

World Coal Association report demonstrates significant potential of low emission coal technologies in India

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LONDON - The World Coal Association (WCA) today published a flagship report “The Case for Coal: India’s Energy Trilemma”. The report focuses on the challenges of meeting India’s growing energy needs, future energy demand, CO₂ abatement costs and the role that can be played by high efficiency, low emission (HELE) coal technologies.

Significant findings include:

- The Indian government’s policies to meet the growing need for electricity are focused on developing large-scale coal-fired power plants.
- India’s technology choice to meet future energy requirements has significant implications on CO₂ emissions.
- A \$1 Billion expenditure in ultra-supercritical coal in India could abate more CO₂ than the same expenditure in European renewables.
- Coal is expected to remain the most cost-effective way to abate CO₂ in India, accounting for declines in the capital cost of renewables and increased gas availability.

Benjamin Sporton, Chief Executive of the WCA said: “India has 300 million people who don’t have access to electricity. As with many developing economies, India needs all sources of energy available to meet its growing energy needs using the best possible technology. With the International Energy Agency (IEA) predicting that coal will continue to make the largest contribution to electricity generation in India through to 2040 it is essential that we promote the best available technologies to ensure coal is used as cleanly as possible.”

India is currently the world’s third largest energy consumer; this position will be consolidated over coming years driven by economic development, urbanisation, improved electricity access and an expanding manufacturing base. Indeed, the IEA forecasts that by 2040 India’s energy consumption will be more than OECD Europe combined, and rapidly approaching that of the United States.

The report highlights the clear benefits of deploying supercritical and ultra-supercritical technology. WCA analysis shows that replacing subcritical capacity currently in the development pipeline with supercritical or ultra-supercritical technology would translate into significant reductions in CO₂ emissions for India over the life of the power plants.

Mr Sporton continued: “Our analysis shows that investing in super and ultra-supercritical technologies in India remains a cost-effective carbon abatement alternative compared to investment in other generation technologies. Furthermore, from a global perspective, our research shows that investing in ultra-supercritical technologies in India may lead to higher CO₂ abatement than investing in renewables in Europe.”

Raising the average global efficiency of coal plants from 33% to 40% with off-the-shelf technology available today would save 2 gigatonnes of CO₂ emissions. This is the equivalent of running the Kyoto Protocol three times over.

“As we approach COP21, it's essential that we quicken the deployment of all low emission technologies, including HELE. This is particularly true in countries, such as India, where energy demand is growing rapidly and the current trend is for subcritical power stations to be built. HELE technologies allow developing countries to minimise CO₂ emissions, while not sacrificing legitimate economic development and poverty alleviation efforts.

“Expanding efficient coal consumption will help address India’s energy trilemma of meeting demand, reducing energy poverty and actively participating in climate change commitments,” said Mr Sporton.

Notes

About the World Coal Association

The World Coal Association is a global industry association formed of major international coal producers and stakeholders. The WCA works to demonstrate and gain acceptance for the fundamental role coal plays in achieving a sustainable and lower emissions energy future. Membership is open to companies and not-for-profit organisations with a stake in the future of coal from anywhere in the world, with member companies represented at Chief Executive or Chairman level. WCA is the global network for the coal industry.

For further information, please contact:

Katie Warrick, Director of Communications

kwarrick@worldcoal.org

t: +44 (0) 20 7851 0052

CNC Communications

wca@cnc-communications.com