

COAL NEWS

NEW ZEALAND

Coalbed methane finds promising coal seam gas flows at Huntly

Coalbed Methane Ltd says initial exploration drilling for coal seam gas in the Huntly coalfield, has indicated that economic quantities of gas may be able to be produced from the field.

The company is a joint venture between Solid Energy and Colorado-based Resource Development Technology LLC. It is soon to test flow rates from a coal seam gas play north of Huntly by drilling five closely-spaced wells. Dr Tim Moore, Solid Energy Research Manager, said the wells are to be drilled specifically to test completion techniques and define water and gas flow profiles. Testing procedures would also help understand permeability, porosity and pressure characteristics. The testing is likely to be completed by year end.

Early indications show flow rates of 2 to 5 PJ/year, potentially sufficient for supply to a small town or even partial supply to Huntly Power Station which outputs about 65 PJ/year.

Gas purity from five wells so far tested was very positive with results showing methane levels at more than 98%.

Eastern establishes foothold in Southland's Ohai coal fields

Eastern Corporation of Queensland, Australia has taken an option to purchase the coal mining operations of Straith Industries in the Ohai-Nightcaps area, Ohai coal fields of western Southland in the South Island.

The acquisition, should it proceed, will give Eastern a second coal mine in New Zealand and secure an operation in an area of the South Island where considerable market opportunities may exist in the coming years.

Last year Eastern acquired the Cascade mine in the Buller coalfields on the west coast of the South Island.

Eastern is also currently exploring 5 km north of Cascade at Whareatea West where it aims to prove up known coal resources for mine development.

The Straith operations are located in three separate areas within the Ohai-Nightcaps region, where open cut and underground coal mining operations have been conducted for over 50 years.

The Straith coal is predominantly a sub-bituminous thermal coal, with potential application for use by domestic and industrial coal customers throughout the South Island.

Eastern said it is pursuing a strategy of coal mine development and expansion in New Zealand as well as Australia. The purchase will be subject to completing due diligence investigations on the mine assets, existing coal resources, and available markets plus acquisition of all needed statutory and resource consents.

Mataura lignite mine restart possible

The Southland Times recently reported that Solid Energy has spent more than \$16M since November buying six properties in Eastern Southland, putting it in a prime position to restart its lignite mine at Mataura.

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Five of the properties, including farms and lifestyle blocks, were south-west of Mataura and a sixth was in the Waimumu-Upper Charlton area, near Gore.

The Gore community newspaper reported the company was planning to reopen its mothballed lignite mine at Mataura that it closed in August 2000.

Mining industry expert appointed to Solid Energy Board

Australian-based mining expert, Alan Broome, has been appointed a director of Solid Energy New Zealand Ltd by the Minister for State Owned Enterprises. Mr Broome had extensive experience in metal casting and steel production before joining the mining industry as managing director of a major Australian coal industry owned group in 1990.

He is currently Chairman of New Zealand consulting company, CRL Energy Ltd, Chairman or Deputy Chair of a number of Australian mining technology companies; Chairman of a listed Australian junior mining company and Chairman of a leading Australian wind farm project planning and management company. He is also a delegate to the International Committee for Coal Research; Chair of the Australian Government Action Agenda promoting mining technology; member of the minerals sector advisory council of Australia's Commonwealth Scientific and Industrial Research Organisation and a director of the Coal Association of New Zealand.

INTERNATIONAL NEWS

Premier hints at delays on coal-fired plants (Canada)

Premier Dalton McGuinty has provided yet another signal that his government is set to again push back the deadline for closing Ontario's coal-fired power plants.

"We are going to do what is responsible," McGuinty said. "We will eliminate coal-fired generation in a way that does not compromise reliability. "Were we to receive new information from an independent authority telling us that we should change our plan (to close the coal-fired plants), then we would be very eager to listen to that."

