

То	Company Announcements Office	Facsimile	1300 300 021
Company	Australian Stock Exchange Limited	Date	30 May 2006
From	Bill Hundy	Pages	53
Subject	SHAREHOLDER CORRESPONDENCE		

In accordance with Listing Rule 3.17 please find attached Origin Energy's Sustainability Report to Stakeholders, which will be sent to shareholders who have elected to receive a copy. The report is also available on Origin's website www.originenergy.com.au in the Environment section.

Regards

Bill Hundy

Company Secretary

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#### Scope of this report

Unless otherwise stated, this document reports on the sustainability performance of the assets and activities operated by Origin Energy for the year ended 30 June 2005. To make this report as timely as possible, we have reported on some aspects of our business up to the time of publication (May 2006). Ernst & Young has conducted assurance procedures in accordance with Australian Auditing and Assurance Standard AUS 110 'Assurance Engagements other than Audits or Reviews of Historical Financial Information in relation to a selection of performance statements in this report, the method used for determining greenhouse gas emissions from the 'supply chain' and greenhouse gas emissions for three key business units. See pages 45 and 46 for Ernst & Young's reports.

Origin Energy Limited ABN 30 000 051 696

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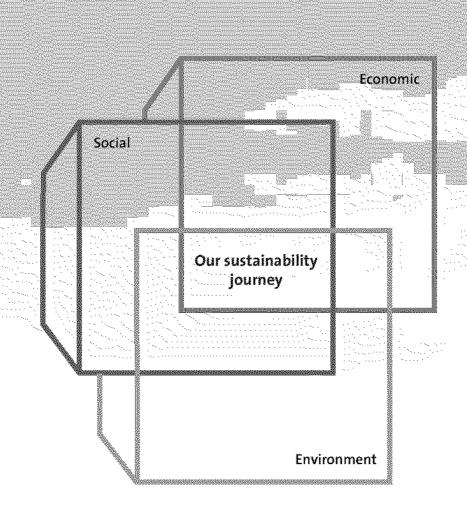
#### Highlights



- Green Power customer base increased to 55,000 customers.
   Environment – page 18
- Launched GreenEarth Gas, the first product of its type in Australia to offset a customer's greenhouse emissions through investment to reduce emissions.
   Environment – page 19
- Continued to be the Australian retail market leader for installation of grid-connected solar photovoltaic panels. Environment – page 19
- Introduced more detailed greenhouse gas and environmental incident reporting.
   Environment – page 15-22

- Accredited as an 'Employer of Choice for Women' by the Federal Government's Equal Opportunity for Women in the Workplace Agency (EOWA) in February 2006.
   Social – page 26
- Exceeded safety
   performance target –
   lost time injuries improved
   4 percent from 2.6 to 2.5
   lost time injuries per
   million hours worked.
   Social page 29
- Assisted over 17,000 customers through our Power On hardship assistance program.
   Social – page 35
- Over 780 hours of volunteering leave taken by employees in 2005.
   Social – page 28

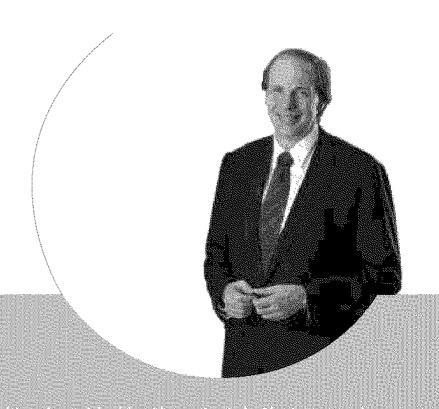
 Created \$909 million for our stakeholders during 2004/05.
 Economic – page 38



Ensuring the **long-term sustainability** of our business by balancing environment, social and economic impacts in a transparent way.

# From the Managing Director

This, our fourth sustainability report, focuses on building and improving our performance against our current sustainability objectives.



Our decision making is guided by the principle that we seek to create value for stakeholders while recognising the need to ensure the sustainability of our business and its impact on the environment and the communities in which we operate

> Grant King Managing Director

Over the last couple of years we have come a long way in our sustainability performance as demonstrated by initiatives such as: full reporting of our greenhouse gas emissions both within our business and across the supply chain that delivers energy to our customers; development of a market-leading positioning in the sale of green energy products; provision of solutions for customers in financial hardship; and the launch of employee programs including a share plan.

Many of these initiatives, while sound achievements were easy gains when compared to the challenges ahead of us.

Our decision making is guided by the principle that we seek to create value for stakeholders while recognising the need to ensure the sustainability of our business and its impact on the environment and the communities in which we operate.

In line with this principle, over the next 12 months we will be reviewing how we make the next step change so that we can continue to create value in a more sustainable way.

The review of the company's sustainability objectives, strategies and actions will be conducted by a new sustainability committee including senior managers from across the company.

We look forward to reporting our progress as we evolve our understanding of what sustainability means to Origin Energy.

In this context, one of our major challenges remains how to reduce greenhouse gas impacts of our activities. In order to drive economically viable abatement options and investment in zero or low emission technologies it is critical to have the appropriate national policy framework in place.

Our approach has been to highlight the need for clear policy around valuing carbon by participating in initiatives such as the Australian Business Roundtable on Climate Change which was launched in April 2006.

# We look forward to reporting our progress as we evolve our understanding of what sustainability means to Origin Energy.

The Roundtable commissioned economic research that found Australia can significantly reduce its greenhouse gas emissions at an affordable cost by introducing a carbon signal. This research also concluded that acting early was a more sustainable solution than delaying action. Origin Energy will continue working with Australian governments to develop the necessary framework to value carbon and promote investments in low emission technologies.

This year our sustainability report is focused on following areas:

#### Environment

Our aim is to grow our business in a less greenhouse gas intensive manner.

As a producer of energy, our objective is to decrease the greenhouse gas intensity of the energy available for consumption:

 We progressed the approvals process for two 1,000-megawatt gas-fired power stations. One is at Mortlake in Victoria and the other is close to our gas production plant at Spring Gully in Queensland. Gas-fired electricity generates significantly lower greenhouse gas emissions per unit of electricity generated compared with coal fired plants.

 Our solar plant in South Australia was commissioned and the first SLIVER solar cells were developed for commercial use.

As an energy retailer, we have continued to assist our customers manage the environmental impact of their energy use:

- We sell Green Power to more customers than any other energy retailer in Australia.
- We introduced GreenEarth Gas the first product of its type in Australia to offset a customer's greenhouse emissions through investment to reduce emissions.
- We provide energy efficiency advice to some of Australia's largest companies and have identified more than 214,000 tonnes of CO<sub>2</sub>e savings over the last four years.

Alongside our carbon reduction strategies we are also focused on improving our environmental management practices and performance. We believe it is important to provide transparent information to stakeholders on the environmental impacts of our business and we are working to continuously improve our reporting systems. We are able to report no fines or prosecutions for environmental performance in this period. This year however, we have provided a greater level of detail by reporting our environmental incidents by category.

#### From the Managing Pirector

#### Social

Our employees are a critical stakeholder group as our success relies on attracting and retaining the best people for the needs of our business. A significant sustainability issue for our industry is the shortage of skilled labour. With the current resources boom and a strong Australian labour market generally, the competition for skilled people specifically in project areas is strong.

Initiatives both to develop the capability in our employees and to attract and retain skilled employees support our core objectives. The restructure of our human resources area has been designed to assist us achieve these ends.

After feedback from a work-life balance focused survey and to provide a more flexible working environment, new leave initiatives were launched giving employees more time for care giving responsibilities and options to purchase an extra four weeks of annual leave. In February 2006, we were accredited as an 'Employer of Choice for Women' by the Federal Government's Equal Opportunity for Women in the Workplace Agency (EOWA).

I am very pleased to be able to note that once again fewer employees are being injured at work. Our lost-time injuries improved 4 percent from 2.6 to 2.5 lost-time injuries per million hours worked. This year we also introduced the measure of near misses into this report. Near misses have been reported internally for several years, assisting us in highlighting potential workplace hazards and risks.

Our matched giving and volunteering program has now been running for over a year. Strong relationships have been formed between our employees and charity partners such as The Big Issue. We understand that our employees want to contribute to the community with over 780 hours of volunteering leave taken in 2005.

We are currently involved in several major infrastructure projects and a highlight of the last year was the opening of our Spring Gully Gas Plant, near Roma in Queensland. We were pleased to be able to share the occasion with members of the local community as our strategy is about being welcomed into the communities in which we operate.

Community consultation around current projects such as the Spring Gully and Mortlake power stations

#### Our commitments

Origin Energy's commitments define the outcomes that we strive to achieve for key stakeholders.

#### We are committed to:

- Delivering market leading performance for shareholders by identifying, developing and operating value creating businesses across the energy supply chain.
- Delivering value to customers by developing and procuring competitive sources of energy and related products and services that better meet customers' energy needs.
- Creating a rewarding workplace for employees by encouraging personal development, recognising good performance, valuing teamwork and fostering equality of opportunity
- Respecting the rights and interest of the communities in which we operate by working safely and being mindful of, and attentive to the environmental and social impact of the resources, products and services we use or provide to others.

#### Our values

Origin Energy's values describe behaviours that the company expects employees to demonstrate in their actions and the decisions they make in pursing the outcomes we are committed to achieving

Caring We care about our impact on customers, colleagues, the community, environment and shareholders.

**Listening** We listen to the needs of others, knowing that an unfulfilled need creates the best opportunities

**Learning** We constantly learn and implement new and better ways, sharing information and ideas effectively.

**Delivering** We deliver on the commitments made in all areas of performance

and the Kupe gas project in New Zealand have been conducted to understand any community concerns which are considered in the development of the project.

We recognise that energy is an essential service and that access to energy is important for customers to meet their life style expectations. Ongoing feedback has enabled us to continually refine our services for customers facing hardship. During the reporting year we assisted over 17,000 customers through our 'Power On' hardship assistance program.

#### **Economic**

In maintaining sustainable economic performance our objective is to provide growing returns to stakeholders. During 2004/05, we created \$909 million for our stakeholders. This is a 62 percent increase on the previous year, due to the addition of contributions from Contact Energy of New Zealand. We purchased a 51.4 percent interest in Contact Energy in October 2004.

We have refined our methodology for calculating community investment, which we have detailed in our economic contribution section of this report.

I would like to conclude by thanking Origin Energy's employees for the commitment and effort they have demonstrated in delivering the many initiatives you can read about in this report.

I would also like to thank our stakeholders for your interest in our report. Our aim is to continue to provide stakeholders with the ability to assess our sustainability performance by improving the accuracy, transparency and completeness of our reporting. To help us in this process, we welcome your feedback via the response form in the back of the report.

**Grant King**Managing Director

#### Our principles

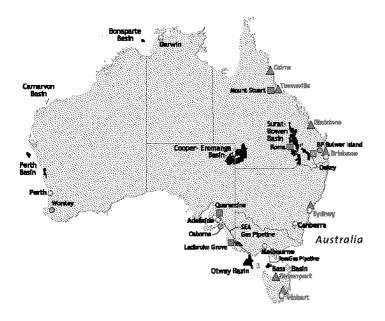
Origin Energy's principles provide guidance and direction for decision making.

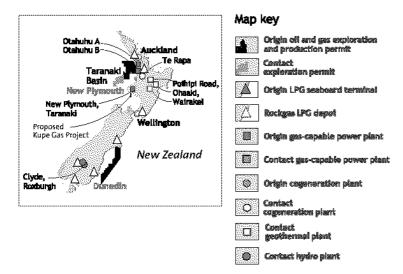
- We conduct ourselves and our business with due care and in accordance with relevant laws and
  regulations. We have an overriding duty to ensure the health and safety of our employees, and
  to minimise the health, safety and environmental impacts on our customers and the communities
  in which we operate.
- · We will add value to the resources that come under our control.
- The value we create will be distributed to stakeholders recognising the need to ensure
  the sustainability of our business and its impact on the environment and the communities
  in which we operate.
- When faced with choices we make decisions knowing they will be subject to scrutiny. We should
  be able to demonstrate the soundness of our decisions to all stakeholders.
- We encourage diversity and expression of ideas and opinions but require alignment with the company's commitments, principles and values and the policies established to implement them.

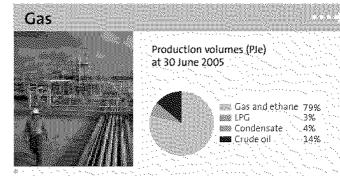
## Origin Energy across the supply chain

Origin Energy is a major Australasian integrated energy company focused on gas and oil exploration and production, energy retailing, power generation and utility network management.

#### Location of key activities and operations







#### **Exploration and production**

Origin Energy produces gas and oil from reserves strategically located close to major Australian and New Zealand energy markets, from proved and probable resources of 2,220 Ple. We are the operator of 10 oil and gas onshore production facilities and are participating in three major offshore developments in Australia and New Zealand. Our annual production is over 80 Ple per annum and is set to increase significantly in 2006, with the addition of production from the BassGas and Otway Gas Projects. Origin Energy is also Australia's leading developer of coal seam gas (CSG), which is an abundant, new and reliable gas supply for eastern Australian gas markets.

#### Electricity



**Electricity generation** 

more than

3,000 MW\*

In Australia, Origin Energy mostly uses gas to generate electricity. We operate four power stations and have interests in a portfolio of cogeneration plants which supply electricity and steam under long-term contracts.

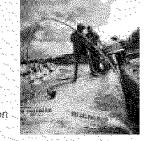
Origin Energy has a 51.4 percent interest in Contact. Energy which is responsible for generating about 27 percent of New Zealand's electricity, through its interests in installed generation capacity of more than 2,000 MW. Contact Energy owns and operates. 10 power stations in New Zealand, generating electricity from hydro, geothermal and gas sources.

Origin Energy is investing in electricity generation technologies that produce no or low greenhouse gas emissions including:

 Gross installed capacity of power stations in which Origin Energy or its subsidiaries have interests.

### Transmission & distribution

Natural gas is transported via high pressure pipelines (known as transmission networks) from gas fields into distribution



networks of smaller low pressure pipelines that connect with customers.

#### **Origin Energy operates**

20,000 kilometres

of natural gas networks through all mainland states and the Northern Territory!

Origin Energy distributes LPG by road, rail and sea through a network of distribution terminals

 Origin Energy operates gas networks on behalf of network owner Envestra.

- New SLIVER solar cell technology, which reduces the amount of silicon used in solar panels by up to 90 percent and allows new and innovative solar applications.
- An interest in Geodynamics Ltd, which is developing a world-class fractured rock geothermal resource in South Australia's Cooper Basin. Geodynamics is aiming to harvest the searing heat from about 4.5 km below the Earth's surface to generate electricity.

#### Gas and electricity retailing

2.1 million customers\* in Australia

630,000
customers\* in New
Zealand and the Pacific

#### Natural gas and LPG

1.3 million gas customers'

Origin Energy purchases natural gas from producers to sell to around 900,000 residential, commercial and industrial customers in Queensland, South Australia, Victoria and New South Wales. In New Zealand, Origin Energy supplies natural gas to more than 80,000 customers through Contact Energy.

Origin Energy also supplies LPG to around 290,000 homes and businesses in all Australian states. This includes supply to 800 service stations through Vitalgas in which Origin Energy is a joint venture partner with Caltex. In our own right or through local joint ventures and subsidiaries, Origin Energy supplies domestic and commercial LPG and autogas in New Zealand and a number of countries in the Pacific.

#### Electricity

Origin Energy purchases electricity from the wholesale market to sell to around 900,000 residential and business customers mostly in Victoria, New South Wales and South Australia. In New Zealand, Origin Energy supplies more than 500,000 customers through Contact Energy.

1.4 million electricity customers\*

#### No.1

Green Power product in Australia as rated by 16 peak environmental groups

#### Clean energy products

Origin Energy is a leading provider of environmentally friendly energy and energy-related products including:

- The GreenEarth range of green power products sourced from solar, wind and hydro generators.
- Grid-connected solar panels through which customers generate their own 'green' electricity.
- \* Customer accounts

- Clean burning compressed natural gas for city transport fleets and non-ozone depleting refrigerant gases.
- Energy efficiency services to help customers reduce their energy consumption.



