Building Naming Protocol
  - Portfolio Manager web services
  - EPA recognition opportunities

# ENERGY STAR Program



- **Management Tool** – Helps business and organizations by offering a platform to:
  - Assess whole building energy and water consumption
  - Track changes in energy, water, greenhouse gas emissions, and cost over time
  - Track green power purchase
  - Share/report data with others
  - Create custom reports
  - Apply for ENERGY STAR certification
- **Metrics Calculator** – Provides key performance metrics to integrate into a strategic management plan
  - Energy consumption (source, site, weather normalized)
  - Water consumption (indoor, outdoor)
  - Greenhouse gas emissions (indirect, direct, total, avoided)
  - ENERGY STAR 1-to-100 score (available for many building types)

→ **Accessible in a free, online secure platform:**  
[www.energystar.gov/benchmark](http://www.energystar.gov/benchmark)

# Understand Comparative Performance



- ALL properties can be benchmarked
- Benchmarking through Portfolio Manager enables you to:
  - Compare one building against a national sample of similar buildings
  - Compare all of your buildings of a similar type to each other
  - Set priorities and targets for the use of limited staff time and/or investment capital
  - Track performance over time and gain recognition

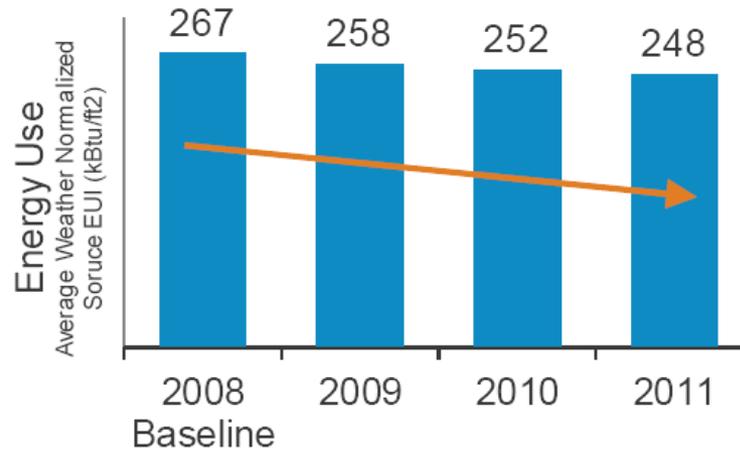
# Value of Benchmarking



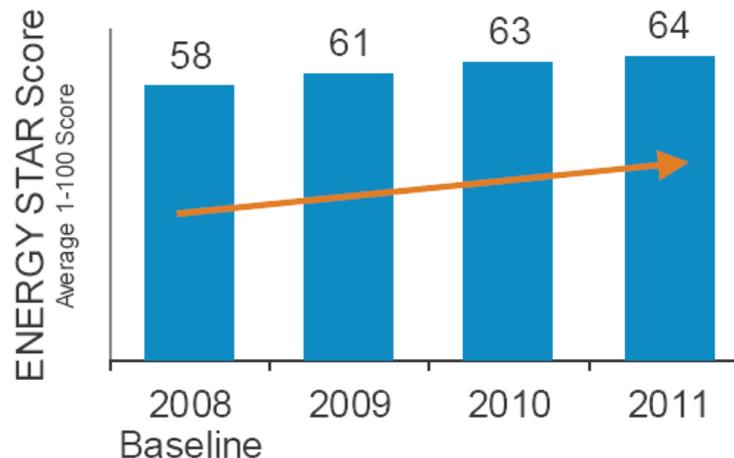
Consistent benchmarking in buildings results in energy savings and improved performance

Access the “Benchmarking and Energy Savings” and many more in EPA’s “DataTrends” report series:  
[www.energystar.gov/datatrends](http://www.energystar.gov/datatrends)

