# Second Quarter Activities Report

For period ending 30 June 2018

ASX: STO | ADR: SSLZY

#### 19 July 2018

### Key Highlights

#### Production growth in core Cooper Basin and WA gas assets

- Cooper Basin gas production up 8% and oil production up 17% compared to the prior quarter due to strong performance from recently connected wells more than offsetting the impact of a higher level of planned maintenance at Moomba. Quarterly Cooper Basin oil production was the highest in four years.
- Fastest ever gas well drilled in the Cooper: Marabooka-18 development well 3.1 days from spud to rig release. Successful outcomes from Cooper exploration program.
- WA gas production up 10% compared to the prior quarter due to higher customer demand and commencement of two new sales contracts.
- Second quarter production of 14.2 million barrels of oil equivalent (mmboe) was higher than the prior quarter due to strong production from the Cooper Basin and Western Australia gas, combined with the restart in PNG LNG production following major earthquake activity in February. Offsetting these factors was a planned one-month maintenance shutdown of Bayu Undan/Darwin LNG during the quarter.

#### Strong revenue growth notwithstanding shutdown activity

- First half sales revenue up 16% to US\$1.7 billion due to stronger commodity prices and higher oil sales.
- The strong increase in revenue was achieved despite the PNG LNG outage and planned shutdowns at Moomba and Bayu Undan/Darwin LNG which reduced first half production by about 2 mmboe and sales revenue by approximately US\$80 million.

#### Growth project updates

- Barossa project enters FEED. Barossa is the lead candidate to underpin the long-life extension of Darwin LNG and would more than double Santos' current Northern Australian production. A final investment decision is targeted towards the end of 2019.
- In PNG, Santos is in discussions regarding a proposal received for Santos to farm-in to PRL 3 (P'nyang).
- In Queensland, the Scotia CF1 project was successfully completed ahead of schedule and under budget, and field production is ramping-up with current rates already exceeding 50 TJ/day. Roma is currently producing more than 70 TJ/day. The initial phase of development of the Arcadia field was sanctioned during the second quarter with first production expected in late 2019, while encouraging results continue to be achieved with the Mira-6 pilot well in the Mahalo field.

#### Strong balance sheet to support growth strategy

• As at 30 June 2018, Santos had cash and cash equivalents of US\$1.5 billion and total debt of US\$3.9 billion, resulting in net debt of US\$2.4 billion. Net debt includes US\$145 million oil hedging mark-to-market liability.

#### New dividend policy announced. Board to consider a return to dividends at the 2018 half-year results

- Santos' new dividend policy will see the company look to pay ordinary dividends that are sustainable through the oil price cycle and will target a range of 10% to 30% payout of free cash flow per annum.
- Given the cyclical nature of the industry, the Board will also consider additional returns to shareholders above the ordinary dividend when business conditions permit.

#### Asset sales consistent with Santos' strategy to realise value from non-core assets

• During the quarter, Santos announced the sale of its non-core Asian portfolio for US\$221 million and the completion of the sale of its Denison Trough conventional assets in Queensland for up to A\$43 million.

#### Daniela Ritorto +61 8 8116 5167 / +61 (0) 455 319 770 daniela.ritorto@santos.com

#### **Investor enquiries**

Andrew Nairn +61 8 8116 5314 / +61 (0) 437 166 497 andrew.nairn@santos.com **Santos Limited** ABN 80 007 550 923 GPO Box 2455, Adelaide SA 5001 T +61 8 8116 5000 F +61 8 8116 5131 www.santos.com

Santos



## Comparative performance

Santos share	Units	Q2 2018	Q1 2018	Change	2018 YTD	2017 YTD	Change
Production	mmboe	14.2	13.8	3%	28.0	29.5	-5%
Sales volume	mmboe	19.1	18.9	1%	38.0	40.1	-5%
Average realised oil price	US\$/bbl	78.6	71.6	10%	75.4	54.8	37%
Sales revenue	US\$million	886	794	12%	1,680	1,453	16%
Capital expenditure <sup>1</sup>	US\$million	167	139	20%	306	321	-5%

<sup>1</sup>Capital expenditure including restoration expenditure and acquisition of exploration assets but excluding capitalised interest.

Santos Managing Director and Chief Executive Officer Kevin Gallagher said: "Santos' strategy has been to establish a low cost operating model that is designed to deliver strong cash flows through the oil price cycle."

Our second quarter results demonstrate the strength of our diversified portfolio of core assets underpinned by a disciplined operating model and significantly stronger balance sheet."

"In the Cooper Basin, we delivered production growth due to strong performance from recently connected wells, including the highest quarterly oil production in four years and the highest daily oil rate in a decade. We also had exploration success with the wildcat gas exploration wells Mountain Goat and Hobgoblin."