# Performance summary Environment

Objective	Strategies	2004/05 actions
To measure and accurately report the company's greenhouse gas emissions.	Improve the company's greenhouse gas measurement methodology, audit and report regularly	<ul> <li>Include Contact Energy (NZ) in the equity accounting of our greenhouse gas inventory.</li> <li>Work co-operatively with our joint venture partners to agree on consistent greenhouse gas inventory methodology for all our facilities and improve the accuracy and completeness of shared data.</li> </ul>
To reduce the greenhouse gas intensity of our energy production	Seek economic avenues for reducing greenhouse gas emissions in our energy production activities.	<ul> <li>Progress the proposed gas-fired generation projects.</li> <li>Offset greenhouse gas emissions from vehicle use associated with our operated assets in Australia from June 2005.</li> </ul>
and distribution.	Identify and invest in renewable energy technologies that are economically viable	<ul> <li>Complete commissioning of the solar PV manufacturing plant and report on in-field performance of the SLIVER modules.</li> <li>Complete the evaluation and approvals process for the Troubridge Point Wind Farm.</li> <li>Evaluate additional opportunities for developing and deploying renewable technologies.</li> </ul>
	Seek economic avenues to reduce fugitive emissions.	Replace 177 km of mains throughout the gas networks under management.
To reduce the carbon intensity of customers' energy consumption.	Provide a range of competitively priced clean energy products and services, which allows customers to choose their level of greenhouse gas intensity.	Increase Green Power customers base to 50,000 billed customers and lift annual CO <sub>2</sub> e savings to 280,000 tonnes for 2004/05  Launch Greenhouse Friendly Gas by May 2005.  Install 140 kW of solar PV, saving 4,100 tonnes of CO <sub>2</sub> e over the life of the systems in comparison with the current NEM average of 1.05 tonnes of CO <sub>2</sub> e/MWh.  Release a 10-15 W and 40 W SLIVER solar panel for sale by July 2005.
		Achieve greenhouse gas savings of \$7,000 tonnes of CO,e from the environmental refrigerants' portfolio.
	Provide information for our customers so they can measure and reduce the carbon intensity of their energy use.	<ul> <li>Reduce customer greenhouse gas emissions by an additional 20,000 tonnes of CO<sub>2</sub>e per annum through energy efficiency consulting services.</li> <li>Include greenhouse gas emissions on mass market natural gas bills in Victoria and South Australia by June 2005, and on remaining LPG bills by June 2006.</li> </ul>
To take all reasonable steps to eliminate or minimise any adverse impact that our activities have on the local environment.	Ensure all environmental impacts are appropriately assessed and all environmental approvals are obtained.	<ul> <li>Obtain environmental approvals for the Kupe Gas Project by December 2005.</li> <li>Obtain environmental approvals for the proposed Victorian and Queensland generation plants by 2006.</li> <li>Finalise and implement plans for the processing of mercury from the Yoffa field.</li> </ul>
the local environment.	Comply with all environmental conditions of approval and promptly report any non-compliance to relevant authorities.	No reportable hydrocarbon spills that contaminate land or water.  Further evaluate management options for produced water in coal seam gas areas.  Complete reverse osmosis trials at Spring Gully by December 2005, and report findings to stakeholders.  Continue to understand and monitor extraction of coal seam gas water from aquifers in the Bowen and Surat Basins.  Measure and report paper consumption in Australian offices.
	On tompletion of use, ensure land is managed and/or rehabilitated to appropriate environmental standards.	<ul> <li>No noise complaints.</li> <li>Before relinquishment, rehabilitate all gas or petroleum exploration sites so vegetation can be re-established to be consistent with the area.</li> <li>Monitor all contaminated sites to ensure appropriate remediation plans are in place and obtain acceptance from relevant state regulatory authorities for those plans.</li> <li>Complete Launceston and Newstead remedial works including sign off by relevant authorities by the end of 2005 and June 2006 respectively.</li> <li>Sell a former gas manufacturing site in Sandgate, Queensland to a suitable developer who will be obliged to complete remedial works including sign off by relevant authorities within a specified penod following the sale.</li> <li>Monitor the groundwater at the former gas manufacturing site at Osborne, South Australia. to assess the impact of metal stabilisation works.</li> </ul>

#### Performance Contact Energy data included in the equity greenhouse gas inventory. Work is ongoing with joint venture partners on improving accuracy and completeness of data. in late 2005, we issued environmental impact statements for public comment as part of the approvals process for the Spring Gully and Mortlake power station projects Assessment continues on appropriate offset programs. Solar manufacturing plant commissioned. Mark 1 SLIVER modules passed IEC 61215 performance standards. First sales secured in June 2005. Evaluation completed, project on hold, due to a lack of investment incentives including Australian government decision not to increase the Mandatory Renewable Energy Target. A range of projects are being reviewed, with a low emissions technology investment strategy to be developed. 150 km of older cast-iron mains replaced. Green Power customer base increased to 55,137 customers billed as at 30 June 2005, saving more than 311,000 tonnes of CO.e for 2004/05. In May 2005, launched GreenEarth Gas – the first product in Australia to offset a customer's greenhouse emissions against investments to reduce emissions. By 30 December 2005, we had sold around 4,500 GreenEarth Gas contracts. Installed 233 KW of grid-connected solar systems, which will save more than 8,000 tonnes of CO,e over the life of these systems. · We produced and sold a small number of 10 watt SLIVER panels. Rather than producing 40 watt panels we are concentrating on manufacturing 75+ watt SLIVER panels for the domestic and international grid connect markets. Achieved 27700 torines of CO.e savings from the refrigerants portfolio. Shortfall was due to a mild summer affecting sales. Our energy efficiency team helped customers to identify projects to reduce their greenhouse gas emissions by more than 54,000 torines. During 2005, we began including greenhouse gas emission information on most residential LPG and natural gas bills. By June 2006, we will provide this information on most LPG residential customer bills for those customers supplied directly by Origin Energy. → All environmental approvals have been granted. in late 2005, we released environment effects statements for Spring Guily and Mortlake generation projects for public comment. A waste disposal contract has been finalised with the mercury being transported to Europe for reprocessing. The sewage treatment plant at Spring Gully which processed waste from construction and operations camps was not working adequately. resulting in breaches. These breaches were reported to the EPA. Modifications have been made to the process to prevent further breaches. An incident also occurred involving 1,000 litres of diesel spilling on to our unmanned Yolla Platform, in Bass Strait, which was reported to the regulator. We had no fines or prosecutions. One level three hydrocarbon spill was reported, details are on page 22. Origin Energy contributed to a coal seam gas water study report. Issued in August 2004, the report was jointly funded by government and industry. A reverse osmosis trial at Spring Gully indicated that produced water can be treated to a high quality that is suitable for reuse – such as for irrigation. We are investigating full-scale processes. Alternatively, the water may be used for cooling in a proposed power station. -- Cround water modelling indicates that extracting water at Spring Gully is unlikely to have a significant impact on other potential ground water sources. We have implemented ground-water monitoring to confirm our analysis. We reduced our paper consumption by 5 percent saving \$11,500. 🛶 In 2004/05, we received two noise complaints – one at Ladbroke Grove Power Station and one at the Spring Gully Gas Plant. - During 2004/05, we disturbed some 373 hectares of land for oil and gas exploration and development. We rehabilitated more than 218 hectares - We are investigating the need for rehabilitation at three sites (Port Pirie, Sale, and Broken Hill), regularly monitoring two sites (Brompton), Mount Cambier); and remediating three sites (Newstead, Launceston and Osborne). We completed site remediation work at Launceston, Tasmania, and will monitor groundwater for 18 months to determine the program's success. · We continued remediation work at Newstead by removing contaminated soil to an approved landfill Expect to complete remediation by December 2006. In October 2005, we entered into a conditional contract for the sale of our Sandgate site in Queensland for the purchaser to remediate. the site to the level required for residential use within two years. Each six months, we conduct three sampling events to monitor groundwater at Osborne in South Australia.

# Performance summary Social

Objective	Strategies	2004/05 actions
To provide a satisfying and rewarding working environment for all our employees.	Provide employment conditions consistent with community expectations	<ul> <li>Improve the processes for identifying and capturing the principal reasons why employees leave, and analyse to determine whether areas of high turnover might benefit from any changes to practices or policies.</li> <li>Introduce new reward and recognition schemes to better identify and reward improvers and performers within our Customer Contact Centres and telephone sales teams.</li> <li>Review and report the results of the culture and leadership programs in the Customer Contact Centres by June 2006.</li> <li>Link work life balance initiatives and policies into an integrated package by December 2005 and communicate it to employees.</li> </ul>
	Work towards having Origin Energy's workforce reflect the diversity expected by the communities in which we operate	Commence application process for EOWA Employer of Choice by June 2005.     Analyse the cultural diversity of external recruits and internal promotions and transfers.
	Provide access to the necessary job training and assist employees obtaining additional skills to develop their careers	Monitor and report the completion of career development plans within the Performance Management System framework.     Improve the process of measuring total hours invested in employee training.     Ensure development and training programs are in place to fulfil skill and experience requirements of future leaders in the company.
	Encourage and support employee participation in community-based activities that form part of the company's corporate community involvement	Build awareness of the volunteering opportunities available through the Matched Giving Program
	Provide guidance to management and employees on the company's values and the interpretation of those values	Publish the company's Code of Ethics by December 2005 and Integrate into relevant policies and procedures
To eliminate or manage hazards and practices in our business that could cause accident, injury or illness to people, damage to property, or unacceptable impacts on the environment.	Continuously improve the Health, Safety and Environment Management System	Complete an external audit of the implementation of the HSEMS across the business by December 2005.  Review high-risk operational control procedures.  Reduce employee lost-time and moderate medical treatment injuries per million hours worked from 7.3 to 6.7.  Review contractor management processes across the organisation by December 2005.  Review and implement recommendations from the Tarantula 1 gas well incident and complete the implementation of the Coroner's recommendations from the Myalf Creek Enquiry.
To maintain community support and goodwill for the company's activities.	Maintain an open and constructive approach to gaining access to land and resources	Implement community consultation and communications plans for all new major project developments.     Develop and implement regional plans for community involvement where Origin Energy has, or expects to have, a major presence.
	identify and participate in public debates where we can make a relevant and meaningful contribution.	Document process for formal consultation with government to assist the development of effective and efficient policy.

Perform	ance	
<b></b>	→ Through exit interviews, we collect information from employees leaving the business and undertake ongoing data analysis.	
	→ We introduced a sales incentive program in our National Customer Contact Centre, incentive programs are available to team leaders to reward and recognise initiative and achievement and encourage continuous improvement.	
-	We introduced a dedicated team to champion employee communications and change initiatives in Eustomer Contact Centres We identif	ied <b>201</b>
<b>4</b>	positive trends in the last quarter of 2005, and expect to report further improvement when these programs are reviewed in June 2006.  A draft integrated package has been developed but not fully implemented. However, in October 2005 we introduced a purchased	71
•	leave program and incorporated additional leave provisions into our parental, adoption and carer leave policies.	
<b>%</b>	In February 2006; Origin Energy was awarded EOWA Employer of Choice.	
<b>(b</b>	<ul> <li>During 2004/05, we included a questionnaire in each new employee information pack to enable employees to volunteer information on their cultural background, foreign experience, language abilities, educational qualifications, disability and age.</li> </ul>	
	This greater understanding allows us to better target development programs to meet specific needs.	
	During 2004/05, our monitoring indicated that improvements in the completion, appropriateness and effectiveness of career	
W	development plans needed to be prioritised.  — During 2004/05, improvements to capture hours were made and our employees attended 48,971 hours of training.	
•	<ul> <li>In January 2006, as part of a restructure of our Human Resources department, we appointed a Group Manager Learning and Development to assess program opportunities.</li> </ul>	
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	More than 780 hours of endorsed volunteering leave was taken during 2005	
		4 4
<b>(b</b> -	<ul> <li>We communicated to employees a refreshed Code of Conduct including new commitments to stakeholders, principles to guide decision making and our values in December 2005. Policies have been aligned with the code.</li> </ul>	
	to guide decision making and quit values in December 2003, runcles have seen aligned with the code	
<b>6</b>	The HSEMS is under review Revised standards will be audited by June 2007.	_ 46
edile.		1 160
(% <b>4</b>	<ul> <li>Review of procedures for isolation and lockout, confined space entry and major hazard facilities is in progress.</li> <li>Achieved target with 5.3 lost-time and moderate medical treatment injuries per million hours worked.</li> </ul>	1
		14/3
		A
	and implemented 35 action items to improve safety management of drilling operations. No report is available from regulators on Tarantula to date.	
(D)2.		
	<ul> <li>Released Community Consultation and Communications Guidelines in January 2005. Used guidelines in developing communications plans for new development projects.</li> </ul>	
-	<ul> <li>During 2004/05, we drafted Regional Community Involvement Guidelines, to provide a framework for developing strategies in communities in which we have major involvement. Guidelines are being trialled at Spring Gully.</li> </ul>	
	state Big in Continuities in which we have that to involve here, dissecting and define that it as a 2 print during	- 1
	Process has been documented.	

# Performance summary Social and Economic

Objective	Strategies	2004/05 actions
To maintain community support and goodwill for the company's activities.	Maximise value of company sponsorship to recipients by focusing on activities that most leverage Origin Energy's skills and resources	<ul> <li>Expand environmental education programs into New South Wales and Queensland and continue to expand and leverage existing programs in Victoria and South Australia.</li> </ul>
	facilitate improved access to services and support the disadvantaged in our community so they can also enjoy the comforts of energy use	Continue to review energy audit and advice services and monitor the effectiveness of these services     Improve our ability to identify customers requiring payment assistance.     Develop better measures of customers in financial hardship.
To provide sustainable returns to Origin Energy's key economic stakeholders.	Provide shareholder returns in the top third of comparable companies.	Achieve an Operating Cash Flow After Tax Ratio of greater than 9.4 percent.
	Ensure that the contribution the company makes to the community through payment obligations to government is identified and reported.	Establish processes to improve the reporting of physical payments of tax made to government by June 2006.
	Identify appropriate levels of investment in community activities.	Externally verify our methodology for calculating investment in community activities.



# Performance Expansion of the program into New South Wales and Queensland was delayed. We continued to expand our energy educational programs in South Australia and Victoria with 1,733 kifs being requested by 952 educational institutions in 2004/05. We referred 168 customers to our audit and advice service, with most customers able to reduce their consumption by between 540 and \$70 per quarter. We continue to monitor this service. In order to improve the way we manage customers in hardship, we rolled out a training program in November 2005 to help our staff encourage customers to feel comfortable about telling us if they are having difficulty in paying their bills. No new measures were developed due to the complexities of identifying customers in hardship. Our approach has been to train staff to help customers self identify (see above). The Operating Cash Flow After Tax Natio, excluding Costact Energy, for the year to 30 June 2005 was 1.4.4 percent—well above our 3.4 percent auget. In the Operating Cash Flow After Tax Natio, excluding Costact Energy, for the year to 30 June 2005 was 1.4.4 percent—well above our 3.4 percent auget. Existing help our meeting of where payment of tax to all levels of government can be identified within the financial systems. Existing help our meeting of where payment of tax to all levels of government can be identified within the financial systems. Existing help our meeting of these payment of tax to all levels of government can be identified within the financial systems. Existing help our meeting of the payment of tax to all levels of government can be identified within the financial systems. Existing help our meeting of the payment of tax to all levels of government can be identified within the financial systems.

#### Definitions of performance indicators:

- Achieved Achieved within the reporting period or as stated.
- Partially achieved or in progress as at March 2006.
- Not achieved Not achieved within the reporting period or as stated.
- E&Y verified Verified as outlined in Ernst & Young statement on page 46. These items were selected by Origin Energy as key areas of focus for each objectives during the reporting period.

## **Environment** Greenhouse gas emissions

#### Climate change

The past 12 months have been historic in the context of national and international debate on climate change issues.

Origin Energy believes energy producers and consumers must acknowledge that we are now operating in an environment increasingly constrained in its ability to absorb greenhouse gases without unacceptable environmental impacts. However, while investors are anticipating a carbon constrained future, there is little appetite to invest without a suitable regulatory framework.

There is a need for clear policy around costing carbon to attract investment in renewable or low emission technologies.

Origin Energy supports policies that advocate early action and complement longer-term efforts to develop and deploy breakthrough technologies. We also support the use of market-based instruments to create the incentives for private investment in lower greenhouse intensive technologies. In order to better understand the range of policy options and potential impacts on investment decisions. Origin Energy has been involved in a range of external activities with our stakeholders and like minded companies.

#### Australian Business Roundtable on Climate Change

As part of the Australian Business Roundtable on Climate Change, we have been working with BP Australia, Insurance Australia Group, Swiss Re, Visy Industries, Westpac and the Australian Conservation Foundation to better understand the business risks and opportunities associated with climate change. The Roundtable commissioned CSIRO to quantify climate impacts on Australia. CSIRO concluded that Australia is vulnerable to climate change but that reducing global greenhouse gas emissions may reduce the rate and magnitude of climate change which will give more

time to adapt to a harsher and more varied climate.

Given the scientific advice that there is a strong incentive to act early to reduce emissions, the Roundtable commissioned The Allen Consulting Group to analyse what it will cost to substantially reduce greenhouse gas emissions as a part of an international response. This research demonstrated that Australia can deliver a 60 percent reduction from year 2000 levels by 2050 at an affordable cost.

Furthermore, the economic modelling illustrated that the longer we delay action, the more expensive it becomes for business and the wider Australian economy to reach the deep cuts.

#### This research demonstrated that Australia can deliver a 60 percent reduction from year 2000 levels by 2050 at an affordable cost.