## Energy Savings in Portfolio Manager



7% Savings



6 point increase

# Governments Report Public Building Benchmarking Results



- New York State: <http://buildsmart.ny.gov/> (benchmarking results coming to this portal soon)
- Washington State: [www.des.wa.gov/services/facilities/Energy/EnergyStar/Pages/default.aspx](http://www.des.wa.gov/services/facilities/Energy/EnergyStar/Pages/default.aspx)
- State of Alabama: [www.adeca.alabama.gov/Divisions/energy/Documents/State%20Buildings%202012%20Report.PDF](http://www.adeca.alabama.gov/Divisions/energy/Documents/State%20Buildings%202012%20Report.PDF)
- District of Columbia (see pg 22 of DC report):
  - [http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/20140113\\_Green%20Building%20Report%202012\\_FINAL.pdf](http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/20140113_Green%20Building%20Report%202012_FINAL.pdf)
- Philadelphia: [www.phila.gov/green/PDFs/Municipal%20Energy%20Benchmarking%20Report.pdf](http://www.phila.gov/green/PDFs/Municipal%20Energy%20Benchmarking%20Report.pdf)
- New York City: [http://www.nyc.gov/html/gbee/html/plan/1184\\_scores.shtml](http://www.nyc.gov/html/gbee/html/plan/1184_scores.shtml)
- Minneapolis: [www.bomamppls.org/boma/pdf/CityofMPLSBenchmarking.pdf](http://www.bomamppls.org/boma/pdf/CityofMPLSBenchmarking.pdf)
- San Francisco: <http://sfwater.org/index.aspx?page=701>
- Seattle: [www.seattle.gov/Documents/Departments/OSE/EBR-muni-buildings.pdf](http://www.seattle.gov/Documents/Departments/OSE/EBR-muni-buildings.pdf)

# Identify Trends, Opportunities for Savings



## Top Performing Public Buildings

By ENERGY STAR score

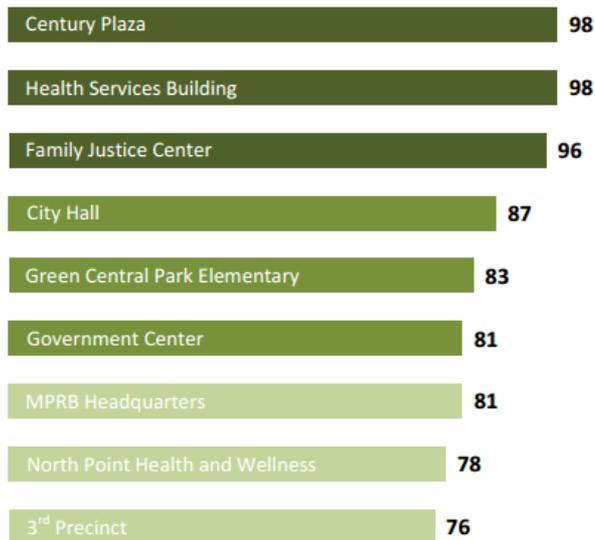


Figure 6: City Building EUI Averages: Percent from National Average by Building Type, 2010

