



Origin Energy Results for the half year ended 31 December 2012 Management Discussion and Analysis

Forward looking statements

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Statements about past performance are not necessarily indicative of future performance.

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Financial information

All figures in this report relate to businesses of the Origin Energy Group (Origin, or the Company), being Origin Energy Limited and its controlled entities, for the half year ended 31 December 2012 (the half year) compared with the half year ended 31 December 2011 (the prior half year), except where otherwise stated.

Origin's Interim Financial Statements for the half year ended 31 December 2012 are presented in accordance with Australian Accounting Standards. The Segment results, which are used to measure segment performance, are disclosed in Note 2 of the Interim Financial Statements and are disclosed on a basis consistent with the information provided internally to the Managing Director. Origin's Statutory Profit contains a number of items that when excluded provide a different perspective on the financial and operational performance of the business. Interim Income Statement amounts presented on an underlying basis such as Underlying Consolidated Profit, are non-IFRS financial measures, and exclude the impact of these items consistent with the manner in which the Managing Director reviews the financial and operating performance of the business. Each underlying measure disclosed has been adjusted to remove the impact of these items on a consistent basis. A detailed reconciliation and description of the items that contribute to the difference between Statutory Profit and Underlying Consolidated Profit is provided in Section 3.2.

This report also includes certain other non-IFRS financial measures. These non-IFRS financial measures are used internally by management to assess the performance of Origin's business and make decisions on allocation of resources. Further information regarding the non-IFRS

financial measures and other key terms used in this presentation is included in the Glossary in Appendix 5 (footnotes reference the first time a term is used). Non-IFRS measures have not been subject to review.

A reference to Contact Energy is a reference to Origin's controlled entity (53.1% ownership) Contact Energy Limited in New Zealand. In accordance with Australian Accounting Standards, Origin consolidates Contact Energy within its result.

A reference to Australia Pacific LNG or APLNG is a reference to Australia Pacific LNG Pty Ltd in which Origin had a 50% shareholding in until 9 August 2011, when completion of a share subscription agreement between Australia Pacific LNG and Sinopec resulted in a dilution in Origin's shareholding to 42.5%. Origin's shareholding in Australia Pacific LNG, which is equity accounted in line with Origin's shareholding, was 42.5% as at 30 June 2012. This shareholding was subsequently diluted to 37.5% upon completion of Sinopec's increased share subscription in Australia Pacific LNG on 12 July 2012.

A reference to the NSW acquisition or NSW energy assets is a reference to the Integral Energy and Country Energy retail businesses and the Eraring GenTrader arrangements acquired by Origin in March 2011.

A reference to \$ is a reference to Australian dollars unless specifically marked otherwise. All references to debt are a reference to interest bearing debt only (excludes Australia Pacific LNG shareholder loans). Individual items and totals are rounded to the nearest appropriate number or decimal. Some totals may not add down the page due to rounding of individual components. When calculating a percentage change, a positive or negative percentage change denotes the mathematical movement in the underlying metric, rather than a positive or a detrimental impact. Measures for which the underlying numbers change from negative to positive, or vice versa, are labelled as not applicable.

Operating Segments

Energy Markets - This segment includes Australian energy retail operations (including energy related products and services), power generation activities in Australia, and Liquefied Petroleum Gas (LPG) operations in Australia, the Pacific, Papua New Guinea (PNG) and Vietnam.

Exploration & Production - This segment records Origin's gas and oil exploration and production activities in Australia, New Zealand and other international areas of interest.

Australia Pacific LNG - This segment covers Origin's equity accounted investment in Australia Pacific LNG.

Contact Energy - This segment reports the results of Origin's investment in its 53.1% owned controlled entity, Contact Energy, involved in energy retailing, associated products and services and power generation in New Zealand.

Corporate - This segment reports corporate activities that are not allocated to other operating segments and business development activities outside of Origin's existing operations. Business development activities principally include Origin's overseas generation development opportunities such as geothermal opportunities in Chile and Indonesia and hydro opportunities in PNG and Chile.

Net financing costs and tax specifically associated with the Australia Pacific LNG and Contact Energy segments are recorded in those segments. All other net financing costs and tax are recorded in the Corporate segment.

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Report for the half year ended 31 December 2012

Management Discussion and Analysis

1. Financial performance summary

1.1 Statutory Profit¹ - \$524 million profit, down from \$794 million

Origin reported a Net Profit After Tax (NPAT) and Non-controlling interests¹ (Statutory Profit) of \$524 million for the half year ended 31 December 2012, a decrease of \$270 million, compared with \$794 million reported in the prior half year.

The key factors contributing to the decrease in Statutory Profit include:

- lower Underlying Profit¹ (-\$127 million) predominantly due to a decline in contribution from the Energy Markets segment, only partially offset by increased contributions from the Exploration & Production, Australia Pacific LNG, Contact Energy and Corporate segments;
- a lower net gain on items related to Australia Pacific LNG (-\$163 million). The current half year includes a lower gain on dilution of Origin's shareholding in Australia Pacific LNG than the dilution gain recorded in the prior half year, a higher net interest expense from funding for the Australia Pacific LNG project, and a foreign currency loss related to the funding and development of Australia Pacific LNG compared to a gain in the prior half year;
- a net decrease in the fair value of financial instruments during the half year, while a net increase was recorded in the prior half year (-\$117 million period on period);

partially offset by:

- a lower impairment of assets (+\$137 million).

Further details are provided in Section 3.2 - Reconciliation of Statutory Profit to Underlying Profit.

1.2 Statutory earnings per share¹ - 48.0 cps, down from 73.8 cps

Basic earnings per share (EPS) based on Statutory Profit decreased by 25.8 cents per share (cps) to 48.0 cps from 73.8 cps in the prior half year. The weighted average capital base of 1,092 million shares increased 2% on the prior half year, mainly due to the issuance of shares under the Dividend Reinvestment Plan (DRP).

1.3 Interim dividend - 25 cps fully franked

An interim fully franked dividend of 25 cps will be paid on 4 April 2013 to shareholders of record on 4 March 2013. Origin shares will trade ex-dividend from 26 February 2013. This is in line with the prior half year. The DRP will apply to this dividend. No discount will be applied in the calculation of the DRP price.

1.4 Underlying Profit - \$362 million, down 26%

Underlying Profit for the half year decreased by 26% or \$127 million to \$362 million. The result primarily reflects a 9% or \$102 million decrease in Underlying Earnings Before Interest, Tax, Depreciation and Amortisation (Underlying EBITDA¹), predominantly due to a decline in contribution from the Energy Markets segment, only partially offset by increased contributions from the Exploration & Production, Australia Pacific LNG, Contact Energy and Corporate segments. The Underlying Profit result also included higher depreciation and amortisation charges (-\$31 million) and an increase in Underlying net financing costs¹ (-\$42 million).

Further details are provided in Section 3.

¹ Refer to Glossary in Appendix 5.

1.5 Underlying EPS² - 33.2 cps, down 27%

Underlying EPS calculated on Underlying Profit was 33.2 cps on a weighted average capital base of 1,092 million shares. This represents a 27% decrease from 45.5 cps on a weighted average capital base of 1,076 million shares in the prior half year.

Origin's interim dividend of 25 cps represents a payout ratio of 75% based on Underlying EPS.

2. Outlook

Origin expects the regulatory and market competitive pressures that have affected the half year result in Energy Markets to continue into the second half of the 2013 financial year.

Energy Markets is focused on stabilising the recently implemented Retail Transformation project to improve billing and customer management processes, increase competitiveness and reduce costs. In the second half of the 2013 financial year, Origin will also continue to invest to further improve its customer acquisition and retention rates as well as continue to work on restructuring this business.

It is also expected that improved billing and collection performance will also result in a strong increase in cash collections in the second half of the current financial year.

For the full year, Origin expects a strong increase in the contribution from the Exploration & Production segment, driven by higher levels of plant availability and production in the second half of the financial year. It also expects Contact Energy's investment in improved fuel and generation flexibility to make a growing contribution to earnings. Australia Pacific LNG's earnings are expected to grow in line with increased sales to domestic markets.

In November 2012, based on current market conditions at that time, Origin issued revised guidance, which stated that it expected a reduction in full year Underlying Profit of 5 to 10% compared to the prior year.

The results to December 2012, together with a review of expected performance in the second half, were consistent with the November 2012 guidance, with the exception of the consequence of an event that occurred in January 2013 in the Queensland wholesale electricity market.

In January 2013, a combination of weather, demand and plant availability resulted in an extended period of very high wholesale electricity prices in the Queensland market. Origin now estimates that the cost of this event, including additional hedges to reduce exposure to such events in the second half, is approximately \$30 to \$35 million in Underlying Profit.

The consequence of this event cannot be absorbed in the guidance range issued in November 2012, and therefore based on prevailing market conditions, guidance for Underlying Profit for the 2013 financial year is now 10 to 15% below the prior year.

Origin has already implemented a number of initiatives that will contribute improved performance in financial year 2014 and looking further forward, is confident that our investment in Australia Pacific LNG will drive substantial growth in Origin's earnings and cash flow.

Australia Pacific LNG Funding

In the medium term, the primary driver for growth in Origin will be its investment in Australia Pacific LNG.

Following Australia Pacific LNG's significant review of schedule and cost for its CSG to LNG project, Origin has confidence that the project will be delivered on or ahead of schedule at the revised estimated cost of \$24.7 billion.

² Refer to Glossary in Appendix 5.

Based on project costs of \$24.7 billion and other forecast expenditures and revenues for Australia Pacific LNG, Origin expects its funding requirement for Australia Pacific LNG to peak at \$4.4 billion³.

The peak in funding occurs when cash flow begins from production from the start of the first train in 2015, as Australia Pacific LNG becomes self-funding from that time.

This increase from \$3.6 billion which was previously advised in July 2012, reflects Origin's share of increased project costs, which are also partially accelerated into the peak funding period due to earlier than scheduled completion of Train 2.

Origin's current committed undrawn facilities, together with operating cash flow, provide sufficient liquidity to cover its Australia Pacific LNG funding commitment and the requirements of Origin's existing businesses, without the need for any refinancing until the 2015 financial year.

³ Partially via loan repayment.

3. Review of Financial Performance

3.1 Interim Income Statement

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
External revenue	7,379	6,499	14
EBITDA	1,196	1,424	(16)
Depreciation and amortisation	(336)	(305)	10
Share of interest, tax, depreciation and amortisation of equity accounted investees	(8)	(11)	(27)
EBIT	852	1,108	(23)
Net financing costs	(219)	(102)	115
Profit before income tax	633	1,006	(37)
Income tax expense	(72)	(183)	(61)
Net profit after tax before Non-controlling interests	561	823	(32)
Non-controlling interests' share of Statutory Profit	(37)	(29)	28
Statutory Profit	524	794	(34)
Statutory earnings per share	48.0¢	73.8¢	(35)

The above table is derived from the Interim Income Statement and Notes to the Interim Financial Statements. The Company excludes certain items (described in detail below) from Statutory Profit in order to calculate Underlying Profit, which the Managing Director uses to assess the financial and operational performance of the business.

3.2 Reconciliation of Statutory Profit to Underlying Profit

Reconciliation half year ended 31 December 2012 (\$ millions)	EBITDA	D&A	Share of ITDA	EBIT	Net financing costs	Tax	Non-controlling Interests	NPAT
Statutory measure	1,196	(336)	(8)	852	(219)	(72)	(37)	524
Gain on dilution of Origin's shareholding in APLNG	358	-	-	358	-	-	-	358
Financing cost related to APLNG funding	-	-	-	-	(93)	28	-	(65)
Unwinding of discount on APLNG receivable balances	-	-	8	8	-	-	-	8
APLNG foreign currency impacts	(22)	-	-	(22)	-	7	-	(15)
Share of tax benefit on translation of foreign denominated tax balances within APLNG	-	-	5	5	-	-	-	5
APLNG related items	336	-	13	349	(93)	35	-	291
Decrease in fair value of financial instruments	(119)	-	-	(119)	-	36	-	(83)
Impairment of assets	(3)	-	-	(3)	-	-	1	(2)
Other								
Transition and transaction costs	(75)	-	-	(75)	-	22	1	(52)
Tax benefit on translation of foreign denominated long-term tax balances	-	-	-	-	-	7	-	7
Land sales in Contact Energy	2	-	-	2	-	-	(1)	1
Less total excluded items	141	-	13	154	(93)	100	1	162
Underlying measure	1,055	(336)	(21)	698	(126)	(172)	(38)	362
Underlying Basic EPS (cps)								33.2

Australia Pacific LNG related items (+\$291 million)

Gain on dilution of Origin's shareholding in Australia Pacific LNG (+\$358 million)

Origin has recorded a gain on diluting its shareholding in Australia Pacific LNG as a result of Australia Pacific LNG issuing further shares to a subsidiary of China Petrochemical Corporation (Sinopec). As a result, Sinopec increased its shareholding in Australia Pacific LNG by 10% to 25%, and Origin's shareholding decreased by 5% to 37.5%.

Financing cost related to Australia Pacific LNG funding (-\$65 million)

Origin recorded an after-tax financing expense of \$65 million relating to funding its investment in Australia Pacific LNG. This financing cost would otherwise be capitalised if Australia Pacific LNG was directly held by Origin rather than being an equity accounted investment.

Unwinding of discount on Australia Pacific LNG receivable balances (+\$8 million)

A non cash benefit of \$8 million recorded for the half year is attributable to Origin's share of the unwinding of the discounted loans receivable within Australia Pacific LNG.

Australia Pacific LNG foreign currency impacts (-\$15 million)

Origin and Australia Pacific LNG incurred a net foreign currency loss in relation to the funding and development of Australia Pacific LNG. The loss was attributable to a depreciation of the Australian dollar against the Euro, partially offset by an appreciation of the Australian dollar against the US dollar.

Share of tax benefit on foreign currency translation (+\$5 million)

A benefit of \$5 million was recognised for Origin's share of the foreign currency translation of the long-term tax balances within Australia Pacific LNG associated with its downstream activities to US dollars.

Decrease in fair value of financial instruments (-\$83 million)

Although the fair value movements in Origin's financial instruments are included every financial period, the quantum of the movements is subject to significant volatility. During the current half year period, a net decrease in the fair value of financial instruments, primarily relating to those not qualifying for hedge accounting, resulted in a post-tax loss of \$83 million.

Impairment of assets (-\$2 million)

Contact Energy recorded an impairment of \$3 million (tax expense nil) in recording certain land that is currently being marketed for sale at recoverable amount.

