# Second Quarter Activities Report

For period ending 30 June 2016



22 July 2016

### Key Highlights

- Record first half production of 31.1 mmboe, up 10% on the prior half-year.
- Second quarter production of 15.5 mmboe, up 8% on the corresponding quarter.
- Average realised oil price decreased 29% to US\$43 per barrel for the first half.
- Upstream production costs of US\$8.80/boe, 15% lower than the prior half-year.
- First half capital expenditure of US\$283 million, 58% lower than the prior half-year.
- GLNG train 2 commenced LNG production on 26 May 2016. GLNG produced 1 million tonnes of LNG in the second quarter and shipped 16 cargoes.
- As announced on 19 July 2016, Santos has changed its reporting currency to US dollars. All dollar amounts in this report are US dollars, unless otherwise stated.

Santos Managing Director and Chief Executive Officer Kevin Gallagher said the company's commitment to lifting productivity and cutting costs was starting to deliver tangible results.

#### Comparative performance at a glance

Corresponding period	Q2 2016	Q2 2015	Change
Production (mmboe)	15.5	14.3	+8%
Sales (mmboe)	19.6	15.7	+ 25%
Average realised oil price (US\$/bbl)	49.21	64.58	-24%
Sales revenue (US\$million)	590	611	-3%
Capital expenditure (US\$million) <sup>1</sup>	133	271	-51%
Quarterly comparison	Q2 2016	Q1 2016	Change
Production (mmboe)	15.5	15.6	-1%
Sales (mmboe)	19.6	21.3	-8%
Average realised oil price (US\$/bbl)	49.21	37.02	+ 33%
Sales revenue (US\$million)	590	601	-2%
Capital expenditure (US\$million)1	133	150	-12%
Year-to-date comparison	2016	2015	Change
Production (mmboe)	31.1	28.3	+ 10%
Sales (mmboe)	40.9	30.9	+ 32%
Average realised oil price (US\$/bbl)	42.79	60.36	-29%
Sales revenue (US\$million)	1,191	1,261	-6%
Capital expenditure (US\$million)1	283	673	-58%

<sup>&</sup>lt;sup>1</sup> Capital expenditure including restoration expenditure but excluding capitalised interest.

<sup>&</sup>quot;There is a lot of work ahead of us but today's results show we are heading in the right direction.

<sup>&</sup>quot;The second quarter also saw first LNG from GLNG train 2, which marked the successful delivery of the two-train project," Mr Gallagher said.



Sales gas, ethane and sales gas to LNG production of 71.6 PJ for the quarter was 10% higher than the corresponding quarter, reflecting a full quarter of GLNG train 1 production and the start-up of GLNG train 2 on 26 May 2016. Total sales gas, ethane and LNG sales revenue increased 18% to US\$374 million for the quarter.

Quarterly crude oil production of 2 mmbbl was 3% lower than the previous quarter, primarily due to natural field decline and higher downtime in the Cooper due to recent heavy rain. The average realised oil price for the quarter was US\$49.21 per barrel, 33% higher than the previous quarter. Total crude oil sales revenue of US\$154 million for the quarter was 18% higher than the previous quarter reflecting higher oil prices partially offset by lower third party sales volumes.

### Corporate activities

Transition to Santos' new organisational structure was well underway at the end of the second quarter. This involves moving to an asset focused model with strong technical capabilities in the primary business areas of exploration, development, production and commercial.

Santos has appointed Naomi James to the role of Executive Vice President Environment, Health, Safety (EHS) and Governance. Ms James will join the company in August and her appointment completes the Executive team (Excom).

Peter Hearl and Guy Cowan were appointed to the Santos Board on 10 May 2016. The appointments of Mr Hearl and Mr Cowan followed the retirements of Ken Dean and Jane Hemstritch from the Board at the conclusion of the 2016 Annual General Meeting on 4 May 2016.

On 31 May 2016, S&P Global Ratings (S&P) reaffirmed Santos' long-term senior unsecured credit rating of BBB- (negative outlook).

Santos announced on 20 July 2016 that Chief Financial Officer Andrew Seaton will retire from the company by the end of 2016 following over 11 years of service, including the last six years as CFO. Mr Seaton will remain with the company until the end of the year to ensure a smooth transition of his key responsibilities. Santos has commenced an executive search to identify a successor to Mr Seaton.

#### 2016 Guidance

2016 production and sales volume guidance is maintained. Consistent with the company's change in reporting currency, guidance on financial items is now given in US dollars.