McGuinty said "independent authority" refers to the Independent Electricity System Operator (IESO), which manages the power grid to ensure supply meets demand. IESO will release a report expressing doubt about the schedule for closing coal-fired power plants. In the 2003 election campaign, the Liberals promised to close all remaining coal-fired plants "by 2007."

Last year, however, they pushed that deadline back and said three of the four plants would close "by the end of 2007" and the fourth (Nanticoke, the largest) in 2009.

Extra US\$180 billion needed to meet demand for power (China)

China says it will need an extra US\$180 billion for power generation infrastructure to be spent by 2020. International consultancy Capgemini has forecast that the country will need another 280,000 MW of electricity generation by 2020, as well as the 950,000 MW planned.

The report says the scale of investment needed presents an opportunity for foreign investors. Companies able to offer "clean coal" technology had big opportunities. Despite efforts to diversify fuels, the country will be heavily reliant on coal for its electricity. China wants to reduce the proportion of coal fired generation from the present 73% to less than 60% in 2020. However, CapGemini says coal fired plants will still provide 71% of supply in 2010 and 65% in 2020.

Coal-fired power plants ordered to cut emissions (China)

The Chinese government has ordered 6 major power groups to reduce sulphur dioxide emissions from their coal-fired power plants. Six large power groups, including the Huaneng Enterprise Group, have signed commitments to reduce sulphur dioxide emissions to mark the start of construction of the first desulphurising project in a nationwide programme to spread the technology among coal-fired power plants by 2010.

Coal-fired power plants were a major force in fulfilling the goal of reducing sulphur dioxide emissions by 10% by 2010. China's 11th Five-Year Plan (2006-2010) for economic and social development has set environmental protection targets for the next five years, which include reducing discharges of major pollutants by 10%.

All new coal-fired units have to install desulphurising facilities and half the existing plants must be renovated within five years. Plants that failed to meet the target would be closed. By the end of 2005, the installed capacity of thermal power plants with desulphurising facilities reached 53,000 MW.

Largest coal methane gas project in the world (China)

Caterpillar Inc. has been selected to provide 60 methane-gas- powered generator sets to produce 120 MW of power at the Sihe Coal Mine in Jincheng City, Shanxi Province.

The Shanxi Jincheng Anthracite Coal Mining Group. is the project developer for the methane gas power project, which is expected to be the largest of its kind in the world when it is fully operational in 2007. This project will improve environmental and economic conditions and mine safety while increasing trade between the US and China.

Energy sector will need \$10 billion investment (India)

India will need private investments to the tune of \$9-10 billion in the energy sector over the next five to six years to bridge the demand supply gap, according to consulting firm KPMG in its recent 'India Energy Outlook'. In order to attract and sustain private investments, the Government will have to evolve a clear policy framework in the energy sector with clarity in matters such as energy pricing, market structure, cross-border investments and imports and exports of energy products.

KPMG estimates that since the country's energy requirements could jump four-fold over the next 25 years, the Government should enter into partnerships with key nations to diversify its energy supply base and improve long term supply arrangements. The report said India's mineable coal reserves could be exhausted in about 40 years.

The KPMG report favoured deregulating the coal sector and setting up an independent body to govern investments in the sector. The report said that India's energy requirements and availability of sources also imply that it would have to build 250,000 MW of nuclear capacity by 2050.

Coal gasification project (India)

The detailed feasibility report on GAIL's coal gasification project based on Shell technology is being finalised by Uhde India Ltd. The plant would consume around 5,200 tonnes of coal per day to generate synthesis gas which can produce around 3,000 tonnes per day of ammonia.

Andhra firm eyes Orissa coal fields (India)

The Andhra Pradesh Generation Corporation wants Mahanadi Coalfields Ltd's fields in Orissa for the proposed 2 x 800 MW Krishnapatnam power project. The corporation has asked the power ministry to endorse its proposal. The power plant, when fully commissioned, requires 7.8 Mt per annum of coal.

The corporation plans to blend the domestic coal with the imported coal for power generation. Unit-I is expected to be commissioned by May 2010 and Unit-II in November 2011.

