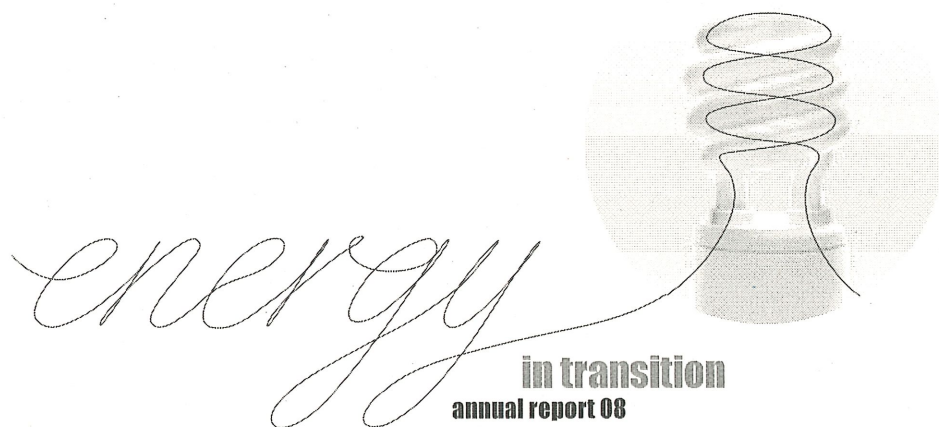
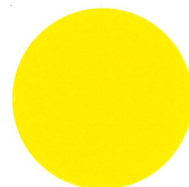


(Solid Energy New Zealand Ltd , 2008: 11)



**Solid Energy New Zealand Ltd**



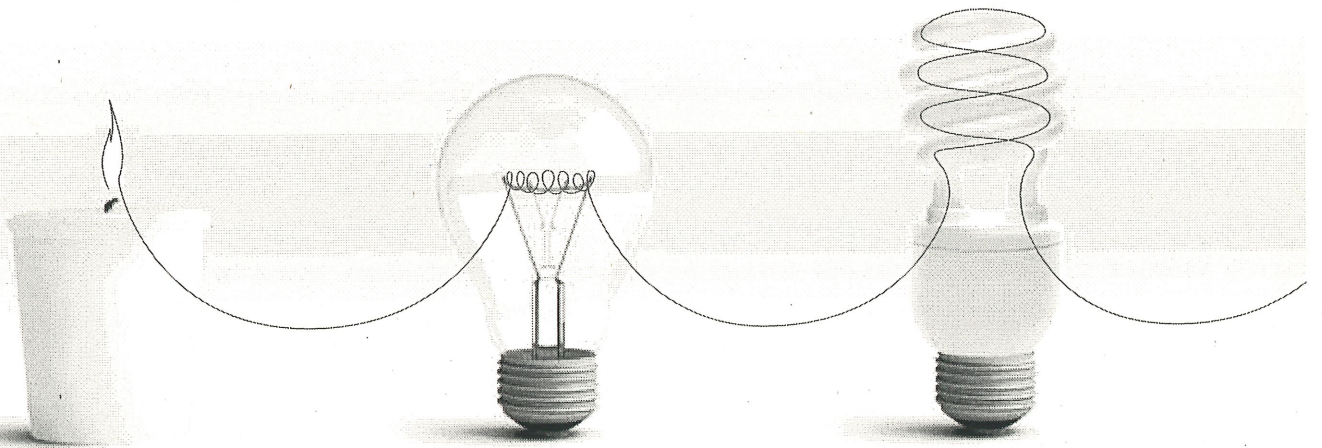
## Evolving energy solutions

For over a century, Solid Energy and its predecessors have produced coal as a cost-effective means to power many of New Zealand's key energy-intensive industries and exporters. Industries like dairy, steel, cement, timber and industrial processing that rely on low-cost energy to remain competitive in world markets.

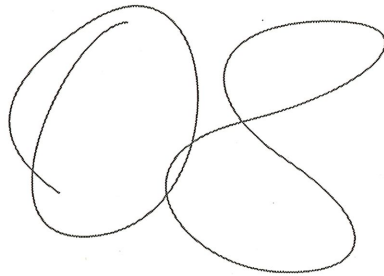
Many of these vital businesses share our desire to see cleaner energy options on the table. But we know these may take time to realise and become viable. A strategy that offers flexibility and supply certainty, while new technologies are advanced and implemented, seems a wise one.


Solid Energy is developing some of the promising energy solutions that will help to power New Zealand's future. Technologies such as biodiesel from used cooking oil and rapeseed oil, wood pellets from waste wood for commercial and household use, solar, and new cleaner ways of using coal.

We are working hard to anticipate the future shape of New Zealand businesses and provide a suite of viable energy options to match.



