

Unit 43 distinction

[Engineering](#)



work, Engineering and Construction The quest to make changes in the way energy is being used and supplied in the entire world pose a greatest challenge to all the engineers in pushing towards sustainability. There are several patterns of energy that exist, but none of them has proved to be much efficient, thus making engineers think beyond by making energy efficient equipment. The equipments that are made should reduce the energy in use but maintain both the individual and industrial activities that are in progress. Moreover, the energy saving equipments must meet the legitimate demand, economical and improve the living standards¹.

There are several merits of using energy efficient devices, and this include saving of money. Studies have shown that improving the thermal characteristic of a home by buying the latest energy saving equipments easily save about 30% of the energy bills. A properly insulated house shall use less heating fuel and less electricity during summer for air conditioning. Other ways of reducing utility bill is by using CFL bulbs and other energy star appliances².

The energy efficient equipments help in improving the local economy. This can be achieved when the local and domestic companies provide energy efficient devices instead of importing electricity or natural gas from outside the community. By using the energy efficient devices, we help in reducing environmental pollution. The power plants that generate electricity use natural gas or burning oil thus causes air pollution and emission of greenhouse gases. Therefore, by consuming less energy it helps to lower the emission of pollutants in the air.

Energy efficient devices will enhance less utilization of the available energy thus saving a lot of energies that can be exported. Exported power earn a lot

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of revenues to a country that can be vested in improving schools, hospital among others. Moreover, using energy efficient devices improves an individual comfort at home since it reduces expenditure needed to heat their homes to comfortable levels.

Electrical energy can be utilized in a commercial building for different purposes including use in computer appliances, driving of lifts within the building as well as maintain the thermal characteristics. Electrical energy can be used to heat equipments to produce heat as well as running the air conditioner machines to bring in cold air³.

Reference

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