A key outcome of this research for Origin Energy is that early, affordable steps to reduce greenhouse gas emissions may delay the need for drastic and costly reductions later. Lack of agreement on long-term solutions cannot be used as an excuse to avoid near-term actions.

In order to apply a carbon constraint in line with goals for long-term deep emission cuts, Origin Energy supports the introduction of a national emissions trading scheme as being the appropriate policy response. It will be important that an Australian scheme is able to link internationally and the scheme must take intoaccount the risks to international competitiveness. We are convinced that our long-term business competitiveness will benefit by leading the development of marketbased solutions to the climate change issue.

# Asia Pacific Partnership on Clean Development and Climate

The Australian Government has committed to technology development under the Low Emission Technology Development Fund and the Asia Pacific Partnership on Clean Development and Climate. The key will be to unlock private sector investment in order to deploy the low emission technologies at sufficient commercial scale to reduce costs to acceptable levels. In January 2006 in Sydney, Origin Energy's Managing Director, Grant King, joined with other business leaders to develop a workplan for the development of low emission technologies through the member countries of the USA, Japan, South Korea, China, India and Australia. Origin Energy will be contributing to the taskforces on cleaner fossil fuels and renewable power generation.

#### 11th Conference of the Parties, Montreal

During November-December 2005 Australia participated in the United Nations Conference in Montreal the largest intergovernmental climate conference since the Kyoto Protocol was adopted in 1997. As an outcome of this meeting, a new government working group was established to discuss future commitments for developed countries for the period after 2012. Technology was at the centre of discussions to reduce emissions and adapt to climate impacts. Countries agreed to foster the development and transfer of such technologies.

Origin Energy supports the focus on post-2012 international action and is well positioned to contribute to the discussion around Australia's role in that future response.

#### Objective

# To measure and accurately report the company's greenhouse gas emissions.

Origin Energy measures the greenhouse gas emissions from our facilities and across the supply chain that delivers energy to our customers, so that we identify greenhouse gas reduction opportunities.

#### Our supply chain

Included in our supply chain are emissions from our energy production and third party purchases of energy required to meet customer demand, as well as the direct emissions from customer use of natural gas. The external emissions make up about 88 percent of the full supply chain emissions. Origin Energy includes the full scope of greenhouse gas emissions in this manner as it is an important element of our risk management process. By focusing on the full supply chain, we can identify a broader range of opportunities to reduce emissions. We are committed to working with our suppliers and customers to adopt cost effective strategies to reduce the overall intensity of our energy products.

In 2004/05, the total emissions across the Origin Energy supply chain increased 4 percent to 32.8 MtCO<sub>2</sub>e. This represents 12 percent of Australia's stationary energy emissions.

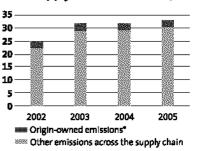
In 2004/05, the emissions intensity across the Origin Energy supply chain increased 3 percent to 122 kt/PJe.

#### Our greenhouse gas inventory

We have reported our company greenhouse gas inventory using both equity and operated accounting. Equity accounting describes our emissions profile in relation to the assets we own, in a similar way to financial reporting. We included our share of Contact Energy's emissions for the nine months of the reporting period that we held a 51.4 percent equity stake. The operated inventory includes emissions only from activities where we have operational control.

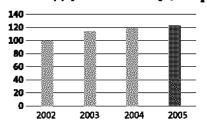
This year, we have extended our reporting to include more detail on our company inventory by providing data on greenhouse gas intensity – a measure of the greenhouse gas impacts associated with a unit quantity of energy, whether it is gas or electricity. The reporting of greenhouse gas intensity for each of our major business activities is in line with our objective to meet growing demand for energy with less greenhouse gas intensive forms of energy such as natural gas or renewable energy.

#### Total supply chain emissions (MtCO,e)



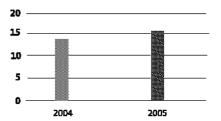
Origin equity-accounted emissions.

#### Total supply chain intensity (ktCO,e/PJe)



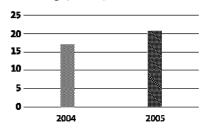
#### Greenhouse gas emissions – Operated basis

Intensity (kt/PJe)



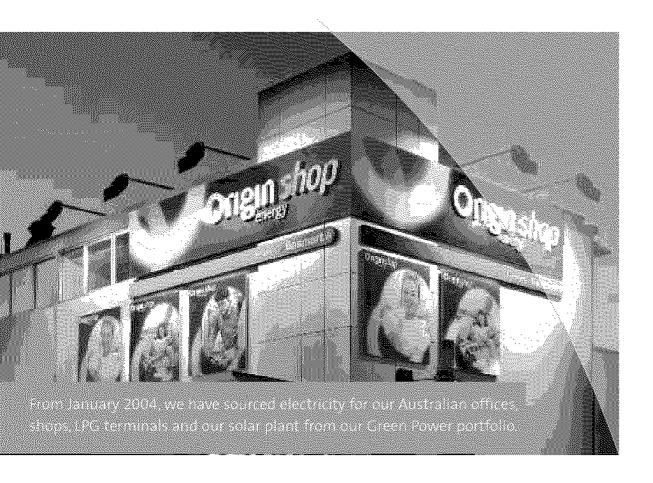
#### Greenhouse gas emissions – Equity accounted basis

Intensity (kt/PJe)



<sup>\*</sup> Excludes Contact Energy.

#### **Environment** Greenhouse gas emissions



#### Objective

To reduce the greenhouse gas intensity of energy production and distribution.

On an operated basis, our 2004/05 greenhouse gas inventory was 2,411 ktCO<sub>2</sub>e, an increase of 9 percent over 2003/04 and an increase of 10 percent on our baseline year primarily due to new production projects in the reporting year. The intensity level, based on our own operations, was 15 kt/PJe which is 13 percent higher than the previous year. The increase in intensity was primarily a result of the commissioning phase of major gas production activities.

On an equity accounted basis, our emissions were 3,613 ktCO<sub>2</sub>e in 2004/05, a 36 percent increase from the previous year. The majority of this increase was due to the inclusion of

our share of Contact Energy's emissions for the nine months of the reporting period that we held a 51.4 percent equity stake. Contact Energy's emissions are predominantly from gas-fired and geothermal power stations which are low greenhouse intensive operations.

The increase in the intensity of energy supplied, measured as kt/Ple was a result of the higher emissions from gas production and distribution on a per unit of energy basis. We reported an overall intensity for the equity accounted inventory of 21 kt/Ple for 2004/05. The inclusion of Contact Energy's generation emissions resulted in a lower intensity overall for the generation activities.

#### **Exploration and Production**

On an operated basis, there was an increase of 21 percent from 558 ktCO<sub>2</sub>e to 675 ktCO<sub>2</sub>e due to the start up of the Spring Gully coal seam gas facility.

In the next reporting period, there should be a reduction in emissions at Spring Gully due to significantly less flaring at the gas plant as a result of the sale of produced gas.

On an equity accounted basis, our greenhouse gas emissions for Exploration and Production increased nine percent to 1,333 ktCO<sub>2</sub>e. Greenhouse gas emissions from our interest in the Cooper Basin represent more than 50 percent of our inventory from our equity portfolio of upstream assets. The Cooper Basin assets are operated by Santos.

#### Generation

The intensity level of our operated generation business increased by three percent to 213 ktCO<sub>3</sub>e/PJe, which includes steam production. It is expected that the greenhouse gas intensity could decrease in the next period as a change of gas supply is in progress at the Ladbroke Grove Power Station due to supply constraints from the Ladbroke gas field. The alternate gas to be supplied from Victorian gas fields via the SEA Gas Pipeline, has a lower carbon dioxide content. Gas to one of the power station units is now being delivered through a new Origin Energy gas pipeline connected to the SEA Gas Pipeline. Conversion of the second power station unit is scheduled to occur in mid 2006.

Based on the lower greenhouse gas intensity of gas via the SEA Gas Pipeline, the changeover project has been accredited under the New South Wales Greenhouse Gas Abatement Scheme, enabling Origin Energy to earn future New South Wales greenhouse gas abatement certificates.

The greenhouse gas intensity level from our equity accounted generation portfolio reduced by about 30 percent in 2004/05 compared with the previous year, as a result of the inclusion of our equity share of Contact Energy's emissions and steam. In the reporting period, the intensity from the combined generation activities on an equity basis was 77 kt/PJe.

#### Networks

Our Networks business operates natural gas networks, mostly on behalf of Envestra – in which we have a 17.5 percent equity share. Greenhouse gas emissions result from the leakage of gas from pipelines within the networks. This leakage is difficult to measure accurately; therefore, we have used total unaccounted-for-gas derived from accounting data. This estimate includes variances related to metering and calibration in addition to actual losses.

During 2004/05, 150 km of mains were replaced as part of Envestra's ongoing commitment to replace older cast iron mains. In 2004/05 Networks'

greenhouse intensity was 11 kt/PJe, an eight percent increase from the previous period.

The increase is thought to be related to variances in the measuring of gas losses, due to variable in-service measurement constraints, which are a small proportion of overall volume of gas flowing through the line.

#### LPG transportation

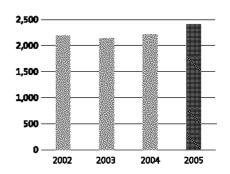
Emissions from LPG transportation come from the combustion of transport fuels – mainly diesel for ships and trucks. In 2004/05, our equity emissions increased from 9 ktCO<sub>3</sub>e due to the full-time charter of two additional supply vessels. These vessels are used to provide LPG to our Pacific and east coast Australian operations.

#### Offices

We are now able to report zero emissions from our Australian offices, shops, LPG terminals and solar manufacturing plant. From January 2004, we have sourced electricity from our Green Power portfolio of wind power contracts. Our budgeted commitment is in the order of \$500,000 per year.

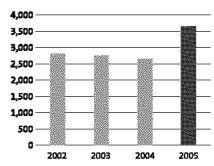
#### Greenhouse gas emissions – Operated basis

Emissions (ktCO,e)



#### Greenhouse gas emissions – Equity accounted basis\*

Emissions (ktCO,e)



<sup>\*</sup> Includes Contact Energy for the nine months of the reporting period.

Sti		

Improve the company's greenhouse gas measurement methodology, audit and report regularly.

Seek economic alternatives for reducing greenhouse gas emissions.

Identify and invest in renewable energy technologies that are economically viable.

Seek economic avenues to reduce fugitive emissions.

#### 2005/06 actions and targets

- Work co-operatively with our joint venture partners to agree on consistent greenhouse gas inventory methodology for all facilities and improve the accuracy and completeness of shared data.
- Progress the proposed gas-fired generation projects.
- Finalise conversion of the Ladbroke Grove Power Station to operate on gas supplied from the SEA Gas Pipeline.
- Secure an international development and marketing partner for SLIVER solar cell technology.
- Replace 151 km of mains throughout the gas networks under management.

#### **Environment** Clean energy choices

#### Objective

To reduce the greenhouse gas intensity of our customers' energy consumption.

Origin Energy offers energy products to help residential and business customers to reduce the greenhouse gas intensity associated with their energy use and to reduce their energy use.

#### Green electricity and offsets

Through Origin Energy GreenEarth, we offer clean electricity from hydro, wind, biomass and solar sources. These generation methods produce electricity with zero greenhouse gas emissions.

Our 2004/05 target was to increase our green electricity customer base to 50,000 billed customers and lift the annual CO<sub>2</sub>e savings to 280,000 tonnes. We exceeded this target, with 55,137 customers at 30 June 2005 and annual CO<sub>2</sub>e savings of more than

311,000 tonnes. Of this amount, 192,073 tonnes was sourced from renewable energy generators commissioned before 1997 and 119,311 tonnes came from predominately new renewable generation projects. We maintained our market-leading position with more customers purchasing green electricity from us than any other energy retailer in Australia.

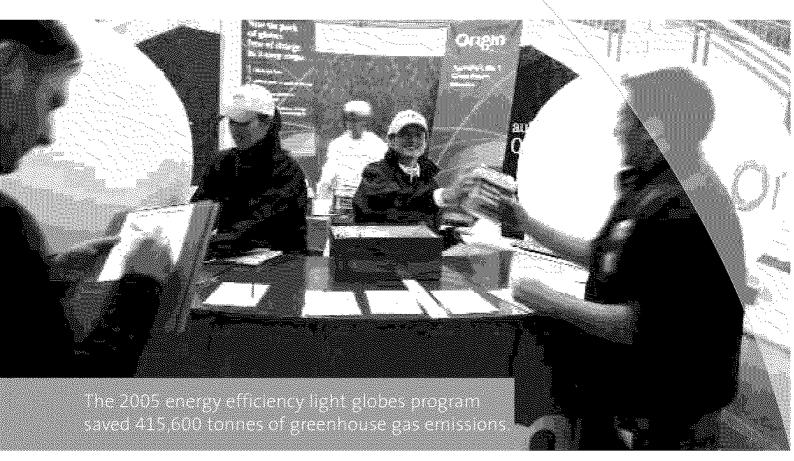
During the reporting period, we purchased 364,868 Renewable Energy Certificates to meet our regulatory obligations and the needs of our green electricity customers, an increase of 46 percent over the previous year.

#### Greenhouse abatement

In June 2002, we entered the New South Wales residential electricity

market. In January 2003, the Greenhouse Gas Abatement Scheme (NSW GGAS) commenced, requiring all electricity retailers within New South Wales to reduce the greenhouse gas emissions associated with electricity purchases. To meet this requirement, Origin Energy has undertaken a variety of greenhouse gas reduction activities.

In 2005, we distributed 831,204 energy efficient light globes to Sydney residents. In accepting a light globe, the recipient signs over the greenhouse credit to Origin Energy, allowing Origin Energy to use it towards our NSW GGAS obligations. The 2005 program will save 415,600 tonnes of  $\mathrm{CO}_2\mathrm{e}$  over the life of the light globes.



In June 2005, Origin Energy received accreditation under the New South Wales GGAS to create greenhouse abatement certificates generated from the gas cogeneration plants at Royal Melbourne, St Vincents and Alfred hospitals.

In November 2004, Origin Energy signed an agreement with Carbon Banc to deliver carbon credits from oil mallee sequestration plantations. At 30 September 2005, Carbon Banc had planted 920 hectares of oil mallee eucalyptus trees in western New South Wales, close to Condobolin, Parkes and Dubbo. Another 80 hectares will be planted early in 2006. When completed, Origin Energy will purchase the majority of the carbon credits generated from these plantations for New South Wales greenhouse gas abatement certificates.

#### GreenEarth Gas

In May 2005, we launched GreenEarth Gas, the first product in Australia to offset the customer's greenhouse gas emissions from natural gas usage and accredited under the Australian Greenhouse Office's Greenhouse Friendly program™. The greenhouse gas emissions are offset by the Yellowbank Flare project which reduces waste methane produced at the Yellowbank gas production facility in central Queensland. By the end of 2005, Origin Energy had approximately 4,500 GreenEarth Gas customers.

During 2005, to assist customers assess the impact of their gas use, we began including greenhouse gas emission information on most residential natural gas bills for customers in Victoria, New South Wales and Queensland. We will provide this information on most residential LPG customer bills by June 2006.



↑ As part of an extensive redevelopment for the 2006 Commonwealth Games, we installed photovoltaic solar panels on the new members stand entrance at the Melbourne Cricket Ground. More than 15 kilowatts of large commercial panels will generate 10 to 15 megawatt hours of electricity each year and reduce greenhouse gas production by 450 tonnes over the system's life.

#### Solar energy

With 30 percent of the national market, we continue to be the Australian retail market leader for installation of grid-connected solar photovoltaic panels with strong sales in Victoria and South Australia.

Grid-connected solar systems enable excess power generated by the panels to be fed back into the national grid and credited to the customer's account, while customers retain all the benefits of connection to the grid.

For 2004/05, we exceeded our installation target of 140 grid-connected solar systems, installing 233 kilowatts of systems. During their estimated 30 year life, these systems will save more than 8,000 tonnes of CO<sub>2</sub>e production.

During the reporting period, large commercial systems were installed at Parliament House in South Australia, the Melbourne Cricket Ground (MCG) and the Yarra Trams Green Depot in Melbourne. In South Australia, we are producing solar panels using our unique new SLIVER technology. This technology uses mono-crystalline silicon to give high performance benefits such as improved output under shady conditions, enabling the panels to operate better in real-world conditions.

We have produced and sold a small number of our unique 10 watt SLIVER panels. During 2004/05, our SLIVER technology won a Banksia Environmental Award, a Global 100 Eco-tech Award, an inaugural Australian Institute of Energy 'Excellence in Energy' Award and a \$5 million grant from AusIndustry's Renewable Energy Development Initiative (REDI) program. We are currently concentrating on manufacturing 75+ watt SLIVER panels for the domestic and international grid-connected markets.