Transition and transaction costs (-\$52 million)

Origin recorded a \$48 million expense for the half year relating to transition and integration costs primarily relating to the transition of the acquired NSW energy assets and Origin and Contact Energy's Retail Transformation Programs. Origin recorded a \$4 million expense for the half year relating to transaction costs for corporate transactions activity.

Tax expense on translation of foreign denominated long term tax balances (+\$7 million)

The foreign currency translation of long-term tax balances in exploration and production activities in New Zealand.

Gain on land sales in Contact Energy (+\$1 million)

Contact Energy gain on Clutha land sales of \$2 million.

As a result of the above factors, items excluded from Underlying Profit for the half year provided a benefit of \$162 million after tax and Non-controlling interests, compared with a benefit of \$305 million in the prior half year. Refer to Appendix 2 of this document and the "Management Discussion and Analysis" report for the half year ended 31 December 2011 for more details.

3.3 Underlying performance

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)	Section reference
External revenue	7,379	6,499	14	3.3.1
Underlying EBITDA	1,055	1,157	(9)	3.3.2
Underlying depreciation and amortisation	(336)	(305)	(10)	3.3.3
Underlying share of interest, tax, depreciation and amortisation of equity accounted investees	(21)	(20)	5	3.3.4
Underlying EBIT ⁴	698	832	(16)	-
Underlying net financing costs	(126)	(84)	50	3.3.5
Underlying Profit before tax	572	748	(24)	-
Underlying income tax expense ⁴	(172)	(227)	(24)	3.3.6
Underlying Profit before Non-controlling interests	400	521	(23)	-
Non-controlling interests' share of Underlying Profit	(38)	(32)	19	3.3.7
Underlying Profit	362	489	(26)	-
Items excluded from Underlying Profit	162	305	(47)	-
Statutory Profit	524	794	(34)	-
Underlying earnings per share	33.2¢	45.5¢	(27)	

The key line items are explained below.

3.3.1 External revenue

External revenue increased by 14% or \$880 million to \$7,379 million. Notwithstanding lower volumes in the Energy Markets segment, revenues increased reflecting tariff increases that recovered the carbon price following the introduction of the Federal Government's Clean Energy Legislation and increased network charges, which are passed through to customers, and an uplift in electricity pool prices due to the impact of carbon. Further details are available in Section 5.

3.3.2 Underlying EBITDA

Underlying EBITDA decreased 9% or \$102 million to \$1,055 million, predominantly due to reduced Electricity volumes and compressed margins within the Energy Markets segment, partially offset by higher commodity prices and lower operating costs in Exploration & Production and increased hydro generation for Contact Energy.

The Underlying EBITDA contributions by business segment are presented in the following table:

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Energy Markets	660	820	(20)
Exploration & Production	200	179	12
Australia Pacific LNG	19	16	19
Contact Energy	198	182	9
Corporate	(22)	(40)	(45)
Underlying EBITDA	1,055	1,157	(9)

⁴ Refer to Glossary in Appendix 5.

3.3.3 Underlying depreciation and amortisation⁵

Underlying depreciation and amortisation increased by 10% or \$31 million to \$336 million. This was primarily due to depreciation of commissioned capital projects including the Mortlake Power Station and the Retail Transformation Program, works in relation to the Eraring Power Station and increased production from the Otway Basin.

3.3.4 Underlying share of interest, tax, depreciation and amortisation of equity accounted investees (ITDA)

Origin's Underlying share of ITDA⁵ attributable to equity accounted investees increased 5% or \$1 million on the prior half year to \$21 million.

3.3.5 Underlying net financing costs

Underlying net financing costs increased by 50% or \$42 million to \$126 million, predominantly due to interest no longer being capitalised on the Ironbark project and reduced capitalised interest for the Mortlake Power Station, which was commissioned in August 2012, and a higher average Net Debt⁵ (excluding funding related to Australia Pacific LNG), partially offset by lower average interest rates.

Capitalised interest for the half year was \$36 million compared with \$89 million in the prior half year.

3.3.6 Underlying income tax expense

Underlying income tax expense for the half year decreased 24% or \$55 million to \$172 million, in line with a decrease in Underlying profit before tax. The Underlying effective tax rate⁵ was 30% in the current and the prior half year periods.

The current half year Statutory income tax expense⁵ of \$72 million results in a Statutory effective tax rate⁵ of 11% (prior half year 18%), which is lower than the company tax rate mainly due to the non assessable gain arising on dilution of Origin's shareholding in Australia Pacific LNG recorded in the current and prior half years.

3.3.7 Non-controlling interests' share of Underlying Profit

Underlying Profit attributable to Non-controlling interests increased by \$6 million or 19% to \$38 million primarily due to an increased contribution from Contact Energy.

⁵ Refer to Glossary in Appendix 5.

4. Review of cash flows

4.1 Interim Statement of Cash Flows

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (\$m)	Change (%)
Cash and cash equivalents at the start of the period	357	724	(367)	(51)
Cash flows from operating activities	790	758	32	4
Cash flows used in investing activities	(788)	(844)	56	(7)
Cash flows from financing activities	(64)	197	(261)	N/A
Net decrease in cash and equivalents	(62)	111	(173)	N/A
Effect of foreign exchange rates on cash	(3)	2	(5)	N/A
Cash and cash equivalents at end of the period	292	837	(545)	(65)

The above table is an extract from the Interim Statement of Cash Flows in Origin's Interim Financial Statements.

Cash flows from operating activities reflect the cash generated from Origin's operations and excludes investing and financing activities. Cash flows from operating activities for the half year included a \$284 million⁶ contribution from the sale of future oil and condensate production (Oil Sale Agreement) (nil in the prior year). A summary of the Oil Sale Agreement is contained in Section 5.2.1. For more detail on Origin's operating cash flows, see Section 4.2.

Cash flows used in investing activities primarily relate to capital and investment expenditure, which is discussed in more detail in Section 4.3.

Cash flows from financing activities include net cash flows relating to Origin's funding activities, including the payment of interest and dividends. Section 4.4 provides more details on Origin's funding initiatives during the period.

4.2 Operating Cash Flow After Tax (OCAT)

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (\$m)	Change (%)
Underlying EBITDA	1,055	1,157	(102)	(9)
Change in working capital	(268)	(192)	(76)	40
Stay-in-business capex	(124)	(99)	(25)	25
Share of APLNG OCAT less EBITDA	(7)	14	(21)	N/A
Exploration expense	2	11	(9)	(82)
NSW acquisition-related liabilities	(95)	(139)	44	(32)
Other ⁷	(22)	(3)	(19)	633
Tax (paid) / received	(80)	(13)	(67)	515
Group OCAT⁸ (including share of APLNG)	461	736	(275)	(37)
Net interest paid	(218)	(174)	(44)	25
Oil Sale Agreement	284	-	284	N/A
Free cash flow⁸	527	562	(35)	(6)
Productive Capital⁸	15,116	13,638	1,478	11
Group OCAT Ratio⁸	9.1%	10.5%	(1.4%)	(13)

⁶ Transaction value of US\$300m, less transaction fees and converted into Australian dollars.

⁷ The add-back of non-cash equity accounted profits excluding Australia Pacific LNG and movements in other provision balances are included within the "Other" line item.

⁸ Refer to Glossary in Appendix 5.

One of Origin's internal measures of performance is Group OCAT Ratio which is an indicator of the cash returns the Company is generating from Productive Capital. Group OCAT, Productive Capital, and Group OCAT Ratio are discussed below.

The key difference between Group OCAT and statutory cash flows from operating activities is that Group OCAT excludes proceeds from the Oil Sale Agreement and transition and transaction costs, and includes stay-in-business capital expenditure and Origin's share of Australia Pacific LNG's OCAT.

Group OCAT decreased by 37% or \$275 million to \$461 million. This decrease was attributable to:

- A decrease in Underlying EBITDA of \$102 million;
 - A \$76 million increase in working capital requirements compared with the prior half year primarily due to:
 - Higher debtor related working capital requirements of approximately \$180 million resulting from system related issues and the transitional phase of the recently implemented Retail Transformation Program in the Energy Markets business. Following the large-scale system implementation, changes within the system were required to resolve performance issues. These changes impacted Origin's billing and collection processes, resulting in a delay in bills being issued to some customers and an increase in the aging of outstanding debts as collections teams were unable to effectively collect certain categories of debt. These issues have been resolved or remediation plans are underway;
 - Offset by a net \$80 million benefit to working capital from the introduction of the Commonwealth Government's Clean Energy Future Legislation, with the cost of carbon recovered through customer billing during the half year prior to the liability for carbon being remitted. The carbon liability is to be settled in instalments in June 2013 and March 2014;
 - A \$25 million increase in stay in business capital expenditure principally due to higher expenditure on the Eraring Power Station and higher downhole development and capital maintenance on Cooper Basin assets; and
 - A \$67 million increase in tax paid, with \$19 million relating to Contact Energy and \$48 million from a full year ownership of the NSW energy assets;
- partially offset by:
- A \$44 million decrease in the utilisation of non-cash provisions for transitional services agreements (TSAs) and onerous hedge contracts relating to the NSW acquisition.

Net interest paid was \$44 million higher than the prior half year reflecting higher average Net Debt balances relating to funding capital investments, principally Origin's investment in Australia Pacific LNG.

Free cash flow available for funding growth and distributions to shareholders decreased by 6%, or \$35 million, to \$527 million. Free cash flow for the half year includes the \$284 million received in respect of the Oil Sale Agreement.

Productive Capital in the business, calculated on a 12 month weighted average basis, increased by 11% to \$15,116 million. Major assets contributing to this increase include a full 12 months of the acquired NSW energy assets compared to 10 months in the prior period, the Mortlake Power Station which was commissioned in August 2012, the Retail Transformation Program, works in relation to the Eraring Power Station and Contact Energy's Stratford Power Station.

The Group OCAT ratio for the year ended 31 December 2012 was 9.1%, down from 10.5% for the year ended 31 December 2011, as increased cash flow from the additional productive assets was offset by lower Energy Markets operating cash flow in the 6 months ended 31 December 2012. The calendar year Group OCAT was also lower due to higher tax payments.

4.3 Capital expenditure and Origin's cash contributions to Australia Pacific LNG⁹

4.3.1 Capital expenditure

Total capital expenditure for the half year (including capitalised interest of \$36 million) was \$720 million, down 17% from \$863 million in the prior half year.

Stay-in-business capital expenditure was \$124 million, compared with \$99 million in the prior half year.

Growth capital expenditure (including capitalised interest) was \$596 million compared with \$764 million in the prior half year. This included expenditure of \$35 million or more in the following areas:

- Energy Markets - \$150 million in total, including:
 - Mortlake Power Station - \$47 million;
- Exploration & Production - \$266 million in total, including:
 - BassGas - \$53 million;
 - Otway Project - \$144 million;
- Contact Energy - \$137 million in total, including:
 - Te Mihi geothermal development - \$117 million; and
- Corporate - \$43 million in total, including IT and international development.

Capitalised interest of \$36 million was primarily associated with the Mortlake Power Station up until its commissioning and Te Mihi geothermal projects.

4.3.2 Origin's cash contributions to Australia Pacific LNG

Origin is required to contribute cash to Australia Pacific LNG (in proportion to its equity holding) where Australia Pacific LNG has insufficient cash from other sources to fund its shareholder approved activities. During the half year, Origin contributed \$119 million to Australia Pacific LNG via loan repayments to fund its activities, compared to \$173 million in the prior half year, also via loan repayments. Origin's total contribution to Australia Pacific LNG since the formation of the incorporated joint venture with ConocoPhillips is \$1,286 million.

4.4 Funding and capital management

4.4.1 Funding initiatives

During the six months ended 31 December 2012, Origin undertook a number of funding initiatives to further strengthen its balance sheet and liquidity position.

In October 2012, Origin undertook a €500 million (approximately US\$646 million) seven year medium term notes issuance under its Euro Medium Term Note Program. The Notes have a coupon of 2.875% and will mature in October 2019. The proceeds have been swapped into US dollars resulting in an average rate of 3.462% per annum.

Origin also executed a \$2.4 billion syndicated bank loan facility in October 2012. The loan facility has terms of four and five years and will mature in October 2016 and October 2017. The loan facility was used to refinance existing loan facilities maturing in the 2013 and 2014 financial years.

These initiatives assisted in diversifying Origin's funding portfolio in terms of currency, market and tenor, strengthening Origin's liquidity position.

⁹ The capital expenditure above is based on cash flow amounts rather than accrual accounting amounts, and includes growth and stay-in-business capital expenditure, capitalised interest and Origin's cash contributions (via loan repayments) to Australia Pacific LNG.

Australia Pacific LNG signed project finance agreements for the US\$8.5 billion project finance facility during the second quarter of calendar year 2012 and commenced drawing on the facility in the fourth quarter of calendar year 2012. As a result of the execution of this facility, and in addition to the payment of Sinopec's equity subscription amount associated with its increased shareholding in Australia Pacific LNG on 12 July 2012, Origin's remaining funding requirement for its 37.5% shareholding in Australia Pacific LNG for the period from 1 January 2013 to first production from both LNG trains is approximately \$4.4 billion¹⁰, based on current estimates. This funding requirement will be met from Origin's free cash flow and its existing committed undrawn debt facilities and cash, which totals \$5.4 billion (excluding Contact Energy and bank guarantees) as at 31 December 2012. A portion of these existing committed undrawn debt facilities mature within the period to first production from both LNG trains and will be refinanced as required.

4.4.2 Share capital

During the first half of the 2013 financial year, Origin issued an additional 4.5 million shares, raising a total of \$46 million. This included 3.2 million shares issued under the DRP which raised \$37 million, and 1.3 million shares issued as the result of the exercise of long-term employee incentives which raised \$9 million.

As a consequence, the total number of shares on issue increased from 1,090 million at 30 June 2012 to 1,094 million at 31 December 2012.

The weighted average number of shares used to calculate basic EPS at 31 December 2012 increased by 10 million to 1,092 million from 1,082 million as at 30 June 2012.

4.4.3 Net Debt¹¹ and equity

Net Debt

Net Debt for the consolidated entity increased by 9% or \$503 million to \$6,025 million from \$5,522 million at 30 June 2012.

Equity

Shareholders' Equity¹² increased by 2% from \$14,458 million at 30 June 2012 to \$14,792 million at 31 December 2012. The increase of \$334 million is predominantly due to the Statutory Profit before Non-controlling interests of \$524 million and \$46 million of share issuance, partially offset by \$273 million of dividends paid.

