



RECOMMENDATIONS FOR THE CDM REFORM: END CLIMATE FINANCE FOR COAL POWER

Position Paper for COP19/CMP9, Warsaw, November 2013



EXECUTIVE SUMMARY

The Clean Development Mechanism (CDM) was designed to bring clean and sustainable development to poor countries while enabling rich countries to achieve their emissions reductions cost effectively.

Yet, the CDM allows new coal plants to earn tradable emissions credits for claimed improvements in power plant efficiency. This is unacceptable because:

- **New coal power plants, no matter how efficient, undermine climate mitigation goals by locking in millions of tons of CO₂ emissions over decades to come.**
- **Coal's overall human and ecological toll is staggering.**
- **These projects are not additional because new coal power plants are built to be efficient to minimize fuel costs, regardless of CDM support. Such offsets therefore lead to a net increase in global GHG emissions**

- > **Carbon Market Watch calls on Parties to exclude coal power plants from the CDM with immediate effect.**



COAL AND CLIMATE CHANGE



New coal power plants undermine climate mitigation goals by locking in millions of tons of CO₂ emissions for decades to come. Coal power plants generate about 40% of all electricity worldwide and are responsible for over 8 giga tons of CO₂ emissions. Without additional measures and with electricity demand worldwide projected to be double, emissions from coal will grow to over 18 Giga tonnes of CO₂ by 2030. Yet, if we want to prevent severe, potentially catastrophic effects from climate change we need to act quickly and dramatically reduce greenhouse gas (GHG) emissions. We can only achieve such drastic emissions reductions by rapidly phasing out the use of coal.

To put things in perspective: Annual emissions from the coal plants currently in the CDM pipeline are likely to exceed the current annual CO₂ emissions of Australia (399 mio t), France (376 mio t) or Brazil (390 mio t).

New coal power plants compromise the ability of countries to follow a low carbon development path. Developing countries urgently need new energy infrastructure to support livelihoods and economic growth. Low or zero-carbon alternatives are readily available, including renewable power, and energy efficiency.

COAL FACTS

- **1 kWh electricity from coal produces about 1kg of CO₂.**
- **Over 40% of world electricity is generated from coal.**
- **Total coal combustion causes over 12 Giga tons of CO₂ emissions per year, two thirds of that comes from to electricity production.**
- **Coal accounts for about 25% of all global greenhouse gas emissions.**

(Source: IEA 2010)



COAL'S TRUE ECOLOGICAL AND HUMAN HEALTH COSTS

Coal projects hardly represent a 'clean technology' and have no place in a mechanism that aims to protect the climate and help the poor develop in a safe and sustainable way.

Coal's overall human and ecological toll is staggering. In 2012 pollution from coal-fired power plants caused 100,000 premature deaths in India. In China, more than 31,000 coal miners died from accidents from 2000 – 2006. In addition, the total cost of coal use on Chinese society has been estimated at more than 7% of GDP (1.7 trillion yuan per year) when the costs of air and water pollution, ecosystem degradation, damage to infrastructure, human injuries and loss of life are included. Similarly, a recent study of coal impacts in the US estimated that if the environmental and health damages

were fully accounted for, the price of electricity from coal would double or triple.



COAL PROJECTS IN THE CDM

The coal projects in the CDM pipeline have a truly a staggering climate impact. To date, six coal power projects located in India and China have been registered by the CDM Executive Board. These projects could generate more than 7 million offset credits annually and will emit almost 10 times the amount of CO₂ they claim to save.

But this is only the beginning. More than 40 other coal projects are trying to get registered. These coal plants are expected to emit well over 4 billion tonnes of CO₂ by 2020. In addition, if registered, these coal power projects could generate more than 500 million CDM offset credits from now until 2020.



The Sasan power project @Bank Information Centre / Joe Athialy

CDM COAL PROJECTS INCREASE GLOBAL EMISSIONS

CDM project developers apply to receive offset credits by claiming that they would build a less efficient new coal plant if they did not receive CDM offset.

