

# Perspective

Majority of power plants proposed  
and running are coal based

# Facts

- There is a gap of 70 Million tones of coal in supply and demand of coal by power plants in year 09-10
- Likely gap to increase further

# Issues

- Non availability of Good Quality domestic coal
- Non availability of adequate quantity of domestic coal
- Increasing cost of coal
- Fluctuating price of coal from imported source
- Non financial issues in development of new mines

# Strategies to tackle issues

- Dedicated or linked mine approach
- Development of linked washeries with power stations (specially rail fed or distant stations)
- Acquiring/Development of mines in other countries
- Integrated policy with security, R&R and other socio political issues for new mines in India

# Environment & Efficiency Issues

- Adoption of super critical & ultra critical technology (65% of proposed 75000 MW are to be of super critical)
- Adoption of Higher size units i.e. more than 1000 MW/880MW units for higher efficiency, economy of scale & Govt. incentives
- Only 8% proposed capacity addition is based on Gas or other fuels
- Design of Boilers suitable for inferior domestic sources of coal
- Ash disposal technology improvement to avoid land wastages
- R&R Issues to be solved on comprehensive basis
- Disposal of overburden soil/stones & rehabilitation
- New environmental norms like emission, ash utilization & land for ash disposal

# Maintenance Issues

- Increase in boiler tube leakage due to inferior coal
- Increase in maintenance cost of coal handling equipments

# Logistics and handling

- Gap between requirement and supply of wagons
- Choking of ports, needs development for handling imported coal
- Strain ON EXISTING INFRASTRUCTURES OF RAIL for domestic as well as imported coal
- Need for development of water ways for coal transportation

# Alternative Sources

- Emphasis to shift towards renewables
- Innovative approach to tariff ( e.g. mixing basket for cheaper energy from conventional fuels & renewable energy)
- Maximum exploitation of solar thermal or PV e.g. solar preheating of water in coal based plants

# Strategic Issues for Coal based thermal power plants