**annual report**





STOCKTON  
OPENCAST MINE,  
BULLER.

### *What New Zealanders think about energy*

- 58% of New Zealanders do not believe that the country has an appropriate long-term energy plan (2007: 61%).
- 59% of New Zealanders think that we should be making greater use of our coal resources (2007: 49%).
- 52% of New Zealanders believe that we should use more coal to make electricity if it keeps prices at much the same level as today (2007: 42%).
- 70% of New Zealanders are willing to pay extra on their electricity bill to reduce the environmental impact of electricity generation (2007: 73%) and 66% are willing to pay to increase security of supply (2007: 63%).
- 88% of those not aware of clean coal technologies, would be more positive about using coal as an energy source if they knew technologies were available in New Zealand to reduce emissions (2007: 86%).

Research carried out for Solid Energy by Colmar Brunton between 4 and 30 April 2008 (1,091 respondents). Margin of error +/- 3%.

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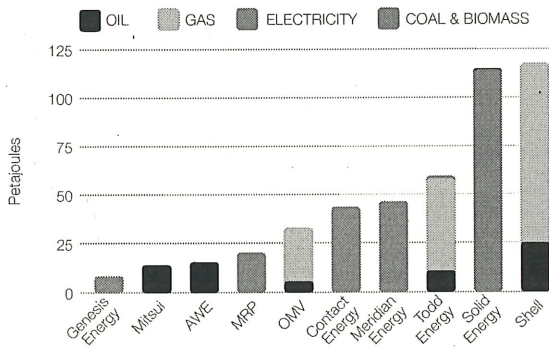
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# A leading producer of primary energy

Solid Energy, a state-owned enterprise, is a **major New Zealand energy producer** and a leading producer of high-quality coal for export and for New Zealand markets.

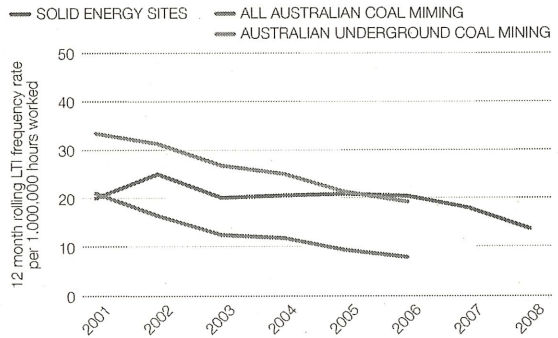
We invest in research and commercialisation of **new sustainable forms of energy** that use coal and in renewables, such as biomass, biodiesel and solar, that help New Zealand in the transition to clean, affordable and renewable energy forms.

