



ENERGY STAR Helps Manufacturers Reduce Their Carbon Footprint and Save Money

Betsy Dutrow, US EPA ENERGY STAR
Concrete Innovations Webinar September 17, 2024



ENERGY STAR

- Voluntary government partnership program by EPA to protect the environment - since 1992*
- Over 800 manufacturers partner to improve energy efficiency in operations
- Focused on the energy efficiency of:
 - **Manufacturing plants** and products, homes, buildings
- The national symbol for energy efficiency
- Awareness exceeds 90%



*Natural Resources Canada administers ENERGY STAR in Canada

2

ENERGY STAR has focused on energy intensive industries

- 33 unique industries work with the program to strategically manage energy
 - Cement and asphalt mix plants are two
- ENERGY STAR provides each industry:
 - Improved energy management practices
 - Tools to improve industry's ability to measure, track and benchmark energy in operations
 - Energy guides that identify savings in a specific plant type
 - A network of industrial energy managers to share best practices and support
- www.energystar.gov/industry

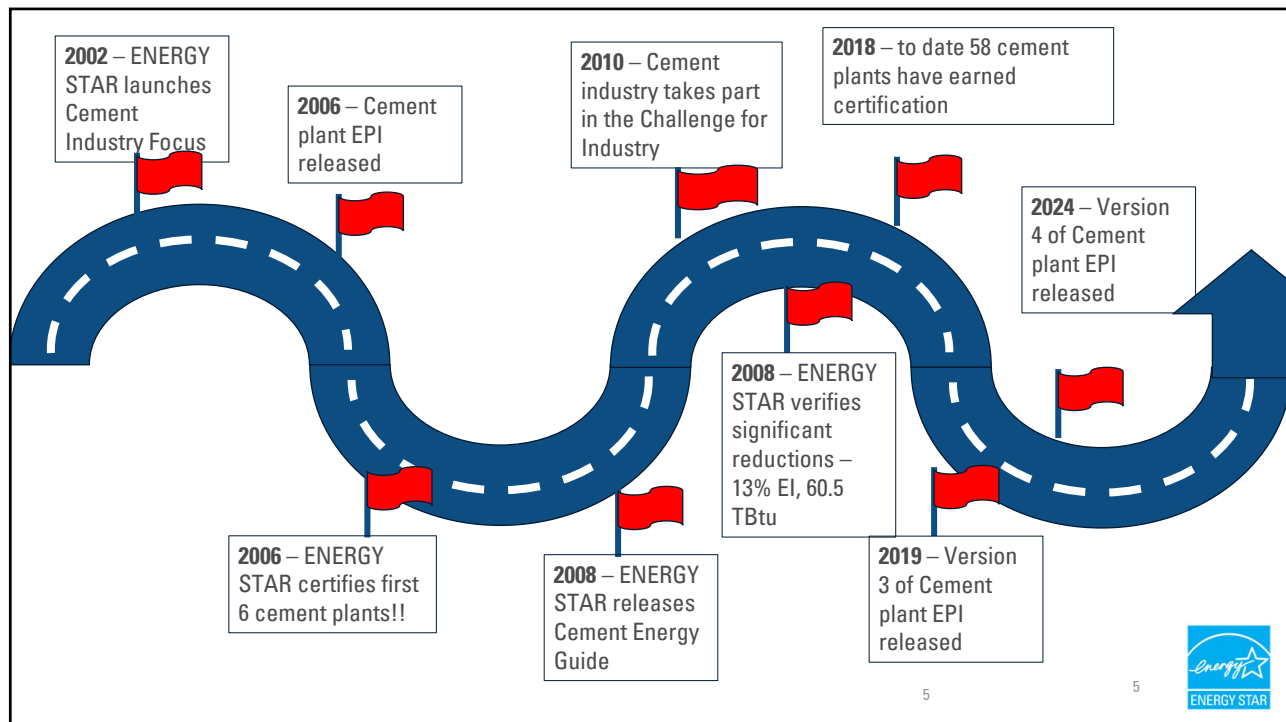
3

ENERGY STAR tools for cement

1. Energy Guide – where to find energy savings in cement plants
2. Plant Energy Performance Indicator – benchmarks a cement plant's energy efficiency compared to similar plants
3. Industry Focus – energy managers meet to discuss barriers and solutions to energy efficiency in cement and asphalt
4. Training – in-person energy management training
5. Coaching – expert industrial energy managers assist cement energy managers

4





Cement industry actively participates



6



60 U.S. cement plants have certified since 2006



ENERGY STAR tools for Asphalt Mix

- Energy Guide – identifies where to find energy savings in mix plants
- Plant Energy Performance Indicator – evaluates how a mix plant's energy efficiency compares to similar plants in the industry – IN DEVELOPMENT
- Industry Focus – energy managers meet to discuss barriers and solutions to energy management in asphalt mix production
- Training
 - Energy Treasure Hunt and in-person, hands-on class
 - In-person energy management training
- Coaching – assistance for energy managers in the industry by expert industrial energy managers