Gearing Ratio¹²

The following table provides the calculation of the Gearing Ratio based on the reported Net Debt and the reported Shareholders' Equity:

As at	31 December 2012	30 June 2012
Net Debt as reported (\$m)	6,025	5,522
Shareholders' Equity as reported (\$m)	14,792	14,458
Net Debt to (Net Debt + Shareholders' Equity)	29%	28%

4.4.4 Adjusted Net Debt¹² calculations

The calculation of Net Debt above includes a favourable mark-to-market adjustment of \$241 million as at 31 December 2012 compared with a favourable adjustment of \$216 million as at 30

¹⁰ Partially via loan repayment.

¹¹ The reported numbers for Net Debt include interest-bearing debt obligations only.

¹² Refer to Glossary in Appendix 5.

June 2012. Favourable adjustments act to decrease the net debt quoted. Excluding these mark-to-market adjustments, the “Adjusted Net Debt” for the consolidated entity was \$6,266 million at 31 December 2012 compared with \$5,738 million at 30 June 2012, a net increase of \$528 million.

Origin owns 53.1% of the ordinary shares of Contact Energy and is therefore required under Australian Accounting Standards to consolidate all of Contact Energy’s assets and liabilities in Origin’s Interim Statement of Financial Position. This includes consolidating 100% of Contact Energy’s outstanding debt obligations. However, under the terms of those debt obligations Origin has no liability associated with Contact Energy’s debt. Excluding Contact Energy’s Adjusted Net Debt obligations, Origin had an Adjusted Net Debt position as at 31 December 2012 of \$5,111 million compared with \$4,617 million as at 30 June 2012, an increase of \$494 million.

4.5 Interest rates

Origin’s Underlying average interest rate¹³ incurred on debt for the half year was 6.0% compared with 7.4% for the year ending 30 June 2012. The lower Underlying average interest rate was primarily due to a reduction in the Australian dollar floating interest rate. Underlying net financing costs used to calculate the Underlying average interest rate include interest on Origin’s Australian dollar, US dollar and New Zealand dollar debt obligations, Contact Energy’s New Zealand dollar denominated debt, as well as commitment fees incurred on undrawn committed debt facilities associated with Origin’s underlying business.

Origin’s Underlying average interest rate incurred excluding Contact Energy and funding costs related to Australia Pacific LNG was 5.7% for the half year.

Interest incurred on drawn debt and commitment fees paid on undrawn committed debt facilities, which act to support Origin’s future funding commitments to Australia Pacific LNG, are excluded from Underlying net financing costs (refer to Section 3.2) and from the interest rate quoted above. This amounted to \$93 million in the half year, and would otherwise be capitalised except for Origin’s investment in Australia Pacific LNG being equity accounted.

As at 31 December 2012, Origin held cash and cash equivalents of \$292 million compared with \$357 million at 30 June 2012 (including Contact Energy). This cash was invested at an average rate of 3.5% for the half year. Excluding Contact Energy, Origin held cash on deposit and cash equivalents of \$286 million at 31 December 2012 compared with \$352 million at 30 June 2012.

Approximately 65% of Origin’s consolidated debt obligations are fixed to 30 June 2013 at an average rate of 5.6% including margin. Excluding Contact Energy, Origin has 61% of its debt obligations fixed at an average rate of 5.0% including margin.

¹³ Refer to Glossary in Appendix 5.

5. Review of Segment Operations

The Review of Segment Operations is a discussion on the underlying performance of each of Origin's business segments. The financial performance metrics and segmental discussion reflect the results of Origin's underlying business and therefore exclude a number of items to provide a different perspective of the financial and operating performance of the Origin business, consistent with the manner in which the Managing Director reviews the financial and operational performance of the business. A detailed reconciliation between Statutory Profit and Underlying Profit is provided in Section 3.2. Further non-IFRS measures, such as Gross Profit¹⁴, are utilised to explain segment performance. These measures are a component of the Segment Result¹⁴ and are defined in the Glossary in Appendix 5.

5.1 Energy Markets

Origin's Energy Markets business is an integrated provider of energy solutions to consumer and business markets in Australia and the Pacific. As well as being Australia's leading electricity, gas and LPG retailer, with 4.3 million customer accounts, Energy Markets also operates Australia's largest and one of the most flexible and diverse owned and contracted generation portfolios, and continues to increase its product and service offerings to customers.

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Total Segment Revenue ¹⁴	6,137	5,207	18
Underlying EBITDA	660	820	(20)
Underlying Depreciation & Amortisation	(140)	(119)	18
Underlying share of ITDA	(4)	(4)	-
Underlying EBIT	516	697	(26)
Segment Result	516	697	(26)
Items excluded from Underlying EBIT and Segment Result	(186)	12	N/A
Growth capital expenditure	150	316	(53)

- Underlying EBITDA down 20% to \$660 million as a result of reduced electricity volumes and compressed margins
- Origin's net Electricity and Natural Gas customer position reduced by 23,000 in the six months to 31 December 2012
- SAP now providing benefits through increased customer acquisition and retention activity, the launch of new products and services, with focus on restoring temporary late bill and collection issues
- Integral Energy NSW customers migrated onto SAP in January 2013. Origin is now servicing 3.3 million customers on SAP, with the final migration of Country Energy customers expected to be completed by the end of 2013
- Mortlake Power Station was commissioned in August 2012 and is performing well with high availability and capacity factors¹⁴ during the period

¹⁴ Refer to Glossary in Appendix 5.

5.1.1 Segment financial performance

Summary Operational Performance

Half year ended 31 December 2012	Natural Gas	Electricity	Non-commodity	LPG
Revenue (\$m) ^{15,16}	749 (+20%)	4,284 (+12%)	102 (-25%)	371 (+6%)
Cost of goods sold (\$m)	(604) (+21%)	(3,522) (+22%)	(73) (-39%)	(268) (+5%)
Gross Profit (\$m)	145 (+15%)	762 (-18%)	29 (+61%)	103 (+10%)
Total operating costs (\$m)	← (380) (+9%) →			
Underlying EBITDA (\$m)	660 (-20%)			
Underlying EBIT (\$m)	516 (-26%)			
Underlying EBIT Margin (%)	9.4% (December 2011: 14.1%)			
Volumes sold ¹⁷	70 PJ ¹⁸ (+2%)	21 TWh ¹⁸ (-2%)	N/A	240 kT ¹⁸ (-2%)
Period-end customer accounts ¹⁹ ('000)	1,002 (+4%)	2,952 (-2%)	N/A	374 (-2%)
Average customer accounts ^{19,20} ('000)	981 (+4%)	2,975 (-4%)	N/A	380 (+3%)
Gross Profit per customer (average accounts, \$)	148 (+10%)	256 (-13%)	N/A	271 (+2%)
Underlying EBITDA per customer (average accounts, \$)	← 159 (-19%) →		84 (+5%)	
Underlying EBIT per customer (average accounts, \$)	126 (-25%)		47 (+9%)	

Energy Markets Underlying EBITDA for the half year decreased by 20% or \$160 million to \$660 million. The decrease in earnings is due to lower Gross Profit in Electricity and higher operating costs, partially offset by higher Gross Profit in Natural Gas, LPG and Non-commodity.

In Electricity, Gross Profit was down \$168 million compared to the prior half year as a result of reduced electricity volumes and compressed margins.

Electricity volumes decreased by 0.4 TWh or 2% (\$28 million impact to Gross Profit), as reduced mass market volume (-1.3 TWh) was only partially offset by increased acquisition activity in the Commercial and Industrial (C&I) segment (+0.9 TWh). The change in volume between the mass market and C&I segments has also contributed to compressed margins in the current period, net of mitigating pricing strategies (\$30 million impact to Gross Profit).

Origin's Electricity customer base was on average 179,000 lower than the prior half year. The majority of customer losses occurred in the 2012 financial year, as Origin's acquisition and retention activities were restricted during four large-scale migrations of customer accounts from legacy systems to SAP as part of the Retail Transformation Program. This also coincided with heightened competition following the acquisition of the retail businesses of Integral Energy and Country Energy.

Increased market competition has also been evident in the Small to Medium Enterprise (SME) segment (within mass market), in particular in Queensland in the prior period, leading to

¹⁵ Energy Markets Total Segment Revenue includes pool revenue from the sale of electricity when Origin's internal generation portfolio, including Eraring and Shoalhaven power stations, is dispatched. These pool revenues, along with the associated fuel costs, are netted off in Electricity cost of goods sold.

¹⁶ Energy Markets Total Segment Revenue includes revenue from the sale of gas swaps to major customers at no margin. These revenues are netted off with the associated cost in Natural Gas cost of goods sold.

¹⁷ Does not include internal sales for Origin's gas-fired generation portfolio (half year ended December 2012: 23 PJ; half year ended December 2011: 15 PJ).

¹⁸ Refer to Glossary in Appendix 5.

¹⁹ Customer account movement since 30 June 2012.

²⁰ Average Customer Accounts is calculated as the average of the month-end customer numbers for each month of the half year.

customer losses and increased discounting with some customers transferring to the C&I segment at lower rates.

Margin compression in Electricity was also a result of the reduced wholesale energy cost allowance in Queensland tariffs (\$58 million impact to Gross Profit) and increased wholesale energy prices across the National Electricity Market (NEM) (\$53 million impact to Gross Profit).

The QCA Final Determination (the Determination) for the 2013 financial year included an allowance for wholesale energy costs based only on short-term market contract prices, forecast spot prices and an allowance for financial hedging. Origin believes the Determination does not adequately allow for the risks inherent in purchasing energy in the wholesale market.

Reduced generation capacity in the NEM, particularly during the September quarter, increased average electricity spot prices in the half year. This was particularly evident in Victoria where the flooding of the Yallourn coal mine reduced capacity in that state. The increased spot prices contributed to an increase in wholesale electricity costs of approximately \$2.50/MWh^{21,22}, or \$53 million across the period.

While Electricity Gross Profit decreased by \$168 million, Gross Profit in Natural Gas, Non-commodity and LPG all had solid gains. In Natural Gas, volumes increased as Origin continues to increase its dual fuel penetration and leverage its incumbent electricity position in NSW, resulting in average Natural Gas customer accounts increasing by 48,000 on the prior half year. These increased volumes contributed to a \$19 million increase in Natural Gas Gross Profit.

In Non-commodity, despite reduced installations of rooftop solar photovoltaic (PV) systems, the growth in margin per solar PV panel increased Gross Profit by 61% or \$11 million. In LPG, Gross Profit increased by \$9 million due to favourable foreign exchange and commodity price movements.

Origin has increased its customer acquisition and retention activities, which resulted in acquiring or retaining an additional 159,000 electricity and gas accounts compared to the prior half year. Origin's customer position improved from a net decrease of 112,000 electricity and gas accounts in the prior half year to a net decrease of 23,000 in the current period. This increase in activity has resulted in higher acquisition and retention costs of \$16 million compared to the prior half year.

Origin is currently dedicating significant effort and resources to improve customer and operational performance, including its billing, collection and call centre processes following the large-scale SAP implementation. This continues to be a focus in order to deliver the benefits of an enhanced customer experience and reduced cost to serve.

Origin's Energy Markets segment spent \$8 million on redundancy costs in the half year as the business commenced its cost reduction program. Given the timing of the redundancies, the benefit of the reduced headcount will flow through into future periods.

As a result of the factors above, Energy Markets' Underlying EBIT margin declined from 14.1% in the prior half year to 9.4%. This margin compression was exacerbated by 1.2% by the introduction of the Federal Government's Clean Energy Package, the recovery of which increased revenue by \$480 million.

²¹ Refer to Glossary in Appendix 5.

²² Increase in wholesale energy costs excluding the impact of the carbon price and increased mandatory green schemes.

Operating cash flows

Operating Cash Flow²³	2012	2011	Change (%)
Half year ended 31 December (\$m)	300	503	(40)
Calendar year calculations			
Operating Cash Flow (\$m)	954	900	6
Productive Capital (\$m)	9,240	8,009	15
OCFR ²³ (%)	10.3%	11.2%	(8)

Energy Markets' Operating Cash Flow for the half year was down \$203 million or 40% to \$300 million compared to the prior half year. Reduced Operating Cash Flow is due to lower Underlying EBITDA and delays in billing and collections experienced following the implementation of SAP. These factors were partially offset by the introduction of the carbon legislation which provided a benefit during the half year due to timing of the settlement of the carbon liability.

During the half year, Origin's billing and collection processes were impacted following the implementation of SAP. As an example, there has been a delay in bills being able to be issued to some customers. The number of late bills peaked at 180,000 in September 2012, however these have since reduced to 54,000 as at mid February 2013. These billing and collection issues continue to be rectified, with the resultant reduction in outstanding debt and late bills expected to have a positive impact on working capital and operating cash flow in the second half of the 2013 financial year.

Productive capital increased by 15% due to completion of the Mortlake Power Station, a full 12 months of the NSW acquisition, the commissioning of SAP as part of the Retail Transformation Program and works in relation to the Eraring Power Station.

²³ Refer to Glossary in Appendix 5.

5.1.2 Natural Gas

Half year ended 31 December	2012	\$/GJ ²⁴	2011	\$/GJ	Change (%)	Change (\$/GJ)
Volumes sold (PJ)	92.8		82.9		12	
C&I	46.6		46.5		-	
Mass Market	23.0		21.5		7	
Total external volumes	69.6		68.0		2	
Internal sales ²⁵	23.2		14.9		56	
Revenue (\$m)	749	10.7	624	9.2	20	1.5
C&I	279	5.9	249	5.4	12	0.5
Mass Market	470	20.4	375	17.4	25	3.0
Cost of goods sold²⁶ (\$m):	(604)	(8.6)	(498)	(7.3)	21	(1.3)
Network costs	(300)	(4.3)	(256)	(3.8)	17	(0.5)
Energy procurement costs	(304)	(4.3)	(242)	(3.5)	26	(0.8)
Gross Profit (\$m)	145	2.1	126	1.9	15	0.2
<i>Gross Margin²⁴ (%)</i>	<i>19.4%</i>		<i>20.2%</i>		<i>(4)</i>	
Period-end customer accounts ('000)	1,002		950		5	
Average customer accounts ('000)	981		933		5	
Gross Profit per customer (average accounts, \$)	148		135		10	

Natural Gas volume and revenue

Origin sold 70 PJ of Natural Gas to customers in the half year, while an additional 23 PJ was used in Origin's generation portfolio, primarily at the Darling Downs Power Station in south east Queensland and Mortlake Power Station in Victoria, which was commissioned during the half year.

