Texas A&M University
Industrial Assessment Center (IAC)
Twenty-Five Frequently Asked Questions

1. Is the assessment *really* at NO-COST to my plant? Essentially, Yes. The only cost you incur is that of providing us copies of the actual utility bills received over the past twelve months detailed in the second paragraph of the cover letter you received. There is never an invoice or bill sent to your plant for any costs related to the assessment visit or the report that results.
2. How then is this service paid for? The US Department of Energy (DOE) Industrial Technologies Program provides contracts to a total of 28 University-based centers that are part of the IAC program, one of which is Texas A&M University. We satisfy the terms of that contract by performing these assessments and providing the reports to the manufacturing plants that the program is designed to help.
3. Seriously, you must be selling something, or will expect a share of the savings, right? Unequivocally, No. There are no goods or services that are bought and sold, no shared savings - the savings stay with you 100%.
4. What is the purpose of the IAC assessments? To make specific recommendations to the small to medium-sized manufacturing plants in the service area of the IAC concerning energy cost reduction, waste cost reduction, and productivity enhancing practices that they can implement. Further, the students who work in the program gain valuable industrial experience.
5. What do you mean, small to medium-sized, and why is this so? From its inception in 1976 the program was developed to help manufacturing plants meeting the DOE's definition of this term, and the current criteria used to establish this is given on the inside of our small brochure that is a part of this packet you received. Please note--Each manufacturing plant site qualifies on its own basis, not on a corporate total. Multiple sites of a larger corporation could each qualify for the program on their own individual merits. The DOE has chosen this sector of manufacturing plants to benefit from this assistance for a number of reasons. Plants meeting these criteria usually are not able to afford the assistance of consultants or the staff necessary to do similar assessments, and consequently could be ill-informed of the benefits. This program brings the knowledge of "good practices" in the realm of energy conservation to the vast segment of US manufacturing capability that otherwise could not afford the assistance. This size of plant is also often easier for the assessment team to handle in the time scale that is available.
6. What do the students gain from the program? First and foremost, some very valuable industrial experience. The plant equipment seen in operation is no longer a device evaluated in a homework problem, but a real piece of working machinery. After graduation they take this experience with them and are better educated about the impact of energy-related decisions in their everyday careers. And as an immediate practical matter for them--they are paid wages, and work as part of a team to gather data and prepare the reports.
7. Is the work the students do part of a classroom assignment or homework? No, it is not. As mentioned earlier, they are paid wages as employees of the university, and the report that results is a professional product, not a homework assignment turned in for a grade in a class.
8. How many students will come to my site, and who is the leader of this group? We typically bring between four or five students to each assessment site visit. The professional leading the group will either be Dr. Bryan P. Rasmussen, the IAC Director, or Jim Eggebrecht, the Assistant Director, and they manage all activities of the group and are responsible for them.
9. What experience do the professional members of the group possess? Dr. Rasmussen is the second Director of the center at Texas A&M University, which started in 1986. Dr. Warren M. Heffington was the Director from 1986 through 2011, when he retired from the University. Jim Eggebrecht has

been a part of the program since 1993, first as a graduate student from 1993-1994 (after working 17 years for a major oil company), and then the Assistant Director since that time. Dr. Rasmussen has done about 60 assessments since starting with the program in 2011, and Mr. Eggebrecht has done over 440 assessments of the over 770 reports that have been completed since 1986.