Item	Previous guidance	Updated guidance
Production	57-63 mmboe	No change
Sales	76-83 mmboe	No change
Upstream production costs (excluding LNG plant costs)	A\$13.5-14/boe produced	US\$9.50-10/boe produced
Depreciation, depletion & amortisation (DD&A) expense	A\$1.1 billion	US\$800 million
Capital expenditure (incl. exploration, evaluation and restoration, excluding capitalised interest) <sup>1</sup>	A\$1.1 billion	US\$750 million

<sup>&</sup>lt;sup>1</sup> Capital expenditure guidance excludes capitalised interest, which is forecast at approximately US\$16 million.

Further detail of 2016 year-to-date capital expenditure, including exploration and evaluation expenditure, is reported in the table on page 7 of this report.

### 2016 Half-year results

Santos will release its results for the half-year ended 30 June 2016 on Friday, 19 August 2016. The half-year report (incorporating Appendix 4D) and associated investor presentation will be available on Santos' website at <a href="https://www.santos.com">www.santos.com</a>. A webcast briefing including investor/analyst questions will also be available on Santos' website from 11:00am AEST on 19 August 2016.



## Production (Santos share)

	Q2 2016	Q2 2015	Q1 2016	2016 YTD	2015 YTD	Full-year 2015
Sales gas and ethane (PJ)						
Cooper	16.0	16.1	15.5	31.5	31.0	63.0
Carnarvon	13.3	13.2	12.7	26.0	27.0	51.6
Indonesia	5.9	6.2	6.0	11.9	11.8	23.8
Denison/Scotia/Spring Gully/Combabula	5.1	3.6	4.7	9.8	6.9	14.3
Otway	2.7	3.4	2.5	5.2	6.9	13.0
GLNG domestic	1.3	1.2	1.4	2.7	3.0	4.7
Other <sup>1</sup>	1.6	1.5	1.6	3.2	2.9	5.6
Total sales gas and ethane production (PJ)	45.9	45.2	44.4	90.3	89.5	176.0
Total sales gas & ethane prod'n (mmboe)	7.9	7.8	7.6	15.5	15.4	30.2
Sales gas to LNG (PJ)						
PNG LNG (incl. SE Gobe)	14.4	15.0	16.0	30.4	29.0	59.5
GLNG <sup>2</sup>	5.9	0.1	6.6	12.5	0.1	5.7
Darwin LNG	5.4	4.9	5.2	10.6	9.8	19.5
Total sales gas to LNG production (PJ)	25.7	20.0	27.8	53.5	38.9	84.7
Total sales gas to LNG production (mmboe)	4.4	3.5	4.8	9.2	6.7	14.6
Condensate (000 barrels)						
PNG LNG	351.2	365.4	382.4	733.6	700.1	1,441.9
Cooper	241.4	225.0	243.5	484.9	468.7	943.9
Bayu-Undan	151.0	191.5	130.2	281.2	382.0	682.1
Carnarvon	133.7	136.3	120.9	254.6	272.9	511.8
Other <sup>3</sup>	7.2	14.0	8.7	15.9	27.7	54.6
Total condensate production (000 barrels)	884.5	932.2	885.7	1,770.2	1,851.4	3,634.3
Total condensate production (mmboe)	0.9	0.9	0.8	1.7	1.8	3.4
LPG (000 tonnes)						
Cooper	28.9	27.5	29.0	57.9	53.3	114.2
Bayu-Undan	8.4	10.6	6.8	15.2	21.0	37.5
Total LPG production (000 tonnes)	37.3	38.1	35.8	73.1	74.3	151.7
Total LPG production (mmboe)	0.3	0.3	0.3	0.6	0.6	1.3
Crude oil (000 barrels)						
Cooper	664.4	723.0	681.9	1,346.3	1,431.6	2,840.4
Vietnam	639.1	685.1	672.7	1,311.8	1,459.4	2,610.4
Mutineer-Exeter/Fletcher Finucane	329.3	-	348.6	677.9	85.8	972.0
Stag	196.1	200.1	185.6	381.7	380.2	817.1
Barrow	119.0	122.9	114.7	233.7	240.4	483.8
Other <sup>4</sup>	62.8	122.7	65.4	128.2	228.1	422
Total crude oil production (000 barrels)	2,010.7	1,853.8	2,068.9	4,079.6	3,825.5	8,145.7
Total crude oil production (mmboe)	2.0	1.8	2.1	4.1	3.8	8.2
Total						
10141						

<sup>&</sup>lt;sup>1</sup> Amadeus, Vietnam and Gunnedah.

