

Proceedings

COAL2005

Moving Technology – Maintaining Competence

**6th Australasian
Coal Operators' Conference**

**26 – 28 April 2005
Brisbane, Australia**

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Australian Coal Association Research Program

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AUSTRALASIAN INSTITUTE OF MINING & METALLURGY

**Southern Queensland Branch,
In Association with Illawarra Branch
and the Mine Managers
Association of Australia**

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Foreword

On behalf of the Southern Queensland and Illawarra Branches of The AusIMM, I extend a warm welcome to delegates who are attending the 6th Australasian Coal Operators' Conference. This is the first time this conference has been held outside of NSW and the Queenslanders have welcomed this opportunity with enthusiasm.

The coal industry is under great pressure due to the recent sharp increases in world coal pricing. Our industry faces an extreme shortage of professionals and skilled labour, both of which will take many years to recover in terms of developing the required skills which come from years of experience.

In resolving the current shortage of professional people we need to address simultaneously the issues of attraction, retention and maintenance of competency. This needs to be approached on a partnership basis by the key stakeholders including the companies, the educational institutions and the profession including The AusIMM and the Mine Managers Association of Australia. COAL2005 is an example of a joint initiative which provides for the Continuing Professional Development of members of The AusIMM, ACARP and MMAA in response to the demand for advances in technology.

This year, we have successfully compiled an extensive range of topics and papers such that we are running parallel sessions. We have also been fortunate to incorporate into the program an outstanding series of papers for SPONCOM 2005. Both streams of papers have been chosen in light of the conference's theme 'Moving Technology – Maintaining Competence'.

All papers presented have been peer reviewed in accordance with The AusIMM's guidelines to ensure our conference standards remain among the best regarded in the technical world. We are confident that our conference volume will serve as a valuable reference for years to come.

As a bonus, we have compiled a CD of the proceedings from all the Coal Operators' Conferences held to date. This is available for purchase at the Conference, and afterwards from The AusIMM's offices in Melbourne.

I wish to take this opportunity to express my gratitude to the organising committee for their hard work in providing the invaluable technical input, to the paper reviewers who have performed a difficult and professional task, and to the staff at The AusIMM office in Melbourne who have provided their extensive expertise in ensuring these conferences are held to the highest standards.

I would also like to thank The AusIMM's Illawarra Branch, ACARP and the Mine Managers of Australia Association (MMAA) for their solid support in promoting this conference.

Finally I wish to acknowledge the generosity of the sponsors and exhibitors for their financial assistance which enables The AusIMM to present these conferences at affordable fees.

Pat Hanna
Conference Convenor

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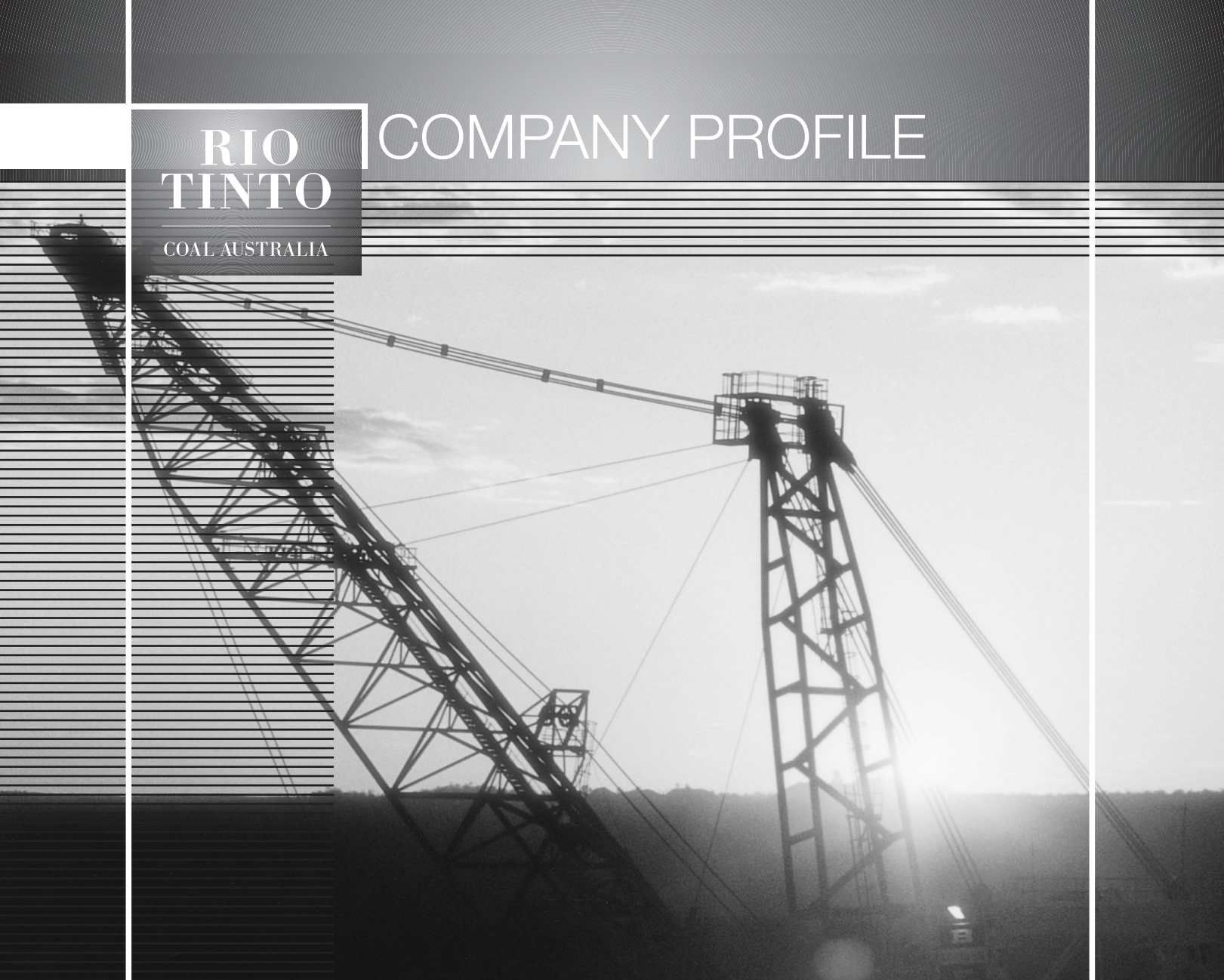




