



ENERGY STAR for Asphalt Plants

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Where have you seen this logo?



What does it mean?



ENERGY STAR Helps Manufacturing Plants

- Reduce energy
- Save money
- Protect the environment



ENERGY STAR



What is ENERGY STAR?






- Voluntary government partnership program
- Established by EPA in 1992
- Focuses on energy efficiency of:
 - Products
 - Homes
 - Buildings
 - **Industrial Plants**
- National symbol for energy efficiency



Over 90% of the American public recognizes the ENERGY STAR logo!



Why Manage Energy?

- Energy costs are significant and controllable 
- Make your operations more efficient 
- Build a history of environmental stewardship 
- Improve relationships with neighbors, municipalities, etc. 
- Enable third-party recognition 

How much of your operational costs do you think are tied to energy?



ENERGY STAR Offerings to Unlock Success in Energy Management

- Partnership
- Peer Exchange
- Tools & Resources
 - Energy Guide for Asphalt Mix Plants
 - Industrial Assistance Networks
 - Treasure Hunts
 - Energy Performance Indicator for Asphalt Mix Plants
- Recognition
 - Challenge for Industry
 - ENERGY STAR Plant Certification



Asphalt Plant Energy Performance Peer Exchange

- Share best practices on energy management
- Member presentations
- Be first to learn news and resources on ENERGY STAR
- ~4-6 virtual meetings per year

Sign up here



Asphalt Mixture Production Energy Guide



Document Number 430F23004
Office of Air and Radiation

- Over 50 ways to improve energy use at asphalt mix plants
- Content includes:
 - Where energy is used in mix production
 - Principles of energy management and savings
 - Energy efficiency opportunities in:
 - Common plant systems
 - Production processes



Resources: Treasure Hunt Maps

- Identify common energy savings opportunities
- Especially helpful to people less familiar with energy efficiency considerations
- Fifteen buildings maps
- Four industrial maps, one for asphalt!
- Available in English and Spanish

energy
ENERGY STAR

Treasure Map FOR ASPHALT MIXTURE PRODUCTION PLANTS

Grab a clipboard and take this map along on your treasure hunt. Focus on uncovering opportunities to save. When you find something, make notes about location, tools, materials, or expertise needed; or further research required. Feel free to add to or modify this list to suit your own needs. For more treasure hunt resources, visit www.energystar.gov/treasurehunt.

Facility Name _____ Date _____ Team _____

1 Facility Management

- Review the plant's energy tracking system, billing records, or other sources of consumption data. Identify any spikes or unusual changes in energy use over the past year.
- Check the facility's energy action plan and reports from energy audits, assessments, and treasure hunts (if available) to see if earlier identified energy savings measures have been implemented.
- Inspect maintenance plans and records to identify areas to review during the treasure hunt. Routine or preventative maintenance on neglected equipment may yield energy savings.
- Review building management system (BMS) and/or building automation system (BAS) code, if applicable, to ensure that specific commands to reduce unneeded energy consumption (e.g., on/off times) remain active.
- Consider facility maintenance during daylight hours to reduce the need for lighting and HVAC during unoccupied periods.
- Consider using software and control systems that provide real-time monitoring, including integration with real-time fuel sensors.
- Check that the facility has a comprehensive training program with energy management emphasis for plant operations personnel, and that all staff have been trained and receive periodic refresher training. For example, see sections 2.2 and 4.1 of the Energy Efficiency and Cost Saving Opportunities for Asphalt Mixture Production guide.

NOTES:

2 Dust Collectors

- Verify proper dust collector maintenance schedules are being followed, including:
 - Identify leaks. Track identified leaks to ensure they are sealed. Replace dust seals regularly, and inspect hidden areas around augurs and chutes.
 - Inspect pulse air jets. If automated to be controlled by differential pressure, confirm correct operation.

Energy Treasure Hunts

- Use your team to find savings
- Create a focus on low-cost operational improvements with quick results
- Establish a focus of continuous improvement and cross-functional collaboration
- Establish an action plan for project implementation
- Engage senior management and financial decision makers to authorize action on projects



Treasure Hunt Framework

- One- to three-day event
- Starts during a non-operating period and continues through an operating period
- Teams walk the site, making observations, and asking questions
- Requires time to prepare findings, estimate potential savings, and make recommendations for management



Challenge for Industry

GOAL:

Reduce energy intensity at a plant by **10%** in **5 years** or less

Achievers receive a certificate, logo, and letter to the CEO

Key lesson: Enroll multiple plants to create friendly competition!



US EPA | ENERGY STAR®
**CHALLENGE
FOR INDUSTRY**



ENERGY STAR Benchmarks

aka Energy Performance Indicators (EPIs)

Assess the level of energy efficiency in a manufacturing plant

- Are based on whole plant energy consumption.
- Provide a plant with a 1-100 ENERGY STAR score.
- Are statistical models based on actual data from industry
- Use normalization to compare a plant to *similar* plants in the industry.



ENERGY STAR Plant Certification

- Eligible for mix plants in top quartile of energy efficiency
 - Score of 75 out of 100 or higher on EPI
- Certified plants can affix ENERGY STAR logo to plant
- Announcement of first certified plants in June 2025 (tentative)
 - To be included in announcement, apply for certification by April 15th.



Certified Plants to Date

Cadillac Asphalt LLC

Rawsonville Plant, Belleville, MI

Callanan Industries, Inc.

Cordell Rd – Drum Plant, Schenectady, NY

Inland Asphalt a CRH Company

Sullivan Plant, Spokane, WA

Rogers Group Inc.

Candora Asphalt Plant, Knoxville, TN
Huntsville Asphalt Plant, Huntsville, AL

Tilcon Connecticut Inc.

New Britain Drum Plant, New Britain, CT



2025 ENERGY STAR CERTIFIED FACILITY

This facility meets strict energy performance levels set by the U.S. EPA.

www.energystar.gov

Submit your plant certification applications by April 15th to be included in a tentative June announcement.



Join the Industrial Assistance Network



Training – Learn from experienced industrial energy managers and peer companies during a series of live, online energy management trainings.



Tools – Gain access to a wide range of tools and resources focused on building a program and on plant utility and process improvements.



Networking – Attend quarterly workshops to discover and share best practices.



Coaching – Receive support to build a focus on energy management and process improvement.



Questions?

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