Coal production climbs (Russia)

Russia's coal production in January-April 2006 climbed 7% year-on-year to 106 Mt. 67% of Russia's coal is produced in the Kuznetsk basin in Siberia's Kemerovo Region, and in the Kansk-Achinsk basin in the neighboring Krasnoyarsk Territory. The two basins, among the world's largest, expanded production by 4% and 16% respectively year-on-year during the period. Russia's coal exports in January-April grew 3% to 263 Mt.

SK Corp. eyes stakes in coal mines (South Korea)

SK Corp., South Korea's top oil refiner is looking to buy stakes in two to three coal mines run by the Chinese government, accelerating its parent's push to expand investment in the mainland.

SK Group, the parent of SK Corp. and the nation's fourth-largest family-run conglomerate, is increasingly tapping China to make the resource-rich neighboring country its stable supplier of energy sources.

Korean companies seek to expand overseas coal exploration (South Korea)

South Korean companies are expanding their overseas coal exploration efforts as a result of rising global prices. The Ministry of Commerce, Industry and Energy said that as of late 2005, 25 companies were either mining or exploring for new coal resources in 25 countries.

Coal the most viable power generation option (Thailand)

Coal is considered as a realistic and practical choice of fuel for power generation in Thailand to address its growing energy appetite. Electricity demand is projected to grow an average 5% a year from 2007 to reach 38,000 MW in 2011.

A cost analysis by the Electricity Generating Authority of Thailand (EGAT) showed that coal is the cheapest fuel for power generation, though the front-end investment cost for plant construction is higher than gas-fired power stations.

Lignite deposits in Lampang can easily run EGAT's Mae Moh power plant for another 40 years at its current output of 2,400 MW.

ICE announces plans for first coal futures (UK)

The Intercontinental Exchange (ICE) announced plans to launch its first coal futures in a move that highlights rising global demand and the growing importance of banks and hedge funds in the energy market.

The all-electronic exchange already lists utility-based contracts, including those based on UK natural gas and pan-European emissions, through its ICE Futures unit in London. It aims to tap into the appetite for risk-management and speculative trading tools from producers and end users such as utilities and steel companies, which rely primarily on an expanding array of over the counter products.

Coal is the next step to complete the offering to the utilities market. The launch, which is subject to regulatory approval, comes weeks after the European Energy Exchange in Leipzig started the region's first energy futures. The ICE offering is similar to that of its rival, with contracts based on the key coal route of exports from Richards Bay in South Africa to Rotterdam in the Netherlands.

Scottish & Southern plans joint clean coal venture in Yorkshire (UK)

Scottish & Southern Energy (SSE) announced it was looking into the prospect of building a £350M clean coal plant at Ferrybridge in Yorkshire.

The power group has teamed up with Mitsui Babcock, UK Coal and Siemens to install the UK's first supercritical clean coal boiler technology at the plant, which would save around 500,000 tonnes of carbon dioxide a year compared with the current plant.

SSE is also in talks with Edinburgh's Heriot-Watt University about designing and implementing carbon capture technology, which could save a further 1.7 Mt of CO₂ annually. The study is expected to be completed within the next year, and SSE will decide whether it will press ahead with the investment during 2007. Subject to SSE's backing, the capture-ready plant could be in commercial operation as early as 2011.

Senate passes bill to improve safety at coal mines (USA)

The Senate recently voted to require safety upgrades at underground coal mines following fatal accidents in Kentucky and West Virginia, and House lawmakers pledged to act soon. The measure would require coal mine operators to keep more emergency air supplies underground and to better seal off abandoned sections of mines.

The bill would require miners to have at least two hours of oxygen available instead of one as under the current policy. It also would require mine operators to store extra oxygen packs along escape routes and to perform checks on the devices to ensure they work. The mine agency recently issued a temporary rule requiring coal operators to give miners extra oxygen, but miners have been pressing Congress to enact a permanent solution.