## NEW ZEALAND INDIGENEOUS ENERGY PRODUCTION

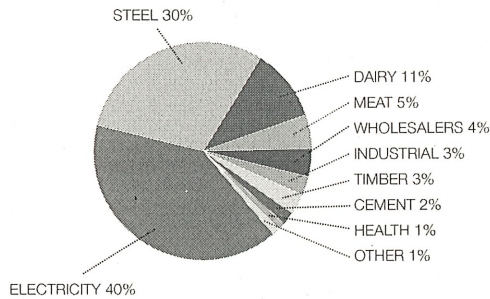


Solid Energy data for 2008 financial year, industry data for 2007

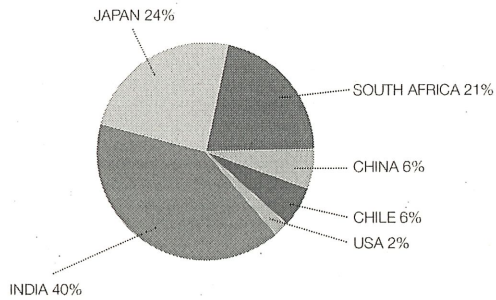
## LOST-TIME INJURY FREQUENCY RATE



## 2008 NEW ZEALAND COAL SALES BY SECTOR



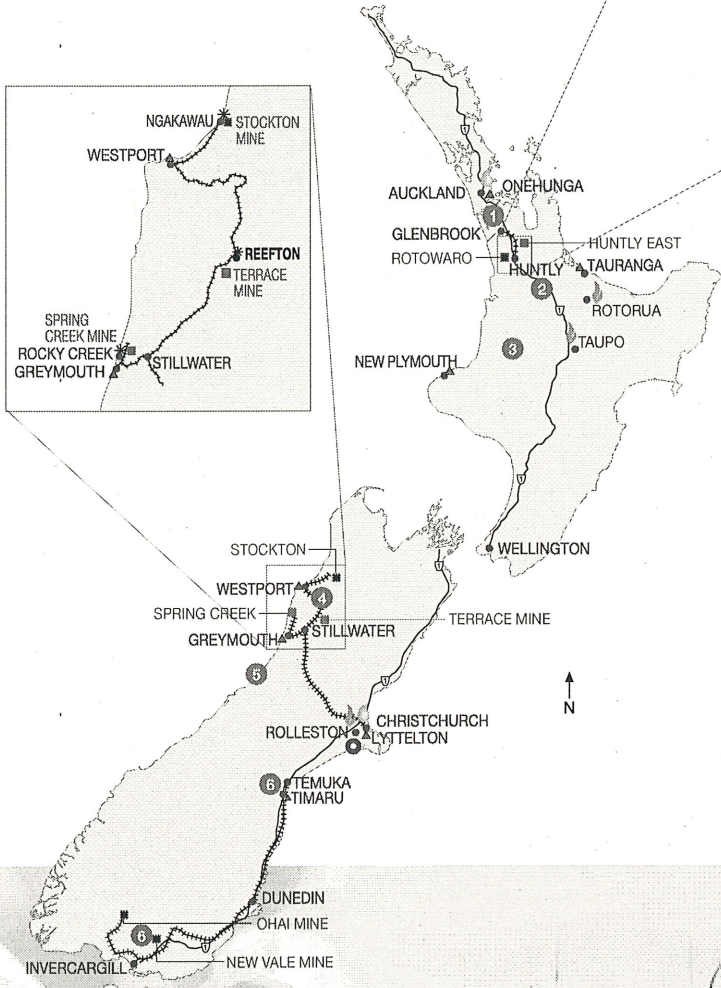
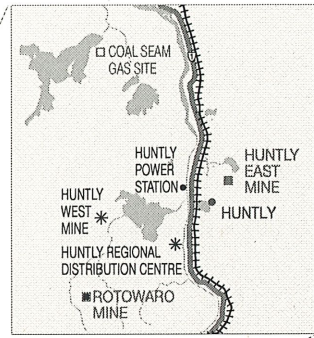
## 2008 COAL SALES BY EXPORT MARKET



We are committed to achieving a positive net effect on the New Zealand environment across all our businesses, and to the highest levels of health and safety performance in our workplaces. Our target is **no harm to anyone, ever.**

We employ **772** staff with a further **800** people employed by contractors at our sites across the country.

In 2008, we spent \$1.78m million on **community support** and **sponsorship initiatives.**

