# Third Quarter Activities Report For period ending 30 September 2012



## 18 October 2012

## Comparative performance at a glance

| Corresponding period                   | Q3 2012 | Q3 2011 | Change |
|--|---------|---------|--------|
| Production (mmboe)                     | 13.5    | 12.7    | +6%    |
| Sales (mmboe) <sup>1</sup>             | 16.6    | 16.0    | +4%    |
| Sales revenue (\$million) <sup>1</sup> | 851     | 738     | +15%   |
|  |         |         |        |
| Quarterly comparison                   | Q3 2012 | Q2 2012 | Change |
| Production (mmboe)                     | 13.5    | 13.0    | +4%    |
| Sales (mmboe)                          | 16.6    | 14.9    | +11%   |
| Sales revenue (\$million)              | 851     | 739     | +15%   |
|  |         |         |        |
| Year-to-date comparison                | 2012    | 2011    | Change |
| Production (mmboe)                     | 38.9    | 35.5    | +10%   |
| Sales (mmboe) <sup>1</sup>             | 45.5    | 44.2    | +3%    |
| Sales revenue (\$million) <sup>1</sup> | 2,344   | 1,911   | +23%   |

## Third quarter production up 6% and record quarterly sales revenue

- > Santos today announced a 6% lift in third quarter production to 13.5 million barrels of oil equivalent (mmboe) and record quarterly sales revenue of \$851 million.
- > Quarterly crude oil production of 2.6 million barrels was the highest in four years and 6% above the previous quarter due to strong production from Chim Sáo and higher Cooper Basin oil production.
- > Gas production of 58 PJ (10 mmboe) was 3% above the corresponding period, with record production from the Carnarvon Basin partially offset by lower Cooper Basin and Indonesian gas production.
- > The average gas price of \$5.46/GJ was up 19% on the corresponding period, primarily reflecting higher Indonesian gas prices following the favourable Maleo price review, the commencement of production from Reindeer in Western Australia and stronger LNG sales volumes from Darwin LNG.
- > Sales revenue of \$851 million for the September quarter was 15% higher driven by higher sales volumes and higher gas prices. 2012 year-to-date sales revenue of \$2.3 billion is also a record.
- Production guidance for 2012 is maintained at 51 to 55 mmboe.

## Key activities during the period

- > Moomba-191 shale well was connected to the Moomba infrastructure and has been flowing gas at a stabilised rate of 2.7 mmscf/day.
- Crown-1 exploration well drilling ahead in the Browse Basin, offshore Western Australia.
- > Farm-in agreement executed with Central Petroleum for Santos to earn up to a 70% interest in 13 permit/application areas in the Amadeus and Pedirka Basins. Santos will be the operator of all permits under the agreement, subject to Central Petroleum successfully renewing the relevant permits.
- Approval received from the Vietnamese Government for the Dua field development. First oil is expected in the first half of 2014.
- > The PNG LNG and GLNG projects remain on track for first LNG in 2014 and 2015 respectively.
- > Santos purchased a 3.31% interest in the Combabula CSG field in Queensland from Tri-Star Petroleum and swapped gas with APLNG for delivery at Fairview.

<sup>&</sup>lt;sup>1</sup> Prior period sales volume and revenue has been restated due to the change in accounting treatment for third party crude oil purchases and sales. Refer to footnote on page 4.

Santos Chief Executive Officer David Knox said that strong performance from the base business had driven another lift in quarterly production and record sales revenue.

"The third quarter demonstrates the growth in our base business. The quarter also stands out for the highest quarterly sales revenue in the company's history."

"The PNG LNG and GLNG projects remain on track for first LNG in 2014 and 2015 respectively," Mr Knox said.

## 2012 guidance

Production guidance is maintained at 51 to 55 mmboe. Capital expenditure guidance has been lowered to \$3.5 billion primarily due to timing of expenditure on the GLNG and Gunnedah projects. All other 2012 guidance is maintained.

|   | 2012              |                     |
|---|-------------------|---------------------|
| Item  | Previous guidance | Updated<br>guidance |
| Production (mmboe)  | 51 - 55           | No change           |
| Production costs (\$million)  | 610 - 640         | No change           |
| Depreciation, depletion & amortisation (DD&A) expense (\$/boe)                      | 15                | No change           |
| Royalty-related taxation expense (\$million after tax) <sup>1</sup>                 | 80 - 100          | No change           |
| Capital expenditure (including exploration and evaluation) (\$billion) <sup>2</sup> | 3.75              | 3.5                 |

<sup>&</sup>lt;sup>1</sup> Royalty-related taxation expense guidance based on an average realised oil price of A\$100 per barrel.