<sup>&</sup>lt;sup>2</sup> GLNG production is Santos' share of the sales gas to LNG produced from the GLNG upstream fields at Fairview and Roma. Santos portfolio gas produced for the Horizon contract is attributed to the field of production.

 $<sup>^{\</sup>rm 3}\,\mbox{Amadeus},$  Otway, Indonesia and Queensland.

<sup>&</sup>lt;sup>4</sup> Amadeus, Queensland, Indonesia and PNG.



## Sales volumes and sales revenue (Santos share)

	Q2 2016	Q2 2015	Q1 2016	2016 YTD	2015 YTD	Full-year 2015
Sales gas and ethane <sup>1</sup>						
Sales – own product (PJ)	39.1	40.2	44.4	83.5	79.6	158.1
Sales - third party (PJ)	13.8	4.9	16.4	30.2	10.9	25.9
Total sales (PJ)	52.9	45.1	60.8	113.7	90.5	184.0
Average gas price (US\$/GJ)	3.79	4.07	3.56	3.65	4.16	4.06
Total sales revenue (US\$million)	200	183	216	416	377	746
LNG <sup>2</sup>						
Sales – own product (000 tonnes)	538.5	348.0	557.5	1,096.0	680.4	1,429.3
Sales - third party (000 tonnes)	99.1	-	107.0	206.1	-	55.0
Total sales (000 tonnes)	637.6	348.0	664.5	1,302.1	680.4	1,484.3
Average LNG price (US\$/mmbtu)	5.19	7.33	6.24	5.70	9.83	8.94
Total sales revenue (US\$million)	174	134	216	390	351	696
Condensate						
Sales – own product (000 barrels)	948.5	907.3	853.6	1,802.1	1,780.0	3,506.6
Sales - third party (000 barrels)	51.3	24.6	21.8	73.1	44.7	67.7
Total sales (000 barrels)	999.8	931.9	875.4	1,875.2	1,824.7	3,574.3
Average condensate price (US\$/bbl)	46.80	61.15	33.78	40.55	56.29	51.16
Total sales revenue (US\$million)	47	57	29	76	103	183
LPG						
Sales – own product (000 tonnes)	40.5	45.2	22.1	62.6	80.2	161.1
Sales - third party (000 tonnes)	1.0	1.4	1.6	2.6	3.9	7.1
Total sales (000 tonnes)	41.5	46.6	23.7	65.2	84.1	168.2
Average LPG price (US\$/tonne)	374.79	485.06	375.28	374.64	490.06	463.90
Total sales revenue (US\$million)	15	23	9	24	41	77
Crude oil						
Sales – own product (000 barrels)	2,078.6	2,025.7	2,160.5	4,239.1	4,001.1	8,236.6
Sales - third party (000 barrels)	1,058.4	1,304.6	1,353.2	2,411.6	2,443.8	5,510.0
Total sales (000 barrels)	3,137.0	3,330.3	3,513.7	6,650.7	6,444.9	13,746.6
Average crude oil price (US\$/bbl)	49.21	64.58	37.02	42.79	60.36	53.83
Total sales revenue (US\$million)	154	214	131	285	389	740
Total						
Sales – own product (mmboe)	15.2	13.5	16.1	31.3	26.5	53.7
Sales - third party (mmboe)	4.4	2.2	5.2	9.6	4.4	10.6
Total sales volume (mmboe)	19.6	15.7	21.3	40.9	30.9	64.3
Third party product purchases (US\$million)	123	100	128	250	187	358
Sales – own product (US\$million)	461	500	452	913	1,055	2,001
Sales - third party (US\$million)	129	111	149	278	206	441
Total sales revenue (US\$million)	590	611	601	1,191	1,261	2,442

<sup>&</sup>lt;sup>1</sup> Domestic sales gas and ethane.

<sup>&</sup>lt;sup>2</sup> PNG LNG, Darwin LNG and GLNG.



## Activity by asset

Comparisons between periods for gas, condensate, LNG and LPG production are made between the current quarter and the same quarter from the previous year, as production is 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.

#### **PNG LNG**

Gross gas production during the quarter was 105 PJ (Santos share 14.2 PJ), measured at the inlet of the LNG plant. The LNG plant produced 1.8 million tonnes of LNG in the quarter, lower than the previous quarter primarily due to routine maintenance in April, and an unscheduled plant shutdown in May due to an electrical issue. 25 LNG cargoes were shipped during the quarter.

Gross condensate production for the quarter was 2.6 mmbbl (Santos share 351,200 barrels), measured at the Kutubu entry point. Gross gas production from SE Gobe of 3.0 PJ (Santos share 0.2 PJ) was purchased by the PNG LNG project during the quarter.

