

Media Release

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WORLD-FIRST CARBON CAPTURE PROJECT WINS VICTORIAN GOVERNMENT FUNDING

The Victorian Government has awarded a world-first carbon dioxide (CO₂) capture technology project \$2.06 million to trial technologies capable of making significant cost savings in the removal of CO₂ from brown coal power generation.

Australia's leading group researching carbon capture and storage technologies, CO2CRC, will conduct the trial in association with the Victorian-based energy technology company HRL Developments situated at Mulgrave in suburban Melbourne.

CO2CRC Capture Program Manager, Barry Hooper, said the \$4.11 million pre-combustion CO₂ capture project was made possible with a grant from the Victorian Government's Energy Technology Innovation Strategy Brown Coal R&D Grants Program. The remainder of the funding will be provided in equal parts from CO2CRC and HRL.

"This CO2CRC capture technology, which was recently patented, will be trialled at HRL's Mulgrave research gasifier along with other solvent-based, membrane and *adsorption capture techniques," Mr Hooper said.

"During the trial, researchers from Melbourne and Monash Universities and HRL will evaluate the capture technologies to identify the most cost effective for application to HRL's Integrated Drying Gasification Combined Cycle (IDGCC) power generation technology.

"Cost-effective capture technology could reduce CO₂ emissions from an IDGCC power plant by up to 90 per cent.

"The successful capture technology could then be trialed at a larger scale at HRL's 400 MW demonstration IDGCC power plant in the Latrobe Valley. The demonstration plant is expected to be in operation in 2009.

"CO₂ is the world's most common greenhouse gas," Mr Hooper said. "The successful technology potentially could be used at similar plants around the world, contributing to significant reductions in greenhouse gas emissions."

CO2CRC collaborates with leading international and national carbon capture and storage experts to conduct world-class research into carbon dioxide geosequestration. Research organisations supporting and participating in the CO2CRC geosequestration research project in Victoria include CSIRO, Geoscience Australia and the Universities of Adelaide, Curtin, Melbourne, Monash and NSW; the Alberta Research Council in Canada and the US Lawrence Berkeley National Laboratory. CO2CRC industry and state core

partners are ACARP, Anglo American, BHP Billiton, BP, Chevron, ConocoPhillips, NSW Department of Primary Industries, NZ Resource Consortium, Rio Tinto, Schlumberger, Shell, Foundation for Research Science and Technology (NZ), Solid Energy, Stanwell, the Victorian Department of Primary Industries, Woodside and Xstrata. CO2CRC is supported through the Australian Government's CRC Programme.

* *Adsorbents are solids that have the capacity to capture CO₂ on their surface.* Adsorbent processes exist for a number of industrial gas separations.

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