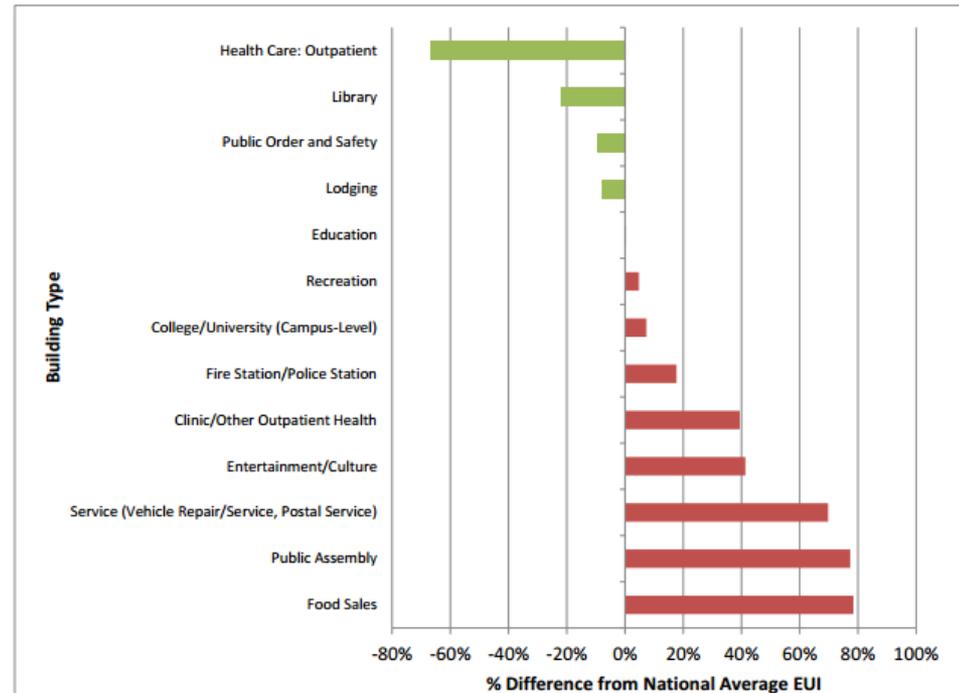


Table 3: DGS Facilities' Energy Use Intensity Compared to National Medians

Facility Type	National Median Source EUI (kBTU/ft <sup>2</sup> )	DGS FY2012 Median Weather-Normalized Source EUI (kBTU/ft <sup>2</sup> )	DGS Median EUI vs. National Median EUI
Fire Station or Police Station	154	219	42% more
K-12 School*	141	154	9% more
Library	236	169	-28% LESS
Lodging (Shelters)	156	202	30% more
Office*	148	214	44% more
Other	123	237	93% more
Recreation	97	203	110% more

