

Clean Development Mechanism (CDM)

General

- 1. Renewable Energy Projects (Wind Power, Solar, Biomass, Hydel)**
- 2. Fuel Switching (from fossil fuel to green fuel like biomass, rice husk, etc.)**
- 3. Cogeneration in industries having both steam and power requirement**
- 4. Energy Efficiency Measures (Boiler and Steam Efficiency, Efficient Cooling System, Back Pressure Turbines, Installation of Variable Speed Drives, Pump and Pumping System, Improved Co-gen Efficiency)**
- 5. Induction of new technologies in power sector**
- 6. Waste Management (Capturing landfill methane emission to capture power, Methane recovery from municipal solid wastes, biomethanation for power generation, Utilisation of waste and waste water emissions for generation of energy)**
- 7. Transport (Fuel switch from gasoline/diesel to natural gas, Modal shift from air to train, road to train at macro level, Replacement of shipment of certain raw material through roads to pipeline)**

Energy & Power

(Generation, Transmission & Distribution)

- 1. Renewable Energy like wind power project, biomass based project, solar power projects, small run of the river hydro electricity generation projects.**
- 2. Refurbishment of existing power plants to achieve a heat rate which is amongst the top 20% of the heat rate of all power plants in the relevant regional grid**
- 3. Fuel shift from coal to gas or liquid fuel to gas**
- 4. Super critical or ultra super critical technologies for power generation**
- 5. T&D loss reduction below CEA stipulated values through (HT line bifurcation, High Voltage Distribution System, etc.)**
- 6. Power Generation through Methane recovery from municipal solid waste/ biomethanation**
- 7. Replacement of SF6 containing equipment and destruction of SF6 etc.**

Cement

- 1. General energy efficiency improvement initiatives**
- 2. Waste heat recovery from kiln fuel gas**
- 3. Raw mix modification to reduce process Co₂ emissions**
- 4. Use of pozzolanas (fly ash/blast furnace slag) over and above the industry specifications**
- 5. Fuel shift from coal to gas or to biomass or high calorific value wastes**
- 6. Initiatives to reduce kiln volume through higher conversion in precalciners, etc.**

Steel

- 1. Coke dry quenching**
- 2. Blast Furnace top gas heat and pressure recovery**
- 3. Basic Oxygen Furnace gas waste heat recovery**
- 4. Coal dust, oxygen and tar injection in Blast Furnace to reduce the coke rate**
- 5. General energy efficiency improvement in rolling mill area**
- 6. Oxy Fuel use in reheating furnaces**
- 7. Corex Units**
- 8. Waste heat recovery from DRI/Midrex process for sponge iron manufacture**
- 9. Romelt iron making technology**
- 10. Hydrogen annealing etc.**

Pulp & Paper

1. Energy efficiency improvements

2. Biomass based cogeneration

3. Continuous pulping, etc.

Fertilizer

- 1. Reduction of N₂O in nitric acid/other fertilizer manufacture**
- 2. Waste heat recovery**
- 3. General energy efficiency improvement**
- 4. Methane recovery and reuse**

Coal Mining

- 1. Coal bed methane capture and use for power generation**
- 2. Coal mine methane capture and use for power generation**

Transport

- 1. Fuel shift from liquid fuel to CNG/LPG**
- 2. Hybrid cars, electric cars and hydrogen fuel cells**
- 3. O&M improvement of existing vehicles, etc.**

Aluminium

- 1.PFC reduction through reduction in anode effect duration and frequency**
- 2.Energy efficiency improvement in alumina refining, smelting and rolling**
- 3.Heat recovery from bauxite digestion and bauxite digestion efficiency improvement**
- 4.Dry scrubbing of smelter fumes, waste heat recovery, etc.**

Chlor Alkali

1. Use of hydrogen to replace fossil fuel

Agriculture

- 1.Land use change from rice cultivation to alternative crops/cropping pattern change**
- 2.Forestry and Afforestation**
- 3.Biodiesel/Ethanol**

Sugar

1. Bagasse cogeneration plants
2. Energy efficiency improvement
3. Ethanol (from molasses) as replacement for fossil fuels

Oil & Natural Gas

1. Methane/CNG leak reduction in T&D system
2. Capture and use of natural gas which would otherwise have been flared