#### Compressed natural gas

Compressed natural gas (CNG) is one of the cleanest burning commercial fuels available. CNG vehicles are quieter and produce less harmful air emissions than their diesel fuelled equivalents.

< To help Origin Energy meet its greenhouse gas reduction targets under the New South Wales Greenhouse Gas Abatement Scheme, we gave away energy efficient light globes at various locations in Sydney, including Sydney Central Plaza pictured left. When accepting the light globes, the recipient signed a form giving Origin Energy the right to create greenhouse abatement certificates from the greenhouse gas reduction that results from the use of the light globes.</p>

#### **Environment** Clean energy choices

We provide refuelling infrastructure for natural gas vehicles and, during 2005, we developed significant facilities in Western Australia. Our refuelling facilities at the Morley and Bayswater bus stations began operations, and we opened a temporary facility at the Fremantle bus depot. We are constructing new facilities at the Fremantle, East Perth and Southern River bus depots.

#### Refrigerant gases

Some refrigerant gases used in truck and car air conditioners and commercial freezers contribute to greenhouse gas emissions and cause ozone depletion. We market refrigerant gases that are more environmentally friendly than traditional gases.

During the reporting year, our sales of environmentally friendly refrigerants helped our customers to save 27,700 tonnes of CO<sub>2</sub>e.

#### **Energy efficiency**

For seven years, our energy efficiency team has provided advice to a wide range of businesses on reducing gas and electricity consumption. The team has developed a collaborative approach to identifying opportunities and implementing energy saving actions.

During 2004/05, the team helped our customers to identify energy efficiency projects that enabled them to reduce greenhouse gas emissions by more than 54,000 tonnes of CO<sub>2</sub>e.

This includes projects with a major packaging group and a major steel products group.

#### Strategies

Provide a range of competitively priced clean energy products and services, which allows customers to choose their level of greenhouse gas intensity.

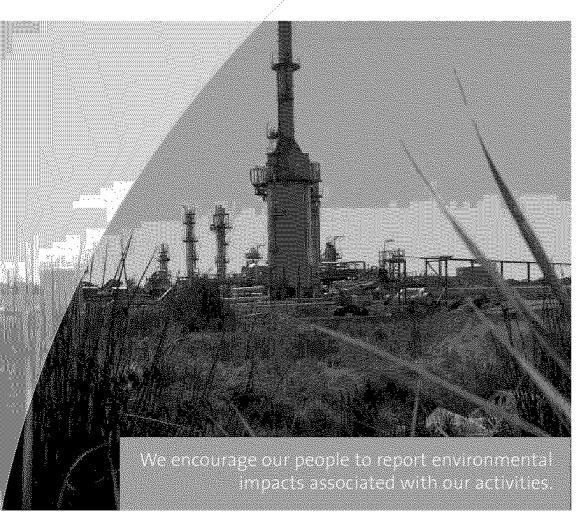
#### 2005/06 actions and targets

- Develop a CO, offset LPG product to allow customers the choice of CO. neutral LPG by December 2006.
- Increase green electricity customer base to 80,000 billed customers, saving .320,000 tonnes of CO<sub>2</sub>e by June 2006 – including 130,000 tonnes from Green Power approved electricity.
- Increase GreenEarth Gas customer base to 6,000 customers billed with annual greenhouse gas savings of over 10,000 tonnes of COze by June 2006.
- Achieve greenhouse gas savings of 39,000 tonnes of CO<sub>2</sub>e from the environmental refrigerants portfolio.
- Identify further greenhouse gas abatement opportunities.
- Finalise power purchase agreement for the Boral landfill site at Deer Park.
- Reduce a further 300,000 tonnes of greenhouse gas emissions in New South Wales by giving away 60,000 energy efficiency packs (shower heads and light globes).
- Construct CNG facilities at Fremantle and Southern River bus depots

so they can measure and reduce the

- Provide information for our customers 🛬 Reduce customer greenhouse gas emissions by an additional 20,000 tonnes of CO₂e through energy efficiency consulting services. ........
- carbon intensity of their energy use. Include greenhouse gas emissions on LPG bills by June 2006.

#### **Environment** Environmental management



The wetlands at the Lang Lang Gas Plant treat rainfall run off from the gas plant process areas and surrounding land. A combination of plants, microbes, sunlight and settlement enable wetlands to treat water.

#### Objective

To take all reasonable steps to eliminate or minimise any adverse impact that our activities have on the environment.

Responsible environmental management is fundamental to Origin Energy's approach to sustainable development. Our Health, Safety and Environment policy commits us to company-wide standards of environmental management that are appropriate to our business. Our policy is to understand and minimise our impact on the environment in all our activities. Our primary intention is to continually improve our environmental performance.

Our company-wide approach to managing specific environmental

issues is set out in our Health, Safety and Environment Management System.

Each of our sites operates in accordance with company-wide health, safety and environment policies and standards. These policy and standards are implemented through site-specific programs, procedures and initiatives.

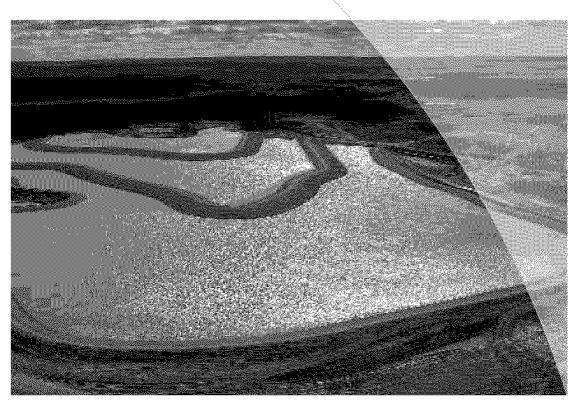
#### Our environmental impacts

We aim to comply with all environmental regulations and conditions attached to our approvals to operate, and promptly report any non-compliance to relevant authorities.

Our activities, through unplanned events such as accidental spills or discharges, have the potential to impact on the environment. Typical environmental impacts associated with exploring for, and producing, oil and gas, generating electricity and managing utility networks include:

- · Emissions to atmosphere.
- Impacts associated with generating, storing and disposing of waste and by-products including produced water.
- · Disturbed land.

#### **Environment** Environmental management



Our Spring Gully Coal Seam Gas Plant produces some 677 megalitres of water, with 20 percent being reused for drilling and construction. The remaining water is diverted to evaporation ponds.

We encourage our people to report environmental impacts associated with our activities. To increase our understanding and improve our company-wide performance, we maintain a register of all identified environmental incidents. Such incidents are classified from level one – lowest impact – through to level five – greatest impact – in line with categories on our risk matrix. These levels are detailed in the Incident Classification table.

Of the 167 incidents we identified during 2004/05, 154 were classified as level one, 12 were classified as level two and one was classified as a level three. We did not record a level four or level five incident during the year.

Reporting all known incidents enables us to provide a greater level of transparency and provides us with analysis opportunities to help prevent higher level incidents. Level one incidents have limited impact on the environment. Examples include small oil or chemical spills that are fully contained and cleaned up, along with individual noise or odour complaints.

Incident classification	Example	Incidents
Level one incidents with minor consequences, requiring a local response and causing no significant environmental impacts.	Small hydrocarbon spills which are successfully contained and cleaned up.	154
<b>Level two</b> Events contained within a site, resulting in short-term impact but not affecting ecosystem function.	Burst irrigation lines with the loss of significant quantities of produced water.	12
<b>Level three</b> Offsite release that is contained or an immediately reportable event resulting in short-term impact to ecosystem function.	A significant hydrocarbon refease to air, land or water in an emergency situation.	* ************************************
<b>Level four</b> Recoverable major offsite release, resulting in impairment of ecosystem function or habitat.	Fire within a processing plant or oil platform.	0
Level five Uncontained, long-term and serious environmental degradation or damage, resulting in lasting impairment to an ecosystem function or habitat.	Undetected and uncontained leak of a significant quantity of oil from a pipeline into a waterway or other sensitive area.	0

We classified our most serious incident as a level three. This incident involved 1,000 litres of diesel spilling onto our unmanned Yolla Platform, in Bass Strait, during a storm. Classified as a level two incident, sampling indicated that the sewage treatment plant processing waste from the Spring Gully construction and operations camp was not working adequately, resulting in breaches of environmental regulations. Modifications have been made to the process to prevent further breaches.

#### Produced water

Water is a common by-product of oil and gas production, usually found in hydrocarbon reservoirs. Generally saline, this produced water also contains hydrocarbons and is unfit for human consumption or irrigation. During 2004/05, we produced 800 megalitres of water as part of our oil and gas production, a 50 percent increase on the previous year.

More than half the water we produced comes from extracting gas from coal seams by reducing ground water pressure within coal seams to liberate gas from the coal's surface.

Our largest coal seam gas project is at Spring Gully, in the Bowen Basin. During 2004/05, we produced some 677 megalitres of water at Spring Gully, reusing some 20 percent for drilling and construction. We divert the remaining water to evaporation ponds. Groundwater modelling indicates that extracting this water will not have a significant impact on other potential ground water sources. We will implement ground-water monitoring at Spring Gully to confirm the ground-water modelling.

We are assessing plans for reusing produced water at Spring Gully. During the reporting period, we completed a small reverse osmosis trial which indicated that the produced water can be treated to a high quality, making it suitable for reuse – such as for irrigation. Initial modelling shows this process may be commercially viable and we are investigating full-scale processes. Alternatively, the water may be used for cooling in a proposed power station at Spring Gully.

#### Air quality

During 2004, detailed analysis of the gas stream from the Yolla development wells in Bass Strait found impurities such as benzene, toluene, xylene and hydrogen sulphide. We installed an incinerator to burn these pollutants, which we will test when the Yolla plant is operational.

During the 2004/05 period, SO, levels were in line with production. However, there was an increase in NO, emissions from our generation assets of 29 percent. Ladbroke Grove had a 20 percent increase due to a lower heat rate from running at a reduced load as variations in heat can cause variations in NO, emissions. There were higher NO, emissions, in line with increased electricity generation at our Roma and Mt Stuart power facilities.

#### Noise and acoustics

We received two noise complaints.
One was the result of our Ladbroke Grove
Power Station in South Australia, running
at reduced output that increased noise
for a limited period. Noise levels were
not above licence requirements. A noise
complaint was also received from a
landholder at Spring Gully. Follow-up
noise monitoring was conducted.

#### Biodiversity

We work to understand flora, fauna and habitat diversity at each of our operations and developments, along with any potential impacts from our activities. Our most active development site is Spring Gully, and so our biodiversity monitoring programs are more comprehensive at this site. Listed as a threatened species, the squatter pigeon is a medium-sized ground-dwelling bird that has been sited in the Spring Gully area. We conduct fortnightly monitoring to record the prevalence of this species.

In 2004/05, vegetation assessments were completed for the construction of gas supply pipelines around the Victorian towns of Hurstbridge, Bairnsdale and Paynesville and on the Mornington Peninsula. Vegetation surveys are conducted within environmental management plans and are used to avoid environmentally significant areas and determine necessary environmental controls.

#### Wetlands - Quarantine Power Station

The Mangroves of Torrens Island near Adelaide, South Australia, are home to a variety of birds and other animal species. Quarantine Power Station, located on the northern end of the island, has recorded at least 19 native species of birds within its plant boundary that regularly visit the station's man-made wetland.

In February 2006, two native species of frogs, the Spotted Grass Frog and the Eastern Banjo Frog, were introduced to the wetland in an attempt to increase biodiversity. Native vegetation has also been planted in and around the site, and it is hoped that this will encourage native birds to feed and remain in the area.

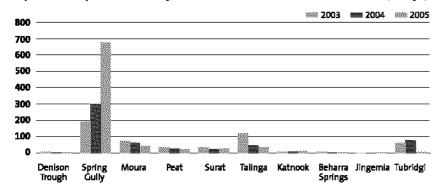
#### Wetlands - Lang Lang Gas Plant

Wetlands are often utilised to improve the quality of water discharged to the environment.

At our Lang Lang Gas Plant in southern Victoria, an artificial wetland has been created to ensure all rainfall runoff is of very good water quality before it leaves the site.

The wetlands at Lang Lang treat rainfall runoff from the gas plant process areas and surrounding land. Gas plant process

#### Operated exploration and production facilities – Produced water (ML/yr)



#### **Environment** Environmental management

flows of water are treated differently, they are managed in fully-enclosed systems and are not discharged to the environment.

A combination of plants, microbes, sunlight and settlement enables wetlands to treat waste water.

A continual monitoring program is conducted to ensure the wetlands are operating effectively.

#### Green Office Program

In its fourth year, our Green Office Program operates across nine sites. Over this time, program initiatives have resulted in reduced office waste and promotion of recycling. During 2004/05, we reduced office paper consumption by 5% saving some \$11,500. We also diverted some 60 tonnes of waste from landfill. Integral to these reductions are volunteer-driven campaigns promoting recycling, green products, double sided printing and less printing.

#### Land rehabilitation

In the 2004/05 reporting period, approximately 373 hectares of land were disturbed for oil and gas exploration and development and more than 218 hectares rehabilitated.

As part of our Spring Gully coal seam gas development in central Queensland, we built a gas transmission pipeline running south, from Spring Gully to Wallumbilla.

An 87 kilometre easement, averaging 20 metres in width, was prepared for

the pipeline works. Most of the area had been used for grazing or cropping, and was dominated by non-native buffel grass, so minimal vegetation clearing was required.

During 2005, we backfilled the pipeline trench and began rehabilitation works. Our aim is to provide a habitat similar to the surrounding landscape where appropriate – given areas are cropped or used for grazing. Rehabilitation is progressing well; however, we will continue regular monitoring until vegetation is re-established, with additional monitoring after significant

#### Remediation - legacy programs

Gas and related by-products were manufactured from coal at 14 of our Australian sites from the late 1800s through to the 1970s. Although feedstock and by-product management was in line with accepted practices of the day, these sites have a legacy of contamination that needs to be managed to today's standards. Our aim is to rehabilitate these sites in line with community expectations, legal obligations and our financial objectives. Alternatively, we may divest sites with conditions requiring rehabilitation.

During 2004/05, we made considerable progress:

 We continued remediation works at our Newstead site in Queensland, where we are removing contaminated

- soil to an approved landfill. At 30 June 2005, we had removed 368,800 cubic metres of soil and expect to complete the remediation by December 2006.
- At our Launceston site in Tasmania, we completed site remediation work, which included removing 650,000 litres of tar to a recycling depot. We will continue to monitor groundwater for 18 months to monitor the success of this program.
- In October 2005, we entered into a conditional contract for the sale of our Sandgate site in Queensland. The contract requires the purchaser to remediate the site to the level required for residential use within two years.
- At our Osborne site in South Australia, we found that metals were migrating toward the Port River. We undertook a remediation program and, to confirm this program's success, we will continue to sample ground water into the next reporting period.
- Remediation is complete at an Ipswich site in Queensland. In June 2004, we sold this site under an agreement requiring the purchaser to carry out remediation works.
   All contaminated material has been removed from the site and a major shopping centre and community redevelopment is being built on the site and adjoining land that was part of the Ipswich railway yards.

#### Strategies

#### 2005/06 actions and targets

Ensure all environmental impacts are appropriately assessed and all environmental approvals are obtained.

- Obtain all approvals for the Kupe Gas Project during the March quarter of 2006.
- Complete development approvals for power projects at Mortlake (Victoria) and Spring Gully (Queensland) by mid 2006.

Comply with all environmental conditions of approval and promptly report any non-compliance to relevant authorities.

- No fines or prosecution under environmental laws, regulations or licences.
- No (level three) spills of hydrocarbon and produced water.
- Commence reverse osmosis water trials at the Talinga Gas Plant in central Queensland.
- · No noise complaints.

On completion of use, ensure land is managed and/or rehabilitated to appropriate environmental standards.

- Monitor all contaminated sites to ensure appropriate remediation plans are in place and obtain acceptance from relevant state regulatory authorities for those plans.
- Monitor the groundwater at the former gas manufacturing site at Osborne,
   South Australia, to assess the impact of metal stabilisation works.
- Complete Newstead remediation works by December 2006.
- Develop management plans for Port Pirie by September 2006 and Broken Hill
   by June 2006 to be submitted to regulatory bodies.

## **Social** Our employees

#### Objective

To provide and maintain a satisfying and rewarding working environment for all our employees.

Origin Energy employs more than 3,200 people across Australia, New Zealand and the Pacific.

Since listing on the Australian Stock Exchange, in February 2000, we have experienced significant growth. By June 2005, our employee numbers had grown by 51 percent. To accommodate our larger organisation and acquisition of a controlling interest in Contact Energy, we implemented an organisational restructure from February 2005.

When we listed, we articulated a set of commitments and values to provide guidance for the way we conduct our business. In light of the growth of the company we reviewed our commitments and values and added new principles to guide decision making.

In December 2005, we also published a refreshed Code of Conduct to guide behaviour. The code, which includes our commitments, principles and values is published in this report on page 4.

