

Annual Review 2008

Coal Association of New Zealand Inc.



Coal
Association of
New Zealand



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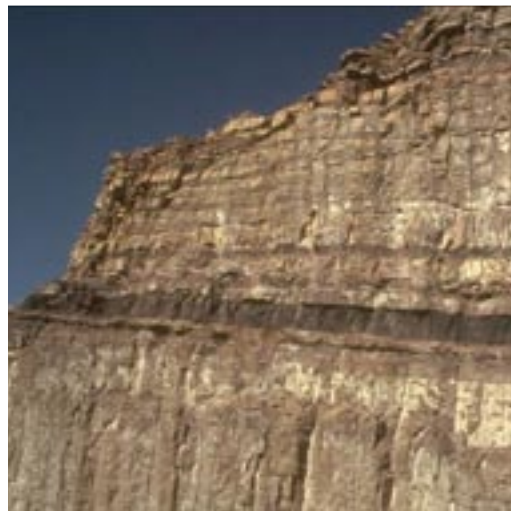
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EnergyScape turns spotlight on future driving: biofuels, hydrogen fuel cells and electric cars



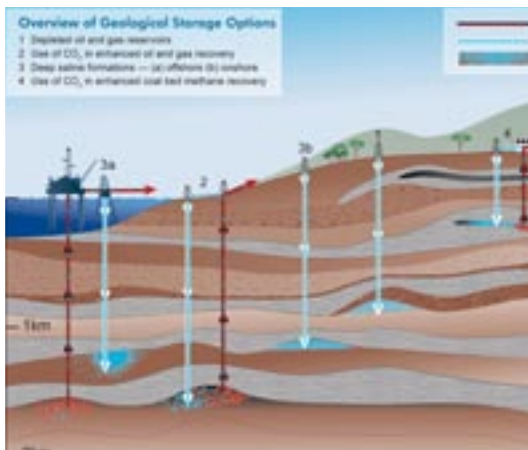
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Carbon capture and storage in New Zealand

Coal Association of New Zealand Inc.

Directors

| | |
|--------------------|------------------|
| C Baker - Chairman | (Other) |
| A Broome | (Other) |
| D Elder | (Coal Producers) |
| B Francis | (Coal Producers) |
| A Melhuish | (Coal Users) |
| G Perkins | (Coal Producers) |
| R Pullein | (Coal Users) |
| N Shewan | (Coal Users) |
| C Van Oosterom | (Coal Producers) |

Officers

| | |
|-----------|--------------|
| Secretary | T W Matheson |
| Treasurer | R McGregor |

Representatives

| | |
|------------------|------------|
| CRL Energy Board | A Broome |
| | B Francis |
| EXITO | B McDonald |
| Mines Rescue | D Stewart |

Coal Producer Members

| | |
|----------------------------|---------------------------|
| Birchfield Coal Mines Ltd | Menzies Mining Company |
| Burkes Creek Mining | New Creek Mining |
| Canterbury Coal Company | New Vale Coal Company Ltd |
| Francis Mining Company Ltd | O'Reilly's Opencast Ltd |
| Glencoal Energy Ltd | ROA Mining Company Ltd |
| Harliwich Carrying Company | Rogers Mining Ltd |
| Heaphy Mining | Solid Energy NZ Ltd |
| Kai Point Coal Company Ltd | Victory Lime 2000 Ltd |
| MacDougall Mining | Waituna Coal Mine |
| McLaughlin Mining | |

Associate Members

| | |
|--|---|
| A W Taylor Industrial Coal Ltd | Meritec (Worley Consultants) |
| Alliance Group Ltd | Metso Minerals (New Zealand) Ltd |
| Bionutral Laboratories Corporation | Ministry of Economic Development |
| Coal Distributors (Auckland) Ltd | Montgomery Watson Ltd |
| Coal Marketing Services | National Institute of Water and Atmospheric Research (NIWA) |
| Coal Power Ltd | NZ Coal Processors Ltd |
| DLA Phillips Fox | NZ Steel Ltd |
| Doug Hood Mining Ltd | Pike River Coal Ltd |
| Energy for Industry (formerly Meridian Sol.) | Port of Greymouth |
| G L Bowron Ltd | SGS NZ Ltd |
| Genesis Energy | Shipherd Nurseries |
| Golden Bay Cement | Sinclair Knight Merz |
| Heinz-Wattie Ltd | Skellerup Industries Ltd |
| Huntly Retail Distribution Centre | South Port NZ Ltd |
| Kenroll Industrial Coal Ltd | Southtile Ltd |
| Kingett Mitchell | Summit Wool Spinners |
| L&M Coal Ltd | Synlait Milk Ltd |
| Lincoln University | TNL Group Ltd |
| Lion Breweries South | University of Canterbury |
| Lyttelton Port Company Ltd | Vector Ltd |
| Mangapapa B2 Incorporation | Websters Hydrated Lime Company Ltd |
| McDonald's Lime Ltd | |

In my 2007 Chairman's report I noted that the year had been a significant one for the Coal Association and for coal in general, both in New Zealand and globally. This year has been no different.

There are a number of particular issues of importance to the coal sector that I want to highlight in this report.

Emissions Trading

Firstly, the Emissions Trading Scheme (ETS) was passed post the end of our financial year. This is a deeply flawed piece of legislation, and there is no doubt there will be significant changes to the Act, sooner or later as the negative aspects of the Act become apparent in the economy.

The ETS legislation passed with a 63-57 vote after its third reading in Parliament in September 2008. Hastily prepared legislation passed by a small majority is not a good basis for durable climate change policy that will help create investment certainty. An Act that will have such major impacts on New Zealand society for decades needs more time to develop better consensus. In particular, the pace and extent to which the Bill imposes costs throughout the New Zealand economy will reduce our competitiveness against most other countries, without creating any benefit for the global environment. In these times of great uncertainty in terms of the global economy and future climate change agreements, that is a strategy with no upside.

At the time of writing this report, the National Party had just won the election. This change is expected to provide the opportunity to make changes, hopefully significant changes, to the Act. However, even with the recent extraordinary events in the global financial markets, a National Government is unlikely to significantly delay the implementation of the ETS – unless perhaps Australia finds cause for delay. If there is a positive in the Act at present, it is that

domestic coal supply goes primarily to Trade Exposed firms and these firms will not face the full cost of the ETS for a number of years.

Looking more broadly, the current financial crisis, the result of the US elections, and the high level of uncertainty surrounding negotiations for a post-2012 Climate Change agreement, provide mixed signals for policy in New Zealand, but nevertheless dictate that we take a much more cautious and self-interested approach than is inherent in the ETS Act as it is now.

The Association has been, and will continue to be active to achieve a more acceptable outcome for coal users and for the New Zealand economy.

