



ENERGY STAR[®]

Resources for Industry



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Products

Commercial Buildings

Homes

Industrial Plants





ENERGY STAR Industrial Program:

- Working with industry for over 15 years
- 30 Sector-specific industry initiatives
- Voluntary and free for any company with plants in the USA
- Helped hundreds of companies save money while reducing greenhouse gas emissions.
- Administered by the US EPA
- www.energystar.gov/industry





Why is Energy Management Important?

- Cost Savings
- Reduces emissions of GHGs and other air pollutants (NO_x, VOCs, etc.)
- Increases competitiveness
- Protects against impacts from energy/fuel prices
- Searching for energy savings can also yield opportunities for process efficiency, safety, and quality improvement



10% reduction in energy intensity within 5 years or less.

- Open to any manufacturing plant.
- Reduction is based on the change from annual intensity baseline registered with ENERGY STAR.
- Baseline is based on a 12 month period in the year prior to “taking” the Challenge.
- Intensity metric (MMBTU/unit or MMBTU/sq ft) is determined by the plant or company.
- No annual reporting.
- Plants outside of the US can participate.
- Verification process required for apply for recognition.

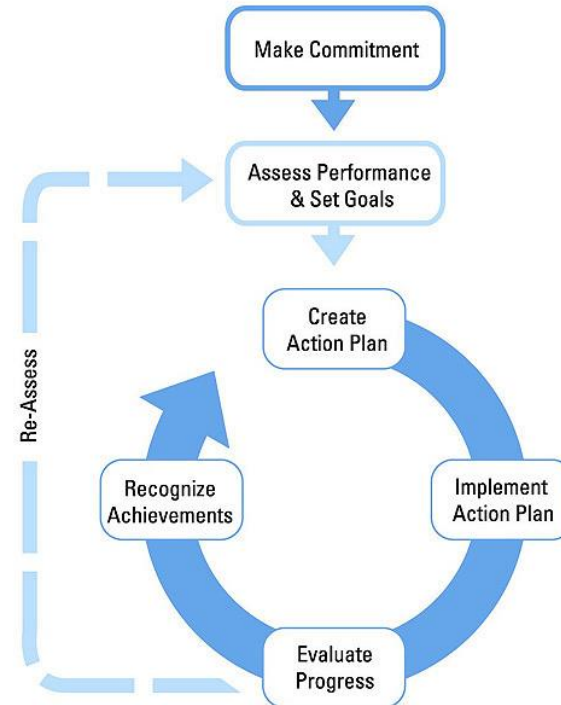
Strategic Energy Management

Guidelines for Energy Management

- Provides a framework for how to implement an energy program.
- Consistent with ISO 50001 and other energy management systems / strategic energy management approaches.
- Released in 2003 and used by hundreds of companies to build better energy management programs.

www.energystar.gov/guidelines

ENERGY STAR Guidelines for Energy Management





Other ES resources to support energy management

- Energy Program Assessment Matrix (XL) – Gap analysis tool for evaluating company EMS.
- Facility Energy Program Assessment Matrix (XL) - Gap analysis tool for evaluating plant EMS.
- Teaming up to Save Energy – Guidance on building an energy program.
- Energy Treasure Hunt Guidebook – Instructions on organizing an energy treasure hunt.
- Employee Engagement Resources - Guidance and outreach materials to promote energy management to employees.
- Energy Performance Indicators - Sector-specific benchmarking tools
- Energy guides – Sector-specific guides on energy saving opportunities.

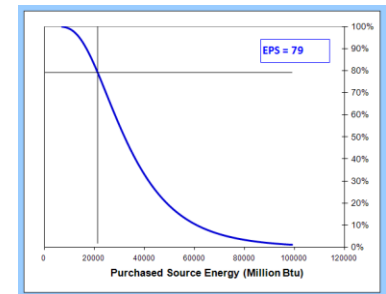
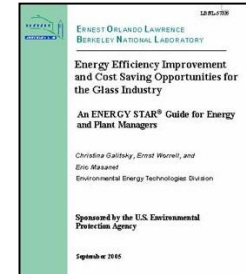
www.energystar.gov/industry



Industrial Focuses

For specific sectors, EPA convenes “Industrial Focuses”
Key activities include:

- ✓ **Energy Guide** that identifies energy efficiency opportunities.
- ✓ **Energy Performance Indicator (EPI)** to benchmark performance of plants in the sector
- ✓ **Sharing of best practices**
- ✓ **Networking** among sector’s energy managers