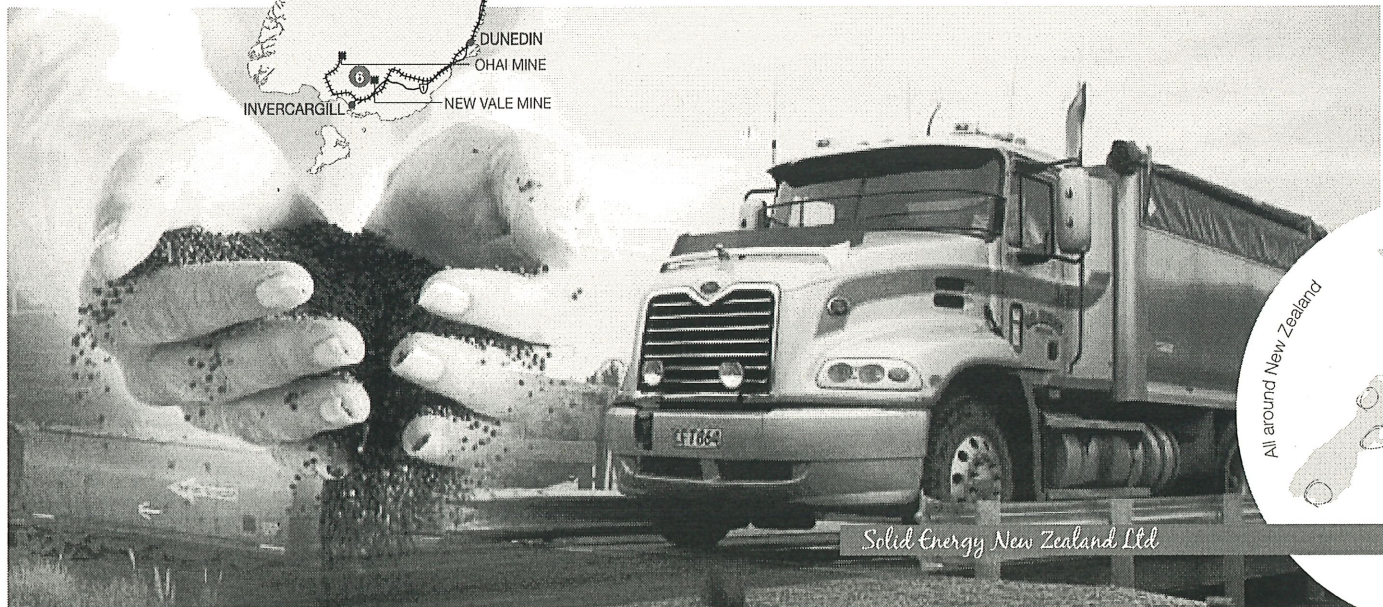


**MAJOR NEW ZEALAND CUSTOMERS**

- 1 NEW ZEALAND STEEL
- 2 GENESIS ENERGY
- 3 MCDONALD'S LIME LTD
- 4 HOLCIM
- 5 WESTLAND DAIRY
- 6 FONTERRA

**KEY**

- CITY/TOWN
- ▲ PORT
- STATE HIGHWAY 1
- SOLID ENERGY RAIL ROUTES
- ☀ NATURE'S FLAME PLANTS
- ⊙ BIODIESEL SITES
- ⊙ SWITCH
- UNDERGROUND MINES
- OPENCAST MINES
- COAL SEAM GAS SITE
- \* DISTRIBUTION / COAL HANDLING FACILITIES

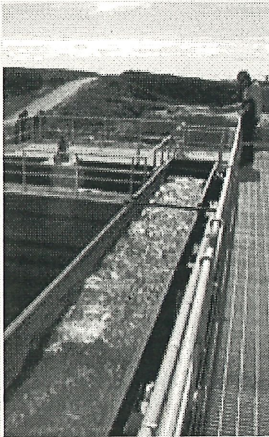


# The year in review

2007

## October

Significant improvements to **water quality** off the Stockton Plateau with commissioning of a large water treatment plant operating 24 hours a day and treating up to 1.4 million litres an hour.



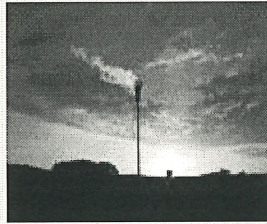
## November



Eighteen-year agreement with Pike River Coal for Pike to use our **rail capacity** to carry up to 1.3 million tonnes (mt) of coal a year from the West Coast to Lyttelton Port of Christchurch.

## December

Coal production resumes at **Spring Creek Underground Mine**, the Solid Energy Cargill joint venture, following a 14-month \$25 million redevelopment to access 3.1 mt of new coal reserves.



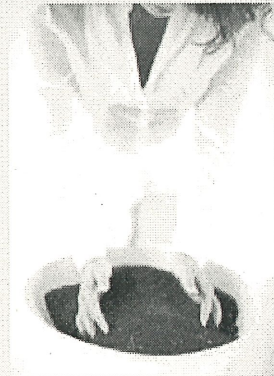
Coal seam gas pilot wells in the Waikato yield **first significant gas flows** in New Zealand, giving us confidence to trial on-site electricity generation.

2008

## February

Terrace Underground Mine achieves **891 days** without a lost-time injury (LTI).

Major expansions of our **renewable energy** manufacturing capacity, with new biomass and biodiesel production facilities to be built in Taupo and Rolleston, near Christchurch.



Solid Energy is major sponsor of the Christchurch Symphony Orchestra's **Outreach and Education Programme**, the most outstanding arts partnership in the National Business Review 2008 Awards for Sponsorship of the Arts.





*March*



Solid Energy granted consents to extend **Huntly East Underground Mine** north to access 6 million tonnes of coal, extending the mine life by up to 15 years.

New **coal supply agreement** reached with Holcim for Westport cement works.

Switch, our one-stop shop for heating with an emphasis on **renewable energy**, opens its first showroom on Blenheim Road, Christchurch.

Solid Energy doubles support, to \$100,000 a year, for the Department of Conservation's **blue duck** (whio) recovery programme.

Four West Coast and three Southland high school students awarded Solid Energy **tertiary scholarships** under a scheme launched by Solid Energy in 2001 which, to date, has assisted 38 students from our local communities with their university studies.

*April*

Increased export sales to our steelmaking customers, Steel Authority of India and Tata Steel, secure India as our number one export market and our position as **New Zealand's largest exporter to India**.

Launch of first CO<sub>2</sub> storage project in the Southern Hemisphere at Otway Basin in south west Victoria, Australia, injecting 100,000 tonnes to a depth of 2 km, designed to demonstrate that **carbon storage is technically and environmentally feasible** and ready for commercial application.



Independent assessment confirms that Biodiesel New Zealand's biodiesel made from high-quality **oilseed rape**, grown and produced in the South Island, is sustainable, emitting about 50% less CO<sub>2</sub> over its life cycle than mineral diesel.

*May*

A **record 257,000 tonnes** of coal carried in one month on the Midland rail line from the West Coast for export through Lyttelton Port of Christchurch.

