

## **Research proposal**

### ***Strategies in reduction of Energy consumption in Built environment with focus on Healthcare sector***

Energy Consumption by Buildings in urban environments accounts for about 60% of the electricity produced, this has effected the building owners to pay heavy utility bills such as electricity & water. Moreover, more energy consumption by Buildings creates more demand for supply of energy which is a burden on the state/municipality Energy Dept.

It has been observed that Buildings consume majority of the energy produced. Construction of buildings & their operation & Maintenance accounts for about more than 60% of the energy on national grid. As industrialization & population explosion demands more & More buildings (residential houses & manufacturing industries) resulting energy demand every year.

Therefore, it is time for buildings to reduce energy consumption & impact the environment & climate change in a positive way.

The consumption of energy by urban Environment is an international problem faced by many Governments worldwide & it Costs every building owner their energy & water bills every year.

Energy optimization by built environments can positively effect in high profits for building owners, less load on municipality & State Electricity Board to cater for new demand in Energy. It can significantly reduce countries GHG emissions & Carbon footprint of any Country thereby Bearing a positive environmental impact.

MCDM methodologies would be used to bring out the factors in Healthcare sector.

The objectives of the Research are to Produce Strategies which can reduce overall Building energy consumption with special focus on HVAC equipment.

The final outcome of the research would be Techniques & strategies that could be used in buildings to reduce energy consumption & operating techniques used to optimize energy in HVAC Equipment.

The scope of this research would be to all permanent & immobile Built Environments such as a manufacturing industry, An Educational organization, And healthcare institute & residential sectors,

Basically comparative sampling technique will be used for research & qualitative techniques will be used to derive the result out of it.

The present problem could be researched to bring out new technique & practices that could bring down the energy consumption. & save large amount of energy & therefore money, Making organization profitable & economically strong.