The communication and embedding of the Code of Conduct within the organisation will be ongoing through 2006/07.

#### Employment indicators\*

One of our main objectives is to provide and maintain a satisfying and rewarding work environment for all our employees to assist us in retaining our workforce. Our retention measures include employee turnover and absenteeism.

#### Employee turnover

Voluntary turnover increased slightly from 13 percent to 14.5 percent during 2004/05. This includes turnover in our customer contact centres where the rate was just under 30 percent. Excluding the contact centre data, the voluntary turnover rate was 13 percent. Approximately 10 percent of employees who leave the contact centres transfer to other departments within Origin Energy. The development of programs to increase retention rates in our contact centres continues.

As reported last year, we collect information from employees leaving the business, to better understand their reasons for departing and to assist to identify areas in which we can target retention strategies.

During the period, the reported primary reasons for leaving remained steady, with career opportunity as the most common reason, followed by higher salary, personal/family reasons and career break. The statistics are analysed at a business unit level to assist us identify trends.

Unplanned absenteeism improved from 7.5 to 5.5 days per employee. This includes the customer contact centre operations where rates improved from 13 to 11 days per employee.

#### Retaining and developing key talent Recruitment

We face significant challenges in recruiting and retaining personnel, particularly for oil and gas exploration, operations and projects. Our industry, and the resources sector, have grown significantly – yet the supply of skilled



Does not include employees in the Pacific and New Zealand.

#### Social Our employees

people and demand for Industry training courses in Australia is shrinking rapidly. Adding to this, skilled professionals have been lost to overseas opportunities.

We are looking at growing the market of skilled professionals through development opportunities to complement external recruitment activities. During 2004/05, new recruits from outside the company represented 19 percent of our workforce. Internal promotions and transfers increased from 14 percent to 15 percent.

Work-life balance – 2005 survey

In May 2005, we conducted an employee survey on work-life balance to help us understand the importance and perceptions of company performance on flexible work arrangements. The results will assist us in developing programs to improve workforce retention.

In the survey, employees nominated the issues they saw as most important in regard to work-life balance. In order of importance, they selected flexible hours and provision of time in lieu. Flexibility around hours worked per day was nominated as the most important issue.

As a result of this survey and feedback from the business, we developed draft work-life balance initiatives which are yet to be fully implemented. However, in October 2005 we launched a purchased leave option that allows our employees to purchase up to four weeks leave per year. Other initiatives include extending parental and carer's leave from five to eight days per year and leave for adoption.

The implementation of some of these initiatives assisted us in achieving successful accreditation for the Equal Opportunity for Women in the Workplace Agency (EOWA) Employer of Choice program, in February 2006.

Whilst the Employer of Choice accreditation is awarded based on measures that increase diversity in the workplace and support females in particular, many of our initiatives which the award was based on, are in fact supportive of all employees.

Women in the workplace initiative Our Sydney office's women in the workplace initiative – profiled in our 2004 Sustainability Report – is in its second year. Retaining a core team of 11 volunteer employees, the initiative's working group has made significant progress in developing and implementing programs.

Achievements in the first year include improved networking opportunities, with a focus on women, improved induction experience, increased focus by both management and staff on career; and improved consistency and use of human resources policies currently in place.

One initiative was to pilot a Buddy Program which matches experienced staff with new recruits (male and female) to assist with their transition into our workplace. See the case study on this page for more information.

#### Feature: Buddy program



The Buddy Program is a formal three month program being piloted within our Australian Operations group in Sydney.

New employees 'Buddies' are partnered with experienced employees, 'Buddy Guides', from complementary business areas. This pilot program, involving 20 Buddies and 20 Buddy Guides, began in April 2005.

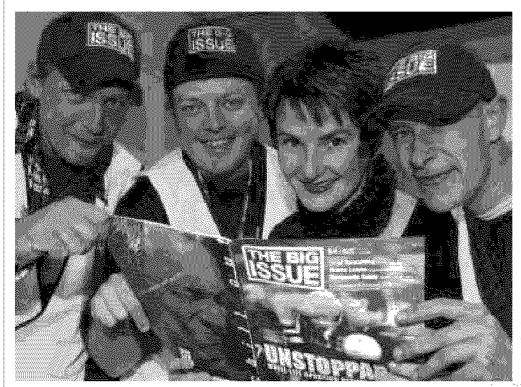
The program gives new employees a head start with an initial, informal network of useful contacts. Buddy Guides helped new employees connect quickly to Origin Energy by sharing their knowledge and experience, and providing an

additional source of guidance and support.

A post-pilot survey drew very positive responses for Buddies and Buddy Guides. Most Buddies agreed that they gained valuable assistance settling into their new workplace. The Buddy Guides agreed that the program should be offered to new recruits and were keen to continue to participate in the program.

↑ Mary Whyte and Cristina Garriel from Australian Operations were part of the pilot Buddy Program in Sydney.

#### Feature: The Big Issue



Natalie Bennett from our Major Development Projects group is pictured with The Big Issue vendors in Adelaide.

The Big Issue – one of our community partners and a beneficiary of our Matched Giving Program – is an independent street magazine.

It is sold on the streets of Australia's major cities by authorised vendors who are homeless or unemployed.

The Big Issue provides 'a hand up, not a hand out' to its vendors. Our support has led to uniforms that better protect vendors from traffic and better equip them to face the elements, while providing safety standards similar to those we offer our employees. The new uniforms

include safety vests, t-shirts, jumpers, rain jackets, caps, sunhats, beanies and magazine bags.

We also provide safety expertise to The Big Issue, with occupational health and safety advice and energy saving improvements to all The Big Issue offices through our professional volunteering program.

#### Training and development

During 2004/05, we helped 108 employees to pursue further education by reimbursing course fees. These employees included 44 studying for an MBA or Masters degree, 33 studying for other postgraduate qualifications and 31 working toward undergraduate qualifications.

We also support training and development with courses on financial skills, professional development, computer and technical skills, and

training related to health, safety and the environment. During 2004/05, our employees attended 48,971 hours of training.

#### Employee assistance

Through our employee assistance program, we provide our people with access to professional counselling where they can discuss work and professional issues in confidence. During 2004/05, this program was accessed by 140 employees for, on average, two hours of counselling.

#### Workforce profile

During 2004/05, we provided a questionnaire to each new employee to encourage them to volunteer information on their cultural background, foreign experience, language abilities, educational qualifications, disability and age.

This greater understanding allows us to better target development programs to meet specific needs. Diversity adds value to our business – diversity of thought and opinion drives better decision making.

#### Social Our employees

Age The average age of our workforce is 39.5 years. During 2004/05, of all promotions 17 percent went to employees over 45 years of age and seven percent went to employees over 50 years of age.

Gender Women hold 27 percent of management and professional positions within Origin Energy. This is a marginal increase from 26 percent last year.

#### Industrial action

For the third successive year, no days were lost due to our employees taking industrial action. However, industrial disputes by construction contractors on our BassGas Project in Victoria contributed to delays in that project.

#### **Employee participation**

#### **Matched Giving Program**

As part of our corporate community investment program, we provide opportunities for employees to assist charitable organisations through our Matched Giving Program. Launched in

December 2004, the program enables employees to donate money through payroll deductions.

As part of our corporate community investment program, we provide opportunities for employees to assist charitable organisations through our Matched Giving Program.

Our community partners are The Salvation Army, The Big Issue, the Australian Conservation Foundation, Clean Up Australia, Royal Flying Doctor Service, Inspire Foundation and Oxfam Australia. In the first year, we committed to matching employee donations up to a total of \$100,000.

By December 2005, our employees had donated a total of \$107,000 which we partially matched with \$100,000. Donations for tsunamirelated projects contributed \$87,000 to the amount raised by employees.

#### Volunteering

We offer our employees access to a range of volunteering opportunities developed with our community partners and other organisations. More than 780 hours of endorsed volunteering leave was taken during 2005.

Volunteering activities included Oxfam's Walk Against Want and 100 km Trailwalker event, tree planting with Landcare, native animal research with The Australian Conservation Foundation at Healesville Sanctuary, a mentoring program with the City of Hume Victoria, for the long-term unemployed, interview training for the unemployed through The Salvation Army and health and safety audits for The Big Issue and The Salvation Army.

Strategies	2005/06 actions and targets
Retain and develop key talent.	<ul> <li>Identify a framework for retaining and developing key talent.</li> <li>Define further talent and resource requirements.</li> <li>Assess opportunities for graduate program and phased retirement options.</li> <li>Improve the completion, appropriateness and effectiveness of career development plans.</li> </ul>
Develop an organisational culture to assist organisational growth.	<ul> <li>Conduct a culture survey to assist in the understanding of the existing culture.</li> <li>Identify programs to increase number of women in management and non-traditional roles.</li> <li>Identify opportunities to improve employee communication.</li> </ul>
Continue to improve efficiency and minimise disruption to the delivery of products and services resulting from industrial disputes.	No lost time, due to industrial action.
Encourage and support employee participation in community-based activities that form part of the company's corporate community involvement.	Review employee-participation activities to ensure they are in line     with the company's community involvement program and employee     expectations.

#### Social Health and safety



#### Objective

To eliminate or manage hazards and practices in our business that could cause accident, injury or illness to people, damage to property, or unacceptable impacts on the environment.

Our Health, Safety and Environment Policy guides our approach in this important area. We strive for a consistent approach to managing health and safety across the company. All our sites are required to manage health and safety matters in accordance with company management system standards. These standards are supplemented by site and task-specific procedures.

In February 2005, as part of our commitment to continually improve our health and safety management systems, we developed a company-wide risk matrix to assist us to identify potential gaps or inconsistency. Our Operational Risk Committee reviews health, safety and environmental risks

as part of broader operational risk management. Risks analysed include those associated with safety, the environment, disruptions to customers' supply, damage to our reputation, breaches of law or prosecutions as well as our impact on communities. Risk mitigation efforts are reported to our Operational Risk Committee quarterly, with the most significant risk events reported to our Board. We have risk treatment plans for risk events rated high and above. We track progress and report on these plans through our risk register and the Operational Risk Committee.

#### Employee safety

We continue to concentrate on reducing the frequency and severity of employee lost-time and moderate medical treatment injuries. During 2004/05, we improved in all areas relating to employee injury:

- Our lost-time frequency rate improved 4 percent from 2.6 to 2.5 lost-time injuries per million hours worked.
- Our total reportable case frequency rate, which includes all lost-time and medical treatment injuries, improved 17 percent from 20.7 to 17.1.

#### Social Health and safety

- Our lost-time and moderate medical treatment injury rates improved by 28 percent, from 7.4 to 5.3 per million hours worked.
- Average days lost per lost-time injury was 10.4, compared with 13.6 for the previous year. This indicator excludes minor injuries to encourage employees to seek early medical treatment.

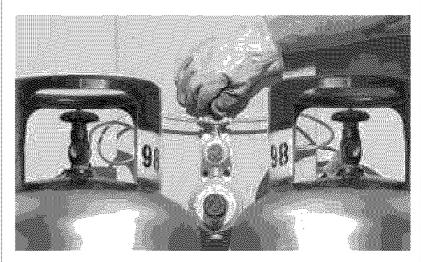
Just over 50 percent of our employee lost-time injuries come from our clerical and administration areas, while most moderate medical treatment injuries are from field operations. Most of our injuries relate to sprains and strains.

We also report near-miss incidents — events that have the potential to, but do not, result in injury. Near-miss reporting is a useful learning tool, providing opportunities to review operations and processes for similar risks and implement preventative measures. Significant near-miss reporting indicates good safety practice and awareness of potential workplace hazards and risks. During 2004/05, we reported 81 near misses. Improvement actions are identified and tracked to completion to minimise the risk of the recurrence of the incident.

In 2004, our LPG business faunched an intensive safety communication program in Australia, New Zealand and the Pacific region. In 2005, this program was extended across the Australian Operations group. We have used posters, payslip messages, newsletters, brochures, videos and forums to raise safety awareness.

Our Risk Register and Business Unit Risk Management plans identify emergency response scenarios. During the reporting period, we conducted 148 crisis and emergency response exercises, including exercises with external emergency management organisations.

#### Feature: Blue-top cylinder safety



There is a serious safety risk associated with incorrect use of LPG liquid withdrawal cylinders.

Identified by the bright-blue tops and warning labels, these cylinders are mainly used for decanting. The blue tops operate differently to vapour withdrawal cylinders used for LPG appliances in homes and businesses. Connecting blue tops to standard LPG appliances can result in explosion or fire.

We are committed to minimising the serious safety risks associated with the confusion between the two types of cylinders. Over two years, we recorded four cases of blue tops being collected by customers in error. Fortunately, all cylinders were recovered without incident.

During 2004/05, we introduced three measures to improve safety:

 We educate authorised dealers on the risk and management of blue-top cylinders.

- At point-of-sale, blue-top cylinders are chained together to prevent customers taking a cylinder in error.
- We have begun a program
  to change blue-top cylinder
  connection valves so that they
  cannot be connected to LPG
  appliances designed for vapour
  withdrawal cylinders. We expect
  all valves will be changed by
  December 2006.

We have supported these actions with a communications campaign. We issued a safety alert to all LPG employees and included information to improve employee knowledge and understanding of the potential safety issues in internal safety videos. Our authorised dealers also received the safety alert, which was followed by a phone call from their account manager.

#### Contractors

Another area we concentrate on is to manage contractor safety consistently. Initiatives include:

- reviewing our contractor management procedure to apply our safety practices across our business consistently.
- improving reporting of contractor incidents.
- changing the employee share plan's performance measure from July 2005, to also include contractor lost-time injuries. Previously, employee rewards were based only on improved employee safety performance. Details of the employee share plan are reported on page 39.

# Our aim is to carry out all work in public areas with due consideration for community safety.

During 2004/05, we recorded 15 contractor lost-time injuries; up from 12 reported in the previous year and 12 moderate medical treatment injuries, compared with 17 for 2003/04. During the reporting period, we employed 2,053 contractors across our business.

In Victoria in August 2004, a contractor sustained serious injuries, while working on the side of a road, when he was struck by a vehicle. This incident resulted in the contracting company being prosecuted for breaching the Occupational Health and Safety Act (Vic). Further charges against Origin Energy are to be heard in 2006.

As reported last year, in June 2004 four contractors received scalding injuries in an incident at the Tarantula 1 gas well in Western Australia. Following internal and external investigations, 35 action items were developed and implemented to improve the safety management of drilling operations. An important area identified for improvement was retaining and training contractors. In conjunction with our rig contractor, we have developed and implemented, a safety, training and retention scheme designed to deliver safer outcomes and improve safety culture through crew retention and training and meeting set performance measures.

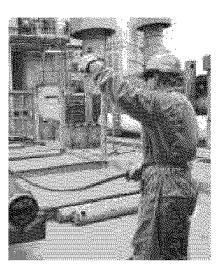
#### Customers and community

Our LPG group launched a national program to instruct our 500 authorised dealers on safe operating procedures for handling, storing and distributing LPG products. As at 30 June 2005, some 55 percent of our authorised dealers had attended these sessions. We anticipate that the remainder will attend the program during 2006.

The LPG group also updated and distributed guidelines for customers, setting out procedures and safety information for decanting, filling and exchanging LPG cylinders.

Our aim is to carry out all work in public areas with due consideration for community safety. In late 2004, a company vehicle from our LPG business hit a young girl crossing the road in Papua New Guinea, tragically, resulting in her death. Following the accident, we provided assistance to the family.

During 2004/05, we received three new personal injury claims, two of which we have settled. Three claims from prior periods were settled, and two remain to be settled.



#### Strategies

Continuously improve the Health, Safety and Environment Management System.

#### 2005/06 actions and targets

- Complete an external audit of the implementation of the Health, Safety and Environment Management System across the business by June 2007.
- Review highest operational risks against the strategic risk plan.
- Reduce employee lost-time and moderate medical treatment injuries and contractor lost-time injuries per million hours worked by 10% from 4.9 to 4.4.
- Review major hazard facilities, and isolation and lockout and confined space entry processes across the organisation by December 2006.

#### Social Our community



#### Objective

# To maintain community support and goodwill for the company's activities.

Origin Energy has over 150 sites located in or near communities in Australia, New Zealand and the Pacific region.

We develop and maintain community support and goodwill to underpin our activities in communities where we have, or expect to have, a major presence. Our community strategy is structured so that it is consistent across our business. During 2004/05, we drafted regional community involvement guidelines, to provide a framework for developing strategies in communities in which we have major involvement. The case study on page 33 details some of our activities around the development of our Spring Gully coal seam gas operation.

Engaging with local communities is an essential component of any stakeholder consultation program. In January 2005, we released our Community Consultation and

Communications Guidelines to ensure our approach to liaising with communities is co-ordinated and consistent across our operating and development divisions.

Our approach, outlined in the guidelines, is to liaise with communities by promoting open, transparent and responsive communication. We have used the guidelines in developing communications plans for projects being developed during 2005.