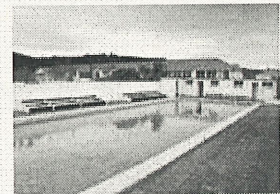


**Solid Energy staff** with West Coast businesses and service groups, together with tourists visiting Stockton Opencast Mine with Outwest Tours, raise more than \$40,000 in support of the Canterbury West Coast Air Rescue Trust, the organisation behind the **Solid Energy Rescue Helicopter** during Westpac Rescue Helicopter Awareness Month.

*June*

Spring Creek Mining Company, the Solid Energy Cargill joint venture, contributes \$350,000 to a community initiative to upgrade, heat and roof the **Runanga swimming pool** while Solid Energy contributes \$750,000, over five years, to the Grey District Aquatic Centre.

Solid Energy **sponsorship and community support projects** total \$1.78 million in the year, including Huntly Early Childhood Centre, Huntly swimming pool, Solid Energy Ensemble of Southern Opera and numerous community, sporting and educational initiatives in our local communities.



All available **West Coast export coal** sold for the next 12 months at record prices.



# Chairman's and Chief Executive Officer's report

## KEY FINANCIAL INDICATORS

	2007 <sup>(1)</sup>	2008 <sup>(2)</sup>
Sales Turnover	\$556.5 m	\$552.3 m
Operating Surplus	\$140.5 m	\$41.7 m
Earnings before Interest and Tax	\$152.2 m	\$55.6 m
Surplus after Taxation	\$96.4 m	\$34.4 m

<sup>(1)</sup> 2007 figures have been restated to conform with NZ IFRS.

<sup>(2)</sup> The 2008 figures equity account for Spring Creek Mining Company and therefore exclude Solid Energy's 51% (\$23.3m) of SCMC third-party revenue.

## PERFORMANCE ACHIEVEMENTS AGAINST 2007/08 STATEMENT OF CORPORATE INTENT TARGETS

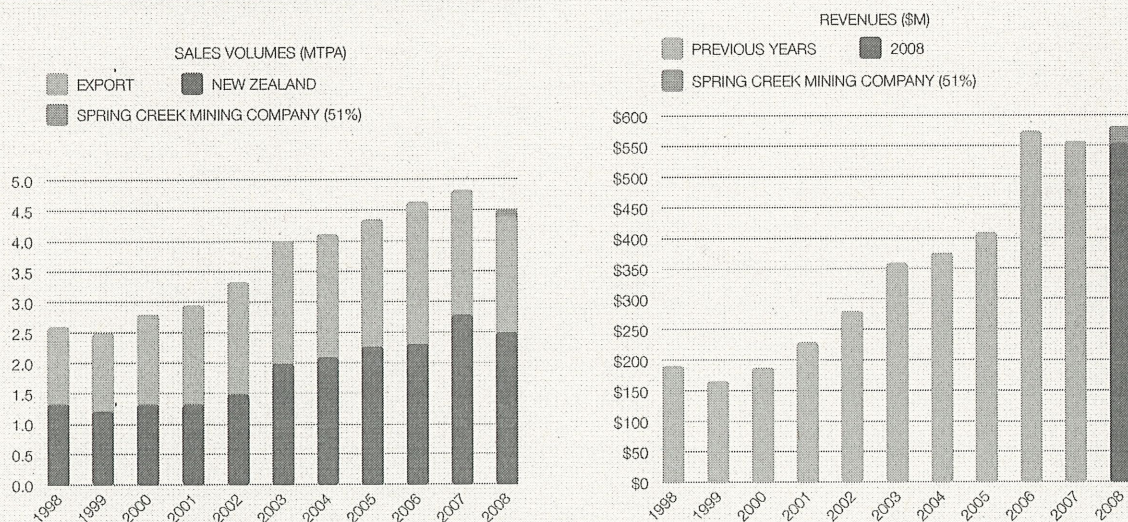
Value		2007	2008 target	2008 achieved
Return on Shareholder's Funds	Return on Shareholder's Funds	33.5%	6%	9.7%
	Return on Average Assets	19.3%	7%	5.7%
	Equity Ratio	61%	52%	56%
	Dividend Paid	Nil	Nil	Nil
	Tonnes of Coal sold - total	4.8m	4.7m <sup>(1)</sup>	4.5m
	Exports	2.2m	1.8m	1.9m
	Spring Creek Mining Company (51%)	-	0.2m	0.1m
New Zealand		2.6m	2.7m	2.5m
	Health & Safety	Lost-time Injury Severity Rate <sup>(2)</sup>	197	<250
	ACC Audit Status <sup>(3)</sup>	Tertiary	Tertiary	Tertiary
Environmental	Compliance with Resource Consents, other Relevant Statutes and Regulatory Conditions.	92.6%	100%	97.5%

<sup>(1)</sup> 2008 Statement of Corporate Intent target adjusted down to 51% of Spring Creek Mining Company sales.