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COMPANY PROFILE



Rio Tinto Coal Australia (RTCA) is one of the country's leading mining organisations with a highly successful record in the development and management of world-class open cut and underground coal operations.

In Queensland, RTCA operates the Blair Athol, Tarong, Hail Creek and Kestrel mines. In New South Wales, RTCA manages Coal & Allied's operations at Bengalla, Mt Thorley/Warkworth and Hunter Valley mines.

Our open cut mines use conventional dragline, truck and shovel methods, while Kestrel Mine works underground using longwall technology.

RTCA and Coal & Allied produce over 50 million tonnes annually of coking and thermal coal for both the domestic and global markets.

Alongside our production RTCA strives towards sustainable development. We measure our success through our commitment to product stewardship, environmental stewardship, internal culture, community relationships, asset use and resource efficiency and economic viability.

Employing over 2300 people across our sites, safety is our core value and major priority. RTCA supports a safety culture that requires visible leadership, ongoing education and training and a high level of participation by everyone in the workplace. Our goal is zero injuries.

RTCA is a wholly owned subsidiary of Rio Tinto, and its corporate headquarters are located in Brisbane, Queensland. Formerly Pacific Coal, RTCA has been in operation since 1983.

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Australia is a world leader in the high tech, highly competitive coal industry. For 15 years, the Australian Coal Association Research Program (ACARP) has worked to secure and advance what is Australia's largest export industry.

ACARP was formed in 1992 when the Australian coal industry elected to take over the government-administered, industry-funded coal component of the National Energy Research Development and Demonstration Council (NERDDC) program. A unique organisation was established – one offering a collaborative research program with total industry control.

ACARP's strength is derived from the hands-on participation of the industry it represents. Today, ACARP is investing in research that will produce tomorrow's technology – delivering results for individual contributors.

ACARP at a Glance

- ⇒ Funded by 35 black coal producers in Tasmania, Western Australia, New South Wales and Queensland.
- ⇒ A levy of 5 cents per tonne of black coal produced.
- ⇒ Directed by the Australian Coal Association (ACA) Executive.
- ⇒ Project definition and selection undertaken annually by five technical committees.
- ⇒ Total ACARP commitment over the past 15 years: \$128.5 million leveraged to \$385 million with additional funding.
- ⇒ 170 current projects.
- ⇒ 628 completed projects – catalogued on the web site (www.acarp.com.au).

ACARP Solves Industry Problems

- ⇒ ACARP is driven by 140 of the industry's best technical people.
- ⇒ ACARP uses carefully targeted research to increase the industry's knowledge base and solve problems.

ACARP Puts Solutions to Work for Coal Producers

- ⇒ ACARP forums provide regular opportunities for problem solving and experience sharing.
- ⇒ ACARP delivers the science directly onto the mine site, with more than 70 mines hosting projects at any one time.

ACARP is Efficient and Cost Effective

- ⇒ All research is outsourced, recruiting the best expertise and minimising overheads.
- ⇒ With the annual \$12 million in levy contributions significantly leveraged, ACARP achieves excellent value.