

A global contribution to mining sustainability recognised

Gavin Murray has become the first Australian to win the prestigious *Dr Adrian Smith International Environmental Mining Award* for his achievements in addressing the environmental and social aspects of mining within the international mining industry.

Only two individuals have previously won the award which has very rigorous nomination and international judging criteria. Recipients must have demonstrated a track record of innovatively resolving environmental and social problems, and in doing so have gained the international respect of peers, governments and non-government organisations.

Murray's achievements span the last two decades in both developed and developing

Perhaps most notably, Murray helped establish the World Alliance for Community Health, a private sector initiative working in conjunction with the World Health Organization ...

countries. He was most recently Director of Environment and Social Development at the International Finance Corporation (the private sector arm of the World Bank) in Washington DC where he introduced a business model for international financing of environmental and social sustainability. The model gave impetus for *The Equator Principles*, now adopted by global finance institutions to

facilitate responsible project financing.

Prior to this, while occupying sustainability leadership positions in Canada and Australian with Place Dome group, he negotiated one of Australia's first Aboriginal heritage agreements. Murray also established a multi-stakeholder oversight process for community issues in a major mining project in Papua New Guinea.

He was involved in the Global Mining Initiative, which resulted in the international Mining, Minerals, and Sustainable development project addressing the responsible evolution of the industry. Perhaps most notably, Murray helped establish the World Alliance for Community



CSIRO Exploration and Mining

Gavin Murray has combined excellence in environmental management with an ability to smoothly achieve agreeable outcomes to complex issues.

Health, a private sector initiative working in conjunction with the World Health Organization (WHO), which continues to benefit Aboriginal and Papua New Guinean communities.

Bonus power from waste mine gas

BHP Billiton is building a \$13 million electricity plant near Appin, NSW, that will burn waste coalmine gas from its West Cliff operation, normally vented into the atmosphere.

The West Cliff Ventilation Air Methane Project (WestVAMP) will construct and operate the plant utilising 20 per cent of West Cliff's available mine ventilation air. The outcome of the project will be a reduction in greenhouse gas emissions of up to 200 000 tonnes CO₂-e per year.

WestVAMP will use VOCSIDIZERTM technology, which converts low concentration methane to carbon dioxide and water vapour through a flameless combustion process. High efficiency heat exchangers will recover large levels of thermal energy to produce steam. This steam will be used to drive a conventional turbine to produce 6 MW of electricity that will power the West Cliff Colliery.

The Federal Government is contributing up to \$6 million to the project through its Greenhouse Gas Abatement Program, in line with newly announced incentives to



Courtesy of the Australian Centre for Mining Environmental Research

Coal extraction operations release significant amounts of re-usable methane.

encourage the energy sector towards a low emissions future.

Minister for Industry, Tourism and Resources, Ian Macfarlane, re-affirmed that, 'The Australian Government is casting a wide net to identify large-scale, cost-effective and sustained abatement from all

sectors of Australia's economy. This includes developing low emission technologies across the entire spectrum of energy sources.'

It's hoped that this project will encourage similar initiatives in other mines and industry sectors across the country.