Senate panel okay Indo-US energy cooperation (USA)

A US Senate committee has approved a bill seeking to promote global energy security through increased cooperation between India and the United States.

Under the terms of the US-India Energy Security Cooperation Act which has to clear the full Senate, there are a number of areas for which assistance may be provided for research, development and deployment cooperation relating to: clean coal and emission reduction technologies and carbon sequestration projects; energy efficiency projects; and alternative fuel sources such as ethanol, bio-mass, coal-based fuels and hydrogen.

Further, the bill provides assistance for research related to commercially available technologies that promote the clean and efficient use of energy in India; and for technical assistance in support of the development by the Indian Government of a strategic oil reserve to allow the country to cope with short-term disruptions to global oil supplies without causing shocks to its market or the global market.

A specific aspect of the deal is that India will share in research and have access to the FutureGen technology once the 275 MW plant is built. More than 20 other countries have been offered the chance to join the project but have yet to sign on.

PPL joins effort to build carbon sequestration demonstration facility (USA)

PPL Corp. has joined the cooperative public-private FutureGen effort to build what is being billed as the world's cleanest coal-fired power plant, a facility that will demonstrate carbon sequestration technology. The FutureGen Industrial Alliance is a nonprofit consortium working with the US Department of Energy on a \$1 billion project to

develop the plant. The consortium will produce electricity and hydrogen while capturing and permanently storing CO₂ emissions underground.

Pennsylvania-based PPL Corp. joins two other major US power generators, American Electric Power Company Inc. and Southern Co., on the project. Several domestic and international coal producers and electricity generators also are part of the alliance. Twelve locations in seven states are vying to be the site of the demonstration project.

Survey of utilities shows fears on energy supply security

Security of gas and electricity supply has become the biggest concern for executives in the utilities industry, according to a global survey by PwC, the professional services firm. Fear of supply disruptions was greatest in Europe, where almost half of the utilities executives surveyed said power cuts or interruptions in gas supply were more likely now than five years ago.

47% of respondents said coal would play a larger role, despite its higher CO₂ emissions. Just under 40% said they were actively considering investing in clean coal technology. RWE, E.on and Vattenfall are among the European utilities companies planning to build clean coal plants with CO₂ capture and storage.

TECHNOLOGY & OTHER NEWS

Low emission fund closes with 30 applicants

Applications for the Australian Government's Low Emissions Technology Demonstration Fund closed with 30 major renewable and new low emission technology projects applying for funding under the A\$500M programme. A seven-member expert panel has begun assessment of the applications which have the potential for significant impact on reducing Australia's energy sector greenhouse gas emissions. Panel members have been described as "eminent business people, leaders in their fields when it comes to leading change in sectors that are being transformed by new technology". Ken Humphreys is an overseas representative who has extensive experience in the field of advanced energy technologies.

The Minister for the Environment and Heritage said the number and size of the projects was evidence the Australian energy sector, both traditional and renewable, had risen to the Government's challenge. The Industry Minister said the breadth of the applications was pleasing with projects as diverse as biomass energy generation, solar concentrators, landfill renewable power, clean coal and carbon sequestration submitted for consideration.

CO₂ pilot project to get under way this year

Australasia's first project to trial CO₂ sequestration technology will get under way later this year. The Cooperative Research Centre for Greenhouse Gas Technologies (CO₂CRC) has announced that the pilot research project will cost about A\$30M and involve approximately 40 Australian and overseas researchers.

The project is designed to demonstrate that CO₂ capture and storage is a viable, safe and secure option for greenhouse gas abatement. It will test the deep underground geological storage (geosequestration) of CO₂ in a location in Western Victoria. Geoscience Australia has now identified 65 viable CO₂ storage sites in Australia.

"What makes this project important at an international level is that it will be one of the most comprehensive geosequestration research projects to take place anywhere in the world," says Dr Peter Cook, CEO of the CO₂CRC. "It'll be applicable to some of the other natural gas accumulations and particularly to the production of electricity whether you're using brown coal or black coal."

