

• classification of energy :-

- (i) Primary energy
- (ii) Secondary energy
- (iii) waste energy resource
- (iv) Renewable energy
- (v) Non-renewable energy
- (vi) Commercial energy
- (vii) Non-commercial energy

Primary energy :-

These are the sources which can be directly found in nature or stored in nature and can be extracted.

for ex :- coal, oil, natural gas

Secondary energy :-

Secondary energy sources are derived from primary energy sources in form of energy supply.

Ex :- steam energy from coal.

waste energy resources :-

It is possible to re-use waste energy liberated in the process of utilization of primary and secondary energy sources.

Renewable energy :-

This is the energy acquired from never ending sources of energy in nature.

for Ex :- Solar energy, wind energy

Non-Renewable energy :-

Non-Renewable energy is the energy obtained from the conventional fuel which is limited available in nature.

for Ex :- coal, oil, fuel, diesel.

Commercial energy :-

This is the energy available in market in certain price.

for Ex :- Electricity.

Non-commercial energy :-

This sources are not available in the market unlike previous time for the price.

for Ex :- Sugar cane crust, fire

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• Difference between conservation and Audit:-

Conservation	Audit
(i) conservation means to reduced the growth of energy consumption by avoiding un-necessary used of energy.	(i) It is an inspection, analysis and survey of energy flows in building to reduced the amount of energy input to the system.
(ii) Energy conservation Technique can be carried out by energy	(ii) energy audit processes can be carried out by energy auditor.
(iii) energy conservation processes is carried out after energy auditing.	(iii) energy audit processes of the given plan is carried out initially.
(iv) Energy conservation processes is costly, time consuming and depend on consumer's application.	(iv) Energy audit is processes for better energy conservation.
(v) Energy conservation devices are required for energy conservation	(v) various measuring instrument with proper sensing element are required for the energy audit.

Need of energy conservation in present scenario:

- coal, natural gas etc. today are generating sufficient energy but these demand is growing day by day.
- Near about 60% of this sources have been used in last two cen.
- If it is continued to be ~~used~~ wasted without pain attention towards energy conservation we will run out of non-renewable energy to used.
- Almost everything of our life depends on energy it is not only just related to making life comfortable but also crucial for survival.
- Energy conservation means to reduced the growth of energy consumption by avoiding un-necessary used of energy.
- Energy conservation/efficiency is achi. when energy intensity is reduced without affecting output.
- energy efficiency come up with energy conservation. Hence, it is always promoted as an integral part of strategies of energy conservation.

Energy Conservation Act - 2001 :-

- Energy conservation (E.C Act - 2001) frem's sum liggele aspect so as to promote energy conservation.
- The central-government, state govt and Bureau of energy Eff (BEE) measured rodd to play in implemetenti act.
- Policies and provisins under this act focus
 - (i) Benefit of High energy savings.
 - (ii) Reduction in the demand supply gap.
 - (iii) Reduction of harmful emmition to envorment: by energy saving.

• Salient features of E.C Act - 2001 :-

- Standard and labelling program.
- Designated consumers.
- national exam for certification of energy auditer.
- Energy conservation building course (ECBC)
- central energy conservation fund.

• BEE and it's Role:

- BEE means Bureau of energy efficiency it is established under the Ec - act - 2001 with the primary objective of reducing energy intensity in the indian economy.
- Role of BEE :-
 - (i) researching on policies on energy and efficiency.
 - (ii) renewable energy study in school education.

- (iii) Arrange training program by expertised about energy efficiency/efficient used and conservation.
- (iv) Increase awareness by spreading information.
- (v) Encourage research and development.
- (vi) Assite the to encourage for increase the energy efficiency used and conservation.

- Schemes of BEE under energy conservation act - 2001 :-
 - (i) Energy conservation building codes (ECBC).
 - (ii) Standard and labelling (S&L)
 - (iii) Demand side management (DSM)
 - (iv) Bachat lamp yojana (BLY) enterprises
 - (v) Promoting energy efficiency in small & medium enterprises (SMEs).

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- MEDA and It's Role :-
- # Maharashtra Electricity Development Association :-
 - (i) Maharashtra Electricity/energy development association is register as the societies registration act-1960. (in 1985)
 - (ii) MEDA works under the ministry of non-renewable energy (MNRE) govt of india.

Role of MEDA :-

- (i) MEDA co-ordinate the central govt or BEE to control and observe the energy conservation at provision at the state.

(ii) To promote / implement energy conservation technique at state level.

(iii) MEDA to circulate information and awareness in public.

(iv) To decide penalty and incentive, subsidy for energy conservation at state level.

• Need of star labelling and benefits of it :-

(i) Star labelling is mainly required to recognize quality of products.

(ii) Star labelling is also required to determine life efficiency of the products.

(iii) Star labels identify percentage of energy conservation of products.

Benefit of star labelling :-

(i) Due to star labelling quality of the product is maintain.

(ii) It's standard reduces energy cost.

(iii) Due to the standard green house emission and air pollution will be reduces.

(iv) efficiency will be improve.