#### Projects

#### Kupe Gas Project

We operate, and have a 50 percent interest in, the Kupe Gas Project in New Zealand's Taranaki Basin. Onshore regulatory approvals were granted in October 2005 after extensive community consultation with the local iwi (traditional landholders), local government, regulatory authorities and other stakeholders, and following

the completion of an assessment of environmental effects statement. One appeal was received by a group representing commercial fishing interests, concerned about the impact of a proposed fishing exclusion zone, but has since been withdrawn. Later in the year, outstanding offshore consents were granted, concluding one fundamental pre-requisite for the approval of the project.

In November 2005, on behalf of the Kupe Project's joint venture parties and in partnership with the South Taranaki District Council we awarded more than \$30,000 in community grants to six organisations in the South Taranaki region. The grant recipients were Surf Lifesaving Taranaki, Cape Egmont Coast Guard, Junior Engineering and Technical Society, Manaia Women's Institute, Manaia Primary School and Victim Support South Taranaki.

The grants aim to recognise and support the important contribution made by community organisations in the Taranaki region. The concept will be assessed to understand if it is transferable to other regional areas.

#### Proposed Spring Gully and Mortlake power station projects

In late 2005, we released an environment impact statement for our proposed 1,000 megawatt power station at Spring Gully in Queensland, which would utilise natural gas from the nearby coal seam gas fields. We also released an environment effects statement for our proposed 1,000 megawatt natural-gas-fired power station at Mortlake in Victoria.

The aim of these documents is to identify any potential environmental, cultural, social and health impacts and assess their significance. The documents involve a comprehensive range of environmental, heritage, social and economic impact studies.

Relevant state government bodies monitor the development of these statements, as well as co-ordinating formal comment and feedback from regulatory authorities and the public. In parallel with the formal process, community consultation is ongoing to inform the public and project stakeholders about the project, its progress and most importantly to seek community feedback. We encourage public participation and comment during these approvals processes.

#### **BassGas Project**

The BassGas Project will deliver gas from the Yolla gas field in Bass Strait to Victorian gas markets. Community consultation for our BassGas Project continues through the community environmental liaison group, which meets periodically to discuss any environment, safety or amenity issues associated with the project.

#### Feature: Spring Gully development

In June 2005, we commissioned the Spring Gully Gas Plant, 90 kilometres north of Roma in central Queensland.



Origin Energy
Managing Director,
Grant King (left), is
pictured with the
Premier of Queensland,
the Hon Peter Beattie,
at the opening of the
Spring Gully Gas Plant.

The plant will supply gas to Queensland, New South Wales and South Australia.

Origin Energy has invested both directly and indirectly in the local community surrounding its Spring Gully operations. We have funded the Big Rig oil and gas educational and tourist facility in Roma and our preference is to employ locally, and support local businesses. During 2004/05, we also employed local university students and school leavers as vacation students.

Throughout the Spring Gully development we met regularly with neighbouring landowners and local councils to keep everyone informed of the development's progress. We also published monthly newsletters which were distributed within the local community.

Aboriginal cultural heritage management agreements were entered into with the registered native title claimants in the area – the Mandandanji people and the Iman people in 2002 and 2003. These ongoing agreements ensure the involvement of traditional owners in the protection and preservation of indigenous cultural heritage on and around the project site.

On 25 November 2005, the Queensland Premier, the Hon Peter Beattie, officially opened the plant at a ceremony attended by neighbours and traditional owners, government and regulatory authorities, customers and contractors.

# Social Our community

#### Rural assistance

Recognising the special needs of drought-affected rural communities, we have been running a rural assistance scheme in New South Wales since July 2003. The program now involves 23 counsellors from 15 rural counselling services. During 2004/05, through the scheme, 160 grants were made with a value of \$40,000, bringing the total funds distributed to householders experiencing financial hardship as a result of the drought to \$62,750.

### **Educational programs**

We support educational programs that help students to understand how they can contribute to energy saving and to be discerning and responsible energy consumers.

The Home Energy Project is a teacher's resource developed to raise student awareness of the importance of saving energy and reducing greenhouse gas emissions. The program continues to attract high demand from teachers with more than 1,733 kits being

requested by 952 educational institutions in Victoria and South Australia.

During the reporting period we continued to sponsor the Centre for Education and Research in Environmental Strategies' (CERES) educational park in Melbourne and the Ollie Saves the Planet program. CERES provides energy education programs to visiting school groups and in 2004/05 over 1,000 educators participated in Ollie Saves the Planet professional development sessions.

### Government policy and regulation

The aim of our dialogue with the Australian and New Zealand governments and Australian state governments is to promote a sustainable and competitive energy industry. We have made submissions to policy and regulation reviews and enquiries relating to industry structure, climate change, customer financial hardship, energy efficiency and corporate social responsibility.

We have taken a leadership role in debating the implications of a carbon constrained future and in advocating policy frameworks that provide greater certainty for the development of gasfired and renewable energy generation. Developments consistent with this position include:

- Unanimous state and territory support for a national emissions trading scheme. The states have set up an inter-jurisdictional working group on emissions trading and, in November 2005, we developed a submission as part of the first round of consultation.
- Extension of the solar photovoltaic rebate program for another two years.
- Development of draft best practice principles across Australian states for handling customers in financial hardship.

# Strategies

# Maintain an open and constructive approach to gaining access to land and resources.

# 2005/06 actions and targets

- Partner with organisation(s) demonstrating like minded approach to strengthening indigenous communities.
- Achieve widespread general community support for the Kupe Gas Project and obtain all required approvals for the project.
- Complete environmental approvals for the proposed Mortlake and Spring Gully power station projects and achieve minimal submissions through extensive consultation.

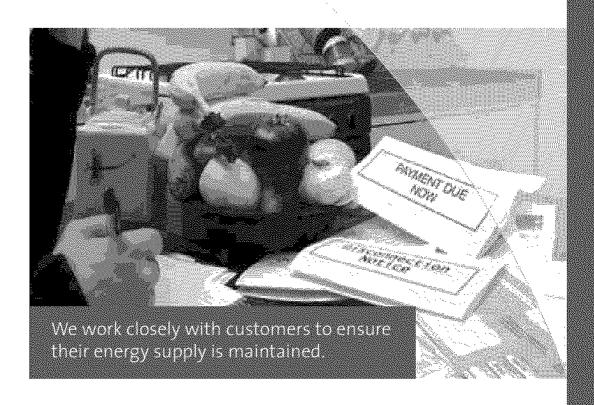
Maximise the value of company sponsorship to recipients by focusing on activities that most leverage Origin Energy's skills and resources.

- Support community education initiatives by:
  - Growing participation in the Home Energy Project by 20%,
  - Supporting a climate change partnership...
  - Launching a schools energy safety program.
  - Establishing a bushfire preparedness campaign.

Identify and participate in public debates where we can make a relevant and meaningful contribution.

- Continue to participate in the development of government policy and regulations that encourage a competitive and sustainable energy industry in Australia.
- Continue to pursue climate change programs that remove uncertainty for the development of renewable and low emission energy generation.

# Social Our customers



Our commitment to customers is to deliver value by developing and procuring competitive sources of energy and related products and services that better meet customers' energy needs. However, we recognise that paying for energy is difficult for some Australian households. Therefore, we believe that we have a responsibility, beyond our regulatory obligations, to work closely with customers to ensure their energy supply is maintained. We are committed to providing assistance to customers who demonstrate a genuine inability to pay for the energy they use.

# Defining hardship

For 2004/05, we set a target of improving our ability to identify customers requiring payment assistance and developing better measures of customers in financial hardship. The indicator of disconnections we were using was not a reliable measure of financial hardship as there are many reasons for disconnection.

As we become more knowledgeable about hardship, we have learned that it is difficult to identify. The issue is complex, with people finding themselves facing hardship at any time. We can identify customers experiencing hardship by talking to these customers and understanding their particular circumstances. Our approach to dealing with hardship involves providing an environment in which customers feel comfortable to tell us that they are having difficulty in paying their bills.

Our community Liaison Team is trained to work toward a solution by listening to, and understanding, customer issues.

Community services organisation Kildonan Child and Family Services is providing training to our Customer Contact Centre staff to enable them to better serve customers who may be in financial difficulty. Where customers are unable to manage payment plans set up by our Customer Contact Centres, they are transferred to our Community Liaison Team for further assistance through our Power On program.

## Power On program

Our Power On program is designed to assist customers through difficult times. It involves a suite of assistance measures including a range of payment plans.

Our community Liaison Team is trained to work toward a solution by listening to, and understanding, customer issues. Conversations with customers will identify if long-term or short-term payment solutions are needed. Short-term solutions include reduced, and customised, payment plans.

Defining long-term solutions is more complex and entails discussions regarding a customer's capacity to pay and debt spiral implications. A solution with encouraging results is incentive payment plans, which assist customers to pay their bills through payments that we match.

# Social Our customers

During 2004/05, we assisted 17,162 customers through the program. Kildonan Child and Family Services also assists us to provide further services to customers in financial difficulty. We have contracted Kildonan financial counsellors to visit customers' homes where they undertake energy use audits as well as provide general financial advice. We referred 168 customers to this service with the result that customers were able to reduce their consumption by an average of \$200 per annum.

# Access to energy efficient appliances

We have several programs to enable customers on low incomes to purchase energy efficient appliances at low cost. In May 2005, we began a pilot program with Good Shepherd Youth and Family Services to provide no-interest loans to enable Victorians living on low incomes to purchase energy efficient appliances. By November 2005, through this program 26 loans were approved. In South Australia, we continued to assist the Energy Friends interest-free loans scheme for low income households. Since its launch in 2004, the scheme has provided 198 interestfree loans for an average amount of \$922 for energy efficient appliances and other energy saving devices.

#### Disconnections

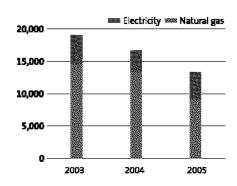
During 2004/05, the number of natural gas and electricity disconnections decreased by 20 percent, from 16,714 to 13,297, continuing a downward trend in disconnections since 2003.

On 8 December 2004, the Victorian Government enacted legislation to require retailers to compensate customers who are disconnected in breach of the terms and conditions of their contract. In the period January to June 2005, Origin Energy paid compensation to eight customers out of a total of 38 customers compensated across the industry in Victoria.

### Strategies

Facilitate improved access to services and support the disadvantaged in our community so they can also enjoy the comforts of energy use.

# Disconnections (numbers of)



Energy Retail Businesses Comparative Performance Report for the 2004-05 Financial Year Victorian Essential Services Commission, December 2005.

### 2005/06 actions and targets

- Improve educational tools around bill management and energy efficiency targeting low income households.
- Support organisations providing hardship relief assistance to people experiencing financial crisis.
- Roll out customer hardship training to the Customer Contact Centre.

# National Customer Consultative Council



↑ The National Customer Consultative Council members. Front (L-R) Catherine Scarth (Brotherhood of St Laurence), Mishael J (Australian Conservation Foundation), Rosalyn Williams (Australian Council of Social Services), John Grigg (Hanover Welfare Services). Back (L-R) Timothy Piper (Australian Industry Group), Kathryn Brown, Secretary (Origin Energy), Tony Wood (Origin Energy), Mark McCabe (Origin Energy), Phil Craig (Origin Energy), Karen Moses, Chairperson (Origin Energy). Absent - Angela Forbes (Kildonan Child and Family Services), Kerry Connors (Consumer Utilities Advocacy Centre)

Well established and now in its third year, the Origin Energy National Customer Consultative Council met four times during 2005 with a principal aim of providing a forum for council members to comment on issues of importance to customers and the general community.

Continuing the presentations program initiated during 2003/04, the council received presentations from Australian Industry Group and Hanover Welfare Services. Origin Energy responds to the issues raised, by outlining our position while considering any issues or proposed action for inclusion as future agenda items.

Customer hardship continues to be an important topic of discussion, with several presentations by members and Origin Energy to enhance mutual understanding of hardship issues. We also shared the results of two partnership trials with family service organisations Kildonan and Good Shepherd, enabling members to comment on these initiatives.

Other issues identified for 2005/06 include affordability and consumer protection, along with sustainability issues such as developing a skilled workforce and strategies to influence customers and suppliers to make sustainable choices.

The council provided comment and valuable feedback on regulatory matters, such as late payment fees, prior to their implementation.

Council members for 2006 include:

- Origin Energy Chief Operating Officer, Australian Operations.
- · Australian Industry Group.
- · Australian Council of Social Services.
- · Hanover Welfare Services.
- · Australian Conservation Foundation.
- · Brotherhood of St Laurence.
- · Kildonan Child and Family Services.
- · Consumer Utilities Advocacy Centre.
- Three Origin Energy general managers.

# Economic

# Objective

To provide sustainable returns to Origin Energy's key economic stakeholders.

Creating value for our stakeholders means delivering competitive returns, creating rewarding jobs, providing valuable products and services, and contributing to the community directly through partnerships, sponsorships, donations and indirectly through payments to governments.

During 2004/05, we created \$909 million for our stakeholders. This was is a 62 percent increase on the previous year, due to the addition of contributions from Contact Energy of New Zealand. We purchased a 51.4 percent interest in Contact Energy in October 2004.

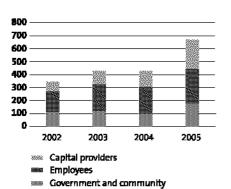
### Capital providers

During 2004/05, we distributed dividends of \$111 million to shareholders, an increase of 28 percent on the previous year.

Shareholders benefited from our improved earnings with annual dividends increasing from 13 cents for 2003/04, to 15 cents per share, fully franked, for 2004/05.

Since listing on the Australian Stock Exchange in February 2000, our total shareholder return has averaged 43.5 percent per year – placing us well within the top third of the largest 100 companies on the exchange. Our

# Distribution of gross value added (\$m)\*



Excludes retained profit amount shown as per the gross value added table on page 43.

basic earnings per share, since 2000, have grown 22 percent on an average compound basis each year.

Our Operating Cash Flow After Tax Ratio, excluding Contact Energy, for the year ended 30 June 2005 was 14.4 percent, compared with 14.8 percent for the year ended 30 June 2004 – well above our target of 9.4 percent.

Our net debt-to-capitalisation ratio was 41 percent at 30 June 2005, compared with 31 percent at 30 June 2004. This is in line with our expectations, given the significant investments we made during 2004/05.

There is more information on our financial performance in our 2005 annual report, which is available at www.originenergy.com.au/investor.

## Employees

During 2004/05, we provided for \$264 million in wages and salaries and other staff-related costs such as superannuation. This is a 28 percent increase over 2003/04, predominately due to the inclusion of our interest in Contact Energy into these figures.

Our remuneration packages are benchmarked annually, and comprise a fixed base-pay component, and a performance-based share plan.

# Feature: Economic benefits from coal seam gas



As a leading developer of coal seam gas, Origin Energy has been keen to understand the economic contribution of this industry to the Australian community and to demonstrate the benefit of developing local gas reserves.

During 2005, we participated in preliminary studies on the economic benefits of coal seam gas production. Within 10 years, the study estimated that the industry could generate more than \$700 million in revenue and more than \$85 million in royalties.

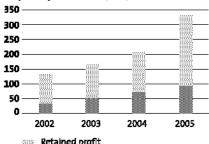
GST and other taxes annually.

During the last five years, close to \$1.5 billion has been invested in the coal seam gas industry. The study estimates that a further \$3.1 billion will be invested in field development alone during the next 10 years.
Currently, the industry in Australia is estimated to employ around 750 to 1,100 people directly. This could easily double within five years. Indirect job creation could add a further 700 or more jobs, with a total of 2,200 to 2,900 jobs by 2014, mostly in Oueensland.

Source: Core Collaborative and EnergyQuest (2005), Coal Seam Methane, Awakening Giant.

# Capital providers (\$m)\*

Dividends



Employees have benefited from our company's growth and profitability through the Employee Share Plan. In September 2005, we awarded 308,844 shares to 2,238 eligible employees. A safety performance indicator is aligned to the share plan and, in July 2005, this was amended to include contractor safety performance.

Our remuneration policy is available on our website at www.originenergy.com.au

# Government and community

Tax expense totalled \$147 million, a 92 percent increase on 2003/04. This was mainly due to the inclusion of Contact Energy into our results for 2004/05.

During the year, we identified \$110.5 million in tax payments to all levels of Australian government including:

- \$71.3 million in GST, FBT and tax to the Federal Government.
- · \$36.8 million in royalties and payroll tax to state governments.
- · \$2.4 million in other taxes and charges, including stamp duties, to state and local governments.

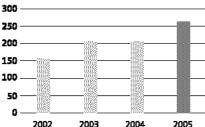
### Community investment

To ensure we consistently report our contributions to the community, we have developed a reporting method that includes cash contributions, in-kind support and administration charges incurred in implementing our community-related activities.

