



ENERGY STAR:

A Clear Pathway to Greenhouse Gas Reductions Via Energy Efficiency

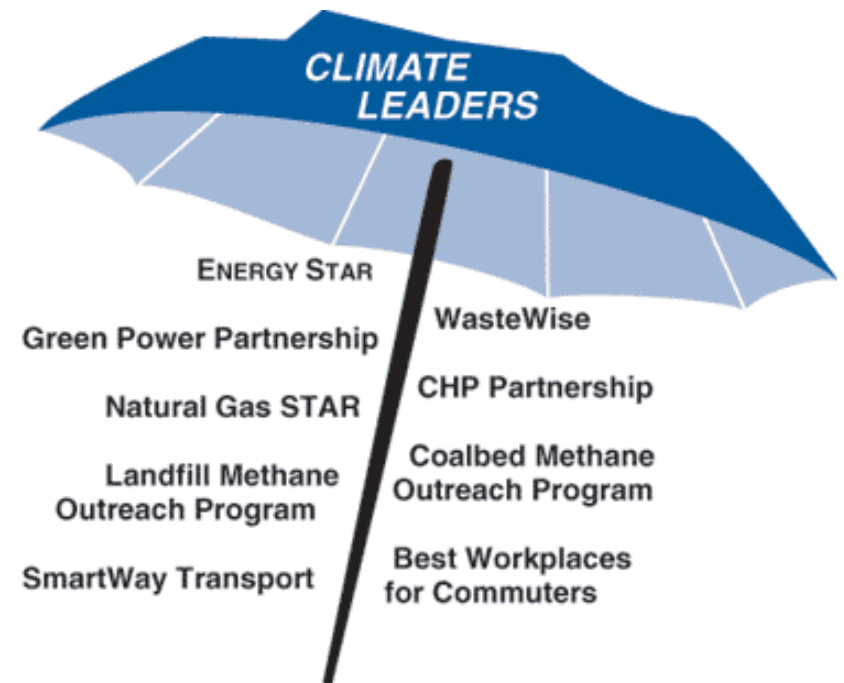
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US EPA

Climate Leaders



- Commit to:
 - Inventory company-wide greenhouse gas (GHG) emissions annually
 - Create inventory management plan
 - Discuss aggressive corporate-wide GHG reduction goal for next 5-10 years



Today's discussion

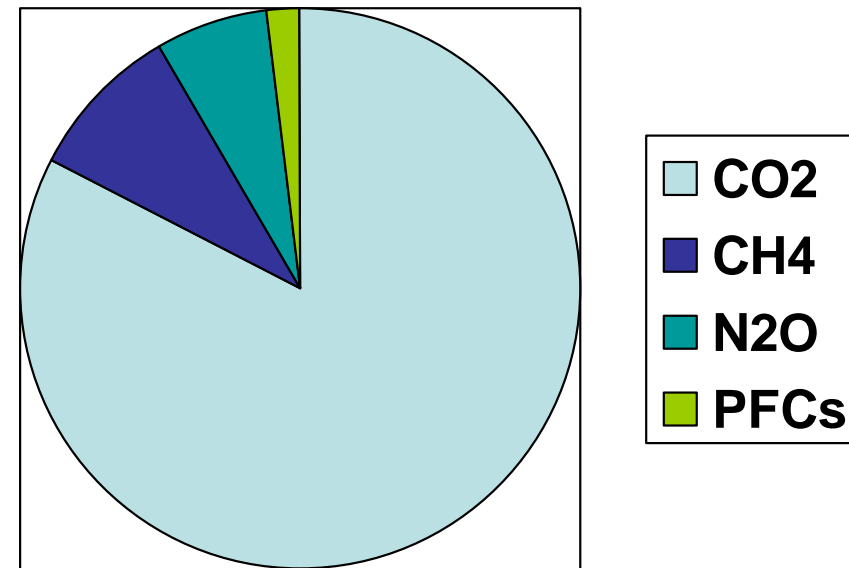


- Energy efficiency - big opportunity to reduce
- Is your organization managing energy efficiently?
- Energy management boosts goal setting and participation in Climate Leaders
- Experiences: ENERGY STAR & Climate Leaders Partners, 3M & Raytheon

U.S. GHG emissions



- CO₂ - the principal greenhouse gas emitted by human activities
- 98% of emitted CO₂ is from fossil fuel combustion



Source: US Climate Action Report - 2002



Managing energy strategically is
the fundamental way to control
emissions of greenhouse gases.

