

ENERGY AUDIT AND CONSERVATION

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Energy in any form is an essential for day-to-day life, whether for lamination, charging mobiles, refrigeration and air-condition, pumping of water for residential or commercial purpose. It provides means for socio-economic and political growth.

It is most important to estimate the magnitude of the total energy required and also examine the economic, environmental, and geopolitical implications in next few decades.

Energy Conservation:

Energy conservation is the process of efficient use of our resources. It is also a process of smart use of resources. Energy conservation is also process of resource management. This leads to energy security and reduces import bills.

Why energy audit?

With increase in population, the demand of electrical energy is increasing exponentially. Few days back, it was seen that the peak demand is 187 GW

and it remain increasing. India is making great strides towards affordable, secure and clean energy. Also, Indian government has set a target of 175 GW of renewable energy by 2030.

Therefore energy conservation is also the area where we can reduce the demand of our electricity. Energy conservation is equally important as energy generation. Energy conservation in every form required.

Energy conservation is required in every form of energy like green energy, clean energy, hydrogen sector etc.

As per government guidelines, there should be an energy audit at all the buildings (commercial, institutional and industrial etc.) having more than 500KW of connected load. Using this audit, we can find out where the potential for energy conservation is and shows where energy management is required.

Clean Development Mechanism:

It was developed as a part of Kyoto protocol, in the year 2001. Its aim to reduce green house gases emission in developing countries. The theory behind this is to fund project in different developing countries of the world that allows reduction in emission of green house gases, such projects also earns saleable certified emission reduction (CER) credits, which are equivalent to one tonne of CO₂, which can be counted towards meeting Kyoto protocol targets.