"Our onshore development team continues to drive excellent results, including the fastest ever gas well drilled in the Cooper. This level of performance gives us confidence we can commercialise more of the vast discovered resource that remains undeveloped within the producing fields of the Cooper Basin, as well as the expanding prospective resource base across the Cooper."

"In our Western Australia gas business, higher customer demand and commencement of two new sales contracts drove production up 10% compared to the prior quarter."

"The PNG Highlands earthquake in February was a major disruptive event for the people of PNG and we were deeply saddened by the loss of life and personal injuries suffered by our local communities. Our PNG LNG expertise and resources were deployed to assist in humanitarian relief and Santos provided funds for the relief effort."

"It is a testament to the great work of the ExxonMobil team that the gas plant maintained integrity throughout the earthquake period and there were no releases of hydrocarbons and no significant injuries to personnel."

"Production was safely re-started within two months of the first earthquake and full rates were achieved by the end of April."

The PNG LNG shutdown, combined with planned maintenance at our facilities in Moomba and Bayu Undan/Darwin LNG, reduced first half production by about 2 mmboe. Excluding these shutdowns, we would have delivered production growth from our core assets in the first half."

"We remain on track to achieve our net debt reduction target in the second half of 2018, more than a year ahead of schedule, and we now have a significantly stronger balance sheet and cash flows to support our growth strategy."

"This positions the company to return to sustainable dividend payments to shareholders."

"We also continued to advance our key major growth projects, with the Barossa development moving into FEED in the second quarter and good progress being made toward building partner alignment in PNG for three additional LNG trains on the PNG LNG site. Our deep opportunity set around existing infrastructure of our core natural gas assets means Santos is very well positioned to drive value for shareholders going forward."

"In May, we announced that after careful consideration, the Santos Board resolved to reject the offer from Harbour Energy as it did not represent appropriate value for the company and, when combined with the additional risks, was not in the best interests of Santos shareholders," Mr Gallagher said.



## Sales volumes (Santos share)

	Product	Unit	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
	LNG	000 t	630.8	642.5	754.8	1,273.2	1,483.8
$\geq$	Domestic sales gas and ethane	PJ	52.6	53.6	60.7	106.2	108.5
	Crude oil	000 bbls	2,863.9	2,433.9	2,684.7	5,297.8	4,771.3
	Condensate	000 bbls	811.6	1,078.0	991.8	1,889.6	2,038.3
	LPG	000 t	43.8	21.5	26.7	65.3	69.5
_	Sales						
	Own product	mmboe	13.5	13.8	15.0	27.3	29.1
$\leq$	Third party	mmboe	5.6	5.1	6.5	10.7	11.0
	Total sales volume	mmboe	19.1	18.9	21.5	38.0	40.1

Second quarter sales volumes were higher than the prior quarter primarily due strong Cooper oil volumes, partially offset by the planned one-month Bayu Undan/Darwin LNG shutdown in May.

## Sales revenues (Santos share)

)							
2	Product	Unit	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
	LNG	US\$m	323	276	290	599	562
	Domestic sales gas and ethane	US\$m	254	261	279	515	491
-	Crude oil	US\$m	225	174	142	399	262
$\cup$	Condensate	US\$m	61	71	48	132	106
	LPG	US\$m	23	11	10	34	32
	Sales						
_	Own product	US\$m	598	559	557	1,157	1,061
)	Third party	US\$m	288	235	212	523	392
2	Total sales revenue	US\$m	886	794	769	1,680	1,453
$\cap$	Third party product purchases	US\$m	209	199	159	408	278

Second quarter sales revenues were higher than the prior quarter primarily due strong Cooper oil volumes combined with higher commodity prices, partially offset by the scheduled Bayu Undan/Darwin LNG shutdown in May.

	Average realised prices								
		Unit	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD		
	LNG price	US\$/mmBtu	9.74	8.19	7.32	8.96	7.21		
$\mathcal{L}$	Domestic sales gas price	US\$/GJ	4.83	4.87	4.60	4.85	4.53		
	Oil price	US\$/bbl	78.61	71.56	52.96	75.37	54.79		
$(\bigcirc)$	Condensate price	US\$/bbl	74.52	66.20	48.49	69.77	52.18		
	LPG price	US\$/t	525.03	529.82	372.81	526.61	467.19		



## Production (Santos share)

Product	Unit	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Sales gas to LNG plant	PJ	26.6	27.0	32.4	53.6	63.6
Domestic sales gas and ethane	PJ	40.9	38.4	37.8	79.3	76.5
Crude oil	000 bbls	1,555.9	1,634.5	1,672.8	3,190.4	3,299.8
Condensate	000 bbls	727.4	685.8	810.7	1,413.2	1,666.4
LPG	000 t	37.8	34.5	34.7	72.3	70.6
Total production	mmboe	14.2	13.8	14.7	28.0	29.5

Second quarter production was higher than the prior quarter due to the recommencement of production at PNG LNG following the earthquake in February, and higher Cooper Basin and WA gas production. This was partially offset by the one-month planned shutdown of Bayu Undan/Darwin LNG in May.