External sales of Natural Gas increased by 2%, with sales to the mass market increasing by 7% to 23 PJ. The increase in mass market volumes is due to an increase in Natural Gas customers in NSW since December 2011, and cooler winter temperatures in Victoria increasing average usage per customer.

Natural Gas revenue increased by \$125 million or 20% to \$749 million. Higher tariffs, largely due to the pass through of carbon and increased network costs, resulted in a revenue increase of \$1.50/GJ.

²⁴ Refer to Glossary in Appendix 5.

²⁵ Internal sales represent volume used in Origin's gas-fired generation portfolio.

²⁶ For the period ending December 2011, there has been a restatement of \$68 million between network costs and energy procurement costs, as disclosed in the 2012 financial year results.

Natural Gas volumes by state and by segment are detailed in the table below:

Half year ended 31 December (PJ)	2012	2011	Change (PJ)	Change (%)
NSW	2.8	1.9	0.9	47
Victoria	15.5	14.8	0.7	5
Queensland	1.1	1.2	(0.1)	(8)
South Australia	3.6	3.6	-	-
Mass Market	23.0	21.5	1.5	7
C&I	46.6	46.5	0.1	-
External volumes	69.6	68.0	1.6	2
Internal generation	23.2	14.9	8.3	56
Total Natural Gas Volume	92.8	82.9	9.9	12

Natural Gas cost of goods sold

Natural Gas cost of goods sold increased by \$1.30/GJ, with \$0.50/GJ due to higher network costs and transmission costs relating to the Queensland - South Australia - New South Wales (QSN) pipeline. The remaining \$0.80/GJ is primarily due to the introduction of the carbon price.

The Natural Gas portfolio continues to perform well, with energy procurement costs, excluding carbon, remaining relatively stable through a period of increased spot prices.

Natural Gas Gross Profit

Natural Gas Gross Profit increased by 15% or \$19 million, primarily reflecting the increased volumes sold in the mass market. Although Gross Profit increased, gross margin decreased from 20.2% to 19.4% as the pass through of carbon increased revenue with no associated margin.

5.1.3 Electricity performance

Half year ended 31 December	2012	\$/MWh	2011	\$/MWh	Change %	Change \$/MWh
Volumes sold (TWh)	21.4		21.8		(2)	
C&I	11.1		10.2		9	
Mass Market	10.3		11.6		(11)	
Revenue (\$m)	4,284	200	3,827	175	12	25
C&I	1,507	136	1,160	114	30	22
Mass Market	2,740	266	2,645	228	4	38
Externally contracted generation	37		22		68	
Cost of goods sold (\$m):	(3,522)	(165)	(2,897)	(133)	22	(32)
Network costs	(1,873)	(88)	(1,774)	(81)	6	(7)
Wholesale energy costs	(1,512)	(71)	(997)	(46)	52	(25)
Generation operating costs ²⁷	(137)	(6)	(127)	(6)	9	-
Energy procurement costs	(1,650)	(77)	(1,124)	(52)	47	(25)
Gross Profit (\$m)	762	36	930	43	(18)	(7)
<i>Gross Margin (%)</i>	<i>17.8%</i>		<i>24.3%</i>		<i>(27)</i>	
Period-end customer accounts ('000)	2,952		3,075		(4)	
Average customer accounts ('000)	2,975		3,154		(6)	
Gross Profit per customer (average accounts, \$)	256		295		(13)	

Electricity volumes and revenue

While overall Electricity volumes were relatively stable, the mix of volume between mass market and C&I changed when compared to the prior half year. As a result of successfully tendering for large customers over the last 12 months, C&I volumes increased by 0.9 TWh or 9%. However, this was more than offset by reduced mass market volumes, which declined 1.3 TWh or 11%.

Reduced mass market sales were largely due to the customer losses experienced in the 2012 financial year, including those lost during the large-scale SAP migration period. This resulted in average Electricity customer accounts being 179,000 lower than the prior half year.

Mass market volume was also impacted by some higher volume SME customers either transferring onto lower margin C&I contracts or being lost through increased competition, particularly in Queensland during the prior half year.

Across the NEM, the continuing penetration of solar PV and other factors causing consumers to use less electricity has resulted in a small reduction in average residential usage per customer.

Despite the reduction in mass market volume, Electricity revenue increased by 12% to \$4,284 million, reflecting higher tariffs due to the pass through of carbon, mandatory green schemes and increased network costs in both mass market and C&I.

Also impacting Electricity revenue is the reduction in the wholesale energy cost allowance associated with the QCA Final Determination for the 2013 financial year. The unmitigated impact of the lower wholesale cost allowance, net of an increase in Retail margin, is \$20/MWh or \$58 million.

²⁷ Generation operating costs in the prior half year include \$21 million of variable costs for the Eraring GenTrader Agreement which had previously been recorded in wholesale energy costs.

Electricity volumes by state and by segment are detailed in the table below:

Half year ended 31 December (TWh)	2012	2011	Change (TWh)	Change (%)
NSW	5.1	5.8	(0.7)	(12)
Victoria	1.9	2.1	(0.2)	(10)
Queensland	2.9	3.2	(0.3)	(9)
South Australia	0.4	0.5	(0.1)	(20)
Mass Market	10.3	11.6	(1.3)	(11)
C&I	11.1	10.2	0.9	9
Total Electricity Volumes (TWh)	21.4	21.8	(0.4)	(2)

Electricity cost of goods sold

Overall, Electricity cost of goods sold increased by \$32/MWh, primarily owing to increases in wholesale energy costs of \$25/MWh and network costs of \$7/MWh.

Included in the \$25/MWh increase in wholesale energy costs are costs relating to the pass through of the carbon price and the increased cost of mandatory green schemes. Excluding these, wholesale energy costs increased by approximately \$2.50/MWh due to higher energy prices across the NEM.

The increase in energy prices was primarily due to constraints on generation availability in Victoria and Queensland during the half year. In July 2012, reduced capacity at the Yallourn Power Station contributed to an increase in average energy prices in Victoria of \$19/MWh²⁸ while prices in Queensland and NSW were up \$17/MWh (compared to July 2011, excluding carbon).

Electricity Gross Profit

Reduced mass market volumes, higher average energy prices and the unfavourable tariff determination in Queensland are the main drivers of the 18% decline in Electricity Gross Profit to \$762 million. Contraction in gross margin from 24.3% to 17.8% also reflects the impact of the carbon price increasing revenue.

5.1.4 Non-commodity sales

Revenue for the Non-commodity businesses declined by 25% or \$34 million to \$102 million, reflecting fewer installations of rooftop solar PV systems compared with the prior half year. Policy changes, including changes to the Renewable Energy Certificate multiplier and feed-in tariff schemes across all states, had a significant impact on demand during the half year, with installations reducing by 2,934 to 7,672 compared to the prior half year.

Despite the decline in revenue during the half year, Non-commodity Gross Profit increased by 61% from \$18 million to \$29 million. This was due to a larger proportion of higher margin solar products, as well as falling hardware costs and improved operational efficiencies.

Energy Markets' other product offerings such as solar hot water, serviced bulk hot water systems and heat pumps are performing well and continue to complement the core Natural Gas and Electricity businesses.

5.1.5 LPG

LPG sales volumes decreased by 2% compared to the prior half year, to 240 kT. Wholesale supply volumes declined following the unwind of Origin's share in the Vitalgas joint venture with Caltex in November 2011. This was partially offset by increased retail LPG volumes.

²⁸ Average energy price in July, less carbon of \$19.78/MWh at the NEM intensity of 0.86.

Despite lower volumes, LPG Gross Profit grew by 10% or \$9 million to \$103 million, with active sales price management and foreign exchange gains more than offsetting the fluctuations in the procurement cost of LPG.

5.1.6 Internal generation portfolio

Energy Markets' generation portfolio continues to achieve high levels of availability and reliability, with an equivalent reliability factor²⁹ (ERF) of 96%. Eraring Power Station achieved an ERF of 89% during the half year, with a boiler issue in one of the units reducing availability for a six week period from mid October 2012.

Mortlake Power Station was integrated into the portfolio in August 2012 and is performing well. With reduced coal supply and increased energy prices in Victoria, the power station has been operating at a relatively high capacity factor of 29% with an ERF of 99%. Mortlake Power Station represents a final investment of \$810 million excluding capitalised interest, and adds 550 MW of peaking to intermediate capacity to Origin's portfolio.

Performance of the internal generation portfolio and externally contracted plant is summarised in the following table:

Half year ended 31 December 2012	Nameplate Plant Capacity (MW)	Equivalent Reliability Factor	Capacity Factor	Electricity Output (GWh ²⁹)	Pool revenue (\$m)	Pool revenue (\$/MWh)
Base Load						
Eraring (Contracted)	2,770	89.3%	44%	5,347	304	57
Darling Downs	630	96.7%	45%	1,261	73	58
Peaking						
Mt Stuart	414	99.3%	1%	15	2	133
Uranquinty	640	95.1%	7%	204	15	74
Roma	74	96.4%	4%	12	1	83
Ladbroke Grove	80	98.3%	14%	50	4	80
Quarantine	216	98.9%	5%	46	5	109
Mortlake ⁽¹⁾	550	99.0%	29%	709	47	66
Renewable						
Cullerin Range	30	94.7% ⁽²⁾	38%	50	3	60
Shoalhaven (Contracted)	240	90.1%	5%	50	6	120
Internal Generation	5,644	96%		7,744	460	59
Externally Contracted						
Bulwer Island ⁽³⁾	32	99.0%	61%			
Osborne ^(3,4)	180	100.0%	67%			
Worsley ⁽³⁾	120	100.0%	97%			
TOTAL (equity %)	5,900					

(1) Mortlake Power Station commenced commercial operation on 21 August 2012.

(2) Availability factor.

(3) Origin holds a 50% share.

(4) For Osborne, Origin holds a 50% share and contracts 100% of the output.

Origin has 30 MW of operating wind capacity at Cullerin Range and a number of contractual wind off-take power purchase agreements to support the Company's renewable energy obligations under the Federal Government's Large-Scale Renewable Energy Target, as well as provide GreenPower to retail customers.

Origin's most advanced wind development project is Stockyard Hill in western Victoria, which has a forecast capacity of around 300 to 500 MW and an expected average capacity factor of

²⁹ Refer to Glossary in Appendix 5.

36%. During 2012, Origin commenced a review to identify the optimal way to develop the Stockyard Hill Wind Farm project. This included seeking proposals from parties interested in supplying turbines, constructing the wind farm on Origin's behalf or providing equity for Stockyard Hill while Origin supported it through a power purchase agreement. The review confirmed Stockyard Hill is one of the best wind farm sites in Australia, and Origin has decided to retain the site and commercialise it at an optimal time for its portfolio. Origin continues to progress the remaining development work, particularly relating to the development approvals and land access for the transmission connection.

5.1.7 Operating costs

Half year ended 31 December (\$ million)	2012	2011	Change %
Natural Gas, Electricity & Non-commodity operating costs	(309)	(283)	9
LPG operating costs	(71)	(65)	9
Total operating costs	(380)	(348)	9

Natural Gas, Electricity and Non-commodity operating costs (Cost to serve)

Origin includes within its cost to serve all costs associated with servicing and maintaining customers, all customer acquisition and retention costs, and all costs associated with delivering new product lines within the Non-commodity business.

Half year ended 31 December	2012	2011	Change	Change %
Natural Gas, Electricity & Non-commodity cost to serve (excl. TSA unwind) (\$m)	(361)	(332)	29	9
TSA provision unwind (\$m)	52	49	3	6
Total Electricity, Natural Gas & Non-commodity operating costs (\$m)	(309)	(283)	(26)	9
Maintenance costs (\$m)	(249)	(239)	(10)	4
Acquisition & retention costs (\$m)	(60)	(44)	(16)	36
Average customer accounts ('000)	3,956	4,087	(131)	(3)
Cost to serve (\$ per customer)	(78)	(69)	(9)	13
<i>Cost to maintain (\$ per average customer)</i>	<i>(63)</i>	<i>(58)</i>	<i>(5)</i>	<i>9</i>
<i>Cost to acquire/retain (\$ per average customer)</i>	<i>(15)</i>	<i>(11)</i>	<i>(4)</i>	<i>36</i>
<i>Cost per acquisition / retention³⁰ (\$ per win/retain)</i>	<i>(85)</i>	<i>(80)</i>	<i>(5)</i>	<i>(6)</i>

Cost to serve increased by 9% or \$26 million to \$309 million. Investment in higher acquisition and retention activity accounted for \$16 million of the increase, as the SAP migration in the prior half was no longer restricting sales and marketing activity. Customer wins and retains were consequently 62,000 and 97,000 higher respectively than the prior half year.

A further \$5 million of the increased cost to serve is due to redundancy costs incurred in the period across Natural Gas, Electricity and Non-commodity. As core operations continue to improve post migration to SAP, Origin has commenced cost rationalisation activities, resulting in a reduction in full time equivalent employees (FTEE) of 252 during the half year. This is inclusive of an increase of 120 FTEEs associated with the Integral Energy migration, which replaces services provided under the Integral Energy TSAs. Labour savings from the reduced headcount will flow through into future periods.

³⁰ Cost per acquisition/retention = Acquisition and Retention Costs divided by the sum of customer wins (325,000; 263,000 prior half year) and retains (384,000; 287,000 prior half year). Prior half year has been restated from 384,000 to remove the impact of inter-entity transfers associated with the acquired NSW energy assets).

While overall cost to serve increased by 9%, cost to serve on a per customer basis increased by 13% or \$9 to \$78. The increase in cost to acquire and retain and cost to maintain drives \$7 of the increase, with the remaining \$2 per customer due to reduced customer numbers.

At the time of the NSW acquisition, Origin entered into TSAs with the NSW distribution network businesses to continue to provide services such as customer billing, collections, debtor management, call centre and other customer services. As these services are at a cost which is higher than the incremental cost Origin would have incurred internally, a provision was raised on acquisition. The unwind of this provision for the half year to 31 December 2012 was \$52 million (\$49 million in the prior half year), which is shown as a reduction in Natural Gas, Electricity and Non-commodity cost to serve.

LPG operating costs

LPG operating costs increased by \$6 million or 9% to \$71 million. Redundancy expenditure reflected \$3 million of the increase, with the business reducing FTEEs by 127 or 12% during the half year. The benefit of the reduced headcount will flow through into future periods.