The Otway trial will capture carbon dioxide from a natural underground source simulating a power station. The gas (about 100,000 tonnes) will then be piped several kilometres for pumping into underground storage in a depleted gas reservoir over a one-to-two-year period.

AP6 projects underway

COAL21 News reports that work continues to progress the agenda of the Asia Pacific Clean Development and Climate Partnership (AP6). A communiqué from the recent meeting of AP6 said it was a reality that fossil fuels will remain the dominant source of the world's energy needs for the next century so emission lowering technologies must be a critical part of the solution to climate change. Australia will take a lead role in this as leader of the AP6 taskforce on fossil fuel energy.

The taskforce is one of eight working groups which have been established by AP6 as a means of "harnessing the power of our private sectors, our research communities and our government sectors to drive sustainable development", the communiqué says. Taskforces have been instructed to drive industries towards best practice and "ensure that a range of technologies is developed and repeatedly demonstrated so that scale is increased and costs are reduced".

Among outcomes is a recognition that “clean development and lower GHG emissions requires economic growth and investment will deliver the new technologies to reduce emissions”.

The Australian Government committed A\$100M to the programme. Other taskforces include: power generation and transmission; coal mining; steel; aluminium; cement; renewable energy and distributed generation; and buildings and appliances.

Europe tests carbon capture at coal fired power plant

The world's largest pilot plant for the capture of CO₂ from a conventional power station has opened in Denmark. It is the first installation in the world to capture the CO₂ in the flue gases of a coal fired power station. The pilot project at the Elsam 420 MW power station near Esbjerg will demonstrate the new technology under the auspices of CASTOR (CO₂ from Capture to Storage), a European initiative grouping 30 partner industries, research institutes and universities from 11 European countries. The CASTOR strategic objective is to enable the capture and geological storage of 10% of the CO₂ emissions in Europe, which corresponds to about 30% of the CO₂ emitted by European power and industrial plants.

The European Science and Research Commissioner said “The European Commission is committed to a low carbon future. With projections showing that fossil fuels will continue to provide about 85% of our energy for the foreseeable future, it will be difficult to achieve these reductions through switching to other forms of energy, such as renewable solar, wind, wave, biomass or nuclear. By developing technologies for carbon capture and storage, we can reduce emissions in the medium term as we move to large scale use of renewable, carbon-free energy sources.”

The pilot CO₂ capture unit will be operated for two years to demonstrate a new technology on a scale large enough to ensure reliable industrial application. A solvent will capture nearly 90% of the CO₂ in the flue gases before it is fed to a regenerator, which is heated to 120°C to separate the CO₂ for transport to its storage place.

The pilot facility will use a system that can be regenerated with a limited quantity of energy, reducing the generation of secondary CO₂. The pilot installation is intended to capture one tonne of CO₂ per hour and is expected to halve the current cost per tonne of CO₂ avoided, to between US\$25 and \$37.

World needs urgent action by UK Government on CCS

The international coal industry has supported the call by the UK Parliamentary Inquiry into Carbon Capture & Storage (CCS) for more urgent action by the UK Government. Speaking about the release of the Parliamentary Report, “Meeting UK Energy and Climate Needs”, the World Coal Institute said: “Governments need a greater sense of urgency in pursuing their energy and environmental imperatives and the technological answers to their challenges”.

The WCI said it supports the view of the Parliamentary Committee on Science & Technology that the UK's actions to date do not reflect the urgency of the situation and that this needs to be rectified in the forthcoming Energy Review. “The coal industry wants, and the world needs, the widespread use of technologies like CCS that could enable power plants to reduce their CO₂ emissions by 80-90%; but this will not occur in time without being given priority support by the government.