First half production was lower than the previous first half primarily due to the impact of the PNG LNG, Bayu Undan/Darwin LNG and Moomba shutdowns in 2018, which reduced first half production by about 2 mmboe. This was partially offset by stronger Cooper Basin, Queensland and WA production.

## 2018 Guidance

Sales volumes, production and production cost guidance for 2018 is maintained. Capital expenditure and DD&A guidance have both been lowered reflecting current internal forecasts and timing of expenditures.

During the second quarter, Santos announced the sale of its non-core Asian assets for US\$221 million. Completion of the sale is expected in the second half of 2018 and Santos will continue to book production and sales volumes from the assets until the completion date.

	Item	Previous guidance	Updated guidance
_	Sales volumes	72-76 mmboe	No change
)	Production	55-58 mmboe	No change
$\frac{2}{2}$	Upstream production costs	US\$8.2-8.8/boe	No change
$\cap$	Depreciation, depletion and amortisation (DD&A)	US\$725-775 million	US\$650-700 million
Z	Capital expenditure (incl exploration, evaluation & restoration, excl cap. int.)	US\$800-850 million	US\$775-825 million

Further detail of 2018 year-to-date capital expenditure, including exploration and evaluation expenditure, is reported in the table on page 11 of this report.

## 2018 First-half results

Santos will release its results for the first-half ended 30 June 2018 on Thursday 23 August 2018. The first-half report (incorporating Appendix 4D) and associated investor presentation will be available on Santos' website at <u>www.santos.com</u>. A webcast briefing including investor/analyst questions will also be available on Santos' website from 1:00am AEST on 23 August 2018.



## Oil price hedging

3.1 million barrels of oil hedging expired in the second quarter under the zero-cost three way collar hedges. The following oil price hedging positions were in place at the end of the quarter.

2018 Open oil price positions	2018
Zero-cost three-way collars (barrels) <sup>1</sup>	6,302,000
Brent short call price (\$/bbl)	US\$60.30
Brent long put price (\$/bbl)	US\$48.48
Brent short put price (\$/bbl)	US\$40.80

When Brent price is above the weighted average short call price, Santos realises short call price. When Brent price is between the long put price and the weighted average short call price, Santos realises Brent price. When Brent price is between the long put price and the short put price, Santos realises the long put price. When Brent price is below the short put price, Santos realises Brent price plus the difference between the long put price and the short put price.

V	2019 Open oil price positions	2019
$\bigcirc$	Zero-cost collars (barrels) <sup>1</sup>	3,431,000
Ŋ	Ceiling (\$/bbl)	US\$79.27
	Floor (\$/bbl)	US\$45.00

<sup>1</sup>When Brent price is above the weighted average ceiling price, Santos realises ceiling price. When Brent price is between the floor and ceiling price, Santos realises Brent price. When Brent price is below the floor price, Santos realises floor price.

As at 30 June 2018, hedge contracts covering 6.3 million barrels of 2018 oil exposure and 3.4 million barrels of 2019 oil exposure were outstanding. These hedge positions will be marked-to-market as at 30 June 2018, which is expected to result in a US\$145 million liability being recorded in the 2018 half-year accounts. This liability is included in the calculation of net debt.

Expiry of 2018 oil hedges in the first half resulted in a cash settlement of US\$52 million which will be reflected in the cash flow statement.

The cost of oil hedges that expired in the first half of 2018 and the revaluation of remaining 2018 oil hedges as at 30 June is expected to result in a charge to the profit and loss statement of US\$109 million (before tax) for the half-year ended 30 June 2018. This charge will be excluded from underlying earnings.