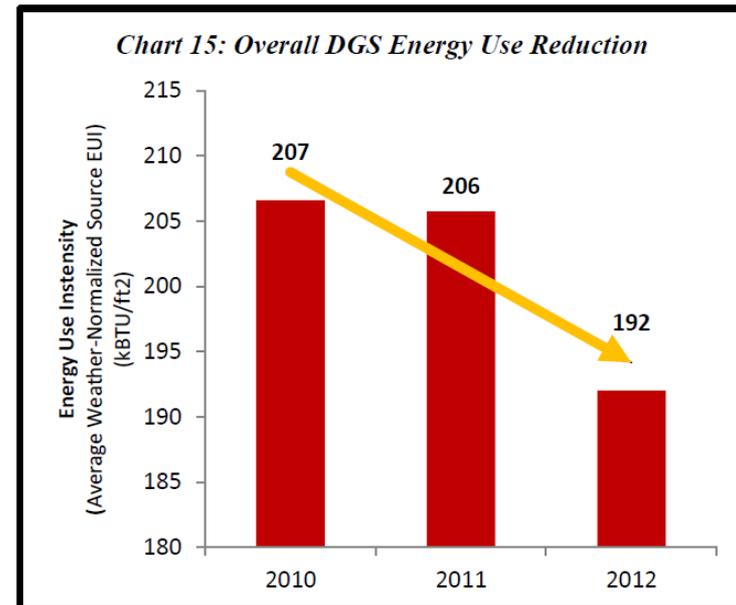
# Communicate Progress



Reporting Agencies		FY 2012		
AGENCY/Institution NAME	Total Floor Space (Sq. Ft.)	Annual Energy Cost	% Chg from Base Year	2012 Est. Cost Saved/Avoided
ABC Board Central Office Hqs & Warehouse	174,610	\$157,892	-6.0	-\$18,559
Corrections Department	2,980,363	\$7,490,874	-16.1	-\$1,571,222
Emergency Management Agency	35,000	\$111,785	-39.5	-\$79,848
Environmental Management	195,222	\$475,408	-18.7	-\$187,063
Finance Department	1,833,076	\$3,482,424	-7.0	-\$184,630
Forestry Commission	29,936	\$38,666	-28.1	-\$19,290
Geological Survey/Oil and Gas Board	95,967	\$105,047	-7.1	-\$6,984
Military Department (State Operated Facilities)	1,213,229	\$1,252,892	-23.3	-\$380,209
Pardons and Paroles	73,517	\$228,924	-2.2	-\$3,769
Postsecondary Education (ACCS)	6,865,103	\$12,041,594	N/A	-\$754,884
Public Health	1,168,527	\$2,335,719	8.6	N/A
Real Estate Commission	16,681	\$54,978	15.0	N/A
Supreme Court	265,017	\$518,924	-5.0	-\$33,712
Transportation Department	1,221,323	\$2,002,986	20.8	N/A
Alabama Institute for Deaf & Blind	536,258	\$362,079	-9.6	-\$373,331
Athens State University	393,817	\$508,955	-19.6	-\$33,064
University of Montevallo	1,062,634	\$1,336,963	-20.0	-\$252,846
<b>TOTALS FY 2012:</b>	<b>18,160,280</b>	<b>\$32,506,111</b>		<b>-\$3,899,411</b>

Alabama state agency benchmarking report compares energy performance in 2005 to FY 2012 to communicate avoided energy costs.

District of Columbia public buildings showed a 7% reduction in EUI from FY 2010 to 2012



# Benchmarking for TX



- TX SECO will “own” buildings benchmarked in Portfolio Manager and share them with agency & C/U accounts (there may be exceptions)
  - For further analysis and to capture statewide savings opportunities, SECO will create groups
    - For each agency
    - For each college and university
    - For each property function type
    - For any reporting purposes, create different groups
  - You will be able to compare your properties against similar properties nationally and in the SECO account

# Portfolio Manager Top-Down Account Structure



- Top-Down Approach
  - All properties are benchmarked in top level TX SECO account and shared, with Full Access, with individual agency and college and university (C/U) accounts
  - In this structure, the Top Level TX account will “own” the properties in Portfolio Manager
  - Top Level TX account owner (TX SECO) will be able to share properties
  - Agency and C/U personnel can enter/update information on a regular basis.

# Top-Down Account Structure



Top Level Portfolio Manager Account  
(All properties benchmarked at this level)

Texas Portfolio Manager Account

Level 2 of Portfolio Manager Accounts (Properties are shared with this level)

Agency A Account

Agency B Account

Higher Ed Institution Account

Buildings in Portfolio Manager



All Buildings



All Buildings



Campus Buildings



More campus Buildings

# Portfolio Manager Account Naming Protocol



## Suggested Protocol for Portfolio Manager Account Names

- Recommended guidelines:
  - Use easily identifiable usernames
  - Reflect name of each agency and C/U in usernames

Organization	State	Type	Org. Abbreviation	Username
Texas Commission on Environmental Quality	TX	Agency	TCEQ	TXTCEQ
Texas A&M University	TX	HED (Higher Education)	TAMU	TXTAMU

- Consider multiple accounts for larger agencies
- Easy to remember and consistent usernames and passwords