New Zealand CCS Strategy

The Association played a significant role in bringing together a Government and industry partnership to develop and advance a CCS Strategy in New Zealand. This initiative leverages Government funding through FRST and Crown Minerals, and is providing a vehicle through which very strong ties into Australia have been developed, and that keeps fossil fuels in New Zealand on the front foot in terms of environmental acceptance (see page 24).

Straterra

The Association has been active in supporting the development of a new minerals industry organization, Straterra. Straterra's mandate will be to provide high level, well resourced, professional representation for the natural resource and energy sectors, including minerals, coal and aggregates. A goal is for the oil and gas sector to join in due course.

Representation in the natural resource and energy sectors has historically been fragmented and not adequately resourced and has thus lacked credibility; this has reduced effectiveness in influencing policy across the common interests that the current industry organizations share. Straterra is a well-resourced incorporated entity that will address issues that



Chris Baker, Chairman of the Coal Association.

are currently in the domain of the New Zealand Minerals Industry Association (NZMIA), Aggregates and Quarrying Association (AQA), Coal Association of New Zealand and Minerals West Coast. Straterra will work for greater recognition of the importance of the sector, including the establishment of a senior ministerial Cabinet portfolio.

The establishment of Straterra raises the question as to what is the ongoing role for the Association. Whilst there are many details to consider, the Association's research and environmental focus and activities, international links and the commitment of its members ensures, along with our strong resource base, that the Association will remain active and effective for the benefit of the industry.

CRL Energy Ltd ownership

The sale of 50 percent of CRL Energy to Genesis Energy has seen a successful transition of the 50 percent ownership from NIWA and has been a positive outcome for all participants, including the Association. We welcome Genesis Energy as a partner in the CRL Energy business, and are excited by the opportunities for CRL Energy as the business grows in the future.

Board Changes

Unfortunately, at the last AGM we lost the excellent contribution of Bret Highsted to the Board when he moved out of the coal industry. Bret's contribution to the Board was always of the highest quality and the industry was fortunate to have him as a Board member. We wish him well in his future endeavours. On a positive note, I am very pleased to welcome Allan Melhuish of Genesis Energy, and Chris Van Oosterom of Fonterra on to the Board. Chris and Allan were elected at the 2007 AGM and have made an excellent contribution to the Board since that time.

Financial Results

For the 12 months of this financial year the Coal Association budgeted for a shortfall of

\$221.4k. The actual shortfall after allowing for business rental and interest received was \$192.2k. Increased costs were incurred because two annual payments were made for the New Zealand CCS Strategy, but these costs were offset by lower than budgeted expenditure for consultant costs. The representation work programme was ahead of budget, particularly in relation to Climate Change issues, and the research work programme over budget, mainly through the additional CCS payment identified above.

Key Priorities

Looking forward key priorities and activities for the Association in 2008 and beyond are:

- The Government's Emissions Trading Policy and the associated economic risks. This is the highest priority with the change of Government;
- Working with Government and advancing the CCS strategy;
- Working with the resource industry to establish Straterra;
- Reviewing the Coal Association structure and activities to maximize the outcomes from Straterra;
- Working across the political spectrum to ensure coal and coal technologies are understood and accepted as part of the energy mix.

Challenges continue to grow, but I am confident that we are pursuing activities that maintain and grow the environmental credibility of coal as a fuel, and the contribution coal makes in the energy sector in New Zealand.



CHRIS BAKER
CHAIRMAN
OCTOBER 2008

Again, this past financial period has been one of activity for the Coal Association with ongoing input and engagement, including submissions, on the Climate Change (Emissions Trading and Renewable Preference) Bill and a submission on the draft West Coast Conservation Management Strategy 2007-2017.

The Emission Trading Scheme will have a major impact on the coal industry in the long term so the Coal Association placed a high priority on the written submission, appearing before the select committee and supporting other submissions. It was recommended that 100 percent free allocation be provided on a more flexible basis for all trade-exposed companies to preserve their international competitiveness until other countries place similar carbon pricing on their competing goods. Further, a mechanism such as a price cap should be included to manage the risk of price volatility. The Coal Association concluded with a recommendation that to achieve a long term, durable solution, the Bill should not proceed until the Government has undertaken more detailed economic analysis to address the risks of avoidable economic shocks and unnecessary transitional pain from plant closures and job losses. However, the legislation passed with a 63-57 vote after its third reading in Parliament on 10 September 2008.

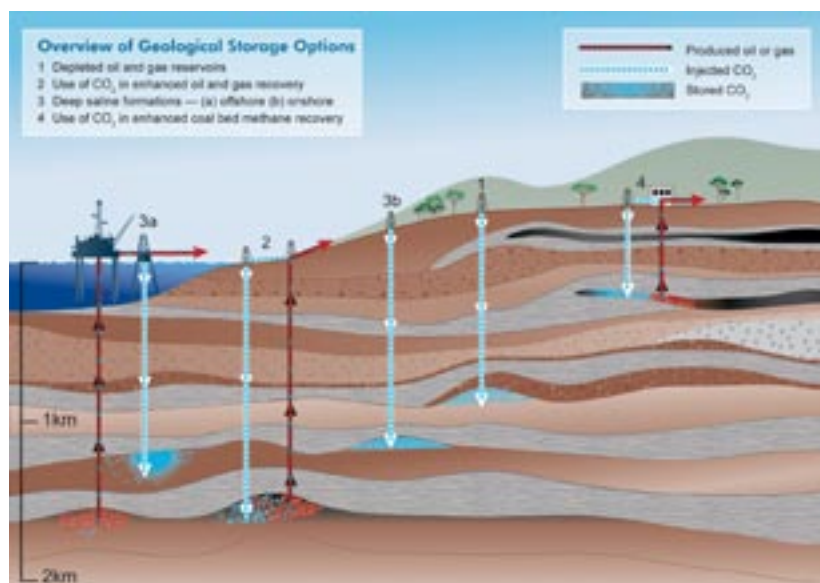
The Coal Association's position on the Bill is that, as it was hastily prepared and passed by a small majority, it is not a good basis for durable climate change policy that will help create investment certainty. A bill that will have such major impacts on New Zealand society for decades needs more time to develop better consensus. In particular, the pace and extent to which the Bill imposes costs throughout the New Zealand economy will reduce our competitiveness against most other countries with little if any environmental upside, a dangerous strategy in times of global economic turmoil. The Coal Association will continue to advocate for an acceptable outcome for coal users as amendments to the

legislation are considered.