#### **Cooper Basin**

	Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
	Sales volume						
$\rightarrow$	Sales gas and ethane						
	Own product	PJ	14.2	15.4	16.9	29.6	35.1
	Third party	PJ	0.6	0.9	0.7	1.5	1.3
	Total	PJ	14.8	16.3	17.6	31.1	36.4
	Condensate						
$\square$	Own product	000 bbls	314.8	440.7	336.1	755.5	707.7
$\bigcirc$	Third party	000 bbls	52.6	99.3	40.1	151.9	78.6
	Total	000 bbls	367.4	540.0	376.2	907.4	786.3
615	LPG						
(UD)	Own product	000 t	41.6	6.3	19.1	47.9	51.6
	Third party	000 t	2.9	6.0	2.0	8.9	4.0
(())	Total	000 t	44.5	12.3	21.1	56.8	55.6
	Crude oil						
	Own product	000 bbls	604.1	472.7	667.3	1,076.8	1,080.1
	Third party	000 bbls	1,489.9	1,055.5	1,070.6	2,545.4	1,800.8
	Total	000 bbls	2,094.0	1,528.2	1,737.9	3,622.2	2,880.9
	Total sales volume	mmboe	5.4	4.9	5.4	10.3	10.4
$(\Omega D)$	Total sales revenue	US\$million	278	224	204	502	379
60	Production						
(	Sales gas and ethane	PJ	15.4	14.3	13.9	29.7	28.6
	Condensate	000 bbls	240.8	208.0	198.2	448.8	413.9
$\square$	LPG	000 t	35.2	27.7	26.1	62.9	53.4
$\square$	Crude oil	000 bbls	769.1	658.8	682.9	1,427.9	1,332.6
RE	Total production	mmboe	3.9	3.6	3.5	7.5	7.1
$\mathbb{O}$	Capital expenditure	US\$million	48	60	46	108	84

Second quarter production was higher compared to the prior quarter, with gas production increasing by 8% driven by strong production from recently connected wells recovering much of the deferred gas production from the scheduled Moomba Plant partial outage in March/April. Oil production was up 17% driven by strong production from accelerated well connections. Santos expects to continue to deploy a dedicated rig to the oil program and maintain strong production performance.

Development activity remains on schedule to drill around 80 wells in 2018. During the second quarter, two exciting results were recorded with the successful drilling of the longest ever well, Tirrawarra-94, at 14,029' MD and also the fastest ever gas well drilled with Marabooka-18 at 3.1 days from spud to rig release. Continuing to set new operating limits is enabling Santos to commercialise more of the vast discovered resource that remains undeveloped within the producing fields of the Cooper Basin.

In the second quarter, 17 wells were drilled comprising four exploration wells, seven appraisal wells and six development wells. A total of 35 wells were drilled in the first half.

A summary of exploration and appraisal activity is included on pages 11-12 of this report.



#### Queensland & NSW<sup>1</sup>

Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Sales volume						
GLNG Joint Venture						
LNG - own product	000 t	195.6	167.4	145.5	363.0	318.4
LNG – third-party <sup>2</sup>	000 t	187.0	180.7	222.3	367.7	450.4
LNG – total	000 t	382.6	348.1	367.8	730.7	768.8
Domestic contracts	PJ	6.0	7.0	7.9	13.0	11.2
Eastern Queensland (non-GLNG) <sup>3</sup>	PJ	4.9	5.5	4.8	10.4	9.3
Total sales volume⁴	mmboe	5.5	5.5	5.6	11.0	10.6
Total sales revenue <sup>4</sup>	US\$million	253	210	187	463	354
Production						
GLNG Joint Venture						
Sales gas to LNG	PJ	10.8	10.3	10.4	21.1	20.2
Domestic contracts	PJ	1.0	0.9	0.8	1.9	1.7
Eastern Queensland (non-GLNG) <sup>3</sup>	PJ	5.5	5.5	5.7	11.0	10.8
NSW <sup>1</sup>	PJ	0.2	0.2	0.2	0.4	0.4
Total production <sup>4</sup>	mmboe	3.0	2.9	2.9	5.9	5.6
Capital expenditure	US\$million	63	47	49	110	79
	Sales volume GLNG Joint Venture LNG - own product LNG - third-party <sup>2</sup> LNG - total Domestic contracts Eastern Queensland (non-GLNG) <sup>3</sup> Total sales volume <sup>4</sup> Total sales revenue <sup>4</sup> Production GLNG Joint Venture Sales gas to LNG Domestic contracts Eastern Queensland (non-GLNG) <sup>3</sup> NSW <sup>1</sup> Total production <sup>4</sup> Capital expenditure	Sales volume   GLNG Joint Venture   LNG - own product 000 t   LNG - third-party <sup>2</sup> 000 t   LNG - total 000 t   Domestic contracts PJ   Eastern Queensland (non-GLNG) <sup>3</sup> PJ   Total sales volume <sup>4</sup> mmboe   Total sales revenue <sup>4</sup> US\$million   Production gLNG Joint Venture   Sales gas to LNG PJ   Domestic contracts PJ   NG Joint Venture PJ   Sales gas to LNG PJ   Domestic contracts PJ   NSW <sup>1</sup> PJ   Total production <sup>4</sup> mmboe   Capital expenditure US\$million	Sales volumeGLNG Joint Venture000 t195.6LNG - own product000 t187.0LNG - third-party2000 t187.0LNG - total000 t382.6Domestic contractsPJ6.0Eastern Queensland (non-GLNG)3PJ4.9Total sales volume4mmboe5.5Total sales revenue4US\$million253Production GLNG Joint VenturePJ10.8Domestic contractsPJ1.0Eastern Queensland (non-GLNG)3PJ5.5NSW1PJ0.2Total production4mmboe3.0Capital expenditureUS\$million63	Sales volume GLNG Joint Venture000 t195.6167.4LNG - own product000 t195.6167.4LNG - third-party2000 t187.0180.7LNG - total000 t382.6348.1Domestic contractsPJ6.07.0Eastern Queensland (non-GLNG)3PJ4.95.5Total sales volume4Mmboe5.55.5Total sales revenue4US\$million253210Production GLNG Joint VenturePJ10.810.3Domestic contractsPJ10.810.3Domestic contractsPJ0.00.9Eastern Queensland (non-GLNG)3PJ5.55.5NSW1PJ0.20.2Total production4Mmboe3.02.9Capital expenditureUS\$million6347	Sales volume   Image: constraint of the section of the sec	Sales volume   Image: constraint of the section of the sec