# Portfolio Manager Property Naming Protocol



## Suggested Protocol for Property Names

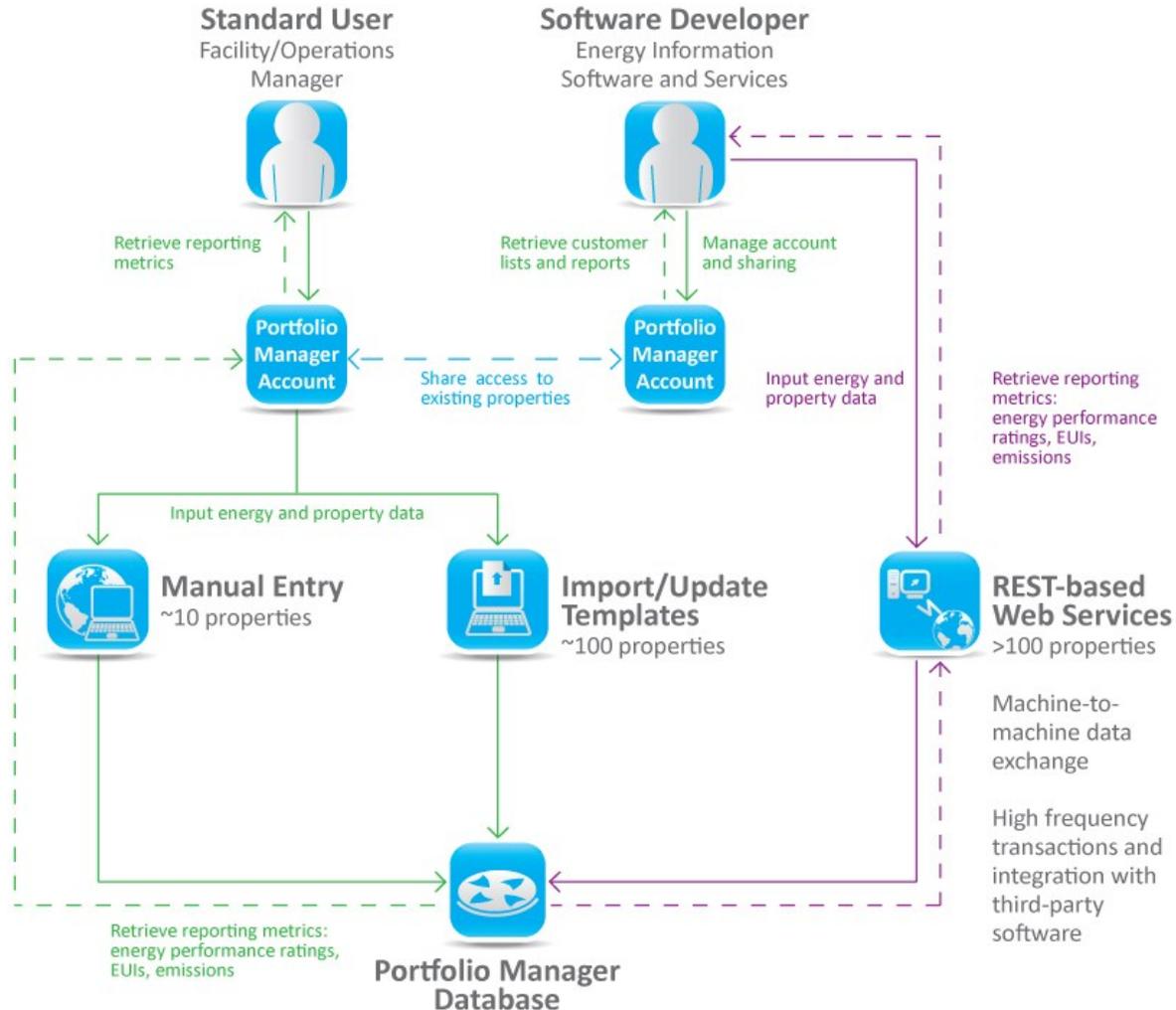
- The following requirement must be met when naming properties in Portfolio Manager:
  - Property name must be 80 characters or less
- Properties that have already been benchmarked are encouraged to switch to this naming nomenclature

Organization	State	Org. Abbreviation	Property Name in Records	Property Name in Portfolio Manager
Texas Commission on Environmental Quality	TX	TCEQ	Building F	TXTCEQ Building F or TXTCEQ_Building F
Texas A&M University	TX	TAMU	Arts and Humanities Building	TXTAMU Arts and Humanities Building or TXTAMU_Arts and Humanities Building