#### **GLNG**

Gross gas delivered to the LNG plant during the quarter was 60.6 PJ from GLNG's supply portfolio including GLNG indigenous production, Santos' portfolio and third-party purchased quantities. Santos' share of GLNG domestic gas and sales gas to LNG production was 7.2 PJ for the quarter.

The LNG plant produced 1 million tonnes of LNG during the quarter and shipped 16 cargoes, taking the total to 39 cargoes since start up in September 2015. GLNG train 2 produced first LNG on 26 May 2016.

### Bayu-Undan/Darwin LNG

Gross gas production of 58.7 PJ (Santos share 5.4 PJ) was in-line with the corresponding quarter due to continued high availability and capacity utilisation at Darwin LNG. 16 LNG cargoes were shipped during the quarter.

Gross condensate production decreased by 31% to 1.74 mmboe (Santos share 151,000 bbl) and LPG was down 27% to 90,000 tonnes (Santos share 8,400 tonnes) during the quarter. This was primarily due to the absence of rich gas production from the wellhead platform (WP1) and declining liquids yields due to the effects of lean gas recycling. Production from WP1 was reinstated in June leading to an increase in liquids volumes.

#### Cooper Basin

Sales gas and ethane production during the second quarter of 16.0 PJ was in-line with the corresponding quarter. Higher sales gas yield and lower downtime were offset by natural field decline. Six appraisal and three development gas wells were drilled during the quarter, all of which were cased and suspended for future production. Condensate and LPG production were higher due to higher yields from the recent development of liquids rich areas.

Crude production was lower than the previous quarter due to lower capacity from natural field decline and higher downtime due to recent heavy rain.

#### Carnarvon

Gas and condensate production of 13.3 PJ and 133,700 barrels respectively were in-line with the corresponding quarter. Total oil production of 644,400 barrels was slightly lower than the previous quarter due to natural field decline.



#### Indonesia

Santos' net entitlement to gas production of 5.9 PJ was 6% lower than the corresponding period. Net entitlement gas production from the Madura PSC was 2% lower than the corresponding quarter as higher contractor entitlement from Peluang was offset by natural field decline at Maleo. Santos' net entitlement to gas production from the Sampang PSC decreased by 11% primarily due to lower contractor entitlement.

Oyong net entitlement oil production for the quarter was 32,200 barrels.

#### Vietnam

Gross oil production from the Chim Sào and Dua fields was 22,800 barrels per day, 7% lower than the previous quarter due to a planned 10-day maintenance period during which average production rates were reduced. Santos' net entitlement to oil and gas production during the second quarter from the combined fields was 639,100 barrels and 1 PJ respectively.

### Denison/Scotia/Spring Gully/Combabula

Sales gas production of 5.1 PJ was higher than the corresponding quarter as production from Combabula continues to ramp up in line with APLNG nominations.

#### Otway

Production from the Casino hub was 2.3 PJ of sales gas and 950 barrels of condensate. Minerva production was 0.4 PJ of sales gas and 780 barrels of condensate.



## Capital expenditure

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

	Q2 2016	Q2 2015	Q1 2016	2016 YTD	2015 YTD	Full-year 2015
Capital expenditure (US\$million)						
Exploration	24	53	16	40	156	211
Evaluation	31	0	26	57	32	111
Development and other capex (including restoration)	78	217	108	186	486	967
Capital expenditure excluding capitalised interest	133	271	150	283	673	1,288
Capitalised interest	9	15	6	15	62	118
Total capital expenditure	142	286	156	298	735	1,406
Exploration and evaluation expensed (US\$million)						
Exploration	15	85	13	28	125	139
Evaluation	9	4	10	19	11	29
Total current year expenditure	24	88	23	47	136	168
Write-off of amounts capitalised in prior years	(1)	6	1	-	16	20
Total expensed	23	94	24	47	153	188

## **Exploration activity**

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

Well name	Basin/ area	Target	Santos %	Well status
Meliwis-1 (Madura PSC)	East Java - Indonesia	Gas	77.5	Gas discovery
Strickland-1#	PNG/PPL269	Gas	30	Drilling ahead
Strickland-2#	PNG/PPL269	Oil	30	P&A, dry hole

<sup>#</sup> Not operated by Santos.

Santos' 2016 exploration program is focused on lower risk, near-field exploration wells that target domestic gas markets and LNG feedstock options proximal to equity-owned infrastructure.