<sup>1</sup>New South Wales entered the core portfolio on 1 January 2018.

<sup>2</sup> Includes LNG produced from Santos portfolio gas and third-party quantities.

GLNG operational data (gross)	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017
Production						
LNG <sup>1</sup>	000 t	1,239	1,217	1,073	2,456	
Sales gas to LNG plant						
GLNG equity gas	PJ	38	33	30	71	
Santos portfolio gas	PJ	14	15	15	29	
Third-party	PJ	23	26	21	49	
Total sales gas to LNG plant	PJ	75	74	66	149	
LNG cargoes shipped		21	19	21	40	

<sup>T</sup>Includes LNG produced from GLNG equity gas, Santos portfolio gas and third-party quantities.

Second quarter LNG production of 1.2 million tonnes was in line with the previous quarter and 21 cargoes were loaded. GLNG equity gas delivered to the LNG plant grew by 15% compared to the prior quarter.

Gross GLNG-operated upstream sales gas production was 573 TJ/d at the end of the quarter, supported by a strong ramp in Scotia production and continued steady incline in Roma.

Gross daily production from Fairview was 445 TJ/day at the end of the quarter, in line with the prior quarter. Current activities are focussed on well availability with a number of high-rate wells offline awaiting workover. An additional workover rig has been mobilised to the field.

Gross daily production from Roma increased to 70 TJ/day at the end of the quarter. Field production is expected to continue building as new development areas come online. Drilling continues in the Roma East project with 51 wells drilled to date.

Gross daily production from the Scotia Field grew to 51 TJ/d at the end of the quarter. The Scotia CF1 project was completed during the quarter ahead of schedule and under budget, with 83 wells now online. Production from the field continues to grow as the reservoir de-pressures.



Production from the Arcadia field remained steady. The next phase of development for Arcadia Valley was sanctioned during the quarter with first production expected in late 2019.

Santos' share of production from the non-operated Combabula and Spring Gully fields was about 40 TJ/day.

Eighty wells were drilled across the GLNG acreage in the second quarter and activity remains on schedule to drill about 300 wells in 2018 with a fourth drilling rig commencing operations in May. Sixty-five development wells were drilled across Santos' non-operated Eastern Queensland acreage in the quarter.

During the quarter Santos also announced the sale of its non-core Denison Trough assets in Queensland for up to A\$43 million. Completion occurred in May and Santos expects to record a profit on sale of approximately A\$70 million.

Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Sales volume						
PNG LNG						
	000 t	203.4	180.9	300.1	384.3	532.9
Condensate	000 bbls	252.1	249.9	352.3	502.0	727.0
Crude oil	000 bbls	1.9	3.3	5.5	5.2	10.5
Total sales volume	mmboe	2.1	2.0	3.2	4.1	5.8
Total sales revenue	US\$million	115	100	127	215	248
Production						
PNG LNG						
Sales gas to LNG <sup>1</sup>	PJ	13.3	10.4	15.7	23.7	31.8
Condensate	000 bbls	286.8	221.3	357.8	508.1	734.9
Crude oil	000 bbls	2.2	2.7	5.4	4.9	10.4
Total production	mmboe	2.6	2.0	3.1	4.6	6.2
Capital expenditure	US\$million	9	6	6	15	16
<sup>1</sup> Includes SE Gobe						
PNG LNG operational data (gross)	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Production						
LNG	Mt	1.6	1.3	2.0	2.9	4.0
Sales gas to LNG plant	PJ	99	78	119	177	239
Condensate <sup>1</sup>	000 bbls	2,125	1,635	2,658	3,761	5,444
	51	1	2		1	0

PNG LNG operational data (gross)	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Production						
LNG	Mt	1.6	1.3	2.0	2.9	4.0
Sales gas to LNG plant	PJ	99	78	119	177	239
Condensate <sup>1</sup>	000 bbls	2,125	1,635	2,658	3,761	5,444
Sales gas (SE Gobe) <sup>2</sup>	PJ	1	3	5	4	8
LNG cargoes shipped		18	20	27	38	54

<sup>1</sup>Measured at the Kutubu entry point.