5.1.8 Customer accounts

Natural Gas, Electricity and LPG customer accounts

The increased investment in acquisition and retention activity has improved the relative performance of Origin's Electricity and Natural Gas customer accounts. During the half year, Electricity and Natural Gas customer accounts reduced by 23,000 compared to a 112,000 net reduction in the prior half year. Furthermore, the current half year performance is an improvement on the second half of the 2012 financial year, which experienced a net reduction of 48,000 customer accounts.

Within the 23,000 net reduction in customer accounts, Natural Gas customer accounts increased by 39,000, reflecting increased dual fuel penetration and marketing efforts in NSW. Origin's large electricity incumbency position in NSW provides an opportunity to further improve Natural Gas market share which will provide ongoing value with gas prices increasing along the east coast over the coming years.

Electricity customer accounts decreased by 62,000 during the half year. In NSW, electricity customer accounts decreased by 43,000 as increased competition post privatisation continued. While further losses in the NSW market are expected given Origin's large incumbency position, retention activities are performing well.

Customer account movement from 30 June 2012 to 31 December 2012 ('000)

Customer Accounts	31 December 2012			30 June 2012			Change
	Electricity	Natural Gas	Total	Electricity	Natural Gas	Total	
NSW	1,382	192	1,574	1,425	157	1,582	(8)
Victoria	623	476	1,099	641	475	1,116	(17)
Queensland	789	134	923	795	130	925	(2)
South Australia	158	200	358	153	201	354	4
Total	2,952	1,002	3,954	3,014	963	3,977	(23)

As at 31 December 2012, Origin held 999,000 dual fuel (electricity and gas) customer accounts. Dual fuel accounts increased by 57,000 accounts in the first half of the financial year from 942,000 accounts at 30 June 2012.

As at 31 December 2012, Origin had 374,000 LPG customer accounts, down 2% from 382,000 customer accounts at 30 June 2012.

5.1.9 Retail Transformation Program and NSW Integration

Retail Transformation has been an essential program to transform all aspects of the Retail business to improve business process efficiency, optimise cost to serve and further enhance customer service. Most notably, this has led to one single integrated SAP billing and customer management system.

Following the migration of the NSW Integral Energy customers onto SAP in January 2013, Origin is now servicing 3.3 million, or over 80% of customers from SAP, with the remaining Country Energy customers to be migrated by the end of calendar year 2013. Origin is now undertaking the customer services that were previously being provided under the Integral Energy TSAs.

While the Retail Transformation Program is nearing completion, there have been some short-term implications for Origin's operations. In 2011, the four large-scale customer migrations onto SAP temporarily restricted customer acquisition and retention activity resulting in the loss of customer accounts. During the half year, billing and collection processes were restricted resulting in an increase in working capital.

Origin continues to focus on improving its core billing, exception management, collections and call centre processes to ensure the customer experience is enhanced, with associated cost to serve benefits to flow through into future periods.

Online self-serve functionality and e-billing capability was launched during the period, with penetration increasing each month. Also, the new system has enabled streamlining of call centre processes, improving the utilisation of call centre staff.

5.1.10 Segment Result

The Energy Markets Segment Result was down 26% or \$181 million to \$516 million on the prior half year.

Items excluded from the Energy Markets Segment Result include a decrease in the fair value of financial instruments of \$119 million and transition and integration costs primarily relating to the acquired NSW energy assets and the Retail Transformation Program.

Growth capital expenditure, including capitalised interest, was down 53% or \$166 million on the prior half year to \$150 million. Included within the \$150 million of growth capital expenditure for the half is spend relating to the Mortlake Power Station of \$47 million.

5.2 Exploration & Production

Origin has exploration and production interests in eastern and southern Australia, the Perth Basin in Western Australia and in New Zealand. Origin also has international exploration interests in South East Asia, Kenya and Botswana. These activities are reported within the Exploration & Production segment. Australia Pacific LNG activities are reported separately and discussed in Section 5.3.

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Total Segment Revenue	372	376	(1)
External Revenue ³¹	294	293	0
Underlying EBITDA before exploration expense	202	190	6
Underlying EBITDA	200	179	12
Underlying Depreciation & Amortisation	(121)	(112)	8
Underlying share of ITDA	-	-	-
Underlying EBIT	79	67	18
Segment Result	79	67	18
Items excluded from Segment result	-	(198)	N/A
Growth capital expenditure	266	194	37

- Underlying EBITDA up 12% or \$21 million to \$200 million
- Stable revenue with higher commodity prices (including carbon price) offsetting the impact to production of plant outages
- Production volumes down by 5% due to an extended shutdown at BassGas, suspension of operations at Kincora and planned inspection and maintenance outages at Kupe, partially offset by higher customer nominations and improved performance at Otway
- Higher growth capital expenditure with commencement of the Geographe development

5.2.1 Financial Performance

Production, Sales and Revenue

Half year ended 31 December	2012	2011	Change (%)
Total Production (PJe ³²)	41	43	(5)
Total Sales (PJe)	44	47	(6)
Commodity Sales Revenue (\$m)	354	358	(1)

Origin's share of total production in the Exploration & Production segment was down 2 PJe or 5% to 41 PJe. This was attributable to lower production from BassGas due to the extended shutdown of the plant arising from the Yolla Mid Life Enhancement (MLE) Project, the suspension of gas operations at the Kincora gas plant in the Surat Basin and lower customer nominations and plant availability at Kupe. These factors more than offset increased production from the Otway Basin due to increased plant throughput following the completion of the Inlet Gas Compression Project.

Sales volumes were also lower reflecting lower production together with lower sales from third party purchases. Of the total sales of 44 PJe, 16 PJe was sold internally to Origin, which is in line with the prior half year.

³¹ The Exploration & Production Segment sells gas and LPG to the Energy Markets segment on an arm's length basis. Intersegment sales are eliminated on consolidation.

³² Refer to Glossary in Appendix 5.

Total Segment Revenue decreased by 1% from \$376 million in the prior half year to \$372 million. Commodity revenue (which excludes tolling revenue) of \$354 million also decreased by 1% from \$358 million in the prior half year with higher commodity prices (including carbon) more than offset by a 6% fall in sales volumes.

Further information regarding production, sales volumes and revenues is provided in Origin's December 2012 Quarterly Production Report, available at <http://www.originenergy.com.au>.

Operating costs

Total operating costs including exploration expense declined by 13% on the prior half year, from \$197 million to \$172 million. Expenses excluding exploration costs decreased by 9% to \$170 million, as detailed in the table below.

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change %
Cost of goods sold	(49)	(43)	14
Stock movement	(6)	(1)	500
Royalties, tariffs and freight	(31)	(33)	(6)
General operating costs	(84)	(109)	(23)
Expenses	(170)	(186)	(9)
Exploration	(2)	(11)	(82)
Total operating costs	(172)	(197)	(13)

Cost of goods sold increased by 14% to \$49 million in the current half year, primarily due to the Commonwealth Government's carbon price mechanism which commenced on 1 July 2012.

Stock movement expense increased by \$5 million from the prior half year reflecting a decrease in inventory volumes held to support higher crude sales.

Royalties, tariffs and freight decreased by \$2 million, or 6% primarily due to a decrease in royalties paid by Kupe due to lower condensate sales.

General operating costs decreased by 23% or \$25 million to \$84 million in the current half year. Routine general operating costs were \$5 million lower primarily due to the shut in operations in the Surat and Perth Basins. Non-routine general operating costs were \$20 million lower than the prior half year primarily due to non-recurring costs from the prior half year including one-off repairs to the Kupe offshore umbilical cable, flood recovery costs at non-operated Cooper Basin assets and contract costs to accelerate production from Manutahi, as well as lower shutdown activity costs during the half year from the Otway, Kupe and Rimu plants.

Origin's general operating costs per unit of production decreased by \$0.48/GJe³³, or 19%, compared with the prior year to \$2.05/GJe.

For the current half year, exploration expenses were \$2 million, representing the acquisition of 65 km² of 3D seismic data in the Surat Basin and ongoing geological and geophysical studies across the exploration portfolio.

Segment Result

For the reasons set out above, Underlying EBITDA increased by 12% or \$21 million to \$200 million.

Underlying depreciation and amortisation charges were 8% higher than the prior half year at \$121 million, primarily due to increased production from the Otway gas field, higher depreciation from BassGas assets following the completion of Phase 1 of the Yolla MLE Project

³³ Refer to Glossary in Appendix 5.

and higher downhole development costs following an increase in field reserves in the Cooper Basin. This was partially offset by reduced depreciation from New Zealand Onshore assets as the TAWN assets were held for sale during the period.

Underlying EBIT increased by \$12 million from \$67 million to \$79 million for the current half year. This represents the Segment Result for the Exploration & Production segment.

In December 2012, Origin entered into an agreement to sell a portion of its future oil and condensate production over a 72 month period commencing July 2015, at a price linked to the oil forward pricing curve. Upon entry into the agreement, Origin received US\$300 million. The production being sold will be sourced from Origin's east coast and New Zealand portfolio, and represents around 20% of Origin's current oil and condensate 2P reserves, excluding Australia Pacific LNG.

Capital expenditure

Growth capital expenditure increased by 37% or \$72 million to \$266 million in the current half year. This primarily reflected expenditure in the Otway and Bass basins, and ongoing exploration and evaluation activities including the Ironbark CSG project and in Kenya.

5.2.2 Operations

Australia

Origin's Australian operations include producing assets in the Bass and Otway basins off the south coast of Victoria, the Cooper Basin in central Australia and the Perth Basin in Western Australia.

Collectively, these assets produced 33 PJe net to Origin during the half year, a decrease of 1 PJe or 2% on the prior half year, due to the extended shutdown of BassGas for Phase 1 of the Yolla MLE Project and the suspension of gas operations at the Kincora plant in the Surat Basin. These factors were largely offset by higher customer nominations from the Otway Basin and improvement in plant performance. Production for the year included 28 PJ of sales gas and ethane, 572,000 barrels of crude oil and condensate and 36 kT of LPG.

Offshore Australia

Production from Origin's offshore Australian assets in the Otway and Bass basins of 21 PJe was in line with the prior half year, with lower production from BassGas offset by higher customer nominations from the Otway Basin and an improvement in plant performance.

The Yolla platform returned to production on 15 October 2012 as Phase 1 works associated with the Yolla MLE project were completed. As predicted, production from the Yolla 3 well declined following the Yolla field restart due to pressure depletion. The well is currently shut in and will come back online following a well work over scheduled for March 2013. The timing of installation of the export compression and condensate pumping modules is yet to be determined by the joint venture.

A planned 23 day inspection and maintenance shutdown of the Otway gas plant brought forward to November and December 2012 was completed on schedule. The timing of this shutdown is consistent with the prior half year.

The drilling program associated with the Geographe development project is continuing following delays caused by bad weather and the suspension of activities following an accident on 27 August 2012 that resulted in the fatalities of two employees of Stena Drilling, a contractor operating the Stena Clyde semi-submersible drilling rig on behalf of Origin in the Bass Strait. The drilling campaign recommenced in October 2012, and Geographe 2 laterals L1 and L2 reached total depth in November and December 2012 respectively.

The project remains on target for production to commence in the fourth quarter of the 2013 financial year, which will enable the Otway gas plant to run at full capacity, subject to market

demand. Costs for the revised work program have increased by \$70 million from the FID budget of \$275 million (Origin share) reflecting the significant drilling delays and higher rig mobilisation costs.

Geographe 3 has been suspended at a depth of 2,750 metres. The Stena Clyde will be demobilised in February 2013 with the completion of the Geographe 3 well deferred to a later campaign.

Onshore Australia

Production from Origin's onshore assets decreased by 9% on the prior half year, to 12 PJe, due to the suspension of gas production at the Kincora plant in the Surat Basin following a recoverability and risk assessment.

Eighteen wells were drilled in the Cooper Basin during the half year including 14 development wells and four exploration wells. Two of the exploration wells were plugged and abandoned with drilling continuing on the two wells related to the deep gas program and shale gas appraisal. Drilling activity will expand in the second half of the 2013 financial year with four rigs in operation compared to two rigs at present.

In the Ironbark permit, the five well Duke 2 CSG pilot was commissioned with dewatering of the wells continuing and sufficient gas now flowing to feed the surface facilities. Construction of facilities for the Duke 3 CSG pilot (five wells) has been completed, and the pilot wells are expected to commence operation in February 2013.

New Zealand

In New Zealand, Origin participates in production from both offshore and onshore assets in the Taranaki Basin, and has interests in exploration permits in the Canterbury and Northland basins.

Origin's share of production from these assets was 8 PJe, a decrease of 13% on the prior half year due to lower customer nominations and a planned 25 day inspection and maintenance shutdown at the Kupe plant. Production for the half year included 5 PJ of sales gas, 457,000 barrels of crude oil and condensate and 18 kT of LPG.

Origin is seeking to farm down its interest in the Canterbury Basin, while a drillship has been contracted to drill an exploration well during the 2014 financial year.

International oil and gas exploration

Origin is pursuing exploration activities in a number of international regions where the combination of geological prospectivity and market opportunities provides incentive to explore. Efforts to date have focussed on conventional gas exploration in a number of countries in South East Asia and in the highly prospective east coast of Africa in Kenya, and for CSG in Botswana.

In Vietnam, an application to extend the exploration phase of Block 121 for a further 12 months to December 2013 was approved by the Vietnamese regulator. Rig contracting activities have completed and the exploration well is expected to commence drilling in the fourth quarter of the 2013 financial year. The farmin with Pan Pacific Petroleum Vietnam (121) Pty Ltd for a 15% participating interest received approval from the Vietnamese Government in July 2012 and is expected to complete shortly. The farmin with Premier Oil Vietnam 121 Limited for a 40% interest received Vietnamese Government approval in February 2013 and is expected to complete shortly.

In Kenya, the Mbawa-1 well was spudded on 10 August 2012 and was drilled to a total depth of 3,150 metres, encountering approximately 51.8 net metres of natural gas pay in three zones. Detailed analysis of data from the well is ongoing, as is interpretation of the Nanna 3D seismic survey to determine future drilling activity.

An aero-magnetic survey in Botswana was completed in July 2012 and drilling commenced in November 2012 on two wells of a nine well CSG exploration program, in PLs 134, 135 and 136.

