INDUSTRIAL TECHNOLOGIES PROGRAM





The Quick Plant Energy Profiler

Diagnose the energy use at your industrial facility and identify ways to improve its energy efficiency Discover Your Facility's Energy-Savings Potential with ITP Software Tools



Energy Efficiency Software Tools http://www.eere.energy.gov/industry/bestpractices/software.html



The Quick Plant Energy Profiler

The Quick Plant Energy Profiler, or Quick PEP, is an excellent "first step" toward improving the energy efficiency of your plant and reducing your energy bills. Developed by the U.S. Department of Energy's Industrial Technologies Program (ITP), Quick PEP can help you quickly understand how your plant is using energy and what you can do to begin saving.

Quick PEP helps you establish a baseline, profiles how energy is being used at your plant, identifies energy- and money-saving opportunities, and calculates carbon dioxide (CO_2) emissions. Designed to typically be completed within one hour, the results from Quick PEP will identify which systems you need to focus on to get the biggest energy savings in your plant.

How Does Quick PEP Work?

Quick PEP will direct you to specific, targeted ways to save energy and money at your facility through table and chart illustrations of the energy purchased, generated, and consumed within your plant. It dissects your plant's energy use—displaying consumption and potential energy savings for each major system—and gives you a customized set of next steps that can help you prioritize which systems within your plant warrant more detailed assessment.

To get started, simply input the following information:

- Utility bill details (e.g., amount of energy purchased—electricity, fuel, and steam—and the average cost for each of these energy types)
- · Production details on one or more of your plant's outputs
- Major energy-using systems (steam, process heating, compressed air, etc.).

Based on your inputs, Quick PEP profiles your plant's energy use and generates a customized report that can be viewed online, printed, or downloaded as a PDF file. Your report will include valuable feedback, such as

- · An overview of your plant's energy purchases
- A baseline of your plant's energy use
- A calculation of your plant's CO₂ emissions
- Energy-use breakdown of your plant's largest energyconsuming systems
- · Suggested upgrades for each system.

Inputs

- Average utility bill information
- Average production information
- Major energy-using systems
- Score cards (optional)*
- Average energy usage information



Outputs

- Energy use and cost per unit of production
- Annual purchased energy graphs and tables
- Annual consumed energy graphs and tables
- Potential annual energy savings graphs and tables
- Customized list of upgrades for each system

* Before presenting your results, Quick PEP requests information about the energy efficiency of your major plant systems. You can determine this yourself or fill out an optional "score card" to obtain efficiency information for selected systems.



Annual Available Energy

The following chart and data table summarize the average annual energy available for an example plant's systems. This includes purchased energy and energy that is generated on site.

Energy Type	Energy (kWh)	Energy (MMBtu)	Cost/Value	\$/MMBtu	\$/kWh
Electricity	22,423,277	1	\$2,219,904	\$29.014	
Fuel/Steam		396,361	\$1,727,317	\$4.358	

76,511 Z Purchased Energy	198,470 📰 Natural gas
0 On-Site Generated Electricity	197,891 💳 Natural gas

What's the Next Step?

Your customized Quick PEP report will identify the next steps for your plant, as well as guide you to ITP resources that will help you implement those steps. ITP's extensive suite of resources will make sure you are well on your way to improving the performance of all your process systems and realizing substantial energy savings at your facility. These resources include

- · Other system-specific software tools to identify targeted savings opportunities
- · Consultations with ITP's Qualified Specialists
- Special training sessions for plant-wide and system-specific improvements.

How to Access Quick PEP

Quick PEP can be **downloaded for free** at *www.eere.energy.gov/industry/quickpep_ml/default.aspx*.

To learn more about Quick PEP, visit www.eere.energy.gov/industry/bestpractices/software_quickpep.html.



More ITP Resources

In addition to Quick PEP, ITP provides a variety of free software tools to help you identify energysavings opportunities across your facility. These tools specifically target

- Motors
- Compressed air systems
- Fan systems
- Process heating systems
- Pumping systems
- Chilled water systems
- Industrial facilities/buildings
- Steam systems
- Data centers.

To access these tools, visit http://www1.eere.energy.gov/industry/bestpractices/software.html.

To learn about training opportunities on topics related to these systems, visit *http://www1.eere.energy.gov/industry/bestpractices/training.html*.

For more information on ITP, visit http://www.eere.energy.gov/industry/.



For More Information Contact the EERE Information Center |-877-EERE-INFO (1-877-337-3463) or visit *https://www1.eere.energy.gov/informationcenter/*.