With regards to the draft West Coast Conservation Management Strategy 2007-2017, Coal Association representatives tabled a written submission and appeared before the Department of Conservation (DOC) hearings committee. The main concern was that DOC should acknowledge prominently its balancing role for conservation and other values, including the importance of economic activities such as mining. It was argued that the strategy should promote the concept of 'net positive conservation benefit' as a flexible means of achieving this balancing role. The strategy stated that DOC wants a change in the quality of its "engagement with key associates". We noted that some Coal Association members have experienced long delays in applications to DOC for access arrangements and we requested that DOC monitor and review its performance in dealing with access applications.

On the home front

The Coal Association is pleased to be part of the New Zealand Carbon Capture and Storage (CCS) Research Steering Group - a joint Government/industry initiative with the Foundation for Research, Science and Technology being the principle funder. The group is chaired by Chris Baker and has initiated a programme to increase New Zealand's capability and knowledge in CCS; the initial step is to identify



Geological storage options for CO₂ being investigated in Australia by the CO2CRC consortium. New Zealand is currently undertaking its own CCS research (see page 24). Image: CO2CRC.

The Year in Review



Dr Stefan Harms, Manager of the Sustainable Energy Technologies (SET) Group at CRL Energy Ltd, explains the shift reactor to stakeholders from the Coal Association and Genesis Energy, following the signing of the shareholders agreement. Photo: Garth Williamson, CRL Energy Ltd.

appropriate technologies and to evaluate storage capacity for CO₂ in the Taranaki and Waikato regions. This will complement research by Solid Energy on storage capacity in Southland, where the bulk of New Zealand's substantial lignite deposits lie.

The CCS Research Steering Group includes the Foundation for Research and Technology (FRST); Crown Minerals; The Coal Association; Solid Energy; L&M Mining; and Genesis Energy. The group has committed \$1.4m per year for three years at this stage. The research partnership is also a member of the world-leading Canberra-based CCS research organisation, the CO₂CRC – where the injection phase of the demonstration project in the Otway Basin began in April 2008.

In addition, the Ministry of Economic Development is working on a whole-of-government approach to the development of regulations and policy for CCS through

the New Zealand CCS Policy Group and is coordinating a review of existing legislation of relevance to CCS, as well as monitoring international CCS developments. The policy group is setting a timeframe for addressing regulatory gaps in the management of potential

CCS activities and is working closely with the FRST CCS Research group.

The successful recipients of the research funding are a research partnership led by GNS Science and involving CRL Energy and the University of Auckland. The work includes preliminary basin assessments for Waikato and Taranaki; preliminary assessments of economic and risk assessment; current technology assessment for capture, transport and injection; and monitoring and verification. By the end of 2008 a series of detailed reports will have been produced around these topics. The primary purpose is of course to assess whether CCS in these areas can reduce the impact of fossil fuel use and industrial processes on greenhouse gas (GHG) emissions in New Zealand. The application of high efficiency, CCS-ready advanced fuel-conversion technologies in New Zealand will require access to such



CRL Energy field geologists working with geologists from PT Geoservices in Indonesia (see page 21). Photo: Hayden MacKenzie, CRL Energy Ltd.

storage sites to minimise their CO₂ footprint (see page 24).

Other activities by the Coal Association included assisting and supporting the establishment of a new minerals industry organisation, Straterra. Based in Wellington, Straterra's mandate will be to advocate for the resource sector, including minerals, coal and aggregates. It will address issues that are currently in the domain of the New Zealand Minerals Industry Association (NZMIA), Aggregates and Quarrying Association (AQA), Coal Association of New Zealand and Minerals West Coast.

Straterra's vision is to double the contribution the resource sector makes to the New Zealand economy, and it will provide high level, well resourced and effective representation for the resource sector in order to achieve that vision. The formation of Straterra was announced in September 2008, and the Coal Association will watch with interest to see how effective the organisation is on our behalf.

In other news, the financial year 2007/2008 finished with the sale of the National Institute of Water and Atmospheric Research (NIWA) shares in CRL Energy to Genesis Energy on 30 June 2008. This gives Genesis a 50 percent stake in the energy research provider, with the other 50 percent owned by the Coal Association. All parties see the transaction as a significant boost for research and development of low emission coal technologies in New Zealand. Some of CRL Energy's research activities, including CCS research, EnergyScape work, and international coal seam gas exploration, have been highlighted in this report (see pages 21 to 24).

The New Zealand scene

The latest figures recently released by Crown Minerals Statistics show New Zealand coal production in 2007 was down slightly to 4.83 million tonnes (Mt) from four underground and 21 opencast mines (compared to the record 5.77 Mt in 2006). Production was mostly bituminous and sub-bituminous coals in approximately equal quantities. Solid Energy, owner of the two largest West Coast mines, was responsible for around 85 percent of the national production, but as their coal production was down in the last financial



Genesis Energy Chief Executive Murray Jackson, Foreground, and Coal Association Chairman Chris Baker sign the shareholders agreement on the purchase of a 50 percent stake in CRL Energy. Photo: Louise Thomas.

year due to production problems at their Stockton export mine and industrial action, this accounts for New Zealand's overall reduced production. Coal production is centred on the Waikato (2.2Mt), the West Coast (2.15Mt), and Otago/Southland (0.47Mt). Over 60 percent of national production was from two large opencast operations, at Rotowaro and Stockton.

Exports and Imports

Exports of bituminous coal, produced entirely from the West Coast, reached 2Mt in 2007. New Zealand coal is exported mainly to India and Japan, with smaller quantities going to Chile, South Africa, Brazil, China, USA and Australia. Most exports are of coking coal, with smaller amounts of thermal and specialist coals. The Pike River mine continues to be developed for coking coal exports, with first production expected this current financial year.

The Year in Review



In October 2008, the Government-owned coal producer, Solid Energy, announced that while their profit for the 2007/2008 year was down on previous years for a number of reasons, they achieved record export price settlements for all coal types – with up to US\$300/tonne for hard coking coal. With these record international coal prices, Solid Energy expects that, with many of the problems now resolved, their combined export and New Zealand revenue for this current financial year will approach \$1 billion.

New Zealand continued to import some 1Mt of foreign thermal coal to the North Island during 2007, indicating that a substantial domestic production shortfall still exists, despite strong output from mines in the Waikato (2.2 Mt). The Waikato accounts for some 70 percent of New Zealand coal production for domestic supply.

Consumption

Coal supplies approximately 13 percent of New Zealand's primary energy supply or about 97 PJ/year. Coal consumption by the Huntly Power Station (owned and operated by Genesis Energy) was down slightly on the previous year from approximately 2.5Mt to 1.9Mt, although the decrease is not as much as might have been previously expected with the successful commissioning of Genesis Energy's new E3P combined cycle gas turbine. The four coal-fired 250 megawatt generating units had to

be kept in use with exceptionally low hydrolake levels creating problems for electricity suppliers. Huntly provides approximately 12 percent of New Zealand's electricity generation.