Santos expects its effective tax rate (excluding royalty-related taxation expense) for 2012 will be approximately 34%, in line with the effective rate incurred in 2011.

Further detail of 2012 year-to-date capital expenditure, including exploration and evaluation expenditure, is reported in the table on page 7 of this report.

<sup>&</sup>lt;sup>2</sup> Capital expenditure guidance excludes capitalised interest.

# 1. Production

| 1. Froduction                  | Quarter ended |         | YT      | .D      | Full<br>year |         |
|--------------------------------|---------------|---------|---------|---------|--------------|---------|
|                                | Q3 2012       | Q3 2011 | Q2 2012 | 2012    | 2011         | 2011    |
| Sales gas, ethane and LNG (PJ) |               |         |         |         |              |         |
| Cooper                         | 17.1          | 19.1    | 17.0    | 49.3    | 49.9         | 66.1    |
| Surat/Bowen/Denison            | 2.1           | 3.5     | 3.1     | 8.2     | 10.6         | 14.2    |
| GLNG                           | 2.6           | 2.3     | 2.6     | 7.7     | 7.0          | 9.0     |
| Amadeus                        | _             | 0.2     | -       | -       | 0.7          | 0.7     |
| Otway                          | 5.6           | 5.5     | 4.7     | 14.4    | 14.9         | 19.0    |
| Gunnedah                       | _             | 0.1     | -       | -       | 0.1          | 0.2     |
| Carnarvon                      | 16.7          | 11.8    | 16.1    | 49.5    | 33.3         | 45.5    |
| Darwin LNG                     | 4.3           | 4.0     | 2.2     | 10.4    | 11.3         | 14.7    |
| Indonesia                      | 6.9           | 8.7     | 7.8     | 21.7    | 28.6         | 33.9    |
| Vietnam                        | 0.9           | -       | 0.6     | 1.7     | -            | -       |
| Bangladesh                     | 1.8           | 0.9     | 0.9     | 3.2     | 2.6          | 3.5     |
| Total production (PJ)          | 58.0          | 56.1    | 55.0    | 166.1   | 159.0        | 206.8   |
| Total production (mmboe)       | 10.0          | 9.6     | 9.5     | 28.6    | 27.3         | 35.6    |
| Condensate (000 bbls)          |               |         |         |         |              |         |
| Cooper                         | 229.7         | 320.2   | 255.9   | 779.0   | 796.1        | 1,072.0 |
| Surat/Denison                  | 0.9           | 0.6     | 0.2     | 1.7     | 2.2          | 2.8     |
| Amadeus                        | 7.8           | 5.4     | 7.3     | 22.6    | 16.2         | 24.1    |
| Otway                          | 3.9           | 6.3     | 6.1     | 13.7    | 15.6         | 19.5    |
| Carnarvon                      | 162.3         | 157.8   | 154.3   | 478.4   | 363.9        | 502.4   |
| Bayu-Undan                     | 311.2         | 333.2   | 249.8   | 878.6   | 977.5        | 1,291.9 |
| Indonesia                      | 2.0           | 1.3     | 0.8     | 4.4     | 4.2          | 5.2     |
| Bangladesh                     |               | 0.2     | 0.1     | 0.3     | 0.5          | 0.6     |
| Total production (000 bbls)    | 717.8         | 825.0   | 674.5   | 2,178.7 | 2,176.2      | 2,918.5 |
| Total production (mmboe)       | 0.6           | 0.8     | 0.6     | 2.0     | 2.1          | 2.7     |
| LPG (000 t)                    |               |         |         |         |              |         |
| Cooper                         | 26.5          | 39.7    | 36.5    | 94.2    | 101.7        | 134.4   |
| Bayu-Undan                     | 18.8          | 19.7    | 14.4    | 51.8    | 56.8         | 75.2    |
| Total production (000 t)       | 45.3          | 59.4    | 50.9    | 146.0   | 158.5        | 209.6   |
| Total production (mmboe)       | 0.3           | 0.5     | 0.5     | 1.2     | 1.3          | 1.7     |
| Crude oil (000 bbls)           |               |         |         |         |              |         |
| Cooper                         | 858.8         | 769.6   | 809.7   | 2,408.4 | 2,119.2      | 2,831.4 |
| Surat/Denison                  | 17.4          | 20.6    | 16.4    | 54.9    | 70.0         | 89.6    |
| Amadeus                        | 52.3          | 27.0    | 49.2    | 151.4   | 72.6         | 112.7   |
| Theyenard                      | 53.6          | 60.7    | 22.0    | 123.9   | 174.2        | 235.5   |
| Barrow                         | 141.4         | 132.2   | 145.0   | 428.0   | 386.9        | 526.0   |
| Stag                           | 323.9         | 429.6   | 415.1   | 1,005.3 | 1,243.9      | 1,677.2 |
| Mutineer-Exeter                | 169.4         | 249.8   | 159.0   | 490.5   | 425.5        | 669.5   |
| Indonesia                      | 83.5          | 49.4    | 105.9   | 261.0   | 227.0        | 269.9   |
| Vietnam                        | 843.1         | - 17. T | 675.6   | 2,123.4 |              | 680.6   |
| PNG                            | 18.0          | 19.8    | 19.8    | 59.4    | 61.7         | 77.5    |
| Total production (000 bbls)    | 2,561.4       | 1,758.7 | 2,417.7 | 7,106.2 | 4,781.0      | 7,169.9 |
| Total production (mmboe)       | 2,301.4       | 1,730.7 | 2.4     | 7,100.2 | 4,761.0      | 7,109.9 |
| TOTAL                          | 2.0           | 1.0     | ۷.٦     | 7.1     | ٠.٠          | 1.2     |
| Production (mmboe)             | 13.5          | 12.7    | 13.0    | 38.9    | 35.5         | 47.2    |
| - 10000tion (minibot)          | 15.5          | 12.7    | 13.0    | 30.7    | 55.5         | 71.2    |

