Green and Energy Efficiency in Library

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The way the world has used global natural resources in the past has placed a tremendous strain on the environment – depleting our natural resources, polluting the environment, warming the earth, raising sea levels, and endangering our biodiversity. Climate change has become the inevitable result of our past actions. According to a report published in India, cities consume two thirds of global energy use and 76% of the world's energy-related carbon dioxide (CO_2) are also emitted by cities through transport, industry, and building and construction related activities. Sustainable development has always been a key consideration for the development of India. Growing and developing our city state in an efficient, clean and green way by utilizing less resources; generating less waste; reducing pollution to the environment. In response to broad concerns regarding the environment and climate change, Green Library are becoming much more common and are increasingly in demand by Libraries.

The online Dictionary of Library and Information Science defines Green Libraries as: A Library designed to minimize negative impact on the natural environment and maximize indoor environment quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of resources (water, energy, paper, responsible waste, disposal, Recycling etc). In new constructing and library renovation, sustainability is increasingly achieved through LEED (Leadership in Energy and Environment Design) certification a Rating system developed and administered by the U.S. Green Building Council (USGBC). A Green Library also knows as a Sustainable Library, is a library build with environmental concerns in mind, Green libraries are a part of the larger green building movement. The main aim of this article to identify and create awareness about the reduction of energy consumption and energy cost in the Libraries. The green and energy saving design of library consists of the following parts: integrating energy management system in monitoring and control systems, complex vacuum glazing of building envelope, energy saving illuminating system, convertible frequency air-conditioner of HVAC and rainwater utilization system. In recent years, building energy consumption increased fast in India, especially the public buildings.Based on this research, some possible actions can be suggested for improving Library activities and output indicators towards mitigating the Climate Change and Global Warming.