

Industrial Assessment

Center Dept. of Electrical & Computer Engineering Seattle, Washington 98195-2500 Phone: (206) 221-6829



# What You Can Expect from the Assessment

There are four main stages to the assessment process: pre-assessment, site visit, report preparation, and follow-up. These are briefly discussed in the following paragraph and then described in more detail in the outline that follows.

During the pre-assessment stage, data about your energy use and information on your manufacturing materials and processes are collected and analyzed. The purpose of this phase is to prepare us to make the best use of the on-site time (both yours and ours) by giving us a sense of what the areas with the highest savings potentials might be. During the one- or two-day site visit, we meet with key plant personnel, take a tour of the facility, and use our measurement equipment to take data that enables us to calculate potential savings in a variety of areas. In the report preparation stage, we then analyze the information collected to produce a confidential report detailing our analysis, findings and recommendations. The report includes specific recommendations with related estimates of costs, performance and payback times, and is provided to plant management within 30-60 days of the audit. Within a year, follow-up phone calls are placed to the plant manager to find out which recommendations have been or will be implemented.

## Pre-assessment Schedule

**Survey (15 min)** We will ask questions about your annual sales, number of employees, and energy bills to determine if your company qualifies for the Industrial Assessment Program. We also would like to briefly review you processes and major equipment.

**Baseline Data Collection (1 to 4 weeks)** We will collect preparatory data such as an annual profile of your monthly expenses related to energy, water and waste. Typically, it is simplest to get permission from you to obtain this information directly from your utility companies.

## Site Visit Agenda

On the plant visit day, a UW team of engineering faculty and students will spend the day touring your facility and collecting data on your process and the operation of your equipment. Our visit will last about 8 hours, and include the following components:

**Introductions (10 to 15 min)** We would like a few minutes to meet the plant tour leader and other key personnel to discuss preliminary ideas.

**Plant Tour (1 to 2 hrs)** We would like to spend about an hour touring your plant with an employee who has knowledge about all aspects of your plant. It will help us serve you better if the person leading the tour can point out any areas you would like us to focus on.

**Identify Opportunities (30 to 45 min)** After the tour we would like to meet briefly to discuss the opportunities we saw on the tour. We also want to include projects that you already know







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about, but that we may be able to help with. For example, we could research potential solutions and equipment or calculate benefits and costs to help you determine if the projects are economically feasible.

**Opportunity Clarification in Specific Areas (1 to 2 hrs, i.e. until lunch)** After identifying possible opportunities, we will assign an analyst to each of the opportunity areas. Each analyst will spend the next one to two hours with key personnel familiar with the area and try to identify and quantify specific problems and possible solutions.

**Potential Recommendation Meeting (30 min to 1 hr during lunch)** We may invite your key personnel to join us at lunch to help us create a specific list of opportunities. We will assign analysts to collect specific information for analysis of these items.

**Data Collection (2 to 3 hrs)** We will collect required information including measuring temperatures, pressures, power, and flow rates, as well as collecting operating schedules, quality statistics, and downtime reports. We will need assistance from qualified plant personnel when measuring electrical loads and steam temperatures.

**Wrap-up Meeting (30 minutes)** Before we leave we would like to meet with selected members of your staff to present the opportunities we think offer significant savings with reasonable payback and that we plan to pursue further. Your comments will be extremely valuable to us at this time to ensure our list includes opportunities that are viable, to prioritize our efforts, and help decide the best assumptions we should make.

## Report Preparation Schedule (30-60 days)

Additional Information In the weeks following our visit we may call you to clarify points about your facility. We try to get as much information as possible during our visit but additional details may be required for a complete analysis. We will also provide a list of recommendations we are pursuing for you feedback.

**Report** Within two months you will receive a report containing specific recommendations on ways to improve productivity, reduce energy costs and minimize waste. These will include estimates of implementation cost and a simple payback analysis.

## Follow-up Schedule

**Implementation Survey (15 min)** We will call you in 6 to 12 months to find out which recommendations you were able to implement.

**Management Survey (15 min)** We may also ask if a representative of the U.S. Department of Energy, which funds the program, might visit with or call you for no more than half an hour. They interview about half the manufacturers we serve to determine how useful our service has been.



