

ACARP matters because fugitive emissions research is saving industry millions

Fugitive emissions of methane from the mining and handling of black coal represent three per cent of Australia's greenhouse gas emissions. Until the 2000s, little was understood about effective greenhouse gas emissions management and abatement within the industry. In addition, there were no practical methods available to measure emissions directly from open cut mining, which accounts for around 75 per cent of Australian coal production. As a result of ACARP-funded research, abatement and utilisation measures are much better understood and a practical method for measuring, monitoring and reporting fugitive emissions from individual mines has been implemented across the industry. The introduction of this method alone has resulted in annual savings of more than \$100 million (by conservative estimate).

Industry target

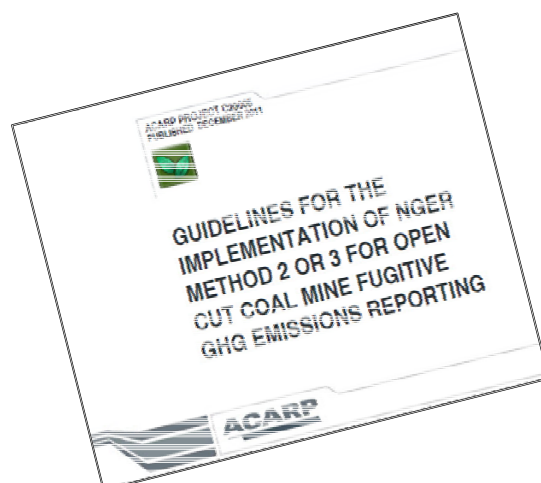
- Greenhouse gas emissions management and abatement
- More accurate estimation of fugitive emissions
- Minimise impacts of a 'carbon tax' on individual coal mines.


Industry investment

- ACARP: \$1.3 million plus funding from individual companies
- More than 10 projects since 1998
- Establishment of Mine Site Greenhouse Gas Mitigation Committee in 1998
- Establishment of Fugitive Emissions Task Group from 2009 to 2012.

Results

- Practical mitigation and utilisation measures implemented across sites
- Practical, cost-effective and rigorous method for measuring, monitoring and reporting fugitive emissions from individual mines, including low-gas mines, developed and implemented across the industry
- Industry developed guidelines for open cut and underground mines referred in the National Greenhouse and Energy Reporting (NGER) Act.





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Return on investment

- Lower fugitive emission liabilities for low-gas open cut mines in Western Australia, southern Queensland and western New South Wales
- Lower fugitive emission liabilities for gassy underground mines that have installed VAM abatement systems or flares
- Better understanding of carbon risk and fugitive emission liabilities for open cut and underground mines
- Improved mine development planning through the allocation capital to gas drainage programs ahead of mining.