The Glenbrook steel mill is the next largest single user (800,000 t/year). Coal is also used extensively in the dairy (300,000 t/year), cement (170,000 t/year), meat processing (120,000 t/year), timber and health industries.

International trends

According to the recently released BP Statistical Review of World Energy (2008), the total global hard coal production in 2007 was 6395.6Mt, a 3.3 percent increase over the previous year. Coal provides approximately 25 percent of global primary energy needs and generates 40 percent of the world's electricity

In 2007, consumption reached 3177.5Mt oil equivalent, up 4.5 percent over the previous year (3041.7Mt oil equivalent). Coal was the world's fastest-growing fuel for the fifth consecutive year. The increase of coal consumption in China accounted for more than two-thirds of global growth.

As well as electricity generation and steel production, coal is also used in cement manufacturing, alumina refineries, paper manufacturers, and the chemical and pharmaceutical industries. Coal seam gas is also becoming an increasingly important resource, and the industry is set to burgeon in the next two decades.

Seminars, Publications and Submissions

COAL ASSOCIATION SEMINARS

The Coal Association, through CRL Energy Ltd, organised a well-attended Wellington-based seminar in the last financial period:

Seminar on Clean Coal Technologies

24 September 2007, Coal Association of New Zealand's Lunchtime Seminar, Dr. Geoff Morrison, Programme Manager, IEA-Clean Coal Centre (UK), Inter-Continental Wellington. Dr Morrison discussed coal and world energy supply, recent developments in clean coal technologies, and the work of the IEA Clean Coal Centre. A PDF of his presentation is available from the Coal Association website under 'events'.

Check our Website at <http://www.coalassociation.org> for coming events.

PUBLICATIONS FROM 1 July 2007

Two issues of the Coal Newsletter

The Coal Association Newsletter is circulated to over 1,300 energy professionals throughout New Zealand and internationally.

Eight issues of the Coal e-News.

Circulated via E-mail to interested energy professionals and available from the Coal Association website. If you would like to join the E-mail list for this publication please contact Dr Trevor Matheson. E-mail: t.matheson@crl.co.nz

Coal Association Annual Review 2007.

Coal Association Website

In the last financial period, CRL Energy Ltd on behalf of the Coal Association has kept the Association's website at <http://www.coalassociation.org> fully updated with the latest coal facts and figures. All of the above Coal Association publications and seminar overheads are available from the website, as well as archives of older publications and presentations. The site attracts hundreds of unique visitors, making thousands of hits each month.

SUBMISSIONS BY THE COAL ASSOCIATION TO 30 JUNE 2008

The Coal Association has again been busy in the last financial period making submissions to Government and local government on behalf of the industry. Submissions have included:

Draft West Coast Conservation Management Strategy 2007-2017

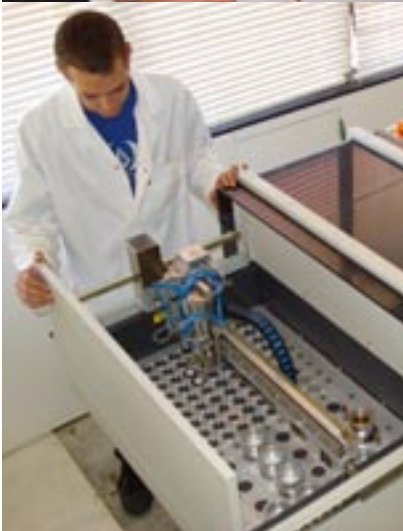
With regards to the draft West Coast Conservation Management Strategy 2007-2017, Coal Association representatives tabled a written submission and appeared before the Department of Conservation (DOC) hearings committee. The main concern was that DOC should acknowledge prominently its balancing role for conservation and other values, including the importance of economic activities such as mining. It was argued that the strategy should promote the concept of 'net positive conservation benefit' as a flexible means of achieving this balancing role. The strategy stated that DOC wants a change in the quality of its "engagement with key associates". We noted that some Coal Association members have experienced long delays in applications to DOC for access arrangements and we requested that DOC monitor and review its performance in dealing with access applications.

The Climate Change (Emissions Trading and Renewable Preference) Bill

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Seminars, Publications and Submissions



appearing before the select committee and supporting other submissions. It was recommended that 100% free allocation be provided on a more flexible basis for all trade-exposed companies to preserve their international competitiveness until other countries place similar carbon pricing on their competing goods. Further, a mechanism such as a price cap should be included to manage the risk of price volatility. The Coal Association concluded with a recommendation that to achieve a long term, durable solution, the Bill should not proceed until the Government has undertaken more detailed economic analysis to address the risks of avoidable economic shocks and unnecessary transitional pain from plant closures and job losses. However, the legislation passed with a 63-57 vote after its third reading in Parliament on 10 September 2008.

The Coal Association's position on the Bill is that as it was hastily prepared and passed by a small majority, it is not a good basis for durable climate change policy that will help create investment certainty. A bill that will have such major impacts on New Zealand society for decades needs more time to develop better consensus. In particular, the pace and extent to which the Bill imposes costs throughout the New Zealand economy will reduce our competitiveness against most other countries with little if any environmental upside, a dangerous strategy in times of global economic turmoil. The Coal Association will continue to advocate for an acceptable outcome for coal users as amendments to the legislation are considered.

Financial Statements of the Coal Association of NZ Inc.

for the year ended 30 June 2008



Coal Association of New Zealand Incorporated

Financial Statements

For the year ended 30 June 2008

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Income Statement

Coal Association

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

INCOME STATEMENT

FOR THE YEAR ENDED 30 JUNE 2008

| | Note | June 2008 \$ | June 2007 \$ |
|--|------|--------------------|--------------------|
| Operating Revenue | 4 | 218,632 | 397,520 |
| Operating Expenses | 5 | (635,051) | (526,103) |
| Operating (Loss) Surplus | | (416,419) | (128,583) |
| Other Income | | | |
| Depreciation Recovered on Sale of Fixed Assets | | - | 39,629 |
| Capital Gain on Sale of Building | | - | 1,072,698 |
| Loss on Disposal of Shares | | - | (53,956) |
| Equity Accounted Earnings of Associate | 8 | 49,417 | 66,259 |
| Business Rental | 7 | 41,447 | - |
| Interest Received | | 182,767 | 63,835 |
| Net Surplus (Loss) | | (142,788) | 1,059,882 |

The attached NOTES form part of these Financial Statements

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

STATEMENT OF CHANGES IN MEMBERS' FUNDS

FOR THE YEAR ENDED 30 JUNE 2008

| | Note | June 2008 \$ | June 2007 \$ |
|--|------|--------------------|--------------------|
| Opening Members' Funds | | 3,238,226 | 2,178,344 |
| Net Surplus (Loss) | | (142,788) | 1,059,882 |
| Movement in Asset Revaluation Reserve | | - | (661,644) |
| Asset Revaluation Reserve transferred to Accumulated Funds | | - | 661,644 |
| Total Recognised Gains and Losses | | (142,788) | 1,059,882 |
| Closing Members' Funds | | 3,095,438 | 3,238,226 |