Industrial Focus Sectors

- **Ammonia Fertilizer**
- **Cement Manufacturing**
- **Concrete**
- **Commercial Baking**
 - Cookies & Crackers
 - Breads & Baked Goods
- **Corn Refining**
- **Dairy Processing**
 - Fluid dairies
 - Cheesemaking
 - Ice Cream
- **Food Processing**
 - Juice
 - Potato Products
 - Tomato Products
- **Glass Manufacturing**
 - Fiberglass
 - Flat glass
 - Container glass
- **Motor Vehicle Manufacturing**
 - Automobile Assembly Plants
 - Power train Plants
- **Metal Casting**
 - Ferrous
 - Aluminum
- **Petrochemical Manufacturing**
- **Petroleum Refining**
- **Pharmaceuticals**
- **Printing**
- **Pulp & Paper**
 - Integrated Mills
 - Pulp Mills
- **Steel**
 - Primary Steel
 - Mini Mills

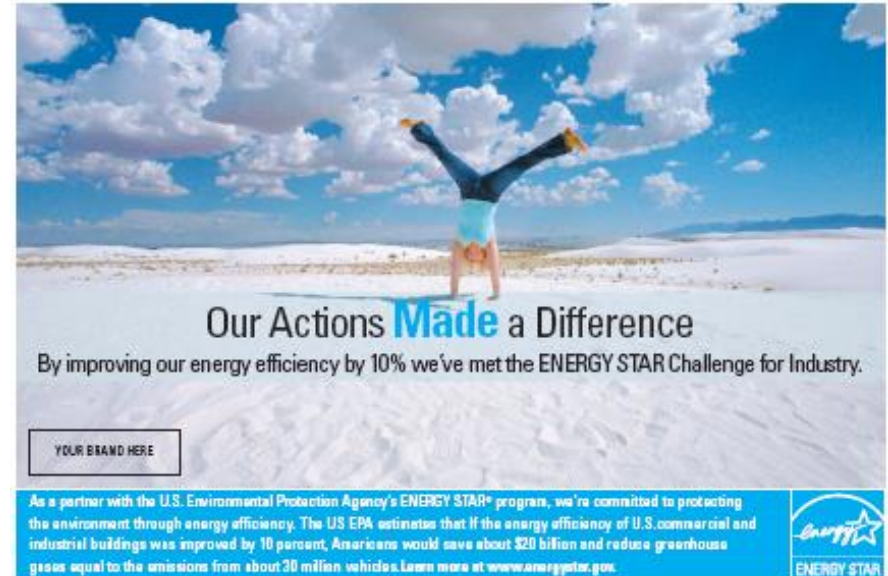
Recognition through ENERGY STAR is a tool

- Recognition of good work motivates better performance
- Raises awareness of energy management internally (staff and management) and externally
- If taking the Challenge for Industry, the 10% reduction goal can be monetized in terms of money that could be saved
- Helps with continual improvement with energy efficiency
- Links company's energy efforts with ENERGY STAR, the most recognized name in energy efficiency



Recognition Formats

- Letter to CEO from EPA
- Certificate
- Communications materials
- Profile on energystar.gov
- Bragging rights





Global Brands Lightbox (0)

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70 GM Plants Meet ENERGY STAR® Challenge for Industry

Seven new facilities and seven repeat achievers recognized for reducing energy use
2014-11-05

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DETROIT – Fourteen General Motors plants around the world achieved the U.S. Environmental Protection Agency’s ENERGY STAR® Challenge for Industry, collectively cutting energy intensity by an average of 17 percent. The new achievers, which include a foundry and assembly plants, bring GM to an industry-leading total of 70.

To meet the challenge, industrial sites must reduce energy intensity by 10 percent in five years or less. All 14 sites



Warren Transmission found energy savings by replacing lights with new, energy efficient bulbs.

GM Scorecard: ENERGY STAR® Challenge for Industry

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Colgate-Palmolive Recognized for Energy and Climate Change Leadership by U.S. Environmental Protection Agency

Submitted by: **Colgate-Palmolive Company**
 Categories: Sustainability, Renewable & Alternative Energy
 Posted: Sep 25, 2014 – 07:00 AM EST



NEW YORK, N.Y., Sep. 25 /CSRwire/ - Eleven more Colgate-Palmolive manufacturing sites have successfully achieved the U.S. Environmental Protection Agency’s (EPA) ENERGY STAR Challenge for Industry in 2014. Thirty-one Colgate sites have now earned this recognition, surpassing the Company’s 2015 goal to have half of its sites around the world achieve the distinction. The sites were recognized for reducing energy intensity by at least 10 percent – with a number of sites achieving energy intensity reductions above 20 percent.