# Get Data Into Portfolio Manager



## Portfolio Manager Data Entry/Reporting Options



# To Get Started Benchmarking in Portfolio Manager



- Helpful data to have on hand
  - Property Information
    - Function
    - Name, street address, ZIP/postal code
  - Property type data
    - Gross floor area
    - Use details (ex. weekly operating hours, number of computers, number of workers on the main shift, etc)
  - Energy consumption data
    - Property-specific invoice information from all purchased and on-site generated energy for all fuel types

# Upload Templates



- Add new properties

*Property Name	*Street Address	*City/Municipality	*State/Province	*Postal Code	*Country	*Year Built/Year Planned for	*Primary Function
Sample 1	1 Walnut Street	Detroit	NY	65772	United States	1980	Financial Office
Sample 2	123 Main Street	Arlington	AK	22201	United States	2012	Financial Office

- Add meters

*Property Name	*Meter Type	*Meter Name	*Units
	Electricity - Grid Purchase		
	Natural Gas		
	Electricity - Grid Purchase		
	Natural Gas		

- Add bills

*Property Name	*Meter Name	*Meter Type	*Start Date	*End Date	*Usage
		Electricity - Grid Purchase			
		Electricity - Grid Purchase			
		Electricity - Grid Purchase			
		Electricity - Grid Purchase			
		Electricity - Grid Purchase			
		Electricity - Grid Purchase			

# Exchanging Data with Portfolio Manager



- Portfolio Manager’s “web services” API\* allows service providers to develop software to transfer data into and out of Portfolio Manager automatically
  - Easy upload & efficient management of data for large portfolios
- **Over 150 organizations** have software that is actively exchanging data with Portfolio Manager via web services
- **Over 50 percent of properties benchmarked in Portfolio Manager** in 2013 were benchmarked via web services

*\*Application Programming Interface*

More info:

<http://www.portfoliomanager.gov/webservices/home>

<http://portfoliomanager.energystar.gov/webservices/home/api>



# Providers of Portfolio Manager Web Services



- Active ENERGY STAR Partners featured on our [Most Active List](#)

– Most Active List URL: [http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/save-energy/expert-help/find-energy-star-service-a-0?c=spp\\_res.pt\\_spps\\_automated\\_benchmarking](http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/save-energy/expert-help/find-energy-star-service-a-0?c=spp_res.pt_spps_automated_benchmarking)



JONES LANG  
LASALLE®



# EPA Portfolio Manager Training and Technical Support



## Many “How to” Guides Available

- [How to get utility data into Portfolio Manager](#) Three options for getting data into Portfolio Manager
- [How to share data with other users in Portfolio Manager](#)
- [How to apply for the ENERGY STAR](#) Step-by-step process for applying for ENERGY STAR certification for your building.
- [How to benchmark a campus](#) How to properly benchmark a campus of buildings.

More Tools and Resources at

<http://www.energystar.gov/buildings/tools-and-resources/portfolio-manager>

# EPA Portfolio Manager Training and Technical Support



- Visit: [www.energystar.gov/buildingshelp](http://www.energystar.gov/buildingshelp)
- Additional Portfolio Manager training resources available at: [www.energystar.gov/pmupgrade](http://www.energystar.gov/pmupgrade)
  - Step-by-step documents (PDF)
  - Recorded webinars and short training videos
- Register for regular webinars at: <http://esbuildings.webex.com>
- Portfolio Manager Technical Reference Series: [http://www.energystar.gov/index.cfm?c=evaluate\\_performance.bus\\_portfoliomanager\\_model\\_tech\\_desc](http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager_model_tech_desc)

# Get Recognized!

- ✓ Join as an ENERGY STAR Partner
- ✓ Earn the ENERGY STAR for your buildings
- ✓ Enter EPA's National Building Competition in 2015
- ✓ ENERGY STAR Partner of the Year