The attached NOTES form part of these Financial Statements

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

BALANCE SHEET

AS AT 30 JUNE 2008

| | Note | June 2008 \$ | June 2007 \$ |
|---|------|--------------------|--------------------|
| Current Assets | | | |
| Cash and Cash Equivalents | | 1,845,451 | 2,579,390 |
| Trade and Other Receivables | | 61,877 | 60,040 |
| Prepayments & Accrued Income | | 39,417 | 53,051 |
| Investment held for resale | 7 | 578,721 | - |
| GST | | 14,918 | 3,496 |
| Total Current Assets | | 2,540,384 | 2,695,977 |
| Non-current Assets | | | |
| Property, Plant & Equipment | 6 | 61 | 2,224 |
| Investments in Associate | 8 | 669,776 | 620,359 |
| Total Non Current Assets | | 669,837 | 622,583 |
| TOTAL ASSETS | | 3,210,221 | 3,318,560 |
| Members Funds | | | |
| Accumulated Funds | | 3,095,438 | 3,238,226 |
| TOTAL MEMBERS' FUNDS | | 3,095,438 | 3,238,226 |
| Current Liabilities | | | |
| Trade and Other Payables | | 68,853 | 18,556 |
| Income In Advance | | - | 14,699 |
| Related Party Balances | 9 | 45,930 | 47,079 |
| Total Current Liabilities | | 114,783 | 80,334 |
| TOTAL LIABILITIES | | 114,783 | 80,334 |
| TOTAL LIABILITIES AND MEMBERS' FUNDS | | 3,210,221 | 3,318,560 |

Authorised for issue for and on behalf of the Board of the Association on 24 September 2008


Chairman, Chris Baker


Board Member

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2008

| | Note | June 2008 \$ | June 2007 \$ |
|---|------|--------------------|--------------------|
| CASH FLOWS FROM OPERATING ACTIVITIES | | | |
| <i>Cash was provided from</i> | | | |
| Receipts from Customers | | 203,661 | 326,263 |
| Rent | | 41,445 | 68,333 |
| Interest Received | | 182,767 | 48,713 |
| | | 427,873 | 443,309 |
| <i>Cash was applied to</i> | | | |
| Payments to Suppliers and Employees | | 575,217 | 552,156 |
| Interest Paid | | - | 2,920 |
| | | 575,217 | 555,076 |
| Net Cash from Operating Activities | 10 | (147,344) | (111,767) |
| CASH FLOWS FROM INVESTING ACTIVITIES | | | |
| <i>Cash was provided from</i> | | | |
| Sale of Investments | | - | 500,145 |
| Sale of Property, Plant & Equipment | | - | 2,372,698 |
| | | - | 2,872,843 |
| <i>Cash was applied to</i> | | | |
| Purchase of Property, Plant & Equipment | | (190,973) | - |
| Purchase of Goodwill | | (395,622) | - |
| | | (586,595) | - |
| Net Cash from Investing Activities | | (586,595) | 2,872,843 |
| CASH FLOWS FROM FINANCING ACTIVITIES | | | |
| <i>Cash was applied to</i> | | | |
| Repayment of Hire Purchase Contracts and Loans | | - | (214,557) |
| | | - | (214,557) |
| Net Cash from Financing Activities | | - | (214,557) |
| Net Increase (Decrease) in Bank Balances | | (733,939) | 2,546,519 |
| Add: Bank Balances at the Start of the Year | | 2,579,390 | 32,871 |
| Bank Balances at the End of the Year | | 1,845,451 | 2,579,390 |

The attached NOTES form part of these Financial Statements

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2008

1. REPORTING ENTITY

The Coal Association of New Zealand Incorporated (the "Association") is an Incorporated Society registered under the Incorporated Societies Act 1908.

The Financial Statements for Coal Association of New Zealand Incorporated are presented. The financial statements comprise the Association and its interest in its joint venture and are for the year ended 30 June 2008.

2. BASIS OF PREPARATION

Statement of Compliance

The financial statements have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP). They comply with the New Zealand Equivalents to International Financial Reporting Standards (NZ IFRS) and other applicable Financial Reporting Standards as appropriate to non profit-orientated entities that qualify for and apply differential reporting concessions. These are the Association's first NZ IFRS financial statements and NZ IFRS 1 has been applied. There are no adjustments to opening reserves and comparative figures as a result of transition. The Association is a non profit-orientated entity. The Association is a reporting entity for the purposes of the Financial Reporting Act 1993 and its financial statements comply with that Act.

The Association qualifies for Differential Reporting exemptions as it has no public accountability, and is not large. All available reporting exemptions allowed under the Framework for Differential Reporting have been adopted except that a cash flow statement has been prepared in accordance with NZ IAS 7.

Basis of measurement

The financial statements are prepared on the historical cost basis.

Presentation currency

The financial statements are presented in New Zealand (\$).

3. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

Investment in Associates

Associates are entities in which the Association has significant influence over the operating and financial policies. The financial statements include the Association's share of the net surplus and reserves of the associate on an equity accounted basis.

Financial Instruments

Financial instruments comprise; trade and other receivables, cash and cash equivalents, and trade and other payables.

Financial instruments are recognised initially at fair value plus, for instruments not at fair value through profit or loss, any directly attributable transaction costs. Subsequent to initial recognition all financial instruments are measured at amortised cost using the effective interest method, less any impairment losses.

All financial assets are classified as loans and receivables and financial liabilities as other financial liabilities.

Trade and other receivables

Trade and other receivables are recorded at cost less impairment losses.

Trade and other payables

Trade and other payables are recorded at cost.

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED**NOTES TO THE FINANCIAL STATEMENTS****FOR THE YEAR ENDED 30 JUNE 2008**

Foreign Currencies

Transactions in foreign currencies are converted at the New Zealand rate of exchange ruling at the date of the transaction. Foreign monetary assets and liabilities are translated into New Zealand dollars at the exchange rate ruling at balance date. Exchange variations arising from these translations are included in the Income Statement.

Goods & Services Tax

These Financial Statements are prepared on a tax exclusive basis. All items in the Balance Sheet are stated on a tax exclusive basis, with the exception of Trade Receivables and Payables.

Income Tax

The Association has tax exempt status under section CW41 of the Income Tax Act 2004.

Impairment

The carrying amounts of the Association's assets are reviewed at each balance date to determine whether there is any objective evidence of impairment. If any such indication exists, the assets recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. Impairment losses directly reduce the carrying amount of assets and are recognised in the Income Statement.