Energy realities



- The bad news:

- Today's energy costs are volatile, and, if uncontrolled, erode profits
- CO₂ is emitted mainly from energy consumption; CO₂ is a business risk – uncertain future

- The good news:

- Energy efficiency is the least expensive form of energy supply
 - controlling use can increase profits & minimize impacts of volatile energy costs
- Proactive energy management is a wise course for business
 - choose your path

Business realities



- Energy is sometimes managed:
 - Informally and may be decentralized, not centrally coordinated or managed
 - By project and is not program-oriented
 - On a cyclical basis (i.e. company support is irregular)
- As a result, many businesses:
 - Miss important savings opportunities because they lack a means for addressing energy use across the organization

Corporate Energy Management



- **Successful management:**
 - Creates an organization-wide system and program for managing energy
 - Delivers sustained reductions over time and is designed for continual improvement
 - Relates itself to the core business of the organization
- **Thus, businesses with formal energy management programs:**
 - Realize energy and cost savings and greenhouse gas reductions

ENERGY STAR



- A voluntary, government-backed program which helps you protect the environment through superior energy efficiency.
- Since 1992
- Energy efficiency is one of the best opportunities for reducing CO₂ emissions.

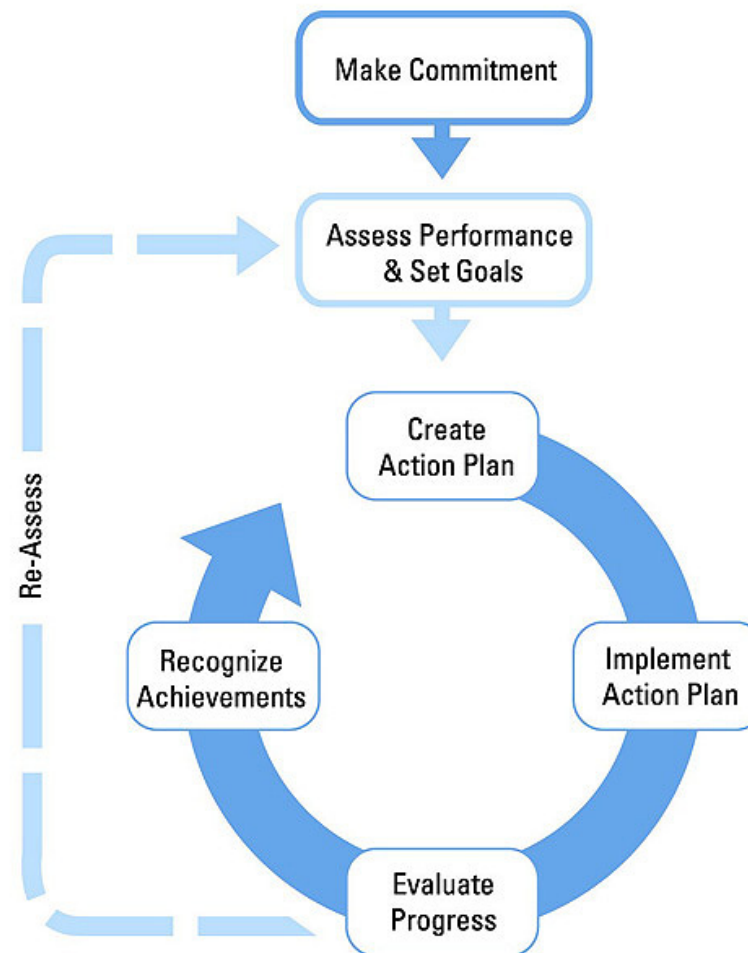
Steps for successful energy management



ENERGY STAR Guidelines for Energy Management

Based on the
successful practices
of over 1,600 major
U.S. organizations

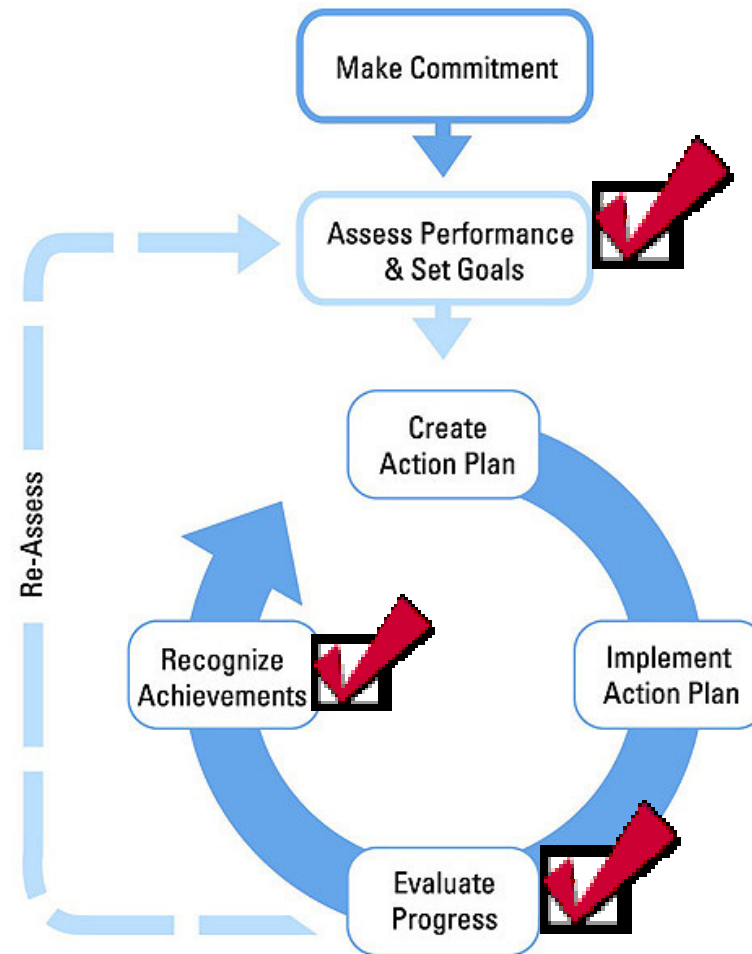
www.energystar.gov



Help for Climate Leaders



The ENERGY STAR path to energy efficiency helps you meet your climate goals.




Is your energy program delivering all it can?



Take the
**ENERGY
STAR** test.

Does it
measure up?

 ENERGY STAR® Guidelines for Energy Management Matrix			
	Little or no evidence	Some elements/degree	Fully implemented
Normalize	Not addressed	Some unit measures or weather adjustments	All meaningful adjustments for corporate analysis
Establish baselines	No baselines	Various facility-established	Standardized corporate base year and metric established
Benchmark	Not addressed or only same site historical comparisons	Some internal comparisons among company sites	Regular internal & external comparisons & analyses
Analyze	Not addressed	Some attempt to identify and correct spikes	Profiles identifying trends, peaks, valleys & causes
