

Australian CMM Activities



Australian Government

Ad Hoc Group of Experts on
Coal Mine Methane
12-13 October 2009
Geneva, Switzerland



Australian Government

Australia's Policy Overview

- Kyoto Protocol: Australia ratified in 2007
- Committed to greenhouse reduction targets
- Proposed legislation:
 - Carbon Pollution Reduction Scheme
- New legislation:
 - Renewable Energy Target



Australian Government

Australia – Fugitive Emissions

- Australian fugitive emissions:
 - Total estimated fugitive emissions for 2007 were 37.7 Mt CO₂-e of which 71.3% (26.8 Mt) were fugitive emissions from coal mining and handling
 - Total fugitive emissions have grown by 28.9% (8.4 Mt) since 1990 of which coal accounts for 3.1 Mt
 - But mine production of coal has increased by 99.5%
- Reflecting the significance of fugitive emissions, Australia proposes to include these in its emissions trading scheme
- Australia will be the first, possibly only, country to do so



Australian Government

CPRS: Transitional assistance measures for coal

- Climate Change Action Fund
 - \$750 million package over the period 2010-11 to 2014-15, to assist coal mines with high fugitive emissions
 - \$500 million through the *Coal Mining Transitional Assistance Fund* for existing coal mines that are particularly gassy
 - \$250 million through the *Coal Mining Abatement Fund* over five years to promote emission abatement solutions



Australian Government

Renewable Energy Target (RET)

- The RET gives effect to the Australian Government's election commitment to require 20% of Australia's electricity generation to come from renewable energy sources by 2020
- The RET has been expanded to include electricity supplied from existing waste coal mine gas power stations



Australian Government

MEGTEC 6 MWe WestVAMP Demo Plant

- MEGTEC Vocsidizer units integrated into a steam cycle
- Designed for processing 250,000Nm³/h mine ventilation air at 0.9% CH₄



(Source: MEGTEC Brochure)



Australian Government

CSIRO 25kWe Prototype VAMCAT Demo Unit

- Experimental results have demonstrated the VAMCAT technology process. It can be operated with 0.94% methane in air



(Source: CSIRO)



Australian Government

MRD Horizontal Post Drainage

- The method has potential benefits in reduced surface footprint and stable gas production
- Two mines in Australia had conducted trials in 2008
- A major research project funded by ACARP commenced in 2009 to develop MRD horizontal post drainage system design methodology and processes



Australian Government

45 MWe Moranbah North CMM Power Project



Aerial view of Moranbah North Power Station
(Source: EDL Factsheet, September 2009)