



INTERVENTION 1

Coal-fired Power Plants Replaced by Cleaner Power

SUMMARY

Polluting coal-fired power plants in urban centres are closed down and their energy output is replaced with cleaner fuel (typically gas) or renewable energy sources. This change is typically done toward the end of the life of the coal fired station when expansion of the energy supply is already in planning.

Health benefits: High or medium, depending on controls and performance of the replacement plant.

Carbon benefits: High, if replacement is renewable energy. Moderate if gas fired (about half the carbon emissions of coal).

Costs: Can be low for the utility if implemented as part of planned expansion and additional transmission costs are nominal. Increasingly, renewables, especially solar and wind, are cost competitive with coal

and numbers of new coal plants are declining rapidly.

Feasibility: Negotiating changes in power planning may be difficult. If not scheduled, then potential rise in energy prices, which would be consumer borne

Key players: Usually national governments, with utilities, as part of national power planning.

EXAMPLES

REDUCING EMISSIONS FROM INDUSTRIAL SOURCES AND POWER PLANTS, HONG KONG. To reduce the emissions from the power sector, the government has prohibited the installation of new coal-fired power plant since 1997, encouraging the use of natural gas for electricity generation. Emission caps were tightened for the power sector from 2015 onward, requiring the power sector to maximize

the use of existing gas-fired generation units and prioritize coal-fired generation units retrofitted with emission abatement facilities.

The first local commercial scale wind power station was commissioned in February 2006 and a photovoltaic solar system between 2010 and 2013.

INDUSTRY AND POWER PLANTS, DELHI.

The National Thermal Power Corporation (NTPC) is retrofitting old electricity generating plants in Delhi from 2018 onwards to meet the revised stringent standards by 2022. The government is also considering the closing down of old polluting plants.