Goodwill

Goodwill represents the excess of cost of the acquisition over the fair value of the identifiable assets, liabilities and contingent liabilities acquired.

Goodwill is measured at cost less accumulated impairment losses. Goodwill is allocated to cash-generating units and is tested annually for impairment.

Property, Plant & Equipment

Property, plant and equipment are recognised at cost less accumulated depreciation. Depreciation has been calculated using an appropriate rate to spread the cost of the assets over their useful economic lives. Gains and losses on disposal of fixed assets are taken into account in determining the operating result for the year.

The following depreciation rates are applied.

| | |
|----------------------|------------|
| Web site development | 36% to 48% |
|----------------------|------------|

15 Months Trading in Comparatives

The previous year's trading was from 1 April 2006 to 30 June 2007, to align with CRL Energy's balance date of 30 June. The comparatives are therefore for 15 months.

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2008

4. OPERATING REVENUE

| | 2008 | 2007 |
|----------------------------|---------|---------|
| | \$ | \$ |
| Research & Consulting Fees | 205,294 | 306,674 |
| Rent | - | 68,333 |
| Subscriptions | 13,338 | 17,413 |
| Sundry | - | 5,100 |
| Total Operating Revenue | 218,632 | 397,520 |

5. OPERATING EXPENSES

| | 2008 | 2007 |
|------------------------------------|---------|---------|
| | \$ | \$ |
| Operating Expenses Include: | | |
| Auditor's Remuneration | 3,198 | 6,776 |
| Bad Debts | 437 | 350 |
| Chairman's Fee | 102,000 | 114,017 |
| Depreciation | 10,037 | 4,935 |
| Interest Expense | 285 | 2,920 |

6. PROPERTY, PLANT & EQUIPMENT

| | 2008 | 2007 |
|----------------------------|----------|---------|
| | \$ | \$ |
| Website Development | | |
| At Cost | 10,564 | 10,564 |
| Accumulated Depreciation | (10,503) | (8,340) |
| | 61 | 2,224 |

7. INVESTMENT HELD FOR RESALE

On 21st December 2007 the Association purchased the business and assets of SpectraChem Analytical. Subsequent to purchase, the acquired business has been subject to a business lease agreement and leased to CRL Energy Limited and subsequent to year end the business has been sold to CRL Energy Limited. Hence the total investment has been included in current assets.

The year end carrying value includes the following:

| | |
|-----------------------------|----------------|
| | \$ |
| Goodwill | 395,622 |
| Property, Plant & Equipment | 183,099 |
| | <u>587,721</u> |

The Goodwill recognised on this purchase is calculated as follows;

| | |
|---|----------------|
| | \$ |
| Purchase price | 599,351 |
| Less identifiable assets and liabilities purchased | |
| Property, Plant & Equipment | (190,973) |
| Inventories | (12,756) |
| Goodwill | <u>395,622</u> |

Carrying value of Property, Plant & Equipment is calculated as follows;

| | |
|--------------------------|----------------|
| | \$ |
| At cost | 190,973 |
| Accumulated Depreciation | (7,874) |
| Net Book Value | <u>183,099</u> |

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2008

8. INVESTMENT IN ASSOCIATE

The Association's investment in the associate includes its share of the net surplus and reserves of the associate on an equity accounted basis.

| Name of Entity | Interest Held by Group | |
|----------------------------------|------------------------|----------------|
| | 2008 | 2007 |
| CRL Energy Limited | 50% | 50% |
| | 2008 | 2007 |
| | \$ | \$ |
| Opening Balance | 620,359 | 1,108,201 |
| Disposal of 50% Share | - | (554,101) |
| Equity Accounted Earnings | 49,417 | 66,259 |
| Closing Balance | 669,776 | 620,359 |
| Share of Net Surplus before tax | 93,537 | 95,520 |
| Share of Income Tax expense | (44,120) | (29,261) |
| Equity Accounted Earnings | 49,417 | 66,259 |

The associate has a balance date of 30 June.

9. RELATED PARTIES

Coal Association of New Zealand Inc. (CANZ) owns 50% of the share capital of CRL Energy Limited.

During the year CRL Energy Limited received from CANZ revenue for energy related environmental research and consulting services. In addition, during the year CRL Energy Limited paid CANZ expenses relating to business lease rental.

| | 2008 | 2007 |
|-------------------------------------|-----------------|-----------------|
| | \$ | \$ |
| Opening Balance | (47,079) | (30,229) |
| Expenses charged | (298,723) | (310,482) |
| Income invoiced | 66,592 | 28,333 |
| Net paid (received) during the year | 233,280 | 265,299 |
| Closing Balance | (45,930) | (47,079) |

COAL ASSOCIATION OF NEW ZEALAND INCORPORATED

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2008

**10. RECONCILIATION OF NET SURPLUS (LOSS)
TO CASH FLOWS FROM OPERATING ACTIVITIES**

| | 2008 | 2007 |
|--|-----------|-------------|
| | \$ | \$ |
| Net Surplus (Loss) | (142,788) | 1,059,882 |
| Add / (Less) Non-cash Items | | |
| Depreciation | 10,037 | 4,935 |
| Depreciation Recovered | - | (39,629) |
| Capital Gain on Sale of Building | - | (1,072,698) |
| Loss on Disposal of Shares | - | 53,956 |
| Equity Accounted Earnings of Associate | (49,417) | (66,259) |
| | (39,380) | (1,119,695) |
| Add / (Less) Movement in Working Capital | | |
| (Increase) Decrease in Trade and Other Receivables | (1,832) | (14,564) |
| (Increase) Decrease in Prepayments & Accrued Income | 13,634 | (48,051) |
| Increase (Decrease) in Trade and Other Payables | 50,291 | (17,393) |
| Increase (Decrease) in Income in Advance | (14,699) | 14,699 |
| Increase (Decrease) in Related Party Transactions | (1,149) | 16,851 |
| (Increase) Decrease in GST | (11,422) | (3,496) |
| | 34,823 | (51,954) |
| Net Cash Inflow (Outflow) from Operating Activities | (147,344) | (111,767) |



AUDITOR'S REPORT

To the Readers of the Financial Statements of the Coal Association of New Zealand Incorporated (the Association)

We have audited the accompanying financial statements of the Association. The financial statements provide information about the past financial performance and financial position of the Association as at 30 June 2008. This information is stated in accordance with the accounting policies set out in Note 3 of the financial statements.

Board's Responsibilities

The Board is responsible for the preparation of the financial statements, which fairly reflect the financial position of the Association as at 30 June 2008 and the results of its operations and cash flows for the period ended on that date.

Auditors' Responsibilities

It is our responsibility to express an independent opinion on the financial statements presented by the Board and report our opinion to you.