For the UK Energy Minister to refer to CCS technology as ‘at a very early stage of development’, is to ignore the evidence of last year's Special Report by the IPCC which demonstrated that most of the technologies needed for CCS could be characterised as ‘at the demonstration phase’, or ‘economically feasible under specific conditions’ or ‘part of a mature market’. According to the IPCC, only 3 of the needed 15 technologies were still at the lowest level of maturity – the ‘research stage’.”

WCI argued that without action by the UK Government, UK industry faces the prospect of being left behind by competitors from other nations and the world will be moving less rapidly than it needs in order to meet its energy security and climate imperatives.

IEA Papers

Implications of forestry carbon offsets for the coal industry

(John Kessels, Wayne Hennessy, Stefan Bakker, CCC/108, ISBN 92-9029-424-8, February 2006)

One potential response from coal users and producers to global climate policies is to offset CO₂ and other greenhouse gas emissions by using forestry carbon offsets. This report discusses the science behind forestry carbon offsets, the institutional setting around the Kyoto flexible mechanisms and current developments.

Science shows that forests are crucial in the carbon cycle and sinks offer potential to sequester CO₂ from the atmosphere. Current international climate policy recognises this with forestry activities taken into account in national greenhouse gas inventories.

Afforestation and reforestation activities are also eligible projects under the Kyoto flexible mechanisms. Other activities such as avoided deforestation and soil conservation offer a larger potential to offset greenhouse gas emissions through offsets.

Forestry offset projects are not permitted to be used by companies in the European Emission Trading Scheme. However, the use of forestry offset projects in the EU ETS is going to be reviewed in 2006. To date, no forestry offset projects have been registered under the Kyoto flexible mechanisms, but over ten are in advanced stage of development.

In the international carbon market, fuel switching from coal to gas appears to be an important emission reduction option at CO₂ prices above 20 euros per tonne CO₂. More use of CDM credits including forestry carbon offsets may lower the price of carbon and thereby reduce the need for fuel switching.

The current international framework and language surrounding forestry offsets are at times unclear and countries differ in their viewpoints of using forestry offsets. In particular, there are several specific practical issues relating to forestry offsets compared to other options, particularly accounting, non-permanence, additionality testing and sustainability effects. These have prevented forestry from obtaining a significant share of the current Kyoto compliance carbon market. This market is however developing rapidly, with a significant number of voluntary programmes.

Chlorine in coal combustion and cofiring

(Robert Davidson, CCC/105, ISBN 92-9029-421-3, November 2005)

Mercury, because of its associated health risks, is the most environmentally important of the volatile metals. Knowledge of the various mercury species that can exist in flue gas is needed if its emissions and capture are to be predicted because each form has different physical and chemical properties.

This report examines the role of coal chlorine on the speciation of mercury in coal combustion flue gas. It also looks at cofiring of coal with biomass and wastes, and the possibility of increased fouling, corrosion, and emissions of chlorinated organic compounds.

Cofiring coal with biomass and wastes has raised questions concerning potentially greater problems with fouling and corrosion, especially when cofiring straw, and possible higher emissions of chlorinated organic compounds, especially when cofiring municipal solid waste (MSW) and refuse-derived fuels (RDF).

The report concludes that, despite claims to the contrary, the experimental and plant data do not support a strong effect of coal chlorine on the speciation and capture of mercury in flue gas. Whilst it cannot be denied that coal chlorine is one of the factors that affect mercury oxidation it does not seem to be the determining factor.

The evidence for chlorine induced corrosion shows that cofiring coal with high chlorine biomass fuels can produce an overall benefit. Not only does coal protect from corrosion, it also appears to reduce potential emissions of PCDD/Fs.

R&D on coal use in Australia and the COAL21 Action Plan

(Colin Henderson, Steve Mills, John Topper, CCC/107, ISBN 92-9029-423-X, December 2005)

IEA Clean Coal Centre was asked to review coal Research, Development and Demonstration (RD&D) in Australia. This was to assess whether these activities are consistent with the COAL21 National Action Plan for securing major reductions in greenhouse gas emissions while maintaining electricity supply security and coal markets.