7

Asphalt Mix Industry actively participates



ENERGY STAR is increasing its focus on small & medium manufacturing

- Many “medium” plants in the U.S.
 - Often are not energy intensive
 - Many have energy waste and may not be aware of help available to them
 - Are widespread across the U.S.
-
- **Goal: help small and medium manufacturers to improve energy management, secure savings, and sustain energy performance**

9



Introducing the ENERGY STAR Industrial Assistance Network








Goals:

Helping manufacturers on a local level

- ✓ Find energy savings & reduce greenhouse gas emissions
- ✓ Engage companies in a local network of supportive energy managers
- ✓ Expand professional skills of plant people



Benefits of joining the Industrial Assistance Network

-  **Training** – Taught by industrial energy managers in 8 online trainings; students gain skills in energy management.
-  **Tools** – Resources focused on building a program and on plant utility and process improvements.
-  **Networking** – Support group for energy managers to share best practices and learn from ENERGY STAR's network of experienced industrial energy managers.
-  **Coaching** – Help from experience industrial energy managers to build a culture of energy management and process improvement within a plant and company
-  **Savings** – Potential energy and money savings through improved energy management

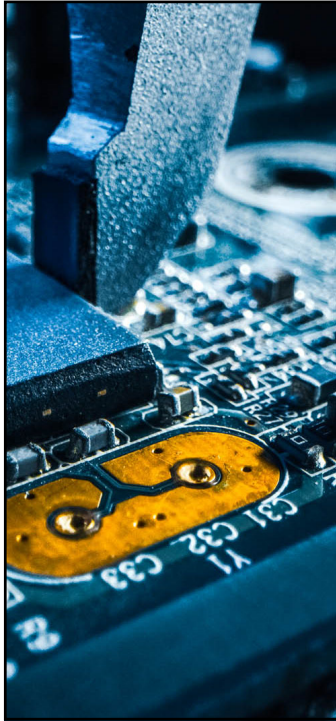


Training builds energy management skills in personnel

What will you learn?

Session	Training	Format	Dates
1	Introduction to Energy Management	Virtual Instructor-led	Month 1
2	Measuring and Monitoring Energy Performance	Virtual Instructor-led	Month 2
3	Teams, Culture, and Communications	Virtual Instructor-led	Month 3
4	Finding Energy Savings Through Treasure Hunts	Virtual Instructor-led	Month 5
5	Planning an Energy Treasure Hunt	Virtual Instructor-led	Month 6
6	Implementation and Building Momentum	Virtual Instructor-led	Month 7
7	Maintaining and Growing Your Program	Virtual Instructor-led	Month 8
8	Energy Efficiency Effects on Low Embodied Carbon	Virtual Instructor-led	Month 9

Each session is 90 minutes in length, delivered by experienced energy managers, and includes engaging instructional content, assignments, and interactive activities. Most training sessions have a post-session assignment (1-2 hours)



The Network connects you to additional assistance

- The Network partners with other federal programs.
- National Institute of Standards and Technology's Manufacturing Extension Partnership (MEP)
 - MEP Centers work with manufacturers to develop new products, expand markets, adopt new technology, and enhance value within supply chains
- Department of Energy's Industrial Assessment Centers (IAC)
 - IACs provide no-cost energy assessments for qualified plants
 - IACs have funds to implement assessments' findings



How can manufacturers join the Industrial Assistance Network?

- Email energynetwork@energystar.gov and tell us you want the training and will participate in quarterly meetings.
- Name plant personnel you want to participate.
 - Provide names, emails and addresses
 - We will send registration instructions.
- Make sure to copy those you want to register.

Questions?

- Email energynetwork@energystar.gov or visit www.energystar.gov/assistanancenetwork for more information.

Doing more with ready mix producers

- ENERGY STAR Tools for RMC – maybe more in the future

15



Perhaps in the future: ENERGY STAR Focus for Ready Mix Concrete

- Energy Guide – identifies where to find energy savings in RMC - EXISTS
- Plant Energy Performance Indicator – evaluates how a plant's energy efficiency compares to similar plants in the industry - TBD
- Industry Focus – energy managers meet to discuss barriers and solutions to energy management in cement and asphalt - TBD
- Training - TBD
 - Energy Treasure Hunt and in-person, hands-on class
 - In-person energy management training
- Coaching – assistance for energy managers in the industry by expert industrial energy managers – FOR PARTNERS NOW

16



Tools you already have from ENERGY STAR



Short “to-do” list

- Take the IAN training; email energynetwork@energystar.gov
- Visit www.energystar.gov/industry for more resources to save energy and money
- Become an ENERGY STAR partner; go to www.energystar.gov/join



Contact information

- Betsy Dutrow, ENERGY STAR
Industrial Team Leader
- Dutrow.elizabeth@epa.gov
- Danny Macri, ENERGY STAR RMC
Focus Lead
- Macri.daniel@epa.gov

19

