About ENERGY STAR for the Industrial Plants

American manufacturers have embraced ENERGY STAR to build successful energy programs, engage in vibrant peer networks, and improve their facilities’ energy performance. Hundreds of companies have deployed ENERGY STAR strategic energy management (SEM) resources, such as the Guidelines for Energy Management, to foster an organizational culture focused on continuous improvement of energy performance.

To help specific industrial sectors become more energy efficient, EPA has convened 31 “Industrial Sector Focuses” to foster collaboration and develop industry-specific tools and resources. These sectors span the U.S. economy—from cookie and cracker bakeries and pharmaceutical plants to integrated steel mills and petroleum refineries. Unique products of an Industrial Focus include a plant Energy Performance Indicator (see below) and an Energy Guide that documents effective energy efficiency measures for the sector. To date, 19 Energy Guides have been published.

Plants achieve ENERGY STAR certification and reductions

Popular tools include plant Energy Performance Indicators (EPIs), which provide companies with the information they need to make smart investment decisions. EPA provides ENERGY STAR certification for 19 types of manufacturing plants, and 100 plants earned ENERGY STAR certification for superior energy performance in 2018.

In addition, 41 industrial plants achieved energy use intensity reductions in the 2018 in the ENERGY STAR Challenge for Industry campaign, in which industrial sites commit to reducing their energy intensity by 10 percent within five years.

Program savings

In 2017, the ENERGY STAR program for industrial plants helped businesses save 34 billion kilowatt-hours of electricity, avoid $3 billion in energy costs, and achieve 40 million metric tons of greenhouse gas reductions.

Spotlight On: Nissan’s Smyrna Assembly Plant

Nissan North America’s Smyrna, Tennessee automobile assembly plant is over 6 million square feet and produces over 600,000 vehicles annually, making it one of the largest in North America. The plant contains two assembly lines that produce cars, SUVs, and electric vehicles.

Nissan’s involvement with ENERGY STAR began with the Motor Vehicle Industrial Sector Focus. In 2006, the company became an ENERGY STAR Partner to demonstrate its commitment to energy management.
Following ENERGY STAR guidance, Nissan established cross-functional energy management teams to identify energy performance improvement opportunities at its Smyrna Plant. Sub-metering to allow better measurement and management of plant energy loads was made an early priority. This allowed the energy team to investigate the energy use between shifts and on weekends when the plant was not running. In return, the Smyrna plant reduced energy use by almost 50% by turning off plant equipment and lighting when not needed. Nissan has continued to identify opportunities to save energy through both equipment upgrades and better operating practices.

Through these efforts the Smyrna plant has distinguished itself as one of the most energy-efficient automobile assembly plants in the U.S. and Canada by earning ENERGY STAR certification for 13 years in a row since 2006.

For additional details about ENERGY STAR achievements see energystar.gov/numbers For ENERGY STAR facts and figures broken down geographically by state, see energystar.gov/statefacts. For achievements by ENERGY STAR Award Winners, see energystar.gov/awards.