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“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

The Use of Computer Resources for Improving Performance Improvement in Energy Efficiency in Construction in Brazil

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Abstract

This research presents a review of the concepts of energy efficiency against the principles of sustainable development. Also emphasized is the importance of optimization of energy consumption, particularly within the buildings. It highlights the government initiatives and the impacts to the environment by various sources of power generation. The research identifies as important the existence of computational resources to support designers and users in order to optimize the use of electric energy in buildings. The case study evaluates the computational resource "PLUS MARK IV. Presents proposals for updating of computer resource using a critical analysis by specialists. The result of consultation with experts confirmed the importance of computational resources in project development and use of electricity in a rational way in construction. One conclusion is that the computational resources for management of electric energy use in buildings, allows obtaining the energy diagnosis and induces rationality in design criteria and use of energy. In the end, were outlined to the possibilities of improving the computational resource "PLUS MARK IV.

Keywords: *Quality in Construction, Energy Efficiency, Engineering Sustainability*

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