## 2. Sales volumes and sales revenue

|   |         |             |         |         |         | Full    |
|---|---------|-------------|---------|---------|---------|---------|
|   |         | uarter ende | ed      | YT      | D       | year    |
|   | Q3 2012 | Q3 2011     | Q2 2012 | 2012    | 2011    | 2011    |
| Sales gas, ethane and LNG                           |         |             |         |         |         |         |
| Sales volumes – own product (PJ)                    | 61.3    | 55.6        | 54.9    | 164.2   | 158.7   | 204.5   |
| Sales volumes – third party (PJ)                    | 10.7    | 16.3        | 10.1    | 32.6    | 47.5    | 61.3    |
| Total sales volumes (PJ)                            | 72.0    | 71.9        | 65.0    | 196.8   | 206.2   | 265.8   |
| Total sales volumes (mmboe)                         | 12.4    | 12.4        | 11.1    | 33.8    | 35.5    | 45.7    |
| Average gas price (A\$/GJ)                          | 5.46    | 4.57        | 4.83    | 5.17    | 4.47    | 4.71    |
| Total sales revenue (\$million)                     | 391     | 328         | 314     | 1,016   | 922     | 1,252   |
| Condensate  |         |             |         |         |         |         |
| Sales volumes – own product (000 bbls)              | 874.1   | 625.0       | 532.4   | 2,139.2 | 1,815.6 | 2,712.6 |
| Sales volumes – third party (000 bbls)              | 64.9    | 58.0        | 32.8    | 146.8   | 161.8   | 207.0   |
| Total sales volumes (000 bbls)                      | 939.0   | 683.0       | 565.2   | 2,286.0 | 1,977.4 | 2,919.6 |
| Total sales volumes (mmboe)                         | 0.8     | 0.6         | 0.6     | 2.1     | 1.8     | 2.7     |
| Average condensate price (A\$/bbl)                  | 100.95  | 96.73       | 102.96  | 101.54  | 104.01  | 104.16  |
| Average condensate price (US\$/bbl)                 | 104.92  | 101.82      | 104.07  | 105.06  | 107.45  | 106.90  |
| Total sales revenue (\$million)                     | 95      | 66          | 58      | 232     | 206     | 304     |
| LPG   |         |             |         |         |         |         |
| Sales volumes – own product (000 t)                 | 44.9    | 54.4        | 40.0    | 140.2   | 154.6   | 197.8   |
| Sales volumes – third party (000 t)                 | 8.0     | -           | -       | 9.3     | 0.6     | 0.6     |
| Total sales volumes (000 t)                         | 52.9    | 54.4        | 40.0    | 149.5   | 155.2   | 198.4   |
| Total sales volumes (mmboe)                         | 0.5     | 0.5         | 0.3     | 1.3     | 1.3     | 1.7     |
| Average LPG price (A\$/t)                           | 808.97  | 879.68      | 905.16  | 880.75  | 878.12  | 861.52  |
| Average LPG price (US\$/t)                          | 840.76  | 925.95      | 915.36  | 911.31  | 907.19  | 884.17  |
| Total sales revenue (\$million)                     | 43      | 48          | 36      | 132     | 136     | 171     |
| Crude oil   |         |             |         |         |         |         |
| Sales volumes – own product (000 bbls)              | 2,456.6 | 2,044.8     | 2,110.4 | 6,513.0 | 4,472.3 | 6,990.2 |
| Sales volumes – third party (000 bbls) <sup>1</sup> | 404.6   | 501.4       | 762.5   | 1,770.4 | 1,124.6 | 1,625.4 |
| Total sales volumes (000 bbls) <sup>1</sup>         | 2,861.2 | 2,546.2     | 2,872.9 | 8,283.4 | 5,596.9 | 8,615.6 |
| Total sales volumes (mmboe)                         | 2.9     | 2.5         | 2.9     | 8.3     | 5.6     | 8.6     |
| Average crude oil price (A\$/bbl)                   | 112.49  | 116.10      | 115.33  | 116.37  | 115.61  | 115.34  |
| Average crude oil price (US\$/bbl)                  | 116.91  | 122.21      | 116.56  | 120.41  | 119.44  | 118.38  |
| Total sales revenue (\$million) <sup>1</sup>        | 322     | 296         | 331     | 964     | 647     | 994     |
| Total   |         |             |         |         |         |         |
| Sales volume – own product (mmboe)                  | 14.2    | 12.6        | 12.4    | 37.9    | 34.8    | 46.4    |
| Sales volume – third party (mmboe)                  | 2.4     | 3.4         | 2.5     | 7.6     | 9.4     | 12.3    |
| Total sales volume (mmboe) <sup>1</sup>             | 16.6    | 16.0        | 14.9    | 45.5    | 44.2    | 58.7    |
| Total sales revenue (\$million) <sup>1</sup>        | 851     | 738         | 739     | 2,344   | 1,911   | 2,721   |