Technical assessments and audits	Not addressed	Internal facility reviews	Reviews by multi-functional team of professionals
Set Performance Goals			
Determine scope	No quantifiable goals	Short term facility goals or nominal corporate goals	Short & long term facility and corporate goals
Estimate potential for improvement	No process in place	Specific projects based on limited vendor projections	Facility & corporate defined based on experience
Establish goals	Not addressed	Loosely defined or sporadically applied	Specific & quantifiable at various organizational levels
Create Action Plan			
Define technical steps and targets	Not addressed	Facility-level consideration as opportunities occur	Detailed multi-level targets with timelines to close gaps
Determine roles and resources	Not addressed	Informal interested person competes for funding	Internal/external roles defined & funding identified
Implement Action Plan			
Create a communication plan	Not addressed	Tools targeted for some groups used occasionally	All stakeholders are addressed on regular basis
Raise awareness	No overt effort made	Periodic references to energy initiatives	All levels of organization support energy goals

Evaluate performance



- Determine the efficiency of your buildings and plants
 - ENERGY STAR helps you determine if they are using energy efficiently
 - Set goals for improving their performance
 - Use the ENERGY STAR national ratings and guidance to help you set energy and climate goals
 - Monitor and track performance to judge progress

ENERGY STAR tools



- Portfolio Manager – track & rate building energy use
- Plant energy performance indicators – rate manufacturing plant performance (specific sectors)
- Building use manual – help with whole building energy savings
- Energy guides for manufacturing plants (specific sectors)
- Financial value calculator – create a business case for investment in energy efficiency
- And more! Visit www.energystar.gov under the Business Improvement heading.

ENERGY STAR & Climate Leaders



Knowledge is power.

ENERGY STAR supplies the systems and information you need to make decisions and set goals.

- Use ENERGY STAR tools
- Join ENERGY STAR

Be an ENERGY STAR Partner



- Greenhouse gas reductions don't just happen. It takes planning, measurement, tracking, goals, and dedicated people to reduce emissions.
- Work with ENERGY STAR now to meet your climate commitment!



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