<sup>(2)</sup> Lost shifts per 1,000,000 worked.

<sup>(3)</sup> Work safety management practices audit.

## OUR FINANCIAL PERFORMANCE 1998-2008



<sup>(1)</sup> The 2007 and 2008 results conform with NZ IFRS; all previous results conform with NZ GAAP.

<sup>(2)</sup> Solid Energy's 51% share of Spring Creek Mining Company third-party revenue is included here for comparative purposes only and is not included in the group financial statements.

## Financial performance

Solid Energy has reported a net surplus after tax of \$34.4 million (2007: \$96.4 million) which is a satisfactory result for the year, 63% ahead of budget, although significantly below last year's result which was boosted to a record level by one-offs including the sale of a 49% stake in Spring Creek Underground Mine to Cargill.

Financial highlights for the 2008 year include:

- o Net surplus after tax of \$34.4 million (2007: \$96.4 million).
- o Solid Energy exports (excluding Spring Creek) of 1.9 million tonnes (mt) down slightly (2007: 2.2 mt) as were New Zealand sales at 2.5 mt (2007: 2.6 mt).
- o Revenue of \$552.3 million (excluding Spring Creek) down slightly on last year (2007: \$556.5 million).

Results from the two halves of the year showed huge contrast. At the half-year, we reported a small loss of \$2.7 million, the result of industrial action, ongoing production difficulties at Stockton Opencast Mine, slippage of an export shipment and reduced demand from Genesis Energy for Huntly Power Station.

In the second half of the year, we achieved record export price settlements for all coal types: hard-coking coal at US\$300/tonne, semi-coking coal at US\$240/tonne and thermal coal at US\$125/tonne, a substantial increase on last year's international prices.

These prices came into effect towards the end of the 2008 year and began flowing through to export coal sales at year end. Prior to year end, we dispatched three export shipments at the record export price levels, providing a significant boost for the very good second-half result and the subsequent better-than-budgeted result.

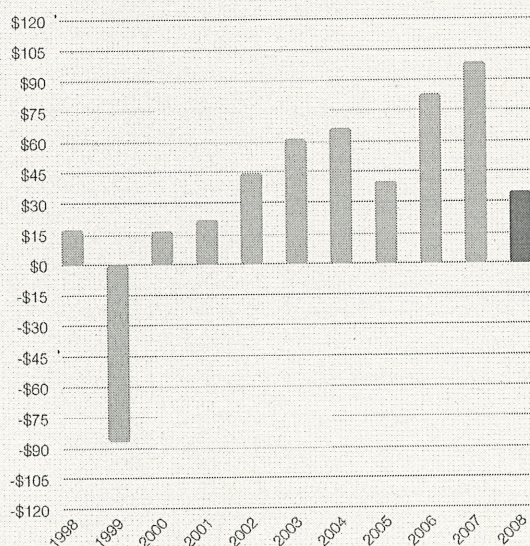
Across-the-board cost increases started to impact on our operations in the second half of the year but the increased revenue offset most of this impact. These increased costs will flow through into the 2009 year and will need to be managed effectively to ensure a sound result in 2009.

In summary, the 2008 year was challenging for the business with profit boosted by the record high export coal prices we achieved in the last month of the year. New Zealand and export coal sales were both down for the year, and the challenge for the coming year is to make the most of the record high export prices and maximise our revenue while controlling escalation of costs.

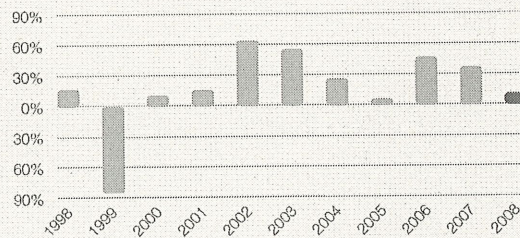
The company continues to have a sound financial base which will allow us to grow the business over the coming years without significant constraint.

Subsequent to 30 June 2008 the Directors have approved a dividend of 56.44 cents per share amounting in total to \$34.375m. The dividend was declared on 18 September 2008 to be paid to the shareholder on 31 October 2008.

