

## **Study of Energy Savings Generated by Clients of the Industrial Assessment Center Program**

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### **ABSTRACT**

The U.S. Department of Energy's Industrial Assessment Center (IAC) Program provides funding to operate 26 assessment centers located at engineering colleges across the U.S. These Industrial Assessment Centers assess energy, waste, and productivity activities at client manufacturing plants and generate recommendations for saving energy and reducing operating costs. The centers serve about 600 U.S. manufacturers with assessments each year, making five to ten separate recommendations, on average, per client. Assessment data, including implementation information collected within a year following the assessment, are recorded and maintained in a database at Rutgers University.

The purpose of this study was to examine IAC Program benefits to clients, including benefits beyond those currently identified in the IAC database. These include benefits generated by IAC clients through replications, delayed implementations, and spin-offs of assessment recommendations. While long-term client follow-up is part of the IAC Program's activities, it is mainly conducted for marketing purposes, and until recently, the effort did not include updating savings data in the database. This study was conducted through telephone interviews with a random sample of IAC clients, stratified by assessment fiscal year (FY). Only clients assessed between FY 92 and FY 99 were interviewed. Ratio estimates were developed to use as a basis for computing current savings estimates by adjusting original database data for all FY 92-99 clients. First, for sampled IAC clients, ratios of current (at interview) to original (at assessment) savings estimates were computed. These ratios were computed for each assessment fiscal year. For each fiscal year, the ratios were then multiplied by the savings estimates from the total original database for the entire population of clients for that fiscal year. Annual savings were then totaled to estimate current savings for clients served over a ten-year period.

The client follow-up interviews revealed that a significant amount of energy savings is not identified in the original savings estimates recorded in the IAC database. Additional savings include source energy savings from replicated measures (7.5 % above original), spin-off measures (17% above original) and measures previously identified in the database as unimplemented (18% above original). Furthermore, 22% of the assessment recommendations originally identified in the IAC database as unimplemented were actually implemented by IAC clients.

The results of this study will be used to quantify long-term IAC savings and adjust database savings estimates to account for the missing benefits. They will also serve as a basis for recommendations about IAC follow-up efforts in the future.