<sup>&</sup>lt;sup>1</sup> As previously advised, Santos changed its accounting treatment of certain Cooper Basin arrangements relating to crude oil purchases and sales that it had previously recorded as trading income. Effective 1 January 2012, these arrangements have been recorded as product sales and third party product purchases. Prior period sales volume and revenue comparatives in the table above have been restated accordingly.

## 3. Production by area

Comparisons between periods for gas, condensate and LPG production are made between the current quarter and the same quarter from the previous year, as production is heavily influenced by seasonal factors. Conversely, comparisons for crude oil are made with the immediate previous quarter, as oil production rates are not generally subject to seasonal variations. Both comparisons are available in the table on page 3.

## Cooper Basin

Crude oil production of 858,800 barrels was 6% above the previous quarter and the highest quarterly production since Q4 2009. This was driven by strong performance from the Charo wells brought on line during the quarter and good underlying performance across the basin.

Gas production of 17.1 petajoules (PJ) during the quarter was 10% lower than Q3 2011, with improvements in downtime being offset by overall lower upstream capacity. Production capacity was lower partly due to commencing the transition of the gas development program to multi-well pad simultaneous operations. This resulted in a backlog of drilled but not connected wells as at the end of the quarter. A large number of these wells are expected to be brought on line in the fourth quarter. Moomba storage was effectively utilised to meet customer nominations during the third guarter.

Five new gas wells were brought on line during the quarter and the first well of the Tindilpie six-well pad was commissioned early in October. The remaining Tindilpie wells are expected to be commissioned during the fourth quarter, marking the first successful large pad-drilling project in the Cooper Basin. Seven gas development wells were drilled during the quarter and all were cased and suspended as future producers.

The Moomba-191 shale well was connected to the Moomba infrastructure and has been flowing gas at a stabilised rate of 2.7 mmscf/day.

2012 year-to-date condensate and LPG production are slightly lower than 2011 due to lower gas production. Third quarter reported production for both products was lower than Q3 2011 primarily due to the impact of a prior period adjustment on production volumes.

## Surat/Bowen/Denison

Sales gas production of 2.1 PJ was lower than Q3 2011 due to planned downtime in the Scotia field and a shut-in at the Northern Denison field. Planning and design for Northern Denison field infrastructure upgrades is ongoing, with the field targeted to return to production in late-2013.

During the quarter, four pilot wells were drilled that comprise the Mahalo pilot in ATP 337, with production pilot testing expected in the fourth quarter. Additionally, the Glen Hill 1A corehole was drilled and tested in ATP 337P.

#### **GLNG**

Sales gas production of 2.6 PJ was higher than Q3 2011, as lower customer nominations were offset by higher volumes of gas injected into Roma underground storage. Gross average daily production from the Fairview field during the third quarter was 122 TJ/day.

## Otway

Sales gas production of 5.6 PJ was 2% higher. Production from the Casino hub was 4.9 PJ of sales gas and 1,800 barrels of condensate. Minerva production was 0.7 PJ and 2,100 barrels of condensate.

#### Carnarvon

Gas production from the Carnarvon Basin of 16.7 PJ was 42% higher than Q3 2011, primarily due to the commencement of production from Reindeer and Spar during the past 12 months.

