



ENERGY STAR Portfolio Manager
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Pala Band of Mission Indians
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Introduction

- ▶ Program Background & History
- ▶ Commercial Buildings: Tools & Resources
- ▶ Building Performance: Portfolio Manager
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ENERGY STAR Background & History

ENERGY STAR

- ▶ Joint program of U.S. EPA, U.S. DOE to reduce GHG
- ▶ Introduced in 1992 as a voluntary certification program designed to identify and promote energy efficient products, i.e., computers and monitors.
- ▶ ENERGY STAR now certifies many additional products as well as new homes and buildings & plants
- ▶ Saved businesses, consumers, organizations \$18B
- ▶ Prevented 170 MMt GHG (33M vehicles)





BATTLE OF THE BUILDINGS

EPA's NATIONAL BUILDING COMPETITION



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CONTENDERS AS
OF THE MIDPOINT!

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HEADLINES

[Energy Star Now Available for New Multifamily High-Rise Buildings](#)

[EPA Announces List of Top Contenders in ENERGY STAR National Building Competition](#)

[EPA Announces New ENERGY STAR Requirements for Dishwashers and Furnaces](#)

[2012 Award Applications Now Available](#)

[Leading-Edge Products for Energy Efficiency Recognized for First Time by New ENERGY STAR Effort](#)

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GO TO PARTNER RESOURCES ▶

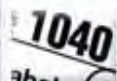
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Commercial Buildings: Tools & Resources

Improve the energy efficiency of buildings

- ▶ Guidance Documents



- ▶ Process to Assess Building Performance

- ▶ Free on-line training

Commercial Buildings: Guidance Documents

- ▶ Guidelines for Energy Management
 - steps to improve building energy efficiency
 - flow chart represents these steps



Building Performance: Portfolio Manager

Interactive on-line database:

- ▶ All Buildings – Measure, track, benchmark energy use entering 12 months energy data, building parameters, zip code.
- ▶ 15 Building Designations – Score performance from 1–100 compared to building peers
- ▶ Peers information based on Commercial Bldg. Energy Consumption Survey
- ▶ Score of 75
 - performs better than 75% of peers
 - eligible for ENERGY STAR certification



Blackfeet Community Hospital, Browning, MT – Certified

CRITERIA FOR SCORING BUILDING ENERGY PERFORMANCE

Criteria can be organized as follows:

- ▶ Building Designation
- ▶ Operating Characteristics
- ▶ Energy Data



Photo credit: Pacific gas & Electric Company

BUILDING DESIGNATION

More than 50% of building's gross floor area (excluding parking lots, garages) must be defined by one of space types below. Restrictions apply to remaining floor space.

<u>Offices</u>	<u>Hotels</u>
<u>Bank/Financial Institutions</u>	<u>Medical Offices</u>
<u>K-12 Schools</u>	<u>Municipal WW Treatment Plants</u>
<u>Retail Stores</u>	<u>Residence Halls/Dorms</u>
<u>Hospitals (acute, children's)</u>	<u>Warehouses (refrig., nonrefrig.)</u>
<u>Supermarkets</u>	<u>Courthouses</u>
<u>Houses of Worship</u>	<u>Senior Care Facilities</u>
<u>Data Centers</u>	

Represent over 50% of US commercial space.

Energy Performance Targets available for non-eligible space types.

OPERATING CHARACTERISTICS

OPERATING CHARACTERISTICS: MINIMUM AND MAXIMUM THRESHHOLDS FOR GROSS FLOOR AREA, OPERATING HOURS, etc.

Ex. Characteristic

- ▶ Gross floor area of building (excluding garage and parking lot) at least 5,000 square feet,
- ▶ 2 exceptions:
 - Hospitals – 20,000 square feet
 - Bank/Financial Institution – 1,000 square feet

ENERGY DATA

Must Enter following Energy Data

- ▶ Energy meters that account for all energy use
- ▶ At least 12 full consecutive months of energy data for all active meters.
- ▶ Multiple meters – 12 consecutive and overlapping months.



Photo credit: Pacific Gas & Electric Company

HOW SCORE IS CALCULATED

- ▶ Scoring system estimates how much energy building would use if
 - best performing
 - worst performing
 - every level in between
- ▶ System compares actual energy data entered to the estimate to determine where building ranks



GAIN EPA RECOGNITION

APPLY FOR ENERGY STAR

- ▶ Determine if building achieves score of 75 or above.
- ▶ Generate and P.E. or R.A. validates Statement of Energy Performance and Data Checklist.
 - all energy use accounted for accurately
 - building characteristics properly reported
 - building fully functional
 - indoor environment criteria met.
- ▶ ENERGY STAR awarded for specific year.



Free On-line Training

- ▶ Date TBD – ENERGY STAR Portfolio Manager WebEx Demonstration for Tribes (See sign up sheet.)
- ▶ Nov. 15 – Office Buildings: Benchmark Energy Performance Using EPA's ENERGY STAR® Portfolio Manager
- ▶ Nov. 15, Dec. 13 – Responding to the Climate Change Imperative: Setting Energy Use Targets with ENERGY STAR
- ▶ Nov. 17 – Multifamily Housing: Benchmark Energy Performance Using EPA's ENERGY STAR® Portfolio Manager



Regional Benchmarking & Certification



Promotion, outreach, technical assistance

As of June 2011:

- ▶ Benchmarked 2.8 B sq. ft.
- ▶ Certified 3,082 buildings

Commercial Buildings Designation:

- ▶ Office
- ▶ K-12 schools
- ▶ Hotel

National Perspective

Commercial buildings & manufacturing plants nearly half total U.S.

- ▶ GHG emissions
- ▶ energy consumption



ENERGY STAR buildings better than average

- ▶ emit 35% fewer GHG
- ▶ typically use 35% less energy

ENERGY STAR Recap

- ▶ Encourages use of ENERGY STAR products and practices to address energy efficiency in homes, buildings & plants
- ▶ Tools/resources to support building energy efficiency improvements
 - Guidelines for Energy Management
 - Portfolio Manager – benchmark, certify building performance
 - Free On-line Training
- ▶ Energy Efficiency Improvement Benefits
 - saving energy & costs
 - protecting the environment
 - demonstrating environmental leadership



ENERGY STAR Contact & Websites

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Websites:

- www.epa.gov
- www.energystar.gov
- <http://www.epa.gov/climatechange/>
- tribal@go.doe.gov – federal funding opportunities
- www.dsire.org – government, utility, non-profit incentives, renewables, energy efficiency, annual & set up fee