Our methodology includes contributions from the areas of sponsorship, government and regulatory affairs, employee volunteering, community consultation, customer concession and

As per amounts shown in the gross value added table on page 43.

# Employee wages and salaries (\$m)\*



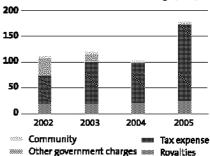
hardship programs. Ernst & Young were requested to verify\* our methodology for calculating investment in community activities. The scope of services included performing certain agreed procedures related to Origin Energy's 'Reporting Community Investment - Draft Guidelines March 2006' including:

- · interviewing key personnel to understand the method and calculations for community investment activities; and
- · undertaking a gap analysis against relevant external guidelines and methods.

As a result of completing their procedures, Ernst & Young provided findings and recommendations for improvement. Key findings included:

· Although the 'Reporting Community Investment - Draft Guidelines March 2006' outline the input costs that are to be included in the reporting of

# Government and community (\$m)\*



community investment, the Guidelines do not provide for the separate reporting of cash and in-kind support.

 The Guidelines have also not provided for the reporting of outputs such as leverage, business and community benefit from community investment activities.

During 2004/05, our community investment, excluding Contact Energy, increased by 26 percent to \$4.6 million. Community programs for customers experiencing hardship have been included for the first time and contributed \$760,000 to our community spend. Improvement in recording community consultation hours also contributed to this increase.

\* Ernst & Young's procedures were conducted in accordance with Australian Auditing and Assurance Standard AUS 904 Engagements to Perform Agreed-upon Procedures! The procedures performed did not constitute either an audit or a review in accordance with Australian Auditing and Assurance Standards and, as such, no opinion was expressed.

### Strategies

Provide shareholder returns in the top third of comparable companies.

Ensure the reward and remuneration levels for employees are consistent with the market, and will attract the quality of employees required for the business to meet its objectives.

# 2005/06 actions and targets

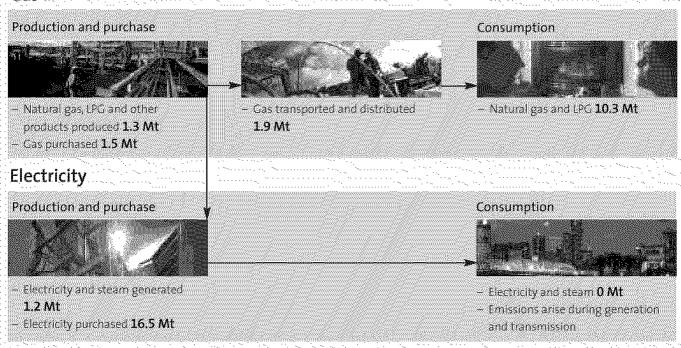
- Achieve an Operating Cash Flow After Tax Ratio of greater than 9.4%.
- Continue to benchmark remuneration levels.
- Ensure that the contribution the company makes to the community through payment obligations to government is identified and reported.
- · Establish processes to improve the reporting of actual payments of tax made to government by June 2006. .....
- Identify appropriate levels of investment in community activities.
- Continue to identify community payments in line with the company's community investment guidelines.

# Key performance data

# Greenhouse gas emissions

Supply chain emissions (MtCO<sub>2</sub>e)

# Gas



# Greenhouse gas inventory

# Equity accounted basis

: Emissions (kťCO;e)	2001/02	2002/03	2003/04	2004/05	% change
E&P	1,257	1,265	1,223	1,333*	9
Offices	11	11	6		(100)
LPG	9	9	9	20	>100
:Generation	1,342	1,263	1,203	2,047*	70
: Networks	199	201	208	213*	2
Total	2,818	2,749	2,649	3,613	36
				***************************************	

. Intensity (ktCO <sub>2</sub> e/	Ple) 2004	2005	% change
E&P	14.5	15.4	8
Generation**	109.2	76.9	(30)
Networks <sup>2</sup>	10.2	11.0	8
Total	17.0	20.5	21
	2000 00 00 00		

12.8

206.2

10.2

2005

15.3

213.2

11.0

15.2

20

3

13

Intensity (ktCO<sub>3</sub>e/PJe) 2004

Generation

Networks<sup>2</sup>

Total

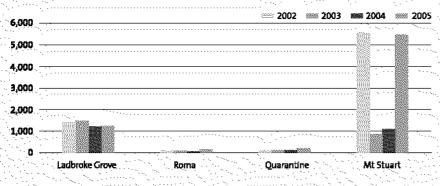
## Operated basis

Emissions (ktCO;e)	2001/02	2002/03	2003/04	2004/05	% change
E&P	520	500	558	675*	21
Offices	11	11	6		(100)
LPG	23	24	23	23	
Generation	598	517	440	496*	13
Networks	1,041	1,083	1,189	1,217*	2
Total	2,193	2,135	2,216	2,411	9

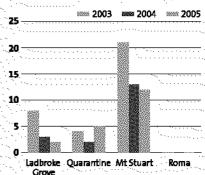
IAGTAACS K2	T)//44.T	1,065	1,169	1,21/	∠ ~		We base our greenhouse gas intensity for	
liotal	2,193	2,135	2,216	2,411	9	- ·	Networks on the total amount of gas transported,	
* These emissions have been au	Sited by Espet & Yo	ung Seetheir	independent	Assurance Re	nort on nage 45	·	therefore, we report both our operated and equity	
**Includes 828kt for Contact Ene						 	intensity as the same value.	•

- a. Inventory includes Yellowbank project offsets which have been sold to BP Australia. Due to commercial in-confidence, amounts are not disclosed.
- b. Scope 1 and 2 emissions were included for all operated sites but in some cases only scope 1 emissions were included for non-operated sites.
- c. Networks inventory includes some data for the period from May 2004 to April 2005 rather than Origin's financial year.
- d. Networks inventory for operated gas pipelines is based on accounting data for unaccounted-for-gas rather than any direct measurement of fugitive emissions.
- e. Inventory data for Networks in Victoria includes estimates not final Vencorp data.
- f. Emissions from non-operated joint venture sites (excluding the Cooper Basin and Contact Energy) are indicative as they rely on estimates based on the assessment of GHG emissions in a report by the Australian Gas Association in May 2000 and data from joint venture partners.
- g. Uncertainty has been estimated, rather than specifically calculated based on empirical data, for some parts of the business.

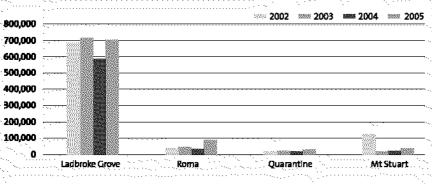




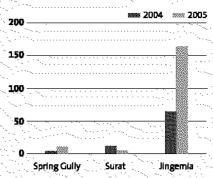
# Operated generation plants – Consumed water (ML/yr)



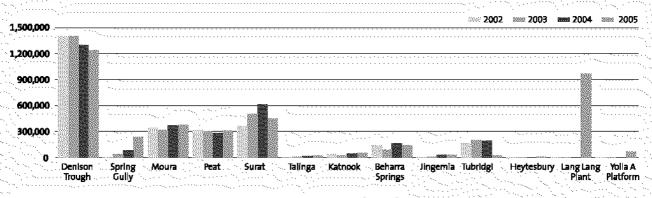
# Operated generation facilities - NO<sub>x</sub> emissions (kg/yr)



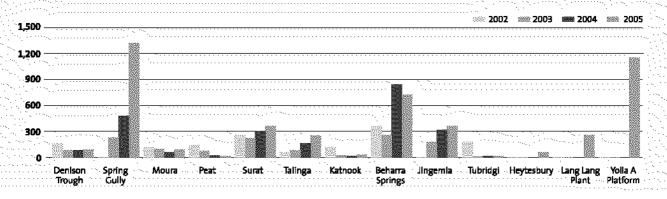
# Operated exploration and production facilities – Consumed water (ML/yr)



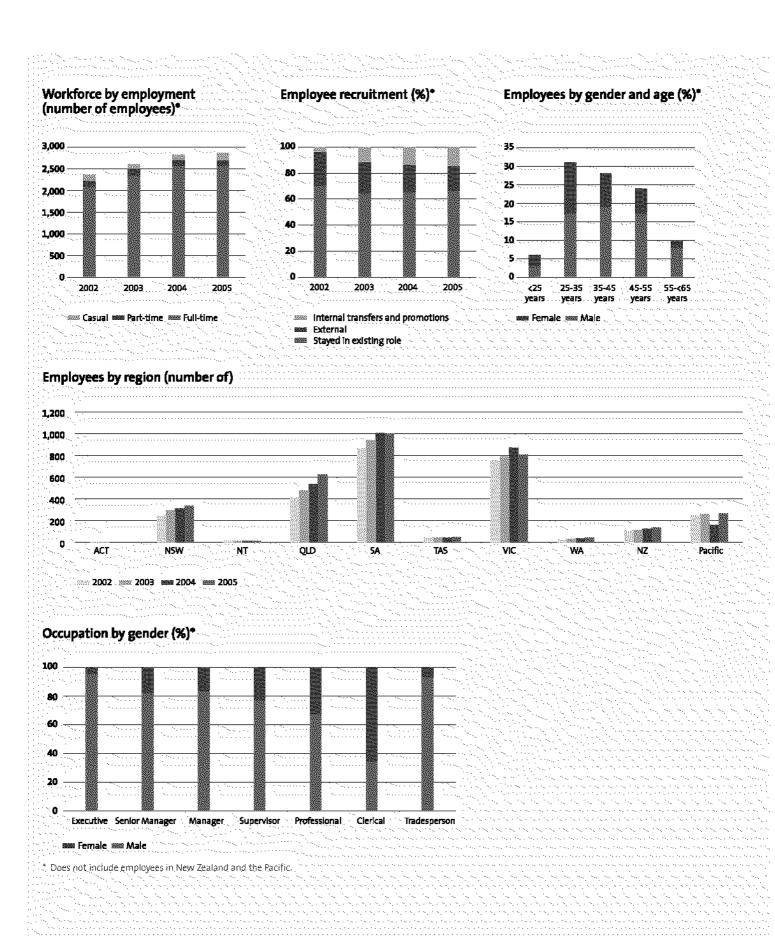
# Operated exploration and production facilities - NO<sub>x</sub> emissions (kg/yr)



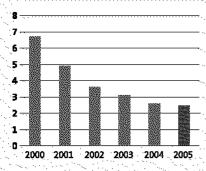
# Operated exploration and production plants – SO<sub>x</sub> emissions (kg/yr)



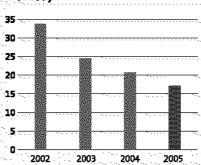
# Key performance data



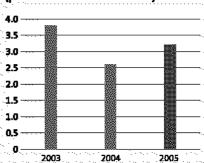
# Employees – lost-time injury frequency rate (per million hours worked)



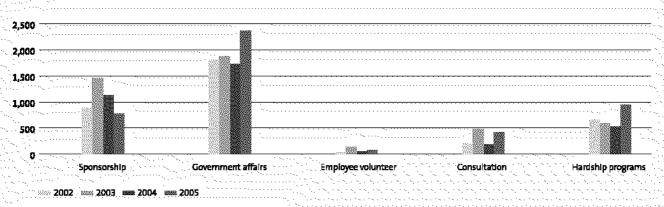
# Employees – total reportable case frequency rate (per million hours worked)



# Employees and contractors – lost-time injury frequency rate (per million hours worked)



# Community investment (\$'000)\*



<sup>\*</sup> Includes cash, gift in-kind, employee time and management costs.

Gross value added*	\$'000	Value distribution	\$'000	%
Exploration & Production	358,249	Wages and salaries	264,442	29
Retail Generation Networks Contact Energy Other	3,075,380 77,830 174,711 1,216,993 16,464	Income tax expense Royalties to government Other government charges	147,418 24,537	
Total revenue (excluding Interest)	4,919,627	Taxes and other government charges	171,955	19
Payment to suppliers Depreciation and amortisation	(3,698,252) (312,613)	Net interest Dividends paid to shareholders	135,100 94,329	
Gross value added	908,762	Retained profit	238,342	
		Capital providers	467,771	51
		Community investment	4,594	1
		Value distribution	908,762	100

# Key performance data

Environmental licences	Site, business or project	Total
NSW EPA – Pollution Control Licence No 245	Dock Perkanic LDC "Tayoninal	rood.
	Port Botany LPG Terminal	
Northern Territory		
Department of Administrative and Information Services – Dangerous Substances Licence	Origin Energy Asset Management	1
Queensland		
Department of Natural Resources and Mines – Integrated Authority	Surat & Bowen Basin	5
Department of Natural Resources and Mines – Environment Approval	Surat & Bowen Basin	20
Department of Natural Resources and Mines – Dam Licence	Moura CSG Project	1
Environment Protection Authority – Operating Licence	Roma Power Station	Personal Per
Townsville City Council – Operating Licence	Mt Stuart Power Station	1
Environmental Protection Authority – Integrated Authority	Mt Stuart Power Station	1
Townsville City Council – Trade Waste Permit	Mt Stuart Power Station	1
Redcliffe City Council – Environmental Licence – Diesel Fuel Storage	Redcliffe Hospital	<u> </u>
Environmental Protection Agency Licence – Fuel Burning	Toowoomba Hospital	r <sub>em</sub>
Environmental Protection Agency Licence – Fuel Burning	Baiffie Henderson Hospital	rood.
Townsville City Council – Dangerous Goods Licence	Townsville Hospital	rood.
Environmental Protection Agency – Environmental Authority/Licence No 5010000186	Cairns LPG Terminal	Frond
Environmental Protection Agency — Environmental Authority/Licence No NRPG	Townsville LPG Terminal	1
Environmental Protection Agency – Storage of Petroleum Products Licence No SR 704 & SR 705	Bulwer Island LPG Terminal	1
Environmental Protection Agency – Storage of Petroleum Products Licence NO GC0106	Gladstone LPG Terminal	1
Cairns City Council Permit to Discharge Trade Waste to Council Sewer	Cairns LPG Terminal	1
South Australia		
Department of Administrative and Information Services – Dangerous Goods Licence	Katnook Gas Field	3
SA Water Provisional Permit to Discharge Water	Katnook Gas Field	1
Environment Protection Authority – Operating Licence	Katnook Gas Field	1
Department of Primary Industries and Resources (PIRSA) – Production Licence	Katnook Gas Field	3
Australian Communications Authority – Radio communications Licence, Apparatus Land Mobile	Katnook Gas Field	2
Excise Manufacturer Licence	Katnook Gas field	1
Environment Protection Authority – Operating Licence	Quarantine Power Station	<u>1</u>
Environment Protection Authority – Operating Licence	Ladbroke Grove Power Station	1
Department of Water Resources Water Licence	Ladbroke Grove Power Station	Tool Tool
Exemption to Environmental Authorisation Licence	Quarantine Power Station	1
Department of Administrative and Information Services – Dangerous Substances Licence	Origin Energy Asset Management	7
Department of Administrative and Information Services Petroleum Products Storage	Brompton Depot	1
Victoria		
Cardinia Shire Council – Gas Plant Planning Permit	BassGas Project	1
Department of Primary Industries – Offshore Pipeline Licence	BassGas Project	Tonal Control
Department of Primary Industries Raw Gas Pipeline Permit to Own and Use	BassGas Project	Poor P
Department of Primary Industries – Onshore Raw Gas Pipeline Licence to Construct and Operate	BassGas Project	Proof.
Department of Primary Industries – Onshore Sales Gas Pipeline Permit to Own and Use	BassGas Project	Y
Department of Primary Industries – Onshore Sales Gas Pipeline Licence to Construct and Operate	BassGas Project	root to
Office of Gas Safety – Subordinate Approval of Sales Gas Pipeline Safety Case	BassGas Project	Among
West Gippsland Catchment Management & Authority – Water Storage Permit	BassGas Project	You!
Department of Primary Industries - Subordinate Consent for Constructure & Operation	BassGas Project	3
Yarra Valley – Water Licence	Thomastown Depot	1
Tasmania		
	BassGas Project	3
	_	2
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence	RaceCae Drainet	1
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence	BassGas Project	
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence Department of Infrastructure Energy & Resources – Subordinate Consent for		2
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence Department of Infrastructure Energy & Resources – Subordinate Consent for Construction & Operation	BassGas Project  BassGas Project	2
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence Department of Infrastructure Energy & Resources – Subordinate Consent for Construction & Operation  Western Australia	BassGas Project	
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence Department of Infrastructure Energy & Resources – Subordinate Consent for Construction & Operation  Western Australia Department of Environmental Protection – Environment	BassGas Project Perth Basin	2
Department of Infrastructure Energy & Resources – Offshore Pipeline Licence Department of Infrastructure Energy & Resources – Production Licence Department of Infrastructure Energy & Resources – Subordinate Consent for Construction & Operation  Western Australia Department of Environmental Protection – Environment Department of Industry & Resources (DoIR) – Dangerous Goods	BassGas Project  Perth Basin Perth Basin	2 2
Department of Infrastructure Energy & Resources Offshore Pipeline Licence Department of Infrastructure Energy & Resources Production Licence Department of Infrastructure Energy & Resources Subordinate Consent for Construction & Operation  Western Australia Department of Environmental Protection Environment Department of Industry & Resources (DoIR) Dangerous Goods Department of Environmental Protection Licence to Take Water	BassGas Project  Perth Basin Perth Basin Perth Basin	2 2
Department of Infrastructure Energy & Resources Offshore Pipeline Licence Department of Infrastructure Energy & Resources Production Licence Department of Infrastructure Energy & Resources Subordinate Consent for Construction & Operation  Western Australia Department of Environmental Protection Environment Department of Industry & Resources (DoIR) Dangerous Goods	BassGas Project  Perth Basin Perth Basin	2 2

# Independent Assurance Report

on greenhouse gas emissions presented in Origin Energy's 'Sustainability Report to Stakeholders 2005'



To the Management of Origin Energy Limited ('Origin Energy')

#### Scope

The scope of our engagement was to conduct audit procedures to enable us to express an opinion to the management of Origin Energy in relation to the following total amounts of greenhouse gas ('greenhouse') emissions from selected sources, for the year ended 30 June 2005, reported in Origin Energy's 'Sustainability Report 2005' ('the reported amounts'):

- Total equity share of greenhouse emissions from each of Origin Energy's Exploration and Production, Generation and Networks Businesses; and
- Total greenhouse emissions from each of Origin Energy's Exploration and Production, Generation and Networks Businesses determined on an operational control basis.