10. What experience will the student team members possess? We operate with about 15 students at any one time that are a part of the IAC, and at the start of most semesters have newly hired between one and three students to replace those that have graduated from the university the previous semester. Most students stay with the IAC for many semesters, often until graduation, and have some considerable experience established as a result.
11. On the typical site visit day, what happens? The assessments typically take place on Fridays, and we time our arrival at your plant to occur about 8:15 AM. We will then want to meet with you about the energy information you will have sent to us, and learn about plant production operations, which usually takes about an hour. This is followed by a tour of the plant where we see your product made in sequential steps, and the equipment used to perform the production operations. A session of brain-storming the projects that will be evaluated takes place, and then the responsibility to gather data for the evaluation is assigned to a specific student. Data gathering usually finishes about 2 – 3 PM, when we end the day with a short, 15 – 20 minute meeting with you to discuss the data collected, preliminary results, and ask any final questions.
12. How will the site visit day affect me, how will it interrupt my day? We naturally need you to be with us in the morning meeting to review the utility data and provide the information on plant operations. During the plant tour we will want to witness a representative production process, the major energy using equipment, and how and where waste is handled, so there is time required for this. Your time spent in our brain-storming session is very welcome and useful for refining our ideas, but is not universally necessary. Generally after this, the students and professional leader will be in the plant gathering data until the end of the day. There are sporadic questions to answer during this time requiring your assistance, or of others who are familiar with the project being studied. Most plants allow us to roam the facility as need be without any escorts which reduces the plant personnel time that is taken up.
13. What safety training is provided to the students? Every student is given our safety training before joining the team. This training comes from our experience in conducting hundreds of these assessments without injury, and is also gleaned from the safety training of plants we visit who have provided their own input to assist us of informing the team of unique situations in the plants.
14. Do you only look at our electrical energy usage? No, we also evaluate the usage of natural gas for economy measures too. In addition to the focus on energy usage, we study the waste generation and handling practices to find ways to minimize these, and also the productivity issues that may reduce the cost of your production or increase the amount of production.
15. How detailed and specific to my plant will the report be? The reports are very specific to your plant. These are not “off-the-shelf boilerplates” that are generic and general ideas, but are projects specific for your operations. The data used in the calculations is measured in your plant, and the recommendations determine the savings impact and implementation costs needed for you to effect the appropriate changes to your practices or equipment.
16. What measurements are taken, and does this involve shutting down equipment or production lines? The measurements taken depend on the nature of the project. For instance, we carry the instruments to make measurements such as the combustion efficiency of fired heaters (boilers, furnaces, etc.), the operation of steam traps, temperatures, velocity of moving air streams, motor and lights on-off times, for finding compressed air leaks, and others. For all these measurements it is not necessary to change your plant operations. We may perform a compressed air system leakage test during your site visit that involves turning off the air compressor and timing a drop of ten pounds pressure off of your air system. This test is usually done during the lunch break of your plant if it can be done without affecting continuous operations. Other than this usually very short test there should not be any disruptions to the normal, everyday plant operations.

17. Do members of the assessment team operate or adjust any of my plant equipment? Absolutely not. We will touch no controls or switches at your site except for the light switch in the conference room you have us to use while we are at your site. During the air system leakage test it will be you that operates the switches to turn off and then back on the air compressor and we will be reading the pressure gauge.
18. How are the utility bills, waste information, and other information that is gathered handled by the assessment team? The information is treated confidentially for our use only in completing the site visit, the report, and the program needs of the IAC program. Some information relating to the recommendations made and the savings determined, plus other information from the report are uploaded into the national IAC database that is maintained by the program manager for the DOE, the Center for Advanced Energy Systems at Rutgers University. This is detailed further in the "Acknowledgment Form" that is the second page of the cover letter you received. If you have any specific concerns do not hesitate to ask us to explain in detail what information is a part of this database.
19. Who gets a copy of the report? We routinely send you two copies of the formal, bound report, Dr. Rasmussen and Jim Eggebrecht keep one each for their files, and the Center for Advanced Energy Systems is sent an electronic version in Adobe pdf format. They review the reports for completeness and correctness and furnish us critiques of the report, which we incorporate into future reports for continuous improvement of our efforts.
20. What about the quality checking of the report before it is sent to the plant? The student assigned to be the team leader for an assessment completes the first draft by three weeks after the site visit. This is then reviewed by the professional who led the study, and it is passed back to the student for corrections, additions, changes, etc. Typically there are a total of three such review steps before the plant is mailed the final report.
21. How many reports and visits do you make in a year? The number is about 25 depending upon DOE funding levels for the IAC program. There are about 8 in the fall semester, 10 in the spring, and the remainder in the summer.
22. What are some typical savings results? We visit a wide variety of plants, but the following are the average numbers: Number of project recommendations per report—8. Total recommended savings per report--$96,000/year. Percentage of energy costs saved by recommendations—11%.
23. What do you know about the implementation of the recommended projects? For every visit we call back to the plant 6 – 9 months after they have had the report, and ask them what projects have been implemented. Historically, plants implement about 62% of the recommended projects. To date the information suggests that plants have spent a total of about $37,000,000 to affect the annual savings of over $43,000,000/year.
24. What are some typical comments you receive from the plants about your reports? We ask the plants, and they tell us, that the reports are "very helpful" or "helpful." Many times the additional comments are along the lines of "It was nice to have a fresh pair of eyes view what we do here and suggest improvements," or, "the team was very professional in their approach and the report was well written and understandable." They often recommend other plants in the area we should call on to offer this **no-cost** service. A number of times we have been asked to come back to the same plant many years after the original visit, or to visit other plants operated by the same companies.
25. How soon after the site visit day do I receive the report? By our contract with the DOE we have to send the report by 60 days after the site visit. Our actual average is about 43 days. Therefore the report shows up within a relatively short time.