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AN OVERVIEW ON BUILDING ENERGY USAGE INFORMATION

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ABSTRACT

Concerns about supply shortages, depletion of energy supplies, and severe environmental consequences have already arisen as a result of the world's fast increasing energy use (global warming, climate change, ozone layer depletion etc.). Buildings' contribution to global power usage, both residential and business, has continuously risen, reaching estimates of 20 to 40 percent in industrialized nations, and has surpassed the contributions of other key sectors such as industry and transportation. The growing trend in energy consumption will continue in the future, thanks to population growth, rising demand for building services including comfort levels, and an increase in time spent within buildings. As a result, building energy efficiency is now a top priority for energy policy at the regional, national, and worldwide levels. The rise in energy consumption of HVAC systems is especially notable among building services (50 percent of building consumption or 20 percent of total consumption in the USA). This study examines the existing data on building energy usage, especially as it relates to HVAC systems. Many questions emerge, such as: Is the information required available? What are the most common kinds of structures? What end uses should be taken into account throughout the breakdown? Specially for commercial structures, comparisons across various nations are given. The case of offices is investigated in more depth.

KEYWORDS: *Building energy use, HVAC consumption, Air conditioning consumption.*

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