# Strong ENERGY STAR brand recognition



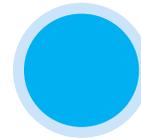
## Partner

- Strategic approach to energy management
- Helps save money & protect the environment



## Benchmark

- The first step
- Provides measurable information on energy savings and GHG emissions reductions



## Certify

ENERGY STAR on a building = Superior Energy Performance



# ENERGY STAR Partnership



- ENERGY STAR partners can co-brand with ENERGY STAR, a brand recognized by 85 percent of Americans
- Partners also gain access to a rich variety of promotional materials
- ENERGY STAR partners commit to:
  - Measure/track/benchmark building energy use
  - Implement a plan to improve energy performance
  - Educate and communicate others about energy efficiency
- Texas government ENERGY STAR partners include: Texas Department of Criminal Justice, Texas Department of Transportation, University of Texas at Austin, cities of Austin, Dallas, Fort Worth, and Houston, Fort Bend and Harris counties, the Greater Waco Chamber of Commerce, and more.



# 15 years

ENERGY STAR  
Certified Buildings & Plants



Two Houston Center



City of Houston  
General Services Department



Memorial Hermann Sugar Land Hospital

# Recognizing the Financial Value of ENERGY STAR Certified Buildings



Owners and operators are realizing a wide-variety of value-enhancing benefits:



**2.7%** higher NOI / sq. ft.



**12.9%** lower operating expenses



**7%** higher effective cash flows



**10-11%** increase in occupancy



**8.5%** higher property value



**+\$30 / sq. ft.** transaction price

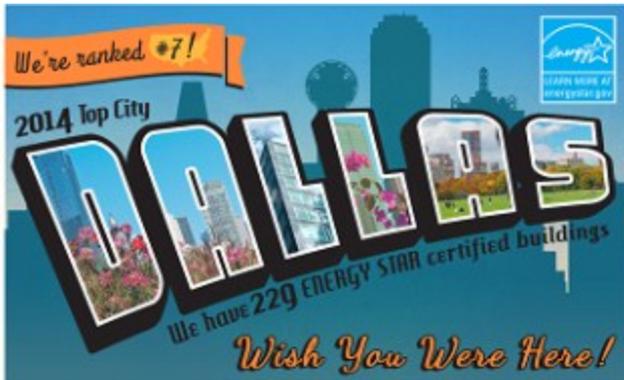


**6.5%** greater rent prices



**0.66%** increase in ROE

# ENERGY STAR Top Cities: Texas



2014 rank	Metro area	# of buildings <sup>1</sup>	Total floor space <sup>2</sup>	Cost savings <sup>3</sup>	Emissions prevented <sup>4</sup>	2013 rank	2012 rank	2011 rank	2010 rank	2009 rank
7	Dallas-Fort Worth	229	60.1	\$43.9	42,600	8	8	10	8	5
10	Houston	204	82.6	\$66.4	61,600	7	7	7	6	3

<sup>1</sup> Number of ENERGY STAR certified buildings in 2013

<sup>2</sup> Total floor space in million square feet

<sup>3</sup> Annual cost savings in millions (\$)

<sup>4</sup> Emissions prevented (equal to the annual electric use of \_\_\_ homes)

# EPA's National Building Competition



What is it?

- A *Biggest Loser*-style competition among commercial buildings and spaces to work off the waste and reduce energy use



Why a competition?

- Weight-loss metaphor works well for buildings
  - Importance of stepping on the scale
  - Small, everyday changes save big
- Proven, effective platform for saving energy

# Thank you for Attending!

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## Questions?

If you have any questions on Portfolio Manager or the ENERGY STAR program, contact us at:

[www.energystar.gov/BuildingsHelp](http://www.energystar.gov/BuildingsHelp)

Presenter

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