Basis of Opinion

An audit includes examining, on a test basis, evidence relevant to the amounts and disclosures in the financial statements. It also includes assessing:

- the significant estimates and judgements made by the Board in the preparation of the financial statements; and
- whether the accounting policies are appropriate to the Association's circumstances, consistently applied and adequately disclosed.

We conducted our audit in accordance with New Zealand Auditing Standards issued by the New Zealand Institute of Chartered Accountants. We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to obtain reasonable assurance that the financial statements are free from material misstatements, whether caused by fraud or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

Other than in our capacity as auditors, we have no other relationships with, or interest in, the Coal Association of New Zealand Incorporated.

Unqualified Opinion

In our opinion the financial statements fairly reflect the financial position of the Association as at 30 June 2008 and the results of its operations and cash flows for the period ended on that date.

Our audit was completed on 24 September 2008 and our unqualified opinion is expressed as at that date.

WHK Sherwin Chan & Walshe
Chartered Accountants
Lower Hutt

CRL Energy's international coal seam gas work

CRL Energy's Geology Group in Christchurch have for the last six years been on the cutting edge of helping several New Zealand clients with coal seam gas (CSG) interests, however, in the last financial year, the service has expanded to assist clients in Australia, Vietnam and Indonesia.

Dr James Pope, Manager of the Geology Group, says CRL Energy's expertise in the measurement and analysis of gas desorption (release of gas) data from freshly drilled coal samples, and their ability to reliably predict the gas production performance and reserve potential of coal seam gas reservoirs, has captured the attention of energy companies off shore.

"Among other contracts, our field geologists have this year teamed up with PT Geoservices, an Indonesian company, where they are supplying the logistics and field staff, and we are providing our expertise to oversee the work. Exploration for CSG in Indonesia is at grass roots stage and the potential is huge," says Dr Pope.

CSG also called coal bed methane (CBM) or coal seam methane, is mostly methane in composition and is adsorbed to micropore surfaces within coal at near liquid methane density. This gas is extracted via wells which are drilled down into coal seams. The gas is released from the coal along natural fractures and cleats (desorbed) when pressure on the coal seam is reduced, usually by removal of water from the seam.

Various techniques can be used to enhance the rate of desorption. Mostly these relate to enhancing gas flow into the well through under-reaming or hydrofracturing the coal. Trials are currently being conducted on pumping of carbon dioxide into the



The team sliding coal core into CSG canisters.



From left, CRL Energy technician Hayden MacKenzie, and environmental hydrologist Dave Trumm, with Nadia Ariana, Agus Budiluhur from PT Geoservices. Behind is the drill rig used for the first CSG exploration hole in Borneo.

reservoir to increase field pressure and increase the flow of methane (enhanced coal seam gas - ECSG or ECBM). This technology, if successful, provides a double bonus as the CO₂ is sequestered and the methane released.

"Until recently, CSG has been overlooked as an alternative to natural gas, but perceptions that CSG is an unconventional gas and only a small resource are diminishing and it is becoming an increasingly important energy resource throughout the world. Indonesia has estimated CSG deposits of 453 trillion cubic feet (tcf), or about 82 billion barrels of oil equivalent (boe), the world's second-largest after China."

The Indonesian Government is reported to be aiming for a daily coal seam gas production of about 1 billion cubic feet (bcf) by 2025. They also plan to build several CSG LNG plants in the next two decades.

Work by CRL Energy to develop technologies for CSG exploration and resource assessment of New Zealand's low rank coals was initiated through a Technology for Business Growth grant from the Foundation for Research, Science and Technology (FRST).

Coal preparation essential for the economic and environmental viability of coal



*Froth flotation test in progress in CRL Energy's coal preparation laboratory.
Photo: Trevor Dine.*

An upturn in the coal industry, and the recognition of the value of coal preparation, has seen CRL Energy's Gracefield coal preparation laboratory busier than ever. In the past financial year the laboratory has expanded, including increasing the float/sink area to process larger samples. In addition, CRL Energy has invested in staff training and new equipment. New equipment includes a Denver Cell to provide froth flotation testing that meets Australian Standards. To help with the cell's commissioning an Australian consultant was engaged to train several staff in the idiosyncrasies of froth flotation.

Trevor Dine, manager of the Analytical and Environmental

Business Group at CRL Energy, says basic coal preparation is the removal of impurities from run-of-mine (ROM) coal by using a series of separation processes in a washery or preparation plant.

"The type of testing we do here in the laboratory is crucial for coal producers for determining what needs to happen in their coal preparation plants (CPP). When coal is prepared in a plant they want to remove all the extraneous non-combustible material - particularly if the coal is fuel for thermal power generation, where cleaning it up at the plant reduces ash handling and sulphur, carbon and NO_x emissions. Coal producers also benefit from reduced transport costs etc. per unit of heat and they provide a consistent, uniform product to their clients. Really coal preparation is essential for the economic and environmental viability of coal, especially for thermal power generation where coal users need optimum calorific value, consistent grindability, minimal moisture and ash variability," says Mr Dine.

Testing in the CRL Energy coal preparation laboratory involves a number of steps:

1. The ROM coal sample is crushed to the desired topsize. At the CPP, crushing reduces the size of the coal pieces so that it can be more easily handled and processed. Crushing requirements are an important part of CPP design.
2. The coal is subject to a 'drop shatter' test. In the laboratory this simulates the coal breaking as it moves around the plant.
3. Size analysis of the coal pieces is carried out.
4. The sample is then subject to a 'float/sink' test, where different density liquids are used to separate the minerals and other contaminants from the coal.
5. Finally the sample is tested using 'froth flotation'. The newly acquired Denver Cell is the industry standard for froth flotation. This gives a semi-quantitative indication of the results that may be achieved in a washery.

For more information about services at CRL Energy's Coal Preparation Laboratory contact Trevor Dine or Grant Murray, Laboratory Supervisor - Solid Fuels.

EnergyScape turns spotlight on future driving biofuels, hydrogen fuel cells and electric cars

The EnergyScape team from CRL Energy, Scion, IRL, GNS Science and NIWA has been examining the technology and the resources that New Zealand has available to create energy and provide fuel for the cars of the future.

The scientists, who presented their research so far at a conference in Wellington on 16 July, say that it is important for New Zealand and the rest of the world to have alternative technologies available so that we are not so reliant on petrol, diesel and oil. Especially as these fuels have to be imported, their prices do not remain stable, and they could eventually run out.

Dr Peter Hall from Scion discussed ways to make biofuels from biomass to run existing combustion engines. He said that existing residues, such as tallow, fruit rejects, straw, dairy effluent etc., would only ever provide a very small percentage of demand, that these are widely distributed and could only be small scale operations. He proposed that purpose grown forests, probably pine or another fast growing species, are the best bet for generating large amounts of biofuel, and that New Zealand currently had some three million hectares available for such a process. He said that if current trends in oil barrel prices continue that prices could get to \$185 a barrel by 2015, if that happens, large-scale forest biomass to liquid fuels could compete directly with fossil fuel even if no improvements in existing technology occurred.