Condensate production of 162,300 barrels was 3% higher than Q3 2011 due to commencement of production from Reindeer.

Total oil production from the Carnarvon was 688,300, 8% lower than the previous quarter. Stag oil production for the quarter was down 22% to 323,900 barrels due to temporary process shut-downs required while a drilling rig was rigging up over the platform. Production from Mutineer-Exeter and Barrow was in line with the previous quarter reflecting stable operations, while Thevenard production was higher due to the six-week shutdown for repairs and maintenance in the second quarter.

## Bayu-Undan/Darwin LNG

Gross Bayu-Undan gas production of 58 PJ was 5% higher than Q3 2011, due to improved plant capacity and efficiency following the planned shut-down in the second quarter. Santos' net entitlement to production was 4.3 PJ.

Gross Bayu-Undan condensate production of 4.9 mmbbl was 11% lower than Q3 2011. Santos' net entitlement to production was 0.31 mmbbl.

Gross Bayu-Undan LPG production of 251,600 tonnes was 8% lower than Q3 2011. Santos' net entitlement to production was 18,800 tonnes.

#### Indonesia

Santos' net entitlement to gas production of 6.9 PJ was 21% lower than the corresponding period primarily due to a lower PSC net entitlement to Maleo gas following the favourable price review in 2011, partially offset by production from Wortel which was brought on line in January 2012.

Oil production from Oyong was 21% lower than Q2 2012 due to natural field decline.

## Vietnam Block 12W

Santos' net entitlement to Chim Sáo oil production of 843,100 barrels was 25% higher than Q2 2012, due to additional production from the CS-17XP well and improved reliability. Santos' share of gas production during the September quarter was 0.9 PJ.

During the quarter, Vietnamese government approval was received for the Dua field development, which will be developed as a subsea tie-back to the existing Chim Sáo facilities. The project is on track for first oil in the first half of 2014.

## Bangladesh

Sales gas production of 1.8 PJ was 100% higher than Q3 2011 due to production from Sangu-11 which was brought on line in mid-June 2012. Gas from Sangu-11 is sold into the Chittagong gas market at prices higher than legacy contracts.

## 4. Capital expenditure

Total exploration, evaluation and development expenditure, including capitalised interest, is summarised in the table below.

|   | Qu      | arter ende | Year-to-date |       |       |
|---|---------|------------|--------------|-------|-------|
|   | Q3 2012 | Q3 2011    | Q2 2012      | 2012  | 2011  |
| Capital expenditure summary (\$million) |         |            |              |       |       |
| Exploration                             | 37      | 44         | 31           | 91    | 101   |
| Evaluation including CSG                | 37      | 50         | 38           | 108   | 100   |
| Development and other PP&E              | 738     | 659        | 790          | 2,122 | 1,961 |
| Total capital expenditure               | 812     | 753        | 859          | 2,321 | 2,162 |

| Exploration and evaluation expensed summary (\$million) |    |    |    |     |    |
|---|----|----|----|-----|----|
| From current year expenditure:                          |    |    |    |     |    |
| Exploration   | 15 | 35 | 22 | 58  | 52 |
| Evaluation  | 25 | 15 | 28 | 66  | 39 |
| Total current year expenditure                          | 40 | 50 | 50 | 124 | 91 |
| Write-off of amounts capitalised in prior years         | -  | 1  | -  | 2   | 3  |
| Total expensed  | 40 | 51 | 50 | 126 | 94 |

# 4.1 Exploration activity

| Well name | Basin/area     | Target | Santos % | Well status     |
|-----------|----------------|--------|----------|-----------------|
| Hoss-1    | Carnarvon – WA | Oil    | 37.3     | P&A – oil shows |
| Crown-1   | Browse – WA    | Gas    | 30       | Drilling        |

Hoss-1 in the Carnarvon Basin offshore Western Australia was drilled to a total depth of 2,122 metres. The primary reservoir section was water wet. A secondary target was interpreted as being oil bearing which was confirmed with an oil sample. The well was subsequently plugged and abandoned as per the program.

Crown-1 in the Browse Basin offshore Western Australia spudded on 30 July 2012 and is currently drilling towards a total depth of 5,400 metres.

# 4.2 Seismic activity

| Permit  | Area/basin | Survey               | Туре       | km/km <sup>2</sup> | Status   |
|---|------------|----------------------|------------|--------------------|----------|
| PPL238/ PPL55/ PPL56/<br>PPL233/ PPL68/ PPL20 | Cooper     | Greater Leleptian 3D | Onshore 3D | 440km <sup>2</sup> | Complete |

# 5. Development projects

Development expenditure during the third quarter of 2012 was \$738 million. The status of development projects during the third quarter is as follows.