The COAL21 National Action Plan identified a number of pilot and/or major demonstration projects that needed progressing in the areas of:

- oxy-fuel combustion;
- lignite dewatering and drying;
- ultra clean coal;
- IGCC.

The CO₂ capture and storage projects are at different stages of development but all require further RD&D for commercial deployment. As well as the planned demonstrations, there are R&D programmes being carried out by a number of research organisations including CCSD, CO₂CRC, CRC CPL and cLET. Input information to the review

included published and webpublished documents, responses to a questionnaire, email contacts, and face-to-face interviews.

The report first presents the key findings that emerged, then outlines each of the demonstrations, identifying R&D needs and any gaps and overlaps. A review of a proposed central Queensland, Australia, IGCC pilot test facility for hard coals follows (treated separately as it was itemised separately in the terms of reference for this study) and then there are discussions of the potential internal and global benefits of the projects and a listing of possibilities for international collaboration.

EVENTS

The 8th Annual New Zealand Energy Summit, Duxton Hotel Wellington, 17-19 July 2006. Tel: 09 912 3616 Fax: 09 912 3617 Email: register@conferenz.co.nz Internet: www.conferenz.co.nz

China power conference Shanghai, China, 4-6 Jul 2006 Aaron Anstey, PennWell Publishing (UK), Warlies Park House, Horseshoe Hill, Upshire, Essex EN9 3SR, UK Tel: +44 1992 656 614 Fax: +44 1992 656 704 Email: attendingchina@pennwell.com Internet: www.powerinchina.com

Power-Gen Asia 2006 conference, Hong Kong, China, 5-7 Sep 2006, Vanesa Martinez, PennWell Publishing (UK), Warlies Park House, Horseshoe Hill, Upshire, Essex EN9 3SR, UK, Tel: +44 1992 656 614, Fax: +44 1992 656 700, Email: paperspga@pennwell.com , Internet: www.powergenasia.com

Conference on clean coal - securing the future, London, UK, 18-19 Sep 2006, Allison Lindsay, Coaltrans Conferences, Nestor House, Playhouse Yard, London EC4V 5EX, UK, Tel: +44 20 7779 8186, Fax: +44 20 7779 8946, Email: alindsay@euromoneyplc.com, Internet: www.coaltrans.com/

2nd Coaltrans Japan, Tokyo, Japan, 20-21 Sep 2006, Allison Lindsay, Coaltrans Conferences, Nestor House, Playhouse Yard, London EC4V 5EX, UK, Tel: +44 20 7779 8791, Fax: +44 20 7779 8946, Email: alindsay@euromoneyplc.com , Internet: www.coaltrans.com

23rd annual international Pittsburgh coal conference, Pittsburgh, PA, USA, 25-28 Sep 2006, Crystal M. Jones, Conference Secretary, International Pittsburgh Coal Conference, University of Pittsburgh, 1249 Benedum Hall, Pittsburgh, PA 15261, USA, Tel: +1 412 624 7440, Fax: +1 412 624 1480, Email: pcc@engr.pitt.edu, Internet: www.engr.pitt.edu/pcc

COAL21 conference 2006, Gold Coast, Qld., Australia, 10-11 Oct 2006, The Meetings Manager, Level 12, 179 Elizabeth Street, Sydney, NSW, Australia, Tel: +61 2 9264 1677, Fax: +61 2 9264 1666, Email: meetings@tmm.com.au , Internet: www.tmm.com.au

World energy congress Rome, Italy, 9-15 Nov 2007 Mike Treacher, PennWell UK Office, PennWell House, Horseshoe Hill, Upshire Essex EN9 3SR, UK Tel: +44 1992 656 636 Fax: +44 1992 656 700 Email: miket@pennwell.com Internet: www.rome2007.it

FEEDBACK

*This e-Newsletter is published for the Coal Association of New Zealand Inc. by CRL Energy Ltd.
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