

One of Australia's fastest growing sources of pollution is fugitive emissions from the mining of coal and gas.

- "Fugitive emissions" are reported as part of Australia's Energy sector emissions. It includes the pollution from the mining, processing and transportation of fossil fuels, but not the burning of them. It also includes emissions from decommissioned mines, which continue for years after production has ceased.
- According to the Department of Climate Change and Energy Efficiency, fugitive emissions in 2009 were 39Mt CO₂-e¹ -- three quarters of which came from coal mining. This is projected to increase to 69Mt CO₂-e per year by 2020, a 97% increase on 2000 levels.
- A 2010 UN Expert Review Team report into Australia's greenhouse inventory suggests the pollution levels from coal and gas mining could be higher than this because Australia's inventories estimate the methane pollution, but not the carbon dioxide pollution from surface (open-cut) coal mining, despite the availability of methodologies to do so.
- Not all coal mines release equal quantities of carbon dioxide and methane pollution – a small number of gassy mines produce the bulk of our pollution from this sector. In 1995, for example, the IPCC estimated that 80% of Australia's fugitive emissions were produced by just 10 mines.²
- In the next five years, LNG projects will create a growing proportion of our greenhouse pollution, as the process of extracting the gas requires the venting of substantial quantities of carbon dioxide, and the gas industry is rapidly expanding.

Expansion of coal and gas exports

- The continued rapid expansion of coal mining is largely driven by the export industry. DCCEE predict that coal export port capacity "is expected to increase from around 350 Mt per year currently to more than 630 Mt per year in 2020" and that "Only around 10 per cent of production growth from new coal mines and expansions is expected to be consumed in Australia."³
- In the next decade, DCCEE expects pollution from oil and gas extraction to increase even faster than emissions from coal mining, but these projections assume no action on climate change internationally and do not factor in the impact of policies that will reduce coal consumption in Japan, South Korea, China, India and elsewhere.
- In total, the pollution from just five large new gas projects in WA is projected to be about 27.5Mt per year, and around a gigatonne (a billion tonnes) over the life of the projects.
- The worst of these is the Chevron Wheatstone Project, which will emit over 10Mt per year on its own and half a gigatonne over the life of the project.
- The Government has given money to Chevron, Shell and ExxonMobil to assist with trialing sequestration technology aimed at reducing fugitive emissions from LNG extraction, such as from the Gorgon Project, which will sequester around 40% of its fugitive emissions.

Impact on international commitments.

- Australia has already committed itself to reducing greenhouse pollution by between 5 and 25% from 2000 levels by 2020 as part of the Copenhagen Accord commitments. Australia has also, under the Cancun Agreements, agreed with the rest of the world, that we must limit global warming to below two degrees above pre-industrial temperatures.

¹ <http://www.climatechange.gov.au/en/publications/projections/australias-emissions-projections/fugitive-emissions.aspx>

² See the IPCC's Good Practice Guidelines for estimating methane emissions from coal handling: http://www.ipcc-nggip.iges.or.jp/public/gp/bgp/2_7_Coal_Mining_Handling.pdf

³ DCCEE "Fugitive Emissions Projections 2010"

<http://www.climatechange.gov.au/~media/publications/projections/fugitive-emissions-projections-2010.pdf>

- The *World Energy Outlook 2010* found that cautious implementation of the Copenhagen Accord pledges “would make it all but impossible to achieve the two degrees goal” to which Australia and 190 other countries have committed.
- The *World Energy Outlook* scenario that brings the 2 degree threshold (itself a dangerous risk) into reach is the “450 scenario,” wherein “coal demand peaks before 2020 and returns to 2003 levels by 2035.”
- The Australian Government has long acknowledged that keeping global warming below 2 degrees above pre-industrial levels is crucial to our national interest.⁴ It is accepted wisdom from the International Energy Agency, that produces the *WEO*, that to achieve this goal requires the scale-back of coal production globally in the next five years.
- The *WEO* found that, “It is vitally important that these [Copenhagen] commitments are interpreted in the strongest way possible and that much stronger commitments are adopted and acted upon after 2020, if not before. Otherwise, the 2 degree goal will probably be out of reach for good.”

Fugitives in the Carbon Pollution Reduction Scheme

- In the initial CPRS proposal, coal mining did not qualify for the assistance given to “emissions-intensive trade-exposed” (EITE) industries, because relatively few of Australia’s 100+ coal mines produced large amounts of gas, and the emissions per unit of revenue across the sector were below the assistance threshold.
- The Australian Coal Association (ACA) campaigned to change this “unfair exclusion”⁵ and to have coal mining either excluded altogether from the CPRS, or to have it assisted in the same way EITEs were.
- The final version of the CPRS, which was presented to NSW parliament in February 2010, included measures called the Coal Sector Adjustment Scheme (CSAS) and the Coal Mining Abatement Fund, and delivered some of what the ACA had been demanding.
- These measures were put in place to appease the owners of a small number of mines that produce the bulk of Australia’s fugitive emissions from coal mining, despite the sector as a whole not qualifying for the “emissions-intensive trade-exposed” assistance.
- The schemes allocated free permits worth around \$1.25 billion to the most emissions intensive mines for up to 60% of their required pollution permits.
- The Coal Mining Abatement Fund was to provide \$270 million in grants to coal companies seeking to capture pollution from mines for electricity production.

Action needed

This year, as the Multi-Party Climate Change Committee negotiates a system to put a limit and price on pollution, the coal and gas miners must be required to pay for their pollution and must be subject to caps once those are introduced.

This will make polluting projects more expensive and drive investment into less polluting projects in the short term, and into renewable sources of energy in the medium term.

If the coal miners are required to purchase all of their pollution units, then around \$1.25 billion will be made available annually to help communities adjust to the pollution price and provide funds for international climate finance.

⁴ For a recent example, see Greg Combet’s speech to the ANU Crawford School of Economics in November 2010: <http://www.climatechange.gov.au/minister/greg-combet/2010/major-speeches/November/sp20101130.aspx>

⁵ See for example, this presentation from Ralph Hillman to a forum in the Illawarra http://pdf.aigroup.asn.au/regions/illawarra/ACA_Illawarra_Carbon_Forum_Presentation_28Octv3.pdf