#### Indonesia

A two-well near-field exploration program was completed during the second quarter in the Madura Straits, offshore East Java, adjacent to the Santos-operated Maleo and Peluang fields. The Meliwis-1 well encountered a gas column and evaluation of the discovery is ongoing. The first well, Merem-1, was drilled in the first quarter and failed to encounter commercial hydrocarbons.

### Papua New Guinea

The first of two exploration wells in PPL269, Strickland-2, was drilled during the second quarter and plugged and abandoned after failing to encounter hydrocarbons. The second well, Strickland-1, was drilling ahead at the end of the quarter.



## Seismic activity

The table below details seismic activity during the second quarter and status.

Permit	Basin/ area	Survey	Туре	km/ km²	Status
PPLs 13, 23, 58, 92, 231 ATP 1189P PLs 34, 37, 63, 84, 110, 130, 134, 140, 186	Cooper Basin	Snowball 3D	Land 3D	1,698 km²	77% Complete (1,310 km² of 1,698 km²)

## **Drilling summary**

## Appraisal/evaluation wells

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

Well name	Basin/ area	Target	Santos %	Well status
AAL 4X-ST1	Offshore Indonesia	Oil	50	P&A, successful oil
Coolah-3	Cooper - QLD	Gas	60.1	C&S, successful gas
Dunadoo-1	Cooper - QLD	Gas	60.1	C&S, successful gas
Durham Downs-9	Cooper - QLD	Gas	60.1	C&S, successful gas
Durham Downs North-5	Cooper - QLD	Gas	60.1	C&S, successful gas
Durham Downs North-6	Cooper - QLD	Gas	60.1	C&S, successful gas
Lyra-1	Cooper - SA	Gas	60	C&S, successful gas

### Development wells

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

Well name	Basin/ area	Target	Santos %	Well status
Tirrawarra-91	Cooper - SA	Gas	66.6	C&S, successful gas
Tirrawarra-92	Cooper - SA	Gas	66.6	C&S, successful gas
Tirrawarra-93	Cooper - SA	Gas	66.6	C&S, successful gas
RM02-05-1	Roma – QLD	CSG	30	C&S, successful CSG
RM02-06-1	Roma – QLD	CSG	30	C&S, successful CSG
RM02-10-1	Roma – QLD	CSG	30	C&S, successful CSG
RM02-12-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-01-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-02-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-03-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-05-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-09-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-11-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-15-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-22-1	Roma – QLD	CSG	30	C&S, successful CSG



Well name	Basin/ area	Target	Santos %	Well status
RM03-45-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-54-1	Roma – QLD	CSG	30	C&S, successful CSG
RM03-79-1	Roma – QLD	CSG	30	C&S, successful CSG
RM08-18-2	Roma – QLD	CSG	30	C&S, successful CSG
RM08-18-3	Roma – QLD	CSG	30	C&S, successful CSG
RM08-18-4	Roma – QLD	CSG	30	C&S, successful CSG
RM08-20-1	Roma – QLD	CSG	30	C&S, successful CSG
RM12-04-1	Roma – QLD	CSG	30	C&S, successful CSG
RM12-04-2	Roma – QLD	CSG	30	C&S, successful CSG
RM12-13-1	Roma – QLD	CSG	30	C&S, successful CSG
RM12-13-2	Roma – QLD	CSG	30	C&S, successful CSG
RM12-13-3	Roma – QLD	CSG	30	C&S, successful CSG
RM12-13-4	Roma – QLD	CSG	30	C&S, successful CSG
RM12-15-1	Roma – QLD	CSG	30	C&S, successful CSG



## Abbreviations and conversion factors

Abbreviation	ons	<b>Conversion factors</b>	
C&C	cased and completed	Sales gas and ethane, 1 PJ	171.937 boe x 10 <sup>3</sup>
C&S	cased and suspended	Crude oil, 1 barrel	1 boe
CSG	coal seam gas	Condensate, 1 barrel	0.935 boe
FPSO	floating production, storage and offloading	LPG, 1 tonne	8.458 boe
GJ	gigajoules	LNG, 1 PJ	18,040 tonnes
LNG	liquefied natural gas	LNG, 1 tonne	52.54 mmbtu
LPG	liquefied petroleum gas		
mmbbl	million barrels		
mmboe	million barrels of oil equivalent		
mmbtu	million British thermal units		
mmscf	million standard cubic feet		
mtpa	million tonnes per annum		
NFE	near-field exploration		
P&A	plugged and abandoned		
ра	per annum		
PJ	petajoules		
PSC	production sharing contract		
Т	tonnes		
TJ	terajoules		