

U.S. Department of Energy's Industrial Technologies Program (ITP) Industrial Facility and Commercial Building Resources

Develop an Energy Management Plan	
<i>Facilities:</i>	EPA ENERGY STAR Guidelines for Energy Management Overview Guides companies through a process to implement an energy management program. Applies to any company or organization. Learn how to set corporate energy policy, form an energy team, set baselines and benchmarks, measure results, create a communications plan, and access resources .
	EPA ENERGY STAR Energy Program Assessment Matrix Evaluate corporate energy management with this easy-to-use Excel spreadsheet. Compare corporate-level energy management practices with the steps outlined in the "Guidelines for Energy Management Overview." Use the spreadsheet to identify strengths and weaknesses in current practices and the next steps to improve energy management.
	EPA ENERGY STAR Teaming Up to Save Energy Use this how-to guide to form an energy management team. Discusses the structure, launch, and maintenance of an energy team and provides examples from ENERGY STAR partners. Use a checklist for help in forming a team.
<i>Buildings:</i>	EPA ENERGY STAR Facility Energy Assessment Matrix Evaluate energy management at a single facility with this easy-to-use Excel spreadsheet. Compare energy management practices at an individual facility with the steps outlined in the "Guidelines for Energy Management Overview." Use the spreadsheet to identify strengths and weaknesses in current practices and next steps to improve energy management.
Assess Energy Use and Develop a Baseline	
<i>Facilities:</i>	DOE ITP Plant Energy Profiler (Quick PEP) Diagnose how energy is used at a plant in about one hour. Helps plant or energy manager prioritize energy saving projects. Generate a customized report for that includes <ul style="list-style-type: none"> • Annual purchased energy and costs • Baseline of plant's current energy use • Calculation of CO₂ emissions • Potential energy and cost savings by plant energy system (steam, process heating, etc) • Suggested upgrades for each system
	EPA ENERGY STAR Energy Tracking Tool Track energy use, energy intensity, energy costs, GHG emissions, and progress toward meeting energy goals in this Excel spreadsheet. Track energy data monthly or annually at the facility or corporate level. Developed for use by small to medium-sized companies.
	DOE ITP Industrial Facilities Scorecard Create a snapshot of energy used by all buildings at a plant in four building systems: envelope/infiltration, lighting, space conditioning, and ventilation. Estimate potential electricity and fuel/steam savings and cost savings for improvements in each system.
	DOE ITP Energy Assessment Protocols Visit the ITP Web site for information on the energy assessment process. Includes information on preparation, participation, implementation, and communications.
	Bonneville Power Administration Industrial Audit Guidebook  Use this manual for step-by-step guidance in conducting an assessment. Considers activities to be completed before and during an assessment, and provides a checklist of activities
	DOE Industrial Assessment Centers (IAC) Apply for an assessment led by university-based teams to identify the top opportunities to save energy in small to medium-sized companies.
	DOE IAC Self-Assessment Workbook for Small Manufacturers Use this workbook to learn

	<p>how to conduct an assessment and implement energy and cost saving projects common to many operations at small manufacturing companies.</p> <p>EPA ENERGY STAR Managing Your Energy: An ENERGY STAR® Guide for Identifying Energy Savings in Manufacturing Plant Find a wide variety of information on ways to improve energy efficiency at manufacturing facilities.</p>
<i>Buildings:</i>	DOE ITP Industrial Facilities Scorecard Create a snapshot of energy used by all buildings at a plant in four building systems: envelope/infiltration, lighting, space conditioning, and ventilation. Estimate potential electricity and fuel/steam savings and cost savings for improvements in each system.
Benchmark Your Energy Performance	
<i>Facilities:</i>	EPA ENERGY STAR Portfolio Manager for commercial space Use this tool to track energy and water use at a commercial or industrial building. Benchmark the energy performance of a commercial building or warehouse compared to similar buildings nationwide. Apply for the ENERGY STAR if ratings are 75 or higher. Evaluate this tool for application to other industrial operations.
<i>Buildings:</i>	EPA ENERGY STAR Portfolio Manager Use this tool to benchmark the energy performance of commercial buildings and apply for the ENERGY STAR.
Evaluate Energy-Saving Opportunities	
<i>Facilities:</i>	DOE ITP Tip Sheets Identify immediate savings with these two-page tip sheets that offer practical energy saving ideas for systems, equipment, and maintenance activities.
	DOE ITP Fact Sheets and Handbooks Learn about industry best practices and technologies with these detailed fact sheets and handbooks to optimize energy performance across an industrial system.
	DOE ITP Sourcebooks Use these reference books to gain a comprehensive understanding of industrial energy systems. Find overviews of system components, analysis of plant and facility needs, technical advice on improving performance, and more.
	EPA Lean and Energy Toolkit Learn about practical strategies, techniques, and resources to integrate energy efficiency into lean manufacturing practices.
Motors	DOE ITP MotorMaster+ Use this motor selection and management tool to identify inefficient or oversized facility motors and compute the savings by replacing them with more efficient models.
	DOE ITP MotorMaster+ International Includes many of the same capabilities as MotorMaster+, but evaluates a broader range of motors, conducts economic analyses in different currencies, and computes annual GHG emissions reductions for selecting a Premium® efficiency motor.
Insulation	DOE ITP 3E Plus Determine how much insulation is necessary to use less energy, reduce plant emissions, and improve system efficiency.
	DOE ITP Mechanical Insulation and Design Calculators Use calculators for determining energy losses or emission reductions in equipment or piping, assess financial considerations, or estimate the simple heat flow through insulation.
Data Centers	DOE ITP DC Pro Learn how energy is used in a data center. Conduct a detailed energy assessment on critical data center operations, such as air flow and electrical use, in less than one day.
Compressed Air	DOE ITP AIRMASTER+ Evaluate a compressed air system, analyze collected data, and review results which could lead to energy savings.
	DOE ITP AIRMASTER+ Log Tool Download companion software that serves as a data importation tool and analysis aid for AIRMASTER+.