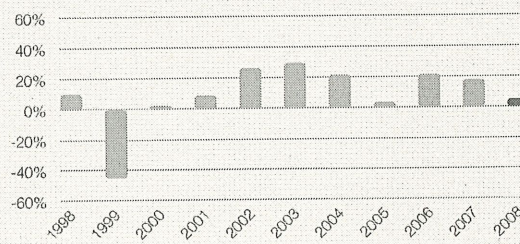
NET SURPLUS AFTER TAX (\$M)

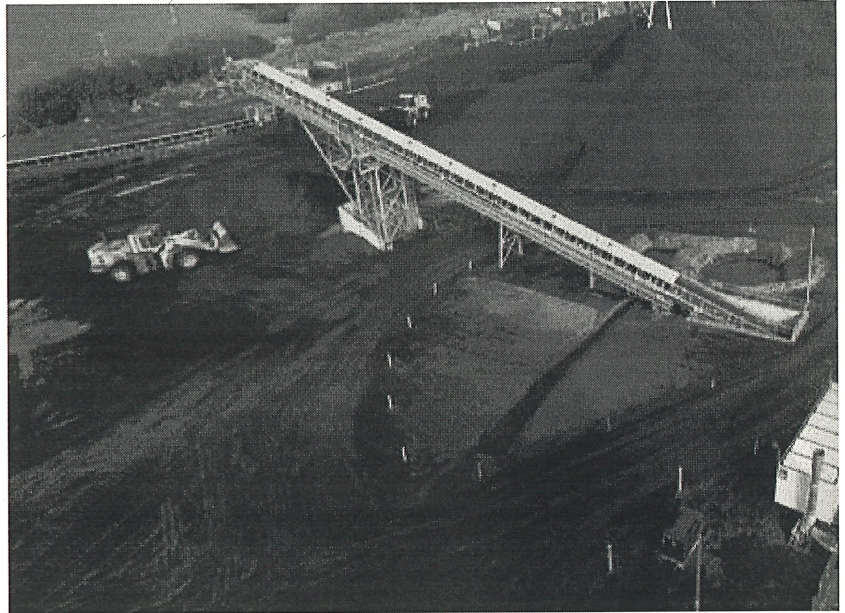


RETURN ON SHAREHOLDER'S FUNDS (%)



RETURN ON AVERAGE ASSETS (%)





### *Coal Operations*

At **Stockton Opencast Mine**, our main export mine, ongoing issues from the 2007 year, coupled with a very wet October, led to production shortfalls in the first half of the 2008 year. Significant improvement in the second half of the year increased monthly production and restored stock levels to three months' supply by year end. Coal export production was boosted at the end of 2007 with the resumption of coal extraction at **Spring Creek Underground Mine**, our joint venture with Cargill, after 14 months of development.

We completed a review of our smallest mine, **Terrace Underground** in Reefton, and concluded that the high international thermal coal prices supported continuing production for a further 12 months. In Southland, we completed the first full year at **New Vale Opencast**, fully integrating the operation into our systems and processes, and developing a 20-year plan for the mine. Throughout the year, we have been winding down operations at **Ohai Opencast Mine** towards closure in 2009.

In the North Island, production at **Rotowaro Opencast Mine** was in line with forecast, though down on the previous year, as Genesis Energy used more gas to fuel Huntly Power Station. At **Huntly East Underground Mine** we began extending the mine to the north to access a further 6 mt of coal. We continued our discussions on a new long-term coal contract with New Zealand Steel and agreed interim supply terms until the end of September 2008.