Earlier this year, the U.S. EPA also recognized Colgate with the 2014 ENERGY STAR Partner

Business Wire A Berkshire Hathaway Company

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HanesBrands Has Five Additional Manufacturing Plants Achieve U.S. EPA Recognition for Energy Efficiency Gains

Hanes plants in the Dominican Republic, El Salvador, Honduras, Thailand and Vietnam increased energy efficiency by 18 percent to achieve EPA Challenge for Industry Status

March 24, 2016 10:53 AM Eastern Daylight Time

WINSTON-SALEM, N.C. – (BUSINESS WIRE) – HanesBrands (NYSE: HBI) announced today that five additional company manufacturing plants have earned U.S. Environmental Protection Agency Energy Star Challenge for Industry awards by reducing energy use by an average 18 percent.

“The employees at all five plants should be commended for their success in reducing energy use and protecting the environment”

To date, 23 of the company’s manufacturing facilities have earned the honor, helping the company reduce energy use as well as the corresponding greenhouse gas emissions that result from energy use. To earn Challenge for Industry status, manufacturing plants must reduce their energy use by 10 percent within a five-year period.

CORNING

CORPORATE COMMUNICATIONS

Eight Corning Sites Named EPA Challenge for Industry Achievers

CORNING, N.Y. | Corning Incorporated | March 07, 2016

Manufacturing plants cut energy intensity per site by up to 42 percent

Corning Incorporated (NYSE: GLW) announced today that eight of its manufacturing facilities around the world achieved the U.S. Environmental Protection Agency’s ENERGY STAR® Challenge for Industry recognition, individually reducing energy intensity ranging from 10.8 percent to 42 percent.

The eight facilities represent five of Corning’s business segments: Display Technologies, Specialty Materials, Environmental Technologies, Life Sciences, and Optical Communications.



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How can we drive your business "success?"

Home - Bimbo Bakeries USA completes EPA Energy Star Challenge

Operations Industry News

Bimbo Bakeries USA completes EPA Energy Star Challenge



May 5, 2015

KEYWORDS bakery energy management energy reduction energy-efficient bakeries EPA Energy Star Challenge Reprints

Bimbo Bakeries USA, Horsham, PA, recently completed the Environmental Protection Agency’s Energy Star Challenge for Industry at six of its bakeries, with an average of 17 percent energy reduction per plant in the past year. In addition to these six bakeries, BBU’s remaining plants are participating in the challenge, saving enough energy to power 330,350 households for a year. With a total of 59 facilities, BBU operates more than half of the bakeries currently participating in the Energy Star Challenge.

“BBU is committed to promoting energy efficiency, preventing pollution, protecting the





Who's taking the Challenge?

- Over 1150 plants have taken the Challenge for Industry.
- Over 380 plants have Achieved Challenge for Industry.
- **More than 150 plants have taken the Challenge more than once.**

- **The average energy intensity reduction of all plants was 20% in 1.9 years.**

- Plants taking the Challenge can be found in over 50 countries.

- Over 66 trillion BTUs in energy saved by Achiever plants.
- Energy savings by Achiever plants equals the total annual energy use of 370,000 households.



Participants in the Challenge



FIAT CHRYSLER AUTOMOBILES



COLGATE-PALMOLIVE COMPANY





Challenge for Industry process

- Step 1: Identify and Energy Intensity Metric
 - Usually BTU/product measure (weight, volume, counts, labor hours, etc.)
- Step 2: Energy Tracking Method
 - Facility can use its own system or ES Energy Tracking Tool (xls)
- Step 3: Set a baseline and a 10% improvement goal
- Step 4: Create a formal site file and plan for tracking data
- Step 5: Register for the Challenge (simple online form)
- Step 6: Track energy use and achieve the 10% reduction
- Step 7: Verify energy savings (PE) and apply for recognition



Take-aways

- Recognition through the **ENERGY STAR Challenge for Industry** helps build internal support for energy management and links it to a well-known brand
 - 80% of ENERGY STAR Challenge for Industry participants indicated that taking the Challenge drove additional energy savings at their plant.
 - 86% indicated that the Challenge increased interest in energy management among facility staff.
- Easy to sign up and submit verification
- ENERGY STAR has additional tools and guidance that organizations can use to create and improve energy management programs

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