## Fletcher Finucane project (Santos 44%, operator)

The Fletcher Finucane oil project is located in permit WA-191-P in the Carnarvon Basin, offshore Western Australia. Fletcher Finucane was sanctioned in January 2012 and involves the development of a three-well subsea tie-back to the existing Santos-operated FPSO facility at Mutineer-Exeter. First oil production is expected in the second half of 2013, at an average gross production rate of 15,000 barrels per day for the initial 12 months of production.

The Fletcher-5H development well has now been completed and the first of the two Finucane wells has been spudded. Manufacture of the subsea facilities is ongoing with the first batch of flowlines and umbilicals on track for delivery by the end of 2012. Offshore installation activities to tie in the new development wells to the Mutineer-Exeter facilities are planned to commence in Q1 2013. The project remains on track for first oil in the second half of 2013.

## Kipper project (Santos 35%, ExxonMobil operator)

Kipper involves the development of subsea wells tied back to existing processing infrastructure in Bass Strait, offshore Victoria. The operator has advised that the Kipper gas field offshore production facilities, including wells, subsea equipment and pipelines were completed during the third quarter. The Kipper project will not be reported under development projects in future quarterly activities reports.

Kipper gas will however not come on line until dedicated mercury handling facilities are installed. Detailed engineering studies to confirm the scope and cost of works for the facilities are underway and are expected to be completed mid-2013 to allow a final investment decision to be made in respect of these facilities. Subject to a final investment decision, the operator has advised that first gas from Kipper is most likely to be in the first half of 2016.

## PNG LNG project (Santos 13.5%, ExxonMobil operator)

Sanctioned in December 2009, the PNG LNG project will develop gas and condensate resources in the Hides, Angore and Juha fields and associated gas resources in the operating oil fields of Kutubu, Agogo, Gobe and Moran in the Southern Highlands, Hela and Western Provinces of Papua New Guinea. The gas will be transported by pipeline to a gas liquefaction plant 25 kilometres north-west of Port Moresby with a capacity of 6.6 mtpa. PNG LNG has binding LNG sales agreements with four Asian buyers.

The project remains on track for first LNG in 2014. Construction continues to progress at the LNG plant and upstream locations and the labour force has completed over 88 million work hours to date.

At the Hides gas conditioning plant, the construction activity is centred around equipment foundations, structural steel and piping installation. The first well of the Hides drilling program was spudded on 26 July and the top sections of the first two wells (B1 and B2) have been drilled. A second drill rig is currently being assembled on site and will begin drilling during the fourth quarter.

At the Komo airfield, site utility buildings have been erected, bulk earthworks continue and runway pavement is underway.

Right of way preparation, welding and trenching continues on the 292-kilometre onshore pipeline, while the offshore pipelaying is complete and pressure testing of the pipeline has commenced.

At the LNG plant site pipework erection, equipment installation and electrical cabling is being progressed on the LNG trains. Installation of jetty sections is proceeding to plan and the inner rings of both LNG tank shells are nearing completion.

## GLNG project (Santos 30%, operator)

Sanctioned in January 2011, GLNG includes the development of CSG resources in the Bowen and Surat Basins in south-east Queensland, construction of a 420-kilometre underground gas transmission pipeline to Gladstone, and two LNG trains with a combined nameplate capacity of 7.8 mtpa on Curtis Island. GLNG has binding LNG sales agreements with PETRONAS and KOGAS for 7.0 mtpa in aggregate. The project has an estimated gross capital cost of US\$18.5 billion from final investment decision to the end of 2015, based on foreign exchange rates which are consistent with the assumptions used at FID (A\$/US\$ 0.87 average over 2011-15). The project remains on track for first LNG in 2015.

#### **Upstream**

Forty wells were drilled in the GLNG acreage during the third quarter. Eight development wells and two appraisal wells were drilled in the Fairview and Arcadia fields. The current Fairview well stock has the capacity to produce 220 TJ/day gross. Twenty-four development wells and three appraisal coreholes were drilled in the Roma field during the third quarter. In addition, three appraisal wells were drilled in the Scotia field

Site preparations including bulk earthworks and foundations continue at the three upstream gas hub sites at Fairview and Roma. Over 1,400 construction personnel have been mobilised to the field. Well-pad separator skid delivery to site has commenced, and other major equipment packages including gas turbine compressors and alternators are scheduled to arrive by early November.

#### Gas transmission pipeline

All 420 kilometres of pipeline has been manufactured and coated. Eleven shipments of pipeline, over 300 kilometres in total, had been delivered to the pipe-yards in Gladstone and Port Alma at the end of the quarter with the twelfth shipment delivered in early October.