<sup>2</sup> Purchased by PNG LNG.

PNG LNG sales volumes and production were higher than the prior guarter due to the ramping-up of facilities following a temporary shutdown as a result of a severe earthquake in the region on 26 February 2018. The shutdown reduced Santos' expected first half share of production from PNG LNG by approximately 1.5 mmboe.

Production recommenced in April and during June, PNG LNG achieved record daily production rates at the LNG plant inlet following plant optimisation activities, including planned upgrades undertaken at both the Hides Gas Conditioning Plant and LNG plant during the time offline as a result of the earthquake.

Santos is in discussions regarding a proposal received for Santos to farm-in to PRL 3 (P'nyang).

Santos along with the other PNG LNG parties are also continuing discussions to build alignment for the proposed construction of three additional LNG trains at the PNG LNG site.



#### Northern Australia

Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Sales volume						
Darwin LNG						
LNG	000 t	44.8	113.5	87.1	158.3	182.4
Bayu Undan						
Condensate	000 bbls	44.5	108.3	133.6	152.8	321.1
LPG	000 t	(0.8)	9.2	5.6	8.4	13.9
Total sales volume	mmboe	0.4	1.3	1.0	1.7	2.2
Total sales revenue	US\$million	28	48	36	76	78
Production						
Darwin LNG						
Sales gas to LNG	PJ	2.5	6.3	4.8	8.8	10.1
Bayu Undan						
Condensate	000 bbls	34.0	109.7	130.6	143.7	286.3
LPG	000 t	2.5	6.8	8.6	9.3	17.2
Total production	mmboe	0.5	1.2	1.0	1.7	2.1
Capital expenditure	US\$million	20	9	27	29	44

D	Darwin LNG / Bayu-Undan operational data (gross)	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
	Production						
	LNG	000 t	540	947	794	1,487	1,691
	Sales gas to LNG plant	PJ	34	57	48	91	103
5	Condensate	000 bbls	535	1,004	1,316	1,539	2,989
2	LPG	000 t	32	63	71	95	159
$\overline{\cap}$	LNG cargoes shipped		9	15	12	24	26

Darwin LNG sales volumes and production were lower than the prior quarter due to a scheduled one-month Bayu Undan/Darwin LNG shutdown in May and adjustments to PSC net entitlement to account for higher commodity prices.

The first of three Bayu Undan infill wells is at the final stages of well completion ahead of clean-up. A better than expected reservoir outcome was achieved in the well and first gas remains on target for the fourth quarter of 2018.

In April, Santos announced that agreement has been reached with our joint venture partners to enter the front-end engineering and design (FEED) phase for the development of the Barossa project to backfill Darwin LNG. The award of three major engineering contracts was announced in June.

A final investment decision on the Barossa project is targeted towards the end of 2019. Successful development of Barossa would extend the operating life of Darwin LNG for more than 20 years and more than double Santos' current production in Northern Australia.



### Western Australia<sup>1</sup>

Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Sales volume						
Sales gas	PJ	14.9	13.8	14.1	28.7	25.4
Condensate	000 bbls	146.4	177.4	129.3	323.8	202.4
Crude oil	000 bbls	139.5	300.3	329.1	439.8	670.6
Total sales volume	mmboe	2.9	2.8	2.9	5.7	5.2
Total sales revenue	US\$million	81	87	81	168	152
Production						
Sales gas	PJ	14.6	13.3	12.5	27.9	23.9
Condensate	000 bbls	163.3	144.3	118.8	307.6	225.1
Crude oil	000 bbls	151.9	323.8	351.4	475.7	688.8
Total production	mmboe	2.8	2.8	2.6	5.6	5.0
Capital expenditure	US\$million	15	2	17	17	35
<sup>1</sup> Includes Western Australia oil a	ssets. The comparative ne	riods have been rest	ated accordingly			

stern Australia oil assets. The comparative periods have been restated accordingly.

Sales gas volumes and production were higher than the prior quarter due to strong asset performance and the commencement of two new sales contracts.

Condensate sales volumes were lower than the prior quarter due to the timing of liftings but production was higher reflecting the higher gas production.

Crude oil sales volumes and production were lower than the prior quarter due to production at the Mutineer-Exeter/Fletcher Finucane fields ceasing during the guarter as planned. The fields produced more than 74 million barrels of oil since production began from Mutineer-Exeter in 2005. The Modec Venture 11 FPSO sailed away in July.