Origin Energy's reported amounts include greenhouse emissions from selected:

- Direct Sources stationary combustion, process emissions and fugitive emissions; and
- · Indirect Sources -- consumption of purchased electricity.

Origin Energy's Exploration and Production, Generation and Networks Businesses comprise all Australian and New Zealand oil and gas permit areas and gas production facilities, power generation facilities and gas distribution infrastructure assets that Origin Energy either operates or has a financial interest in.

We conducted an assurance engagement in accordance with Australian Auditing and Assurance Standard AUS110 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' to provide reasonable assurance whether the reported amounts are free from material misstatement. The nature of our assurance engagement is influenced by factors such as the use of professional judgment, selective testing, the inherent limitations of internal control, and the availability of persuasive rather than conclusive evidence. Therefore an assurance engagement cannot guarantee that all material misstatements have been detected. We performed procedures to form an opinion whether, in all material respects, the reported amounts are presented fairly in accordance with the selected methods.

# Management's Responsibility

The management of Origin Energy is responsible for determining the reported amounts using methods that are appropriate for the purpose of reporting in the 'Sustainability Report 2005'. There are no prescribed methods for determining the reported amounts, and the use of different methods can result in materially different amounts. Management has determined the reported amounts using the World Business Council for Sustainable Development Greenhouse Gas Protocol 2004 and the Australian Greenhouse Office Factors and Methods Workbook December 2005 and other relevant methods ('the selected methods'). No opinion is expressed as to whether the selected methods used are appropriate for the purpose described above. Further, Origin Energy's management is responsible for maintaining an effective internal control structure. As such, no assurance is given on any internal controls not associated with the reported amounts.

## Limitations of Use

This report has been prepared for the purpose set out in this report and for the use of the management of Origin Energy. We disclaim any assumption of responsibility for any reliance on this report to any person other than the management of Origin Energy, or for any purpose other than that for which it was prepared.

We disclaim all fiability to any other party for all costs, loss, damage and liability that the other party might suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

#### Independence, Competence and Experience

All professional personnel involved in this engagement have met the independence requirements of Australian professional ethical requirements. Our team has been drawn from our Environment & Sustainability Services Practice and has the required competencies and experience for this engagement.

### Qualification

- 1. In relation to the total equity share of greenhouse emissions from the Networks Business and the total greenhouse emissions from the Networks Business determined on an operational control basis, although we have not identified errors related to the transcription of data, the methodology adopted for the calculation of greenhouse emissions is based on billing data and assumptions which by their nature include inherent material uncertainties. We have not been able to quantify the impact of these uncertainties. In applying this selected methodology, Origin has assumed that all unaccounted for gas was fugitive emissions which is the most conservative approach.
- 2. In relation to the total equity share of greenhouse emissions from the Exploration and Production Business, the calculation of greenhouse emissions from sites operated by Origin Energy's joint venture partners, comprising 792 kilotonnes carbon dioxide equivalent, is indicative only. It relies on estimates based on the 'Assessment of Greenhouse Gas Emissions from Natural Gas' Australian Gas Association, May 2000, and data sourced from joint venture operators for which supporting evidence was not available for examination. Although no opinion is expressed in relation to the source data, no errors were identified in the transcription or calculations of the greenhouse emissions.

## Qualified Audit Opinion

In our opinion, except for the effects on the reported amounts of such adjustments, if any, as might have been required had the limitations referred to in qualification paragraphs 1 and 2 above not existed, the reported amounts as presented in the 'Sustainability Report to Stakeholders 2005', under the heading of 'Key performance data — Greenhouse gas inventory' (identified by the symbol \*) are presented fairly in accordance with the selected methods described above.

### Commentary

During a year where Origin Energy has expanded operations, it has continued its commitment to having more than 95% of its greenhouse emissions audited. We recommend that, as Origin Energy continues to grow, it considers establishing a program for internal progress reporting of its greenhouse emissions during the year, such as on a quarterly basis.

Ernst & Young Environment & Sustainability Services, Melbourne 17 May 2006

Enst + Jong

# Independent Review Report

in relation to the certain aspects of Origin Energy's 'Sustainability Report 2005'



To the Management of Origin Energy Limited ('Origin Energy')

#### Scope

We have reviewed the following aspects of Origin Energy's 'Sustainability Report 2005' ('the Report'):

- We have performed a review of a selection of performance statements
  presented under the heading of 'Performance Summary' (identified by
  the symbol as 'E&Y verified') in order to state whether anything has
  come to our attention that would indicate that the statements are
  not presented fairly.
- 2. We have performed a review of the method used for determining greenhouse gas emissions from the 'supply chain' presented under the heading of 'Key performance data -- Supply Chain Emissions' on page 40, in order to state whether anything has come to our attention that would indicate that the emissions are not calculated in accordance with the methods determined by management (using the Australian Greenhouse Office Factors and Methods Workbook December 2005 and other relevant methods) as being appropriate for the purpose of disclosure in the Report.

Our review has been conducted in accordance with Australian Auditing and Assurance Standard AUS 110 'Assurance Engagements other than Audits or Reviews of Historical Financial Information'. Because of the nature and scope of the procedures undertaken in a review, it is possible that errors or irregularities may occur and not be detected. Further, a review does not provide all the evidence that would be required in an audit, thus the level of assurance provided is less than in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Any projection of our review statement to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions or that the degree of compliance with them may deteriorate.

### Management's Responsibility

The management of Origin Energy is responsible for the collection and presentation of information in the Report, and for the selection of methods for determining the reported greenhouse gas emissions and investment in community initiatives that are appropriate for purposes of disclosure in the Report. Management has determined the methods using the Australian Greenhouse Office Factors and Methods Workbook December 2005 for the reported greenhouse gas emissions and other relevant methods. No statement is made as to whether the selected methods used are appropriate for the purpose described above. Further, management is responsible for the maintenance of adequate records and internal controls that are designed to support the sustainability reporting process. There are currently no prescribed requirements in Australia relating to the preparation, publication and verification of sustainability reports.

### Limitations of Use

This report has been prepared for the purpose set out in this report and for the use of the management of Origin Energy. We disclaim any assumption of responsibility for any reliance on this report or on the Sustainability Report 2005 to which it relates to any party other than the management of Origin Energy, or for any purpose other than that for which it was prepared.

We disclaim all liability to any other party for all costs, loss, damage and liability that the other party might suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

### Independence, Competence and Experience

All professional personnel involved in this engagement have met the independence requirements of Australian professional ethical requirements. Our team has been drawn from our Environment & Sustainability Services Practice and has the required competencies and experience to perform this engagement.

#### Qualifications

In relation to item 1 above and specifically the performance statement made in relation to breaches of obligations under environmental laws, regulations or licences, although we did not identify any breaches that were not reported, Origin Energy's management systems for identifying, monitoring and reporting of environmental incidents are inconsistent across Business Units and are not adequate to support the conclusion that there were no breaches in the reporting period other than those which have been reported. We are therefore unable to state whether the environmental incidents disclosed in the Report are complete.

### Qualified Review Statement

Based on our review, which is not an audit, except for the effects on the 'Sustainability Report 2005' of such adjustments, if any, as might have been required had the limitation referred to in the qualification above not existed nothing has come to our attention that causes us to believe that:

- 1. The selected performance statements are not presented fairly; and
- The greenhouse gas emissions from the 'supply chain' are not calculated in accordance with the methods selected by management as being appropriate for the purpose of disclosure in the Report.

## Commentary

Origin Energy has continued its commitment to Sustainability Reporting. For the first time, Origin Energy has sought assurance over key performance statements and selected methods rather than a report of findings from procedures agreed with management undertaken in prior years. This is an important step for Origin Energy in expanding its assurance program.

Ernst & Young Environment & Sustainability Services, Melbourne

17 May 2006

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# Sustainability Report 2005 Response card



To continually improve our Sustainability Report, we welcome and encourage feedback. Please complete the form below, detach from this report; and then fold, seal and post at your nearest Australia Post box. Responses will be treated as confidential. No stamp or envelope is required if posted in Australia.

1. 1	low aid	you i	rate Or	igin E	nergy's Sustainability Report overall? (please tick)
	Poor		□ Fair		☐ Good ☐ Very good ☐ Excellent
2. F	lease r	ate (c	ircle) tl	he are	eas of the report you found of most interest (1 = low, 5 = high)
1	2	3	4	5	From the Managing Director
1	2	3	4	5	Origin Energy across the supply chain
U				5	Performance summary
1	2	3	4	5	Environment – Greenhouse gas emissions and clean energy choices
1	2	3	4	5	Environment – Environmental management
Î	2	3	4	5	Social – Our employees
1	2	3	4	5	Social – Health and safety
Î	2	3	4	5	Social – Our community
1	2	3	4	5	Social – Customer hardship
1 2 3 4 5 Economic					Economic
3. F	low sat	tisfied	were	you w	hich each of the following (1 = low, 5 = high)
1	2	3	4	5	Amount of information
1	2	3	4	5	Quality of information provided
î	2	3	4	5	Clarity of design and presentation
1	2		4	5	Easy to read and comprehensive
î	2	3	4	5	Performance data
1	2	3	4	5	Overall rating
4.\	Vhat d	o you	believ	e are	critical environmental, social or economic issues that Origin Energy encounters?
Ori Ori Sus to	gin Ene gin Ene stainab	ergy is ergy is ility e ure su	enviro social fforts a iccess o	onmer ly resp are cri of Orip	ee/disagree with the following statements (Please tick)  Intally responsible. Strongly agree Agree Neutral Disagree Strongly disagree  Disagree Strongly disagree  Disagree Strongly disagree  Disagree Strongly disagree  Strongly agree Agree Neutral Disagree Strongly disagree  Strongly agree Agree Neutral Disagree Strongly disagree  Gin Energy.
Ple	ase tick	the a	approp	riate	boxes that apply to you:
☐ Government official ☐ Origin Energy employee				il loyee	<ul> <li>□ Environmental non-government organisation</li> <li>□ Social non-government organisation</li> <li>□ Interested citizen</li> <li>□ Student</li> </ul>
Na	me				Company
Adı	dress .				
					Emaíl
					copies of future Origin Energy sustainability reports. ve Origin Energy sustainability reports in the future.

Delivery Address: GPO Box 186 MELBOURNE VIC 8060 No stamp required if posted in Australia

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Corporate Communications Manager Public & Government Affairs Origin Energy Reply Paid 186 MELBOURNE VIC 8060

Fold here

# Glossary of terms

Amounts, The continue of the at we beautie.

Blodiversity States in diversity (negtiversity describes the achieves and variety of all living things in the world.

Carbon A chemical Sibstance was thexiss Holls pare form.

as de sur come con escapo dos, apidans poetinadas come ante ante ante escape copia med or oil practs and area ofs

Carbon dioxide (CO.) A greenhouse gas instruction in court is a received the first graph stacker become constant and the case

Carbon intensity of consider persons or one gy

Climate change Any dronge in climate over time, whether our re e din variability or as a result of hydren at 1985.

Configuration of the first of the control of the co

Coal seam gas (CSC) Natural gas certainest within coal seams

Cogeneration The production of two or more toyins at energy from one fuel source. In general, cogeneration plants, percentility or some finer produce are are and electricity from it also diggs.

Combined cycle gos turbine (CCCI) combined excless Symptopy uses forth gas and steam turbine cycles is a single plant to produce electric typical high conversion efficiencies and love messous.

Contact contact transfernment

ENTOA Earlings before who as the server state out according Electricity measures

- Waff (W) a resistant of power present when a current of one unique flows under the pressure of one veit Klowatt (KW) Ohra WH 1506 Watt
- Kilowalt Rose (KWh) The standard shifter electrical energy that recovered the consumering of one known payer the period of one hour An Average household in Victoria syncames about 1, 000 KWb
- of electricity per authors

  Megawatt (MW) Cine MW = 1,000 KW or sine in likes watts
- Megawatt hour (AWh) One AWh with responding of our megawatt
- Cigawatt how (CWh) one sale a 1,600 megawati hows or one risina i vida arata i sa ara
- Terawatt hour (TWH) one TV 1.000 a person consisting

Braissions substances proper decrees a concentration of

BOWA Equal Expectance for Vicaren as the Academic Apertos

EPA Environment Pestection Author/from economics are ar Alberta

Fossil fuels fuels der leed from texsilises organic matter such as cost of and actioleum

Fugitive emissions for a more review of the first of the section o

### Gas measures

- loule 4 scale is the gram any manager of operary in the
- Kingajoule (Cd) A englishmic resequal to one billion proper An average har selected in Vithona consumes approximately 55 CD
- Terajoule (Ta) A teragous sequel to 1,000 pagacoles.
- Petajoule (PJ) A petagopie is equal to one individual ploatopies.
  Petajoules equivalent (Ple) This ring suitement used in this report. o reforment for exposeder cause gy joydragent modules states. amount of energy contained is these products on the compared on arencial basis

The factors used the Cognition (performance) to be an Central Contracted Spage (I) = 1783 (Ge One militar parent condensate = 0,41 Pin One military connectific = 49,3 Pin One I Whilst electrical = 4,5 ePin

Cirica Corporation and a second

645 December Alexandre Metern

Global warming potential (GWP) (are project only presented to

Greenhouse effect charters of their trial keeps the Levis standers of of a level negativity to support the Cours in the lower atmosphere study as Carbon dioxide, methanes and neader vactor are wathred by radiation received by the Earth's surface after the permissipled by solar energy. These gains then radiate briat back towards the ground waiting to the heat the ground receives from the sun without the national green case effects the surface of the planes. versité he gland d'Eff colder en sverage. En éripances preortiouse effect accus suberficación acteury such as burning forsa rucks and land depoting generates have given house gases and increase ine swarming process. After a contists agree that the wideau co деяток жеебелекседону найола матолу или сымабалтакор Greenhouse gases Natural and anthropogeny gases on the arrowhere that also ream emit in trace is best radiation caseing The described secretical described greened as placed as called divinit

HGE Health, carety and ensurance of

HSBMS regions are as a comparate Algorithm and widers Materials reading sale by an observation of confidence of sections of an expension of the confidence of an expension of the confidence of addinipageni generalase gas malisters (clauve), 1900 inscri The Male Picks of Geas with each or chemic strikens recently mechanic dos la value de la colonia LPG to a state of the state of

ETER to section and a property rate is all of the as the permitted of

Moderate medical treatment injuries rate (NACC)

NEW Passages Fleeting & Banker

NO tende di nice con

Operating Cash Flow After Tax Ratio (OCAT Ratio)

Obal Ratio – EBI GA less change in working capital less not cash Arma less stay in baseless capital less can dended by foods omplicated

Origin Energy Couple Entitle United

Ozone depletion in a reference of account to the contract and spirous as a result of terman produced thermosis such as LFL's Recent evidence suggests that or one deplatoer in the pipper atmospheric may affect compate patterns on the Earth's surface.

Photovoltan (PM) Photografiae (eth, previ) - pringst directly ass

MASS For Every and edition approximation System.

Seismic survey deperphysical survey pused to gard an beidgist and a drock foreign where all the built is surface.

Sequestration the uptake and storage of as son, following ple-orion statics; and interesting the curion content of son.

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The company Color coergy Lander are as contribute with Total more making Return (158) K By appreciates the return to shareholders. This is determined by Taking Into account the appreciation in stock project rations to shareholders in the former disidends and effect distribusements, and the effect of movements ar regional capital

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