However, studies show that new coal power plants are built to be efficient to minimize fuel costs, regardless of CDM support. Research commissioned by the CDM Policy Dialogue furthermore showed that all large-scale power

projects, including coal projects, are unlikely to be additional.

Offset credits from such projects therefore do not represent real emissions reductions and result in an increase in global emissions if used against climate commitments. Nevertheless all large power projects, except nuclear remain eligible in the CDM.

RECOMMENDATION

Coal is the world's most carbon intensive fossil fuel and its negative environmental and human health impacts are staggering. Ongoing CDM support for coal could lavish billions of Euros on an already grossly profitable fossil fuel industry at a time when the world desperately needs to dedicate scarce climate finance towards renewable energy and energy efficiency.

But coal power is just the tip of the iceberg of a much larger integrity problem in the CDM. Research estimates that the CDM has likely delivered only 40% of the emission reductions it sold as offsets. This is primarily because the CDM hosts so many large scale power projects which are highly unlikely to be additional.

Major investment banks, including the World Bank, have started to eliminate or limit funding of new coal power plants. Following the recent announcements of the Norwegian and the British government to stop endorsing investments in CDM coal projects, eyes are now set on the COP-19 in Warsaw to see whether the UNFCCC will follow this trend and kick coal power out of the CDM.

- **Policy makers need to act now and excluded coal power from the CDM.**
- **Moreover, all large-scale power projects must be removed from the CDM**



About Carbon Market Watch

Carbon Market Watch is a project of Nature Code – Centre of Development & Environment. For more information about Nature Code, see www.naturecode.org. Carbon Market Watch scrutinises carbon markets and advocates for fair and effective climate protection.

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About Center for International Environmental Law (CIEL)

CIEL uses the power of law to protect the environment, promote human rights, and ensure a just and sustainable society. CIEL is a non-profit organization dedicated to advocacy in the global public interest, including through legal counsel, policy research, analysis, education, training and capacity building.

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- i. International Energy Agency, 2010. Key World Energy Statistics
- ii. International Energy Agency, 2010. CO2 Emissions From Fuel Combustion. Highlights.
- iii. Coal Kills, An Assessment of Death and Disease caused by India's Dirtiest Energy Source. http://www.greenpeace.org/india/Global/india/report/Coal_Kills.pdf
- iv. Mao Yushi, Sheng Hong, Yang Fuqiang. 2008. The true cost of coal.
- v. Paul R. Epstein, Jonathan J. Buonocore, Kevin Eckerle, Michael Hendryx, Benjamin M. Stout III, Richard Heinberg, Richard W. Clapp, Beverly May, Nancy L. Reinhart, Melissa M. Ahern, Samir K. Doshi, and Leslie Glustrom (2011). Full cost accounting for the life cycle of coal in "Ecological Economics Reviews." Robert Costanza, Karin Limburg & Ida Kubiszewski, Eds. Ann. N.Y. Acad. Sci. 1219: 73–98.
- vi. A policy brief by the Stockholm Environment Institute summarises the significant environmental integrity concerns of large-scale power projects. See SEI policy brief "Transitioning Away from Large-Scale Power Projects: A Simple and Effective Fix for the CDM?", 2012
- vii. Assessing the Impact of the CDM. Report Commissioned By The High-Level Panel On The Cdm Policy Dialogue. July 2012.
- viii. http://www.cdmpolicydialogue.org/research/1030_impact.pdf
- ix. Estimated emissions reductions based on PDDs = 438 million, CER price = Eur 8, Estimated CER revenue: Eur 3.5 billion
- x. Assessing the Impact of the CDM. Report Commissioned By The High-Level Panel On The Cdm Policy Dialogue. July 2012.
- xi. http://www.cdmpolicydialogue.org/research/1030_impact.pdf