## Asia<sup>1</sup>

7	Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
٢	Sales volume						
	Sales gas	PJ	4.2	4.2	5.6	8.4	12.3
2	Condensate	000 bbls	2.4	2.4	0.4	4.8	1.3
	Crude oil	000 bbls	628.6	602.0	619.6	1,230.6	1,233.1
	Total sales volume	mmboe	1.4	1.3	1.5	2.7	3.3
	Total sales revenue	US\$million	70	64	63	134	131
2	Production						
)	Sales gas	PJ	4.2	4.2	6.2	8.4	12.5
	Condensate	000 bbls	2.5	2.4	5.1	4.9	5.9
	Crude oil	000 bbls	632.6	649.2	633.1	1,281.8	1,268.1
	Total production	mmboe	1.4	1.4	1.7	2.8	3.5
	Capital expenditure	US\$million	3	1	3	4	9

<sup>|2|</sup>As at 1 January 2018, the 'Other' reporting segment was restructured to comprise Santos' Asian assets only. New South Wales entered the core portfolio and is now reported under the segment 'Queensland and NSW' and WA Oil is now reported under the segment 'Western Australia'. The comparative periods have been restated accordingly.

Asian sales volumes and production were in line with the prior quarter. In Indonesia, average daily gross gas production was steady at 93 TJ/d during the quarter. Reported production was slightly lower however due to lower net entitlements.

In Vietnam, average daily gross oil production was 24,000 bbls/d and gas volumes were 27TJ/d.

On 3 May, Santos announced the sale of its non-core Asian portfolio to Ophir Energy plc for US\$221 million. The sale is consistent with Santos' strategy to realise value from its late-life non-core assets. Under the terms of the sale, the transaction will have an effective date of 1 January 2018. Completion is expected in the second half of 2018 and is subject to customary consents and approvals for a transaction of this nature.



## Corporate, exploration and eliminations

	Santos share	Units	Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
	Total sales volume	mmboe	1.3	1.2	1.9	2.5	2.6
$\geq$	Total sales revenue	US\$million	62	61	71	123	111
	Capital expenditure	US\$million	9	14	47	23	54

Capital expenditure		US\$million	9	14	47	25	54
		n the corporate segme n and evaluation activi				vities. Capital	expenditure
Capital expe	nditure						
		d dovelopment ovnon	dituro io ouron	noviced in the	table below		
Total exploration	, evaluation ai	nd development expen			Lable Delow.		
US\$million			Q2 2018	Q1 2018	Q2 2017	2018 YTD	2017 YTD
Capital expenditu	ire						
Exploration	on <sup>1</sup>		21	17	43	38	73
(//) Evaluatio	n		11	12	36	23	53
Developn	nent and other ca	pex (including restoration)	135	110	108	245	195
Capital expenditu	ire excl capitali	sed interest	167	139	187	306	321
Capitalise	d interest		2	1	3	3	5
Total capital exp	enditure <sup>1</sup>		169	140	190	309	326
Exploration and e	evaluation expe	nsed					
Exploration	on		19	17	10	36	40
Evaluatio	n		6	3	4	9	8
Total current yea	r expenditure		25	20	14	45	48
Write-off	of amounts capita	alised in prior years	-	-	1	-	5
Total expensed			25	20	15	45	53
<sup>1</sup> Includes acquisition of	of exploration asset	S					
Exploration	and appra	isal activity					
Key exploration a	nd appraisal w	ells					
Well name	Basin/area	Santos %	Well	status			
Hobgoblin 1	Cooper/Qld	60.06%	C&S,	gas discovery			
Mountain Goat 1	Cooper/Qld	60.06%	C&S,	gas discovery			
Napowie 3	Cooper/SA	66.6%	Produ	icing gas well			
Barikewa 3 PNG/PRL 9 40%				ne evaluation of			

	Key exploration a	Key exploration and appraisal wells							
15	Well name	Basin/area	Santos %	Well status					
Ľ	Hobgoblin 1	Cooper/Qld	60.06%	C&S, gas discovery					
	Mountain Goat 1	Cooper/Qld	60.06%	C&S, gas discovery					
_	Napowie 3	Cooper/SA	66.6%	Producing gas well					
	Barikewa 3	PNG/PRL 9	40%	Wireline evaluation of primary objectives					

In the Queensland sector of the Cooper Basin, in addition to the smaller, near field exploration Bantam-1 discovery, the Mountain Goat-1 and Hobgoblin-1 wildcats were drilled. These wildcats targeted a large subcrop trap on the southern flank of the Innamincka High. Thick intervals of target Permian gas sands were intersected and determined to be gas bearing. The wells have now been cased and suspended with fracture stimulation of Mountain Goat-1 to be carried out in the third quarter.