Dr Tony Clemens, research manager at CRL Energy discussed the potential role of hydrogen in New Zealand's future energy mix. He says that using 'fluidised bed coal gasification' it is possible to make hydrogen from coal and biomass such as wood waste. "We can do this without making any carbon dioxide emissions by capturing and storing left-over carbon dioxide from both coal and biomass."

The hydrogen can be used to run cars which have hydrogen fuel cells. Several large car manufacturers, such as Honda, Toyota, BMW, Ford and GM are already making hydrogen-powered cars, however, it is likely to be a decade or more before we have them here as New Zealand doesn't yet have a hydrogen infrastructure (hydrogen stations instead of/as well as petrol stations). Many countries have already installed hydrogen stations and introduced hydrogen powered public transport buses. An increasing number of private vehicles are running on hydrogen.



Dr Clemens discussed how such an infrastructure could be rolled out in New Zealand, beginning with a 'hydrogen highway' from Wellington to Auckland. Hydrogen powered vehicles are an attractive option for many reasons, not least of which is they have no emissions except for some water vapour. He also pointed out that the hydrogen fuel cell electric vehicles being made by the auto-manufacturers are already able to match the performance of conventional vehicles in terms of range, refuelling times and meeting customer expectations and to exceed them in terms of reduced emissions and efficiency. Neither of the alternative vehicle technologies – biofuelled vehicles or battery electric vehicles are able to do so.

Many car manufacturers are now making electric cars which you can plug in to a normal power outlet to recharge your car overnight, or combined fuel and electric vehicles. These might also be a good option for New Zealand car drivers and the Government hopes to have five percent of the vehicle fleet as electric vehicles by 2020, assuming we can generate enough electricity to meet both business-as-usual needs and an increased demand to run our vehicle fleet. Hyundai have just announced this September that they will be producing a retrofitted electric vehicle, the Getz, these should be available from November this year. A spokesman for Hyundai warned that while acceleration would be the same as a combustion vehicle, the maximum speed is about 120km/hour with a maximum range from a single charge of about 120km, they would, however, be ideal for urban driving. Fully recharging takes about nine hours from a normal power outlet, the vehicle is expected to have a price tag of about \$35,000.

Carbon capture and storage in NZ

At the beginning of the financial year, CRL Energy formed a new research partnership with GNS Science and the University of Auckland to assess the carbon capture and storage (CCS) potential of the Taranaki and Waikato regions. GNS Science, who is leading the project, is providing expertise in petroleum geology, reservoir architecture, geological risk and social science, CRL Energy is providing expertise in coal science and advanced technologies, and the University of Auckland is contributing expertise in numerical reservoir modelling.

The work includes preliminary basin assessments for Waikato and Taranaki; preliminary assessments of economic and risk assessment; current technology assessment for capture, transport and injection; and monitoring and verification. By the end of 2008 a series of detailed reports will have been produced around these topics. The primary purpose is of course to assess whether CCS in these areas can reduce the impact of fossil fuel use and industrial processes on greenhouse gas (GHG) emissions in New Zealand. The application of high efficiency, CCS-ready advanced fuel-conversion technologies in New Zealand will require access to such storage sites to minimise their CO₂ footprint.

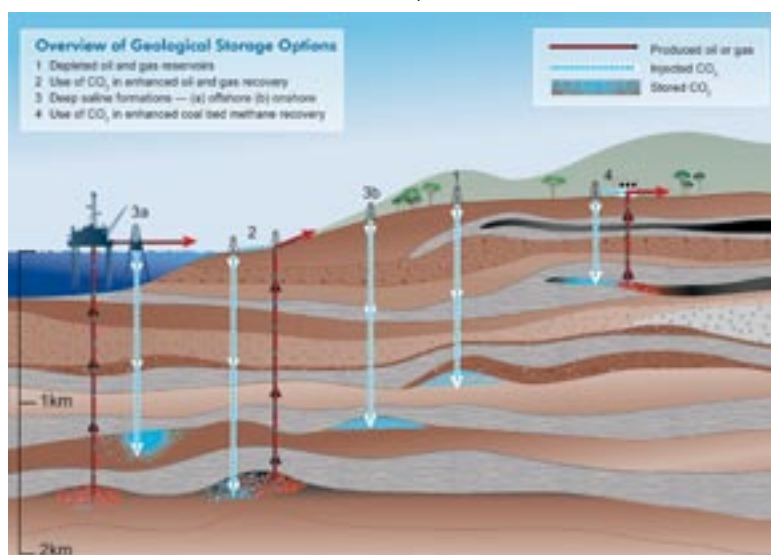
Financial support for the programme is being contributed by both industry and Government with current contributions of \$1.4 million over 17 months from the Foundation for Research and Technology (FRST); Crown Minerals; The Coal Association; Solid Energy; L&M Mining; and Genesis Energy, although it is highly likely the project will be extended and attract further investment. The research partnership has also joined the CO₂CRC consortium in Australia – where the injection phase of the demonstration project in the Otway Basin began in April 2008.

These funders make up the New Zealand Carbon Capture and Storage (CCS) Research Steering Group – a joint Government/industry initiative

led by the Foundation for Research, Science and Technology.

In addition, the Ministry of Economic Development is working on a whole-of-government approach to CCS through the New Zealand CCS Policy Group and is coordinating a review of existing legislation of relevance to CCS, as well as monitoring international CCS developments. New Zealand (as a consortium led by the Coal Association) is a member of a key international CCS agency, the IEA Greenhouse Gas R&D Programme, which is a valuable source of access to these developments.

Dr Trevor Matheson, General Manager of Operations at CRL Energy, has long been a supporter of CCS research in New Zealand and is pleased that such a substantial project is underway. “The research is vital and is paving the way for CCS pilot projects in the near future. A number of countries are already running successful demonstration projects and are sequestering millions of tonnes of CO₂ every year – playing an essential role in the response to climate change. In addition, the research strengthens our ties across the Tasman where investment in CCS by industry and Government is in the order of \$3 billion.”



Geological storage options for CO₂ being investigated in Australia by the CO₂CRC consortium. Several types of rock formations are suitable for CO₂ storage, including depleted oil and gas fields, deep saline formations and deep, unmineable coal seams. Other types of formations such as basalts and oil shales are being examined by scientists for possible future use. Image: CO₂CRC.



Coal
Association of
New Zealand

Our Vision

Coal is accepted as a secure, competitive and environmentally sustainable energy resource contributing to New Zealand's prosperity