

COAL KILLS INDIANS. CAN THE SUN POWER INDIA?**June 1, 2015****[INDIA INFO LINE](#)**

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Coal kills Indians. Can the sun power India?

Amit Bhandari , Indiaspend.org | Mumbai | June 01, 2015 10:16 IST

About 115,000 people die prematurely from pollution caused by Indian coal-fired plants, including 10,000 children below age five. The health costs to India are about \$4.6 billion (Rs 29,400 crore) annually, which is the cost of setting up five power plants of 1,000 mega watts (MW) each, or 2% of India's installed capacity, every year.



The first and second part of this series largely argued that India—the world's third-largest emitter of greenhouse gases but 127th in per capita emissions—had few short-term economic options to using coal as its main energy source.

What is not frequently considered in India are the health and environmental impacts of using coal, which generates 75% of the country's electricity. Let's consider some impacts:

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The death toll and health costs were estimated in a 2013 study by a former World Bank pollution analyst.

Emissions from an Indian power plant were estimated to kill 650 people, said this study of emissions between 2000 and 2008, conducted by Harvard University researchers.

"Air pollution produced by coal-fired power plants has been linked to premature deaths from lung cancer, respiratory illness and heart disease," said another 2012 study on the health effects of coal generation in India.

Although emissions from coal-fired plants are expected to double by 2030, according to this projection by Urban Emissions, a non-profit, there are no emissions standards fixed for sulphur dioxide (SO₂) and nitrogen oxide (NO_x), two of the three main pollutants from such plants.

These studies make it evident that not only do coal-fired power plants come at a cost, which is likely to skyrocket, but a detailed national accounting of the health and environmental impacts is not available.

Timing is right for Modi's great solar-wind push

Zero green-house gas emissions. Zero fuel costs.

The advantages of solar and wind energy are well known (hydro-power shares similar characteristics, but as we previously [discussed](#), they face significant hurdles.

India's power sector added 22,566 MW (225 gigawatts, or GW) of conventional capacity—92% from coal-fired plants—during financial year 2014-15 and 18,846 MW (188 GW) during 2013-14. Bearing in mind capacity additions in thermal, nuclear and hydropower over the next seven years, renewable energy is likely to account for between 10% and 15% of India's total energy need.