### *Renewable Energy*

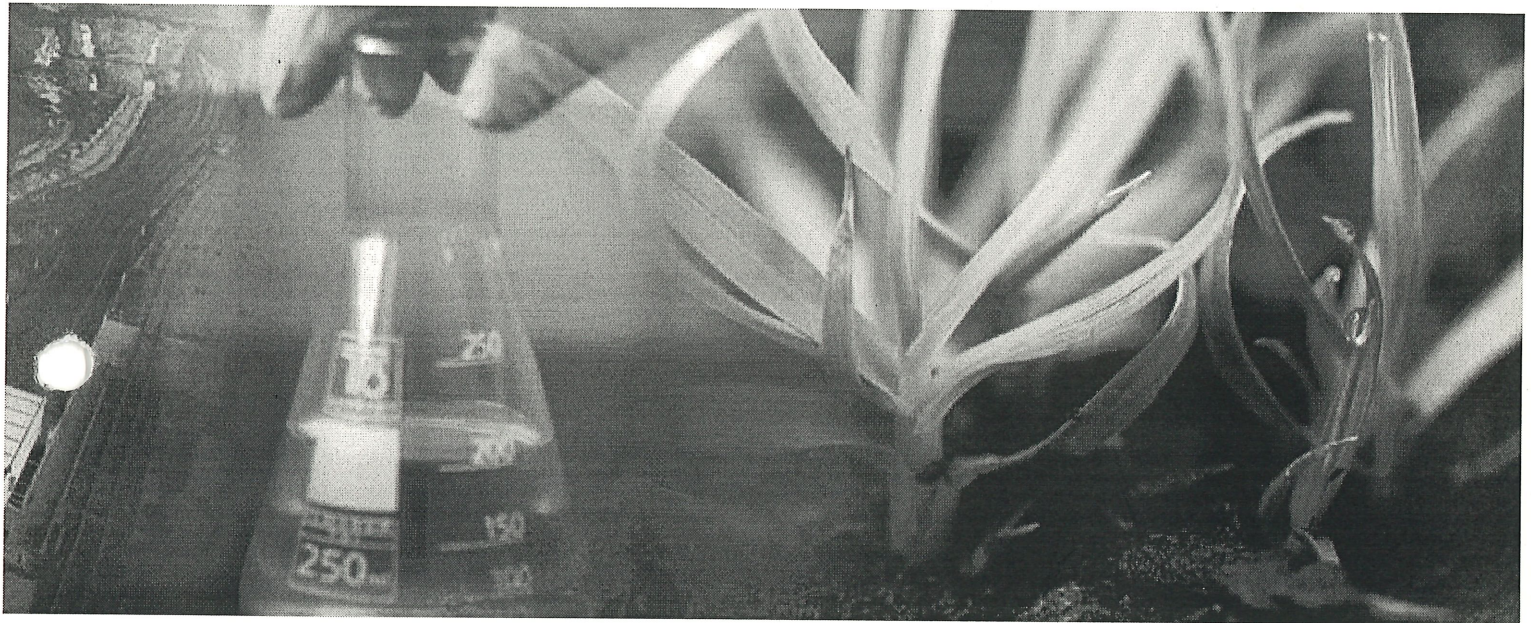
During the year, we began developing a third **wood pellet fuel plant**, in Taupo, to complement the two existing plants in Christchurch and Rotorua. We are now the largest wood pellet manufacturer in the Southern Hemisphere and, through our newest business, **Switch**, a leading solar water heating supplier. Switch was launched at the start of the 2008 year, providing integrated renewable energy solutions for businesses and homes. We also began the first stage of developing a new **biodiesel** production facility at Rolleston with the aim of producing 70 million litres per annum of high-quality biodiesel from oilseed rape and used cooking oil.

### *New Energy*

Just after year end, we reached a milestone in our new energy business, trialling electricity generation from **coal seam gas** produced from deep coal seams in our pilot field in the Waikato. We believe the Waikato fields have the potential to produce up to 300 petajoules (PJ), as much as the Kupe gas field, with 98% methane purity.

### *Health, Safety and Environment*

The year saw a significant reduction in the **lost-time injury** (LTI) frequency rate for staff and contractors on our sites. Unfortunately, in the second half of the year a small number of mostly very minor injuries, but that still resulted in significant time off work, adversely impacted



on the severity rate. Contractor safety performance at Stockton Opencast Mine has been unsatisfactory and we have commenced a major safety improvement initiative at the site. A 907-day run without an LTI at our smallest underground operation, Terrace Mine, was a highlight.

Overall **environmental performance** has been very good, despite difficulties at three of our South Island operations resulting in regulatory action. We are now starting to see real evidence of improved water quality off the Stockton Plateau with the commissioning of a large water treatment plant and limestone dosing of a Ngakawau River tributary over the last year.

### Outlook

Over the last year, the price of oil – and as a result the price of petrol and diesel – has led to fuel protests, and dominated headlines around the world and in New Zealand. The International Energy Agency's (IEA) latest medium-term outlook, published in July 2008, puts this into context.

Major new supplies of oil which were marketed in the early 2000s, from Russia, temporarily met the big surge in demand from emerging economies such as China and India. That extra production has now been absorbed, and the IEA predicts a minimal increase in oil production during the next five years.

The problem, in short, is there is just not enough new production coming on stream to quench the world's thirst for oil. Nubuo Tanaka, Executive Director of the IEA, had a sobering message when interviewed about the Agency's predictions. He believes we are now in the throes of a 'third oil shock'. Some global oil company executives are saying that producers will struggle to meet even the IEA's projections, and many speculate that global oil production has already plateaued.

It seems likely that prices will continue to rise over the long term because of these supply constraints. Since 1999, the price of oil has gone up five-fold. It has quadrupled since 2002. Significantly, where price was once set at the marginal cost of production – the price of the most recently developed oil field – it is now, for the first time since oil was discovered, being set by the marginal ability or willingness to pay. That willingness is likely to be high unless alternative transport fuels can be developed at very large scale, very rapidly. Solid Energy's previous projections for oil to be in the US\$100 to \$200 a barrel (bbl) range by 2013, and US\$150 to \$300/bbl by 2018, with extreme volatility, are already looking realistic but probably far too low.

All this creates risks and opportunities, and options other than oil come into stark relief as they did during previous oil shocks. The difference this time is that the 'shock' is likely to be permanent.

Solid Energy has been anticipating this potential radical