5.3 Australia Pacific LNG

The Australia Pacific LNG segment includes Origin's equity accounted share of the results of Australia Pacific LNG Pty Ltd, and the financing costs, foreign exchange gains and losses and tax associated with Australia Pacific LNG.

Origin's shareholding in Australia Pacific LNG at 30 June 2012 was 42.5%. On 12 July 2012, completion of Sinopec's increased share subscription in Australia Pacific LNG from 15% to 25% resulted in a dilution of Origin's shareholding to 37.5%. Origin recorded a \$358 million gain on diluting its shareholding in Australia Pacific LNG as a result of the issue of shares to Sinopec. Origin's shareholding at 31 December 2012 was at 37.5%.

In Origin's Interim Financial Statements, the financial performance of Australia Pacific LNG is equity accounted. Consequently, revenue and expenses from Australia Pacific LNG do not appear explicitly in the Australia Pacific LNG Segment Result. Origin's share of Australia Pacific LNG's Underlying EBITDA is included in the Underlying EBITDA of the Australia Pacific LNG segment. Australia Pacific LNG's Underlying interest, tax, depreciation and amortisation expense is accounted for between Underlying EBITDA and Underlying EBIT in the line item "Share of interest, tax, depreciation and amortisation of equity accounted investees". As a result, Origin's share of Australia Pacific LNG's Underlying net profit after tax is included in the Underlying EBIT and Segment Result lines below.

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Total Segment Revenue	-	-	-
Underlying EBITDA	19	16	19
Underlying Depreciation & Amortisation	-	-	-
Underlying share of ITDA	(18)	(13)	38
Underlying EBIT	1	3	(67)
Underlying Net Financing Costs	-	-	-
Underlying Net Income tax expense	-	-	-
Segment result	1	3	(67)
Items excluded from Underlying EBIT and Segment result	291	454	(36)
Origin cash contribution to Australia Pacific LNG ³⁴	119	173	(31)

- Underlying EBITDA up 19% to \$19 million reflecting higher domestic gas sales and increased production, partially offset by Origin's reduced shareholding in Australia Pacific LNG
- Offtake agreements in place with Kansai and Sinopec completing marketing for two LNG trains
- FID taken on the second LNG train in July 2012
- Progress on the Upstream component of the Australia Pacific LNG Project is 29% and the Downstream component is 31%

³⁴ Via loan repayment.

5.3.1 Australia Pacific LNG financial performance (100% basis)

Production, Sales and Revenue

Operating Performance	Total APLNG (PJe)	Origin's interest (PJe)	Total APLNG (PJe)	Origin's Interest (PJe)
	Half year ended December 2012		Half year ended December 2011	
Production Volumes	57	21	52	23
Sales Volumes	60	23	53	23

Australia Pacific LNG's domestic production increased 5 PJe or 10% to 57 PJe to support increased customer sales.

Financial performance

Financial Performance (\$m)	Total APLNG	Origin's interest ³⁵	Total APLNG	Origin's interest ³⁶
	Half year ended December 2012		Half year ended December 2011	
Operating revenue	197		165	
Operating expenses	(147)		(129)	
Underlying EBITDA	50	19	36	16
Depreciation and amortisation expense	(60)		(47)	
Net financing income	7		8	
Income tax benefit	5		9	
Underlying Share of ITDA	(48)	(18)	(30)	(13)
Segment Result	2	1	6	3
Items excluded from Segment Result	40	15	10	4
Statutory Profit	42	16	16	7

Revenue increased by \$32 million or 19% to \$197 million. The increase in revenue is attributable to a 13% or 7 PJe increase in sales volumes to 60 PJe, coupled with marginally higher average gas prices. The carbon price mechanism also contributed \$7 million to increased revenue, and is fully offset in operating expenses by the same amount. Removing the impact of the carbon price pass through, revenue increased by 15% compared to the prior half year.

Australia Pacific LNG's operating expenses increased by 14% or \$18 million to \$147 million, reflecting an increase in gas purchases in line with higher sales volumes and the carbon price mechanism.

As a result, Australia Pacific LNG's Underlying EBITDA increased by 39% or \$14 million, to \$50 million.

Depreciation and amortisation expenses increased by 28% or \$13 million to \$60 million due to an increase in assets in operation compared to the prior half year. Underlying net financing income decreased by \$1 million to \$7 million due to slightly lower interest earned on the proceeds received under the subscription agreement with Sinopec.

Underlying income tax benefit decreased by \$4 million or 44% to \$5 million due to lower research and development deductions recognised in the period compared to the prior half year.

³⁵ Reflects Origin's 42.5% share in Australia Pacific LNG until 12 July 2012 at which time this was diluted to a 37.5% share, and remained at that level at 31 December 2012.

³⁶ Reflects Origin's 50% share in Australia Pacific LNG until 9 August 2011 at which time this was diluted to a 42.5% share, and remained at that level at 31 December 2011.

Items excluded from the Segment Result increased by \$30 million to \$40 million. This increase was primarily due to a higher foreign exchange gain on the deferred tax balances of subsidiaries within the Australia Pacific LNG consolidated group with US dollar functional currencies (+\$26 million), and higher net foreign exchange gains in relation to funding and development of Australia Pacific LNG (+\$12 million). This was partially offset by lower unwinding of discounts recognised on shareholder receivables (-\$8 million).

Consequently, Statutory Profit for Australia Pacific LNG increased by 163% or \$26 million to \$42 million.

5.3.2 Segment Result (Origin share)

The Australia Pacific LNG segment recorded an Underlying EBITDA of \$19 million compared with \$16 million in the prior half year, an increase of 19%. This reflected higher sales volumes supported by higher production, partially offset by the dilution of Origin's shareholding in Australia Pacific LNG from 42.5% to 37.5% in July 2012.

Origin's Underlying share of ITDA for Australia Pacific LNG increased by \$5 million to \$18 million for the half year.

Origin's share of the Underlying Profit of Australia Pacific LNG decreased from \$3 million in the prior half year to \$1 million. This is recorded as the Segment Result for the Australia Pacific LNG segment in Origin's Interim Financial Statements.

Items excluded from the Australia Pacific LNG Segment Result amount to \$291 million (post-tax) in the current year, as described in Section 3.2.

5.3.3 Australia Pacific LNG Project

The Australia Pacific LNG export project ("the Project") was sanctioned in July 2011 for an initial 4.5 million tonnes per annum LNG train and infrastructure to support a second LNG train of the same size. The second LNG train was sanctioned in July 2012.

On 20 January 2012, Sinopec agreed to purchase an additional 3.3 million tonnes per annum of LNG through to 2035 under its existing sale and purchase agreement with Australia Pacific LNG. On 29 June 2012, Australia Pacific LNG and The Kansai Electric Power Company signed a binding agreement for the sale and purchase of approximately 1 million tonnes of LNG per year for 20 years. The above Sinopec and Kansai agreements completed the marketing of Australia Pacific LNG's two train project.

5.3.4 Project performance and key milestones

At the end of December 2012, the Upstream Project was 29% complete and the Downstream Project was 31% complete, and based on overall progress of work completed to date, is on track to achieve key project milestones:

Milestone	Target Date at FID	Status Update
First gas field facility complete	Mid 2013	On Track
Pipeline complete	Early 2014	On Track
First LNG from Train 1	Mid 2015	On Track
First LNG from Train 2	Early 2016	Ahead of Schedule

Upstream Project (Operated)

Key accomplishments

The following table reports progress against the Upstream Project key goals and milestones Origin outlined in its 2012 financial year Management Discussion and Analysis:

Upstream goal (August 2012)	FY2013 Plan	Actual progress (December 2012)
200 wells drilled	Q2	Accomplished: 209 wells drilled
100 wells with gathering lines installed (equivalent to 59 diameter-kilometres ³⁷)	Q2	Not accomplished: Equivalent of 55 wells with gathering lines installed (32 diameter-kilometres)
Condabri Central gas plant 50% complete	Q2	Accomplished: 60% complete
150km pipeline installed	Q2	Not accomplished: 142 km total pipeline welded, main pipeline 54 km installed

- Drilling:** 209 Phase 1³⁸ operated wells have been drilled to 31 December 2012. Well drilling durations have continued to reduce during the second half of 2012 due to improved drilling performance and favourable weather conditions. 82 operated Phase 1 wells were drilled during the second quarter of the financial year, including 36 in December 2012. Three Savanna hybrid coil rigs and one conventional Ensign rig were operational at the end of December 2012. While the average duration per well in December 2012 has reduced to 3.2 days, additional drilling rig capacity will be added in 2013 to mitigate potential future weather and other productivity-related risks. Land access (compensation, permitting and other approvals) for drilling and gathering activities has been finalised for 467 Phase 1 well locations (“land bank”), with compensation arrangements agreed for a further 340 wells.
- Gathering:** 967 operated Phase 1 well locations have been ‘scouted’ (land surveys, environmental studies, flow-line routes, etc.) and construction drawings and work packs have been issued for approximately 688 of these wells. Installation of gathering flow lines and electrical and fibre optic cables commenced in the second quarter of the 2013 financial year, with 32 diameter-kilometres installed, equivalent to approximately 55 wells, compared to a target of 59 diameter-kilometres. The gathering installation underperformance does not impact the critical path and is expected to be recovered in 2013. Following finalisation of land access arrangements for Phase 1 well locations in the western gas fields in January 2013, a third gathering installation contractor will be mobilised in the Combabula area. Fabrication of well head separator units is 35% complete and they are being delivered to site on schedule.
- Facilities:** Fabrication of pre-assembled units for the first eight gas processing trains (related to Train 1) were 97% complete at the end of December 2012, in accordance with plan. Construction of the first gas processing plant at the Condabri Central gas plant was 60% complete at the end of December 2012, slightly ahead of plan, and is on track to be complete by mid-2013. Construction of the Condabri water treatment and South and North gas processing facilities are progressing on plan.
- Pipeline:** The main pipeline is on track to be complete in early 2014, consistent with the project plan. Pipe welding is complete for the Condabri lateral and is underway on the main pipeline. Over 40% of the Condabri Lateral pipeline has been lowered in and backfilled and the main pipeline has started backfilling. The Narrows Crossing, which is being executed by QCLNG, is on track to finish before the main pipeline completion in early 2014. At the end of December 2012, easements were secured for 365 km of the combined main pipeline and southern lateral to Condabri. Discussions are progressing satisfactorily for the remaining land access.

³⁷ Calculated by multiplying the diameter of the pipe by the length of pipe.

³⁸ Phase 1 includes Australia Pacific LNG operated wells required to be online to deliver first gas to both trains of the CSG to LNG export project (in conjunction with gas from non-operated areas).

- **Electrification:** Australia Pacific LNG has contracted Powerlink to undertake the electrification sub-project. All aspects of electrification are progressing on schedule. Temporary power supply arrangements for Reedy Creek are currently being evaluated to mitigate Train 2 electrification delay risk, in addition to supporting an early commissioning opportunity.

Upstream Project (Non-operated)

QGC

QGC's drilling performance improved during the half, with a record number of wells drilled in December 2012. Increased well site availability coupled with an increase in the rig fleet is expected to see an even higher level of drilling activity in 2013. The Argyle and Bellevue gas fired field compressor stations were commissioned in the half, and construction commenced on the Ruby Jo central processing plant and a number of electric powered field compressor stations.

GLNG

GLNG's Fairview drilling program was ahead of planned levels at the end of the half. In line with GLNG's plans to accelerate field development, a further well development proposal for the Fairview field was issued by GLNG in late 2012. Construction of combined hub/nodal compressor stations 4 and 5 progressed during 2012 with both being targeted for completion in late calendar year 2013.

Downstream Project

Key accomplishments

The following table reports progress against the Downstream Project key goals and milestones Origin outlined in its 2012 financial year Management Discussion and Analysis:

Downstream goal (August 2012)	FY2013 Plan	Actual progress (December 2012)
Module assembly underway	Q1	Accomplished: September 2012
Mechanical erection begins	Q2	Accomplished: December 2012
Material Offloading Facility complete	Q3	Accomplished: December 2012
First compressors shipped to site	Q3	On track

- **Curtis Island:** The Material Offloading Facility (MOF) was completed and regulatory approvals were received for operation in December 2012. The Train 1 methane compressor foundation table top was completed in December 2012 and work continued to plan for the propane and ethane compressor installations. The Train 2 site area preparations were completed and foundation work initiated. Erection and welding works continued on both LNG tanks and remain on schedule. The first ethylene and propane compressors and the gas turbine generators were released for shipment. The first compressor shipment is expected in the third quarter of financial year 2013, following a successful string test of the methane compressor in December 2012. Phase 3 of the accommodation village, including 264 rooms with sports and recreational facilities was completed in December 2012. Approximately 1,000 rooms are now in use in the camp. The permanent sewer line was completed in December 2012 and tied-in at the site boundary. All 3 sewer pump stations were in operation. Critical path activities continue to progress either on or ahead of plan.
- **Module yard:** Steel shipments continued to be delivered to Batam and assembly commenced in September 2012 as planned. By the end of December 2012, the first four shipments of structural steel had been delivered. Module fabrication and assembly continued, with first modules scheduled for completion and shipment in February 2013.
- **Dredging:** Dredging to support construction access is complete. Dredging for the LNG shipping areas is progressing.