	ASME Compressed Air Standard  Purchase an ASME standard to learn how to organize and conduct a compressed air system assessment at an industrial plant, analyze the data, develop efficiency recommendations, and prepare documentation and reports.
Process Heating	DOE ITP Process Heating Assessment Tool (PHAST) [with NXEAT Capabilities] Survey all process heating equipment within a facility, select the equipment that uses the most energy, and identify ways to increase efficiency.
	ASME Process Heating Standard  Purchase an ASME standard to learn how to organize and conduct a process heating system assessment at an industrial plant, analyze the data, develop efficiency recommendations, and prepare documentation and reports.
Steam	DOE ITP Steam System Assessment Tool (SSAT) Model a real steam system and calculate energy, cost, and emission savings from potential steam improvements.
	DOE ITP Steam System Scoping Tool (SSST) Perform an initial energy assessment of a steam system and create a score for that system.
	ASME Steam System Standard  Purchase an ASME standard to learn how to organize and conduct a steam system assessment at an industrial plant, analyze the data, develop efficiency recommendations, and prepare documentation and reports.
Fans	DOE ITP Fan System Assessment Tool (FSAT) Understand the efficiency of an operating fan system and determine the economic benefit of system modifications.
Pumps	DOE ITP Pumping System Assessment Tool (PSAT) Identify pumping systems that need efficiency improvements and measure potential savings in both dollars and electrical energy savings.
	ASME Pumping System Standard  Purchase an ASME standard to learn how to organize and conduct a pumping system assessment at an industrial plant, analyze the data, develop efficiency recommendations, and prepare documentation and reports.
Case Studies and Best Practices	
<i>Facilities:</i>	DOE ITP Industrial Plant Case Studies Learn about plant successes in overcoming project barriers, adopting best energy management practices, and financing projects.
	EPA ENERGY STAR Teaming Profiles Read these profiles to learn about the value Partners find by working with ENERGY STAR Industrial Service and Product Providers. Profiles include information on the project scope, costs, energy savings, and financial return.
	DOE ITP Participating Plants Database Search for energy-saving recommendations from completed energy assessments for large companies.
	DOE IAC Database Search more than 100,000 energy-saving recommendations from completed assessments for small to medium-sized companies.
Training	
<i>Facilities:</i>	DOE ITP Webcasts Download ITP Webcast and Webinar presentations on a host of energy management topics.
Expert Technical Assistance	
<i>Facilities:</i>	DOE EERE Information Center Contact the Center for advanced engineering assistance, research, and ITP software tool support.
	DOE ITP Qualified Specialists Search a directory of Qualified Specialists who can help optimize plant energy systems and identify energy-saving opportunities.
Federal, Regional, State, Local, and Utility Programs and Incentives	
<i>Facilities:</i>	DOE ITP State Incentives and Resources Database Access more than 3500 technical and financial resources and incentives to help implement energy efficiency projects (also applicable to commercial buildings)
	DOE ITP Utility Partnership Webinars Participate in Webinars to learn how industrial customers can save energy and money through utility efficiency programs.
Estimate Project Costs	
	California Energy Commission Energy Accounting Handbook 

Commercially Successful and Emerging Technologies

	DOE ITP Energy Technology Solutions: Public-Private Partnerships Transforming Industry Details on ITP co-funded energy-efficient technologies, emerging technologies, and other resources to help industry save energy.
	DOE ITP Impacts Industrial Technologies Program: Summary of Program Results for CY2008 (Published August 2010) Summary of ITP program results for CY 2008.