Construction of the mainland pipeline began in August with clearing and grading, followed by stringing and bending in September. Welding is expected to commence in late October. Construction of the pipeline construction camps is well underway with capacity for 840 workers, and over 12,000 lengths of pipe have been delivered to stockpiles. The vast majority of landholder access agreements for the pipeline have been signed, with negotiations ongoing for the few remaining agreements. Construction activities for the Gladstone harbour tunnel are expected to commence in October.

## LNG plant

Construction on Curtis Island is progressing on schedule. Bulk earthworks are more than 97% complete and more than 1,300 construction personnel are currently on Curtis Island. Construction of the Train-1 foundations continues and work has commenced on foundations for Train-2. The first pour of concrete for the walls of LNG Tank B occurred in September and foundations are underway for Tank A. Preliminary works for the LNG jetty have commenced. Construction continues to progress on the material offloading facility, haul road, onsite camp and logistics facilities on the mainland. Construction continues on LNG plant modules at Bechtel's yard in the Philippines.

# GLNG project (Santos 30%, operator) continued



Above: GLNG plant site, October 2012.



Above: LNG tanks with trains 1 and 2 construction in the background, October 2012.

## 6. Business Development

During the third quarter, Santos acquired a 3.31% interest in ATP606P and 972P (Combabula) from Tri-star Petroleum Company. Santos already holds a 2.60% interest in these permits which are operated by APLNG. In parallel, Santos and APLNG have agreed to swap Santos' entitlement to production from Combabula for an equal amount at Fairview, estimated at approximately 25 TJ/day.

On 2 October, Santos executed a farm-in agreement with Central Petroleum covering permits in the Amadeus and Pedirka Basins in the Northern Territory. The farm-in agreement is conditional on various regulatory approvals, including renewal or extension of the permits. Under the agreement, Santos will earn up to a 70% interest in 13 of Central's permit/application areas across a three-stage exploration program expected to begin early in 2013. Santos will be the operator of all permits under the agreements and will fund the first stage \$30 million seismic and well appraisal program.

# 7. Drilling summary

## 7.1 Appraisal/evaluation wells

The table below details wells drilled during the third quarter and their status.

| Well name                | Basin/area            | Target                   | Santos<br>% | Well status                     |
|--------------------------|-----------------------|--------------------------|-------------|---------------------------------|
| Stag 46 <sup>#</sup>     | Carnarvon – WA        | Oil                      | 37.30       | Plugged back for Stag 44H       |
| Stag 44H#                | Carnarvon – WA        | Oil                      | 37.30       | Drilling                        |
| Stag 45H*#               | Carnarvon – WA        | Oil                      | 37.30       | Drilling                        |
| Fletcher 5 <sup>#*</sup> | Carnarvon – WA        | Oil                      | 55.0        | Plugged back for Fletcher<br>5H |
| 12W-CS 3X#               | Nam Con Son - Vietnam | Oil                      | 31.88       | P&A                             |
| Toobunyah 8              | Cooper/Eromanga – QLD | Oil                      | 89          | C&S, successful oil             |
| Toobunyah 9              | Cooper/Eromanga – QLD | Oil                      | 89          | P&A                             |
| Mulberry 36              | Cooper/Eromanga – QLD | Oil                      | 89          | C&S, successful oil             |
| Irtalie East 2           | Cooper/Eromanga – QLD | Oil                      | 55.50       | P&A                             |
| Cuisinier North 1        | Cooper/Eromanga – QLD | Oil                      | 45          | C&S, successful oil             |
| Olive Oyl 1              | Cooper/Eromanga – QLD | Oil                      | 89          | P&A                             |
| FV06-45 1                | Fairview – QLD        | CSG<br>water<br>injector | 23.85       | C&S, successful CSG             |
| Springwater 13           | Fairview – QLD        | CSG                      | 23.85       | C&S, successful CSG             |
| Stakeyard East 2         | Roma – QLD            | CSG                      | 30          | C&S, successful CSG             |
| Stakeyard East 3         | Roma – QLD            | CSG                      | 30          | C&S, successful CSG             |
| Stakeyard East 4         | Roma – QLD            | CSG                      | 30          | Drilling                        |
| Keltinda 1               | Scotia – QLD          | CSG                      | 30          | C&S, successful CSG             |
| Moonamarra 1             | Scotia – QLD          | CSG                      | 30          | C&S, successful CSG             |
| Speculation 2            | Scotia – QLD          | CSG                      | 30          | Drilling                        |
| Glen Hill 1A#            | Denison – QLD         | CSG                      | 50          | P&A                             |
| Comet River 2*#          | Denison – QLD         | CSG                      | 50          | P&A                             |
| Mahalo 3 <sup>#</sup>    | Denison – QLD         | CSG                      | 50          | C&S, successful CSG             |
| Mahalo 4#                | Denison – QLD         | CSG                      | 50          | C&S, successful CSG             |
| Mahalo 5#                | Denison – QLD         | CSG                      | 50          | C&S, successful CSG             |
| Mahalo 6 <sup>#</sup>    | Denison – QLD         | CSG                      | 50          | C&S, successful CSG             |