Project performance to 31 December 2012

Upstream Operated		Result	Downstream		Result
Overall progress of work completed to date		29%	Overall progress of work completed to date		31%
Drilling	Access approvals	467	Curtis Island	Site works construction	95%
	Operated wells drilled	209		Material Offloading Facility	Complete
				Curtis Island Roll on Roll off ramp	Complete
				Curtis Island causeway and ferry terminal	Complete
				Train 1 compressor foundation	Methane foundation poured
			Train 2 compressor foundation	Subsurface & foundation progressing	
			LNG tanks	Ahead of plan	
Gathering	Gathering wells scouted	967	Module Yard	Fabrication commenced	Sept 12
	Gathering well sites ready for construction	688		Materials shipments to Batam	On track
	'Diameter-kilometres' of flow lines installed	32 km		Pressure testing of module piping	On track
	Equivalent number of wells with gathering lines installed	55		Piperack module fabrication	On track
	Fabrication of well-head separators	35%			
Facilities	Fabrication of pre-assembled units for Train 1	97%	LNG Plant	Methane compressor string test	Complete
	Number of gas plant units fabricated and shipped (15 total)	5		First ethylene and propane compressors shipped	En route
	Number of compressor sets shipped (15 total)	6		Compressor fabrication	On track
	Condabri Central gas plant construction progress	60%		5 Gas turbine generators shipped	En route
Pipeline	Pipeline easements	365km	Mainland	Fisherman's Landing Northern Extension roll on/roll off facility	Complete
	Pipeline engineering completion	83%		Ferry terminal	Complete
	Pipeline delivered	84%			
	Pipeline construction by McConnell Dowell, Consolidated Contracting Co. joint venture (MCJV) and NACAP (km welded)	142km			
	Construction of Narrows Crossing (performed by QCLNG)	On track			
Electrification	Train 1 electrification	On track	Dredging	Marine facilities	86%
	Train 2 electrification	On track		Dredging works	47%

Key Project goals and milestones for the second half of the 2013 financial year

Upstream Operated	FY2013 Plan	Downstream	FY2013 Plan
320 wells drilled	Q4	First compressors delivered to site	Q3
100 diameter-kilometres of gathering installed (equivalent to 170 wells)	Q4	First LNG modules delivered to site	Q3
Eastern gas field facilities 70% complete (related to Train 1)	Q4	Set first refrigeration compressor	Q4
Western gas field facilities 15% complete (related to Train 2)	Q4	Set train 1 gas turbine generators	Q4
Main pipeline from Condabri to Gladstone 50% complete	Q4	LNG tanks 35% complete	Q4

5.3.5 Capital expenditure and funding

The table below details Australia Pacific LNG capital expenditure (100% basis) for the half year and cumulative to 31 December 2012.

APLNG Capital Expenditure (100% basis) A\$ million		Half year to Dec 2012	Cumulative from FID 1 to Dec 2012
Project costs	Operated - Growth	3,239	7,462
	Non-Operated - Growth	280	712
		3,519	8,174
Capitalised O&M costs	Operated - Growth	174	
		174	
Domestic costs	Operated - Stay In Business	111	
	Non-Operated - Growth	126	
		237	
Exploration costs	Operated	17	
	Non-Operated	23	
		40	
Total		3,971	
Origin cash contribution		119	1,286

Project costs include all operated and non-operated capital costs associated with the LNG project.

Capitalised O&M costs includes all operating and maintenance costs associated with the LNG project which have been capitalised and are excluded from the LNG export project cost estimates. The capitalisation of operating and maintenance costs prior to LNG start up will continue to be assessed.

Domestic costs include capital costs from Australia Pacific LNG's domestic operations, upstream non-operated capital costs associated with the supply of gas to third party LNG projects and costs associated with head office, project and system assets.

Exploration costs are attributable to exploration, development and appraisal activities not related to the gas required for Phase 1 of the LNG project.

During the half year, Origin contributed \$119 million to Australia Pacific LNG via loan repayments to meet its share of Australia Pacific LNG capital expenditure not otherwise met by cash available to Australia Pacific LNG. Origin made cash contributions of \$1,167 million in the 2012 financial year, including \$173 million in the prior half year. Origin has made total cumulative cash contributions of \$1,286 million at 31 December 2012.

During the half year all conditions precedent were satisfied for the US\$8.5 billion project finance facility obtained by Australia Pacific LNG. The total amount drawn down by Australia Pacific LNG during the half year was US\$2,257 million. Capitalised interest of \$51 million has been recognised during the half year attributable to the funding utilised from the project finance facility.

5.4 Contact Energy

This segment reports the results of Origin's 53.1% owned controlled entity, Contact Energy, which is a natural gas, electricity, LPG and energy related products and services provider and power generator in New Zealand. Origin held a 52.8% interest in Contact Energy at 31 December 2011. The segment also includes Origin's interest and tax relating to borrowings for the investment in Contact Energy.

Financial Performance

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Total Segment Revenue	948	999	(5)
Underlying EBITDA	198	182	9
Underlying Depreciation & Amortisation	(74)	(74)	-
Underlying share of ITDA	-	(1)	N/A
Underlying EBIT	124	107	16
Underlying Net financing costs	(32)	(32)	-
Underlying Income tax expense	(24)	(19)	26
Non-controlling interests' share of underlying profit	(36)	(31)	16
Segment Result	32	25	28
Items excluded from Segment Result	(3)	(4)	25
Growth capital expenditure	137	207	(34)

- Underlying EBITDA up 9% to \$198 million
- Improved price competitiveness has stabilised customer numbers
- Lower wholesale electricity prices due to increased hydro generation
- Lower cost of generation with hydro displacing more expensive thermal generation, lower carbon costs and gains from wholesale energy markets
- Te Mihi enters commissioning phase with completion expected in mid calendar year 2013
- Retail Transformation project in integrated testing phase; 'go-live' planned for late calendar year 2013

5.4.1 Operational Performance

Half year ended 31 December	2012	2011	Change (%)
Total generation volume (GWh)	4,959	5,236	(5)
Retail electricity sales (GWh)	4,260	4,286	(1)
Gas sales (retail and wholesale) (PJ)	3.0	2.8	7
LPG sales (kT)	37	35	6
Electricity customers ('000)	443	443	-
Gas customers ('000)	63	61	3
LPG customers (including franchisees) ('000)	63	60	5
Total customers ('000)	569	564	1

Origin owns a 53.1% interest in and consolidates 100% of Contact Energy in accordance with the Australian Accounting Standards. The interests attributable to minority shareholders are recognised as Non-controlling interests in Origin's Interim Financial Statements.

A financial report entitled “Management discussion of financial results for the six months ended 31 December 2012” was issued by Contact Energy to the New Zealand Stock Exchange (NZX) on 19 February 2013 and is available on Origin’s website www.originenergy.com.au. That document contains details regarding Contact Energy’s financial and operating performance during the period, including comparisons to the performance of Contact Energy in the prior half year.

In consolidating Contact Energy’s results, Origin used an average exchange rate of NZ\$1.27 to the Australia dollar, compared with NZ\$1.28 to the Australian dollar in the prior half year.

Contact Energy’s Underlying EBITDA reported in Origin’s accounts in Australian dollars increased 9% or \$16 million on the prior half year from \$182 million to \$198 million. Underlying EBIT increased 16% or \$17 million to \$124 million, with depreciation and amortisation costs consistent with the prior half year.

The Contact Energy Segment Result increased by 28% or \$7 million to \$32 million in the half year. Improved earnings, and net interest expense in line with the prior half year, were partially offset by an increase in income tax (at a lower rate due to a decrease in the New Zealand company tax rate from 30% to 28%).

Items excluded from the Segment Result are net of tax and non-controlling interests and include adjustments for the change in fair value of financial instruments, transition costs arising from the implementation of Contact Energy’s Retail Transformation program and associated activities in the retail business, and the impairment of the Clutha development and associated sale of land.

Growth capital expenditure of \$137 million (including capitalised interest) decreased 34% from \$207 million. This primarily comprised \$117 million of expenditure for the Wairakei Investment Program, which includes the Te Mihi Power Station. During the half year Contact Energy continued its programme of selling non-core assets, announcing the sale of its gas metering business to Vector for NZ\$63 million in November 2012 and the sale of the New Plymouth Power Station site in two separate transactions for a price of NZ\$24 million (these transactions had not completed as at 31 December 2012).

The commentary below relates to Contact Energy’s performance in New Zealand dollar terms. In January 2013, Contact Energy announced a revised segment structure to simplify the reporting of the relationship between the generation and retail operations. Retail and wholesale gas are now integrated into the Electricity segment which is now called the “Integrated Energy” segment. The “Other” segment includes the contribution of the LPG and meters business.

Contact Energy’s Underlying EBITDA increased by 10% or NZ\$22 million to NZ\$253 million.

The Integrated Energy segment grew strongly, with Underlying EBITDA up 11% or NZ\$22 million to NZ\$231 million. Net purchase costs reduced by NZ\$5/MWh as increased hydro generation resulted in lower gas volumes and carbon costs. Contact’s increased portfolio flexibility, including lower take-or-pay gas and swaption volumes, enabled thermal generation to be reduced during lower priced periods caused by increased hydro generation in the market, while utilising the Stratford and Whirinaki peaking power stations to manage volatility.

Contact Energy’s electricity sales volumes were relatively stable, down 1% at 4,260 GWh, and retail gas volumes were stable at 1.4 PJ. Despite retail competition remaining intense, market churn has eased, with Contact Energy’s electricity customer numbers remaining stable and retail gas and LPG customer numbers continuing to grow. Total customer numbers (including electricity, gas and LPG) increased by 5,000 or 1%. Electricity margins decreased marginally by NZ\$1/MWh as increased network costs were not fully recovered from retail customers and lower wholesale prices were reflected in Commercial and Industrial sales.

Underlying EBITDA from Contact Energy’s Other business segment was stable at NZ\$22 million with LPG sales volume increasing 6%, offset by increased purchase costs as a result of increased LPG imports.

5.5 Corporate

This segment reports corporate activities that have not been allocated to other operating segments together with business development activities outside Origin's existing operations.

Corporate activities consist of Origin's corporate office costs including executive management, finance, strategy, legal and company secretarial costs.

Business development activities are those that do not relate directly to Origin's existing business operations, principally Origin's overseas generation development opportunities such as geothermal opportunities in Chile and Indonesia and hydro opportunities in PNG and Chile. Origin's Australian geothermal activities with Geodynamics have also been included in this segment.

With the exception of net financing costs and tax specifically associated with the Australia Pacific LNG and Contact Energy segments which are recorded in those segments, all other net financing costs and tax are recorded in the Corporate segment.

5.5.1 Financial Performance

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
Total Segment Revenue	-	-	-
Underlying EBITDA	(22)	(40)	(45)
Underlying Depreciation & Amortisation	(1)	-	N/A
Share of Underlying ITDA	1	(2)	N/A
Underlying EBIT	(22)	(42)	(48)
Underlying Net financing costs	(94)	(52)	81
Underlying Income tax expense	(148)	(208)	(29)
Non-controlling interests' share of underlying profit	(2)	(1)	100
Segment Result	(266)	(303)	(12)
Items excluded from Segment Result	60	41	46
Growth capital expenditure	43	47	(9)

- Lower EBITDA loss resulting from lower site remediation expenses and lower unallocated corporate costs, offset by a higher foreign exchange loss in the current half year.
- Underlying net financing costs were higher principally due to interest on completed projects and the Ironbark development no longer being capitalised and higher average Net Debt, partially offset by lower average interest rates
- Underlying income tax expense is lower reflecting Origin's lower Underlying Profit (excluding Australia Pacific LNG and Contact Energy)

Currently, no revenues are generated within the Corporate segment.

Underlying EBITDA loss improved by 45% or \$18 million to a loss of \$22 million, resulting from lower site remediation expenses and lower unallocated corporate costs, offset by a higher foreign exchange loss in the current half year.

The Segment Result loss improved by 12% or \$37 million to a loss of \$266 million. This incorporates the impact of higher Underlying net financing costs of \$94 million, up \$42 million on the prior half year due to interest on completed projects and the Ironbark development no longer being capitalised, more than offset by lower taxation expense primarily reflecting lower earnings in Energy Markets.

Items excluded from the segment result totalled a benefit of \$60 million compared with a benefit of \$41 million in the prior year.

Growth capital expenditure decreased 9% or \$4 million to \$43 million due to reduced expenditure on the “Deeps” and “Shallows” geothermal joint ventures and Transform Solar, offset by increased contributions to the Energía Austral hydro joint venture in Chile.

5.5.2 Business Development Activities

Origin continues to develop a portfolio of high quality, large-scale energy opportunities which offer strong growth prospects. This includes geothermal exploration in Chile and Indonesia and potential hydro projects in Chile and PNG, geothermal exploration in Indonesia and a potential hydro project in PNG.

Geothermal

Chile

Energía Andina S.A. (EASA) is a joint venture owned 40% by Origin and 60% by Antofagasta Minerals. EASA has 12 geothermal projects in its portfolio across northern and central Chile that are currently in the exploration phase, with a combined potential un-risked resource of approximately 1,500 MW. Geoscientific studies are continuing to determine the location of wells to further explore the projects.

Indonesia

A consortium between OTP Geothermal Pte (a 50:50 joint venture between Origin and The Tata Power Company Limited of India) and PT Supraco Indonesia hold the Sorik Marapi geothermal concession in Northern Sumatra, Indonesia. Origin has a 47.5% effective interest in the concession which is undertaking exploration activities and planning for initial exploration drilling. Negotiations for the sale of power from Sorik Marapi have commenced with the Indonesian State owned utility PLN.

Australia

Within Australia, Origin has investments in geothermal opportunities through the Innamincka “Deeps” and “Shallows” incorporated joint ventures with Geodynamics, an equity interest of approximately 4.5% in the Geodynamics ASX-listed company and a 100% interest in a geothermal exploration licence (GEL 185) adjacent to the joint venture acreage.

During the half year, Origin gave notice to the Geodynamics joint venture that it was exercising its right to cease further contributions to the Deeps joint venture’s (30% Origin share) Habanero 4 well as it did not achieve interim cost and technical milestones. Origin has the right to return to full participation in the well and joint venture up until the end of the 2013 financial year, or alternatively dilute its interest.

Origin has agreed to a process under which the GEL 185 licence will be surrendered with no further commitments or obligations.

Origin’s investment in the Deeps and Shallows joint ventures with Geodynamics were fully impaired as at 30 June 2012.

Hydro

Chile

Energía Austral (EA), a 51:49 joint venture between Origin and Xstrata Copper, is a 1,000 MW hydroelectric power development project located in the Aysén region in southern Chile. On creation of the joint venture, Origin agreed to progressively invest project development costs of US\$75 million during the next three years to complete a detailed project feasibility study, and,

if the project is deemed feasible, an additional US\$75 million towards a final investment decision. The project is mid way through its feasibility assessment.

Papua New Guinea

Origin is evaluating the potential of the Purari hydroelectric development project in PNG through PNG Energy Developments Limited (PNG EDL), a 50:50 joint venture between Origin and PNG Sustainable Development Program Limited. The 2,500 MW hydroelectric opportunity is located on the Purari River, approximately 350 km north-west of Port Moresby.

A key milestone was achieved in December 2012 with the issuance of the Scheme Definition Report by the AECOM-led consortium. The report sets out the initial preferred scheme for developing the project including the dam site, transmission line corridor and capital costs as well as completing resource monitoring and the initial PNG flora and fauna studies.

Solar

Given the ongoing deterioration of the global solar market, Origin has decided to discontinue all intellectual property development pathways for Transform Solar, its 50:50 incorporated joint venture with Micron Technology Inc.

The wind up process for Transform Solar will include asset and property sales into the 2014 financial year. Origin's investment in Transform Solar was fully impaired as at 30 June 2012.



