

THE DEVELOPMENT AND ADAPTATION  
OF THE COMPUTER AIDED ENVIRONMENT TO FACILITATE INDUSTRIAL ENERGY  
AUDITS

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**ABSTRACT**

Industrial Energy Audits became more significant in the last several decades in response to increasing rates of energy cost and sustainable awareness. The Industrial Assessment Center supported by the U.S. Department of Energy is an organization that helps participating industrial facilities to identify and evaluate opportunities for energy savings and conservation. This research proposes ‘The Development and Adaptation of the Computer Aided Environment to Facilitate Industrial Energy Audits’ to accommodate the one-day energy audit for Industrial Assessment Center. It will present a development model of industrial energy audits and a logical approach of processes using web-based technology with integrated and sustainable framework. The objective is to propose a development platform to support the participating companies and energy audit team members to understand the logic of the energy audit process and utilize potential assistance tools to achieve a common vision among users. With this development, users will have a vision of energy audit processes in several functions simultaneously and understand logic concept of actions thought out the complete energy audit processes.

This Webtools online effectiveness is validated through actual users from Missouri Industrial Assessment Center as a part of development model through an evaluation of essential key attributes to ensure a continuous development in order to meet the needs of users and plan for a future research.