



# National Awards for Thermal Power Plants

## Why in News?

Three [thermal power plants](#) in Madhya Pradesh have been honored with [the National Award](#) for their efficient and effective management of [fly ash](#).

## Key Points

- **About the Award:**
  - This award was given to Shri **Singaji Thermal Power Station Dongalia, Satpura Thermal Power Station Sarni** and **Amarkantak Thermal Power Station Chachai** of Madhya Pradesh Power Generating Company (MPPGCL) .
  - This honour was given during **the 14th International Housing Conference held in Goa on the theme of Fly Ash Utilisation-2025**.
    - The conference was organised by **Mission Energy Foundation** , a [non-profit organisation](#) .
- **Award Category:**
  - Satpura Thermal Power Station and Amarkantak Thermal Power Station were given this award in **the category of less than 500 MW installed capacity** .
  - Whereas this award was given to Shri Sinhaji Thermal Power Station in **the category of more than 500 MW installed capacity** .
  - Shri Singaji Thermal Power Station has made sustainable and effective use of more than 100 percent fly ash.

## Fly Ash

- **About:**
  - Fly ash is a pollutant typically **produced by coal-fired power plants** , carried by gases expelled from the combustion chamber.
  - It is collected from the expelled gases by electrostatic precipitators or bag filters.
  - **Electrostatic Precipitator (ESP)** is defined as a filter device used to remove fine particles such as smoke and dust from a flowing gas.
  - This device is often used for [air pollution](#) control activities.
- **Combination:**
  - Fly ash contains significant amounts of **silicon dioxide (SiO<sub>2</sub>), aluminium oxide (Al<sub>2</sub>O<sub>3</sub>), ferric oxide (Fe<sub>2</sub>O<sub>3</sub>) and calcium oxide (CaO)** .
- **Application:**
  - It is used in concrete and cement products, road base, metal recovery and mineral filler etc.
- **Harmful effects:**
  - Fly ash particles are toxic air pollutants . They can cause heart disease, cancer, respiratory disease, and stroke .

