About ENERGY STAR for Industrial Plants

American manufacturers have embraced ENERGY STAR to build successful energy programs, engage in and learn through its 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 33 “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 ENERGY STAR tools for the industrial sector include plant Energy Performance Indicators (EPIs), which quantitatively evaluate how energy-efficient a plant is and provide companies with the information they need to make smart investment decisions. EPA provides ENERGY STAR certification for twenty types of manufacturing plants, and 90 plants earned ENERGY STAR certification for superior energy performance in 2021.

In addition, 28 industrial plants achieved energy use intensity reductions in 2021 in the ENERGY STAR Challenge for Industry campaign, in which industrial sites commit to reducing their energy intensity by 10% within five years. Also, 103 plants registered baseline energy use intensity with the Challenge for Industry in 2021.

Program Savings

In 2020, the ENERGY STAR program for industrial plants helped businesses save 30 billion kilowatt-hours of electricity, avoid $2 billion in energy costs, and achieve 30 million metric tons of greenhouse gas reductions.

For additional details about ENERGY STAR achievements see ENERGY STAR Impacts.

Spotlight On: Building an Energy and Decarbonization Strategy with ENERGY STAR: Bimbo Bakeries USA Inc.

Bimbo Bakeries USA Inc. (BBU) is one of the largest commercial baked goods companies in United States whose products include Thomas English Muffins, Earthgrains breads, Sara Lee cakes, and Entenmann’s pastries. BBU’s initial involvement with ENERGY STAR began in the Industrial Focus for Bakeries, an initiative that developed a set of energy
efficiency tools for the industry. Experiencing the value of the ENERGY STAR industrial network, BBU became one of the first baking companies to join the ENERGY STAR partnership in 2013.

Initially, the company did not have a formal corporate energy program but understood the importance energy management would play in the company’s new sustainability strategy. After becoming a partner, BBU took advantage of the energy management resources, support and networking with other Partner companies offered by ENERGY STAR to build a world-class energy program. Since joining, the company has earned ENERGY STAR certification for 18 of the company’s bakeries, achieved the ENERGY STAR Challenge for Industry at 7 bakeries, and has been awarded ENERGY STAR Partner of the Year for Energy Management in 2018 and 2019 and Partner of the Year: Sustained Excellence annually from 2020 to 2022.

Recently, to do its part to address climate change, BBU set aggressive greenhouse gas (GHG) reduction goals. A cornerstone of BBU’s decarbonization strategy for achieving these goals is increasing the energy efficiency of operations and using tools and resources from ENERGY STAR. For BBU and many other manufacturers, increasing energy efficiency is the most cost-effective way to reduce scope 1 and 2 GHG emissions. According to a recent study supported by ENERGY STAR, an 86% reduction in industrial GHG emissions by 2050 is technically feasible; energy efficiency is expected to contribute up to 34% of this reduction. BBU, along with many other companies, is now working with ENERGY STAR to identify ways to enhance energy efficiency further to drive industrial emission reductions.

For additional details about ENERGY STAR achievements see ENERGY STAR Impacts. For ENERGY STAR facts and figures broken down geographically by state, see ENERGY STAR State Fact Sheets. For achievements by ENERGY STAR Award Winners, see the ENERGY STAR Award Winners Page.