Grant King
Managing Director

Sydney, 21 February 2013

Appendix 1 - Origin Energy Key Financials

Half year ended 31 December	2012 (\$m)	2011 (\$m)	Change (%)
External revenue	7,379	6,499	14
Underlying EBITDA	1,055	1,157	(9)
Underlying depreciation and amortisation	(336)	(305)	10
Underlying share of interest, tax, depreciation and amortisation of equity accounted investees	(21)	(20)	5
Underlying EBIT	698	832	(16)
Underlying net financing costs	(126)	(84)	50
Underlying Profit before income tax and non-controlling interests	572	748	(24)
Income tax expense on Underlying Profit	(172)	(227)	(24)
Underlying net profit after tax before elimination of Non-controlling interests	400	521	(23)
Non-controlling interests' share of Underlying Profit	(38)	(32)	19
Underlying Profit	362	489	(26)
Items excluded from Underlying Profit	162	305	(47)
Statutory Profit	524	794	(34)
Free cash flow	527	562	(6)
Group OCAT Ratio (12 months to 31 December)	9.1%	10.5%	(13)
Productive capital (12 months to 31 December)	15,116	13,638	11
Capital expenditure (including acquisitions)	720	863	(17)
Total assets	29,024	27,897	4
Net Debt ³⁹	6,025	4,189	44
Adjusted Net Debt	6,266	4,409	42
Shareholders' Equity	14,792	14,367	3
Earnings per share - Statutory	48.0¢	73.8¢	(35)
Earnings per share - Underlying	33.2¢	45.5¢	(27)
Free cash flow per share ⁴⁰	48.2¢	51.7¢	(7)
Interim dividend per share	25¢	25¢	-
Net asset backing per share	\$12.24	\$12.04	2
Net debt to net debt plus equity	28.9%	22.6%	28
Origin Cash (excluding Contact Energy)	286	799	(64)
Origin Debt (excluding Contact Energy)	5,278	4,024	31
Contact Energy Net Debt	1,033	964	7
Total employees (numbers) ⁴¹	5,834	5,599	4
Total Recordable Injury Frequency Rate (TRIFR) ⁴²	8.1	6.5 ⁴³	25

³⁹ The reported numbers for Net Debt include interest bearing debt obligations only.

⁴⁰ Refer to Glossary in Appendix 5.

⁴¹ Total employee numbers decreased by 107 or 2% from 5,941 at 30 June 2012.

⁴² Reported on a rolling 12 month basis.

⁴³ TRIFR for the rolling 12 months to December 2011 has been revised from the previously reported 6.3 to 6.5 due to retrospective data updates.

Appendix 2 - December 2011 Reconciliation of Statutory Profit to Underlying Profit

Reconciliation half year ended 31 December 2011 (\$ millions)	EBITDA	D&A	Share of ITDA	EBIT	Net financing costs	Tax	Non- controlling Interests	NPAT
Statutory Measure	1,424	(305)	(11)	1,108	(102)	(183)	(29)	794
Gain on dilution of Origin's shareholding in APLNG	436	-	1	437	-	-	-	437
Financing cost related to APLNG funding	-	-	-	-	(18)	5	-	(13)
Unwinding of discount on APLNG receivable balances	-	-	13	13	-	-	-	13
APLNG foreign currency impacts	30	-	-	30	-	(8)	-	22
Share of tax expense on translation of foreign denominated tax balances within APLNG (equity accounted)	-	-	(5)	(5)	-	-	-	(5)
APLNG related items	466	-	9	475	(18)	(3)	-	454
Increase in fair value of financial instruments	45	-	-	45	-	(14)	3	34
Impairment of assets	(198)	-	-	(198)	-	59	-	(139)
Other								
Transition and transaction costs	(46)	-	-	(46)	-	14	-	(32)
Tax benefit on translation of foreign denominated long-term tax balances	-	-	-	-	-	(12)	-	(12)
Less total excluded items	267	-	9	276	(18)	44	3	305
Underlying Measure	1,157	(305)	(20)	832	(84)	(227)	(32)	489
Underlying Basic EPS (cps)								45.5

Appendix 3 - Movements in fair value of financial instruments

Summary of movements in financial instruments

Reconciliation of Statement of Financial Position and Income Statement items associated with movements in financial instruments	(\$m)
Recognition of “effective” instruments in the Statement of Financial Position	9
<i>Recognised in Equity (Hedge Reserve post tax)</i>	6
<i>Recognised in Deferred Tax Liability</i>	3
Recognition of “ineffective” instruments in the Income Statement	(119)
Change in net assets (as above)	(110)

The fair value of financial instruments as measured against the relevant market prices is recorded in the Interim Statement of Financial Position in the financial asset and liability balances.

The total decrease in the fair value of financial instruments for the half year ended 31 December 2012 was \$110 million, of which an amount of \$9 million qualified for hedge accounting and is recognised in Equity (Hedge Reserve). The balance of \$119 million is recognised as an expense in the Interim Income Statement and is attributable to:

- Commodity risk management instruments (expense of \$132 million) - predominantly the reduction in fair value of electricity caps during the period. Of the total expense of \$132 million, \$1 million expense is attributable to Contact Energy and \$131 million expense is attributable to Origin (excluding Contact Energy); and
- Foreign exchange and interest rate risk management instruments (gain of \$13 million) - predominantly due to lower interest rates and the appreciation of the Australian and New Zealand Dollars against the US Dollar during the period. The total gain of \$13 million is attributable to Origin (excluding Contact Energy).

The expense in the Interim Income Statement of \$119 million this half year compares to a gain of \$45 million in the prior half year, which was predominantly attributable to commodity risk management instruments.

Appendix 4 - Energy Markets table - 31 December 2011

Half year ended 31 December 2011	Natural Gas	Electricity	Non-commodity	LPG
Revenue (\$m) ^{44,45}	624	3,827	136	350
Total cost of goods sold (\$m)	(498)	(2,897)	(120)	(256)
Gross Profit (\$m)	126	930	18	94
Total operating costs (\$m)			(348)	
Underlying EBITDA (\$m)			820	
Underlying EBIT (\$m)			697	
Underlying EBIT Margin (%)			14.1%	
Volumes ⁴⁶ (sold)	68 PJ	22 TWh	N/A	245 kT
Period-end Customer accounts ('000)	950	3,075	N/A	355
Average Customer accounts ⁴⁷ ('000)	933	3,154	N/A	363
Gross Profit per customer (average accounts, \$)	135	295	N/A	259
EBITDA per customer (average accounts, \$)			194	
EBIT per customer (average accounts, \$)			166	42

⁴⁴ Energy Markets Total Segment Revenue includes pool revenue from the sale of electricity when Origin's internal generation portfolio, including Eraring and Shoalhaven power stations, is dispatched. These pool revenues, along with the associated fuel costs, are netted off in wholesale energy costs within Electricity cost of goods sold.

⁴⁵ Energy Markets Total Segment Revenue includes revenue from the sale of gas swaps to major customers at no margin. These revenues are netted off with the associated cost in Natural Gas cost of goods sold.

⁴⁶ Does not include internal sales for Origin's gas-fired generation portfolio (half year ended December 2012: 23 PJ; half year ended December 2011: 15 PJ).

⁴⁷ Average Customer Accounts is calculated as the average of the month-end customer numbers for each month of the half year.

Appendix 5 - Glossary

Financial Measures

Statutory Financial Measures

Statutory Financial Measures are measures included in the Interim Financial Statements for the Origin Consolidated Group, which are measured and disclosed in accordance with applicable Australian Accounting Standards. Statutory Financial Measures also include measures that have been directly calculated from, or disaggregated directly from financial information included in the Interim Financial Statements for the Origin Consolidated Group.

Term	Meaning
Net Debt	Total current and non-current interest bearing liabilities only less cash and cash equivalents.
Non-controlling interest	Economic interest in a controlled entity of the Consolidated Entity that is not held by the Parent entity or a controlled entity of the Consolidated Entity.
Statutory EBIT	Earnings before interest and tax as calculated from the Origin Interim Consolidated Financial Statements.
Statutory EBITDA	Earnings before interest, tax, depreciation and amortisation as calculated from the Origin Interim Consolidated Financial Statements.
Statutory effective tax rate	Statutory income tax expense divided by Statutory Profit before Tax.
Statutory earnings per share	Statutory profit divided by weighted average number of shares.
Statutory income tax expense	Income tax expense as disclosed in the Interim Income Statement of the Origin Interim Consolidated Financial Statements.
Statutory net financing costs	Interest expense net of interest revenue as disclosed in the Origin Interim Consolidated Financial Statements.
Statutory Profit	Net profit after tax and non-controlling interests as disclosed in the Interim Income Statement of the Origin Interim Consolidated Financial Statements.
Statutory profit before tax	Profit before tax as disclosed in the Interim Income Statement of the Origin Interim Consolidated Financial Statements.
Statutory share of ITDA	The Consolidated Entity's share of interest, tax, depreciation and amortisation of equity accounted investees as disclosed in the Origin Interim Consolidated Financial Statements.

Non-IFRS Financial Measures

This document includes certain Non-IFRS Financial Measures. Non-IFRS Financial Measures are defined as financial measures that are presented other than in accordance with all relevant Accounting Standards. Non-IFRS Financial Measures are used internally by management to assess the performance of Origin's business, and to make decisions on allocation of resources. The Non-IFRS Financial Measures have been derived from Statutory Financial Measures included in the Origin Interim Consolidated Financial Statements, and are provided in this report, along with the Statutory Financial Measures to enable further insight and a different perspective into the financial performance, including profit and loss and cash flow outcomes, of the Origin business.

The principle non-IFRS profit and loss measure of Underlying Consolidated Profit has been reconciled to Statutory Profit in Section 3. The key Non-IFRS Financial Measures included in this report are defined below.

Term	Meaning
Adjusted Net Debt	Net Debt adjusted to remove fair value adjustments on borrowings in hedge relationships.
Free cash flow	Cash available to fund distributions to shareholders and growth capital expenditure.
Free cash flow per share	Free cash flow divided by the closing number of shares on issue.
Gearing Ratio	Net Debt divided by Net Debt plus Shareholders' Equity.
Gross Margin	Gross profit divided by Revenue.
Gross Profit	Revenue less cost of goods sold.
Group OCAT	Group Operating cash flow after tax of the Consolidated Entity (including Origin's share of Australia Pacific LNG).
Group OCAT ratio	(Calendar year Group OCAT - interest tax shield) / Productive Capital.
Interest tax shield	The tax deduction for interest paid.
Operating cash flow	Operating cash flow before tax.
Operating cash flow return (OCFR)	Calendar year Operating cash flow / Productive Capital excluding tax balances.
Productive Capital	Funds employed including Origin's share of Australia Pacific LNG and excluding capital works in progress for projects under development which are not yet contributing to earnings. Calculated on a rolling 12 month basis.
Shareholders' Equity	Shareholders' residual interest in the assets of the consolidated entity after deducting all liabilities, including non-controlling interests.
Segment Result	Underlying EBIT for the Energy Markets and Exploration & Production segments. For the Australia Pacific LNG, Contact Energy and Corporate segments, it is EBIT less net financing costs and tax expense/(benefit). The Contact Energy and Corporate Segment Results are further adjusted for non-controlling interests' share of Underlying Profit. As disclosed in note 2 of the Origin Interim Consolidated Financial Statements.
Total Segment Revenue	Total revenue for the Energy Markets, Exploration & Production, Australia Pacific LNG, Contact Energy and Corporate segments, including inter-segment sales, as disclosed in note 2 of the Origin Interim Consolidated Financial Statements.
Underlying average interest rate	Underlying interest expense for the period divided by Origin's average drawn debt during the year (excluding funding related to Australia Pacific LNG).
Underlying profit and loss measures:	Underlying measures are measures used internally by management to assess the profitability of the Origin business. The Underlying profit and loss measures are derived from the equivalent Statutory profit measures disclosed in the Origin Interim Consolidated Financial Statements and exclude the impact of certain items that do not align with the manner in which the Managing Director reviews the financial and operating performance of the business. Underlying EBIT, Underlying EBITDA Segment Result and Underlying Consolidated Profit are disclosed in note 2 of the Origin Interim Consolidated Financial Statements. Underlying EPS is disclosed in note 14 of the Origin Interim Consolidated Financial Statements.
- Depreciation and Amortisation	
- EBIT	
- EBIT margin	
- EBITDA	
- Effective tax rate	
- Share of ITDA	
- Net financing costs/income	
- EPS	
- Consolidated Profit	
- Profit before tax	
- Income tax expense / benefit	
- Non-controlling interests	

Non-Financial Terms

Term	Meaning
1P reserves	Proved Reserves are those reserves which analysis of geological and engineering data can be estimated with reasonable certainty to be commercially recoverable. There should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.
2P reserves	The sum of Proved plus Probable Reserves. Probable Reserves are those reserves which analysis of geological and engineering data indicate are less likely to be recovered than Proved Reserves but more certain than Possible Reserves. It is equally likely that the actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P).
3P reserves	Proved plus Probable plus Possible Reserves. Possible Reserves are those additional Reserves which analysis of geological and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high estimate scenario.
Capacity factor	A generation plant's output over a period compared with the expected maximum output from the plant in the period based on 100% availability at the manufacturer's operating specifications.
Equivalent reliability factor	Equivalent reliability factor is the availability of the plant after scheduled outages.
GJ	Gigajoule = 10^9 joules
GJe	Gigajoules equivalent = 10^6 PJe
Joule	Primary measure of energy in the metric system.
kT	kilo tonnes = 1,000 tonnes
kW	Kilowatt = 10^3 watts
kWh	Kilowatt hour = standard unit of electrical energy representing consumption of one kilowatt over one hour.
MW	Megawatt = 10^6 watts
MWh	Megawatt hour = 10^3 kilowatt hours
PJ	Petajoule = 10^{15} joules
PJe	Petajoules equivalent = an energy measurement Origin uses to represent the equivalent energy in different products so the amount of energy contained in these products can be compared. The factors used by Origin to convert to PJe are: 1 million barrels crude oil = 5.8 PJe; 1 million barrels condensate = 5.4 PJe; 1 million tonnes LPG = 49.3 PJe; 1 TWh of electricity = 3.6 PJe.
TW	Terawatt = 10^{12} watts
TWh	Terawatt hour = 10^9 kilowatt hours
Watt	A measure of power when a one ampere of current flows under one volt of pressure.