IAC | Industrial Assessment Center

University of Washington

U.S. Department of Energy
Energy Efficiency and Renewable Energy
Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

Recommendations from industrial assessments have averaged about **$55,000** in potential annual savings for each manufacturer.

What are we?

The University of Washington Industrial Assessment Center (IAC) is one of 26 centers supported by the US Department of Energy (DOE) at universities across the country. The University of Washington IAC provides plant assessments at no cost to eligible mid-sized manufacturers.

Assessments are performed by a team consisting of a University of Washington faculty member, upper-level undergraduate and graduate engineering students. During a site visit, students take measurements to audit how the facility uses energy and resources. With the guidance of their professors students then generate a confidential report identifying opportunities to save energy, reduce waste and improve productivity. On average, IAC assessment recommendations that are implemented save a facility over $55,000 annually.

IAC Database

Selected information from 11,000 assessments over the last 20 years is available in a national database. Some of the new resources available include:

- Typical saving for assessments in different industries.
- Individual recommendation made for each assessment.
- Rates of adoption by company size, geographical area or cost of energy.
- Implementation costs and paybacks for industrial energy projects.

To find out more about the Industrial Assessment Centers, visit the program's web site at http://iac.rutgers.edu/. There you can find more about the history of the IAC, links to the IAC Database and resources to help perform your own assessment.

What are the benefits?

Free. Since the program is supported by the U.S. Department of Energy, there is no cost to eligible manufacturers.

Profitability. Implementation is a simple way to make your business more cost efficient and profitable. On average, implemented IAC assessment recommendations save a plant over $55,000 a year with paybacks coming within 12 to 18 months.

Competitive. The IAC team may be able to introduce proven advanced equipment and recent technological innovations to give your plant a competitive edge.

Confidential. All information will be kept strictly confidential. The report prepared specifically for your company will not have your name on it or be released to the public.

Fast. In most cases, the IAC team will visit your facility for one full day to examine the manufacturing process and take measurements.

Non-Regulatory. IAC assessments do not monitor compliance with any regulations. They are designed to offer technically sound and economically feasible advice on how to save energy, reduce waste and increase productivity.

No Obligation. Although the IAC team's success is measured by the amount of energy and money that is saved, your plant is not obliged to implement any recommendations.

Experience for Students. Each IAC assessment helps provide practical experience to University of Washington engineering students who learn to analyze various industrial processes and professionally communicate their analysis to company management.

Eligibility

To receive a University of Washington IAC assessment, manufacturers should:

-Be in the states of Washington, Idaho, Montana, Alaska or Hawaii

-Be categorized in:
North American Industrial Classification Index (NAICS) codes 311-339
or
Standard Industrial Classification (SIC) Codes 20-39

-Satisfy at least three of the following:
Gross sales below $100 million.
Fewer than 500 employees at the plant.
Annual utility bills more than $100,000 and less than $3 million.
Have no in-house professional staff to perform an assessment.

How does this work?

A complete IAC assessment consists of the following four steps:

1. The Pre-Assessment Analysis - The purpose of this analysis is to collect preliminary information about the facility and give the IAC team some background data regarding utility bills and usage. This analysis should be completed prior to arranging an assessment date.

2. The Site Visit - The IAC team will conduct a one-day site visit to study the manufacturing process and to make energy, material waste and productivity-related measurements using diagnostic equipment.

3. The Report - Within 60 days of the assessment, the IAC team will submit a confidential report to the plant manager detailing the team's analysis and money-saving recommendations, along with estimates of related costs, performance and payback periods.

4. The Follow-Up - Two to six months after the assessment, the IAC team will contact the plant manager to determine which, if any, of the recommended measures have been implemented. The implementation rate helps to measure the IAC program's success.

Success Stories

74% improvement
Establish a Predictive Maintenance Program
$10,316 real savings for a average cost of $1,270.
Pays for itself in about a month. Recommended 5,755 times.

76% improvement
Clean and Maintain Refrigerant Condensors and Towers
$4,882 real savings for a average cost of $1,096.
Pays for itself in about two and a haf years. Recommended 5,755 times.

77% improvement
Repair Leaks In Lines And Valves
$9,099 real savings for a average cost of $1,292.
Pays for itself in about two months. Recommended 370 times.

$583,150 savings
Use Waste Heat to Drive a Steam Turbine Generator
11.76% efficency improvement for a average cost of $1,932,898.
Pays for itself in about three years and half years. Recommended 51 times.

$309,784 savings
Install Refrigeration System to Cool Product
39.13% efficency improvement for a average cost of $153,557.
Pays for itself in about six months. Recommended 23 times.

$280,156 savings
Condense Operations into One Building
36.84% efficency improvement for a average cost of $369,156.
Pays for itself in about one year and two months. Recommended 38 times.

How do I get started?

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