# 7.2 Development wells

The table below details development wells drilled during the third quarter and their status.

| Well name                | Basin/area            | Target | Santos<br>% | Well status          |
|--------------------------|-----------------------|--------|-------------|----------------------|
| Big Lake 92 <sup>*</sup> | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Big Lake 93              | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Big Lake 94              | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Bobs Well 3              | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Kanowana 8               | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Kanowana 9               | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Waukatanna 4             | Cooper/Eromanga – SA  | Gas    | 66.60       | C&S, successful gas  |
| Toobunyah 7              | Cooper/Eromanga – QLD | Oil    | 89.00       | C&S, successful oil  |
| Hides B1 <sup>#</sup>    | Papuan – PNG          | Gas    | 13.50       | Drilling             |
| Hides B2 <sup>#</sup>    | Papuan – PNG          | Gas    | 13.50       | Drilling             |
| Fletcher 5H              | Carnarvon – WA        | Oil    | 55.00       | Completed oil        |
| FV06-42 1                | Fairview – QLD        | CSG    | 23.85       | Drilling             |
| FV06-42 2                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV11-13 2 <sup>*</sup>   | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV11-13 3                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV11-35 2                | Fairview – QLD        | CSG    | 23.85       | Drilling             |
| FV12-10 2                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV12-10 3                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV12-10 4                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV16-04 2                | Fairview – QLD        | CSG    | 23.85       | C&S, successful CSG  |
| FV17-35 1*               | Fairview - QLD        | CSG    | 23.85       | P&S CSG              |
| Pleasant Hills 381       | Roma – QLD            | CSG    | 30.00       | C&S future injector  |
| Pleasant Hills 411       | Roma – QLD            | CSG    | 30.00       | C&S future injector  |
| Pleasant Hills 421       | Roma – QLD            | CSG    | 30.00       | C&S future injector  |
| Pleasant Hills 431       | Roma – QLD            | CSG    | 30.00       | C&S, future injector |
| RM07-19 1                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM07-19 2                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM07-21 1                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-06 1                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-06 2                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-15 1                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-15 2                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-15 3                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-15 4                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-17 1*               | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-17 2                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-17 3                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM08-17 4                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |
| RM12-11 1                | Roma – QLD            | CSG    | 30.00       | C&S, successful CSG  |

| Well name | Basin/area | Target | Santos<br>% | Well status         |
|-----------|------------|--------|-------------|---------------------|
| RM12-11 2 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-11 3 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-11 4 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-14 1 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-14 2 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-14 3 | Roma – QLD | CSG    | 30.00       | C&S, successful CSG |
| RM12-14 4 | Roma - QLD | CSG    | 30.00       | C&S, successful CSG |

<sup>\*</sup>Spudded during second quarter 2012.
# Not operated by Santos.

# 8. Abbreviations and conversion factors

| Abbreviation | ons                                       | Conversion factors         |                               |
|--------------|---|----------------------------|-------------------------------|
| PJ           | petajoules                                | Sales gas and ethane, 1 PJ | 171.937 boe x 10 <sup>3</sup> |
| TJ           | terajoules                                | Crude oil, 1 barrel        | 1 boe                         |
| GJ           | gigajoules                                | Condensate, 1 barrel       | 0.935 boe                     |
| mmbbl        | million barrels                           | LPG, 1 tonne               | 8.458 boe                     |
| mmboe        | million barrels of oil equivalent         | LNG, 1 PJ                  | 18,040 t                      |
| mmbtu        | million British thermal units             |                            |                               |
| mmscf        | million standard cubic feet               |                            |                               |
| mtpa         | million tonnes per annum                  |                            |                               |
| t            | tonnes                                    |                            |                               |
| P&A          | plugged and abandoned                     |                            |                               |
| C&S          | cased and suspended                       |                            |                               |
| C&C          | cased and completed                       |                            |                               |
| P&S          | plugged and suspended                     |                            |                               |
| WI           | water injector                            |                            |                               |
| ST           | side track                                |                            |                               |
| CSG          | coal seam gas                             |                            |                               |
| LNG          | liquefied natural gas                     |                            |                               |
| pa           | per annum                                 |                            |                               |
| PSC          | Production sharing contract               |                            |                               |
| FPSO         | floating production, storage & offloading |                            |                               |
|              |   |                            |                               |