In the South Australian sector of the Cooper Basin, the Napowie-3 appraisal well was drilled on the northern flank of the Innamincka High, in a similar structural setting and addressing similar objectives to Mountain Goat-1 and Hobgoblin-1. The well was tested and shut-in whilst flowing over 9 mmscf/day gross. The well has recently been connected and rates remain high, accompanied by high well head flowing pressures. Additional appraisal is planned at Napowie and positive results at Mountain Goat will lead to an accelerated appraisal drilling programme.

Also in the Cooper, a Moomba South appraisal drilling programme is expected to commence later this year subject to joint venture approval. This program is designed to evaluate a large contingent resource volume associated with the Patchawarra reservoir.



These Cooper opportunities are all elements of a renewed focus on exploration and appraisal opportunities across the Basin, enabled by the onshore upstream operating model. Santos intends to further increase exploration and appraisal activity in the Cooper Basin in 2019 given the attractive resource and reserve opportunities being identified and to leverage the efficiencies being delivered in onshore drill cost and performance.

Elsewhere in Queensland, production from the shallow Mira-6 lateral pilot in the Mahalo field (Santos 30%) has exceeded 1.4 mmscf/day gross. The well continues to be flowed to gain further insight into the reservoir characteristics. A fivewell appraisal program is now planned in the field during the remainder of 2018 with a view to accelerating project definition and refining reserve and resource assessment.

In Northern Australia, the Bethany 3D seismic survey in the Northern Bonaparte Basin is complete. The vessel will move on to the Beehive 3D survey which is being acquired to mature a new exploration play in the Southern Bonaparte Basin. Each of these surveys are contributing to the building of a diverse exploration inventory ahead of wildcat drilling currently planned to commence around 2020.

Following the lifting of the NT moratorium, planning to recommence exploration/appraisal and stimulation activities in the McArthur Basin in the 2019 dry season is continuing. These activities remain subject to regulatory approval.

In Papua New Guinea, Barikewa-3 has reached TD after successfully intersecting the Toro and Hedinia reservoirs, with indications that both reservoirs are likely to be gas bearing. A DST may be undertaken if wireline log and pressure data confirm the presence of hydrocarbons. Barikewa is located approximately 10 kilometres from the PNG LNG gas pipeline.

Activity in PNG will continue throughout the year with the PPL 402 2D seismic program to re-commence in October-November and the Muruk-2 appraisal well scheduled to spud in December.



## Drilling summary

## Near-field exploration (NFE) / Appraisal wells

$\geq$	Cooper Ba	sin oil		
	Well name	Basin/area	Santos	Well status
	Minos 3	QLD	70%	C&S, successful
	Watkins 2	QLD	55.5%	C&S, successful
	Watkins 3	QLD	55.5%	C&S, successful

Cooper Ba	Cooper Basin gas							
Well name	Basin/area	Santos	Well status					
Adelie 1	QLD	60.06%	P&A					
) Tigris 1	QLD	60.06%	P&A					
Whanto 5	QLD	60.06%	C&S, successful					
Whanto 6	QLD	60.06%	P&A					
Pooraka 2	SA	66.6%	C&S, successful					
Moomba 224	SA	66.6%	C&S, successful					

Papua Ne	w Guinea gas		
UWell name	Basin/area	Santos	Well status
Barikewa 3 <sup>#</sup>	Gulf Province PNG	40%	Drilling
# Not operated b	oy Santos		

### **Development wells**

Cooper Basin gas						
Well name	Basin/area	Santos	Well status			
Marabooka 17	SA	66.6%	C&C, successful			
Marabooka 18	SA	66.6%	C&C, successful			
Moomba 221	SA	66.6%	C&S, successful			
Moomba 222	SA	66.6%	C&S, successful			
Moomba 223	SA	66.6%	C&S, successful			
Tirrawarra 94	SA	66.6%	C&S, successful			

Northern Australia gas					
Well name	Basin/area	Santos	Well status		
Bayu Undan W12 <sup>#</sup>	Bonaparte	11.49%	Plugged back and side-tracked		
Bayu Undan W12ST1 <sup>#</sup>	Bonaparte	11.49%	Drilling		

# Not operated by Santos

Queensland - GLNG gas				
Well name	Basin/area	Santos	Well status	
FV10-35-21	Fairview	23.85%	C&S, successful	
FV10-35-22	Fairview	23.85%	C&S, successful	
FV10-36-21	Fairview	23.85%	C&C, successful	
FV10-38-21	Fairview	23.85%	C&C, successful	
FV10-39-21	Fairview	23.85%	C&S, successful	
FV10-40-21	Fairview	23.85%	C&S, successful	
FV10-43-21	Fairview	23.85%	C&S, successful	
FV11-71-21	Fairview	23.85%	C&S, successful	
FV11-73-21	Fairview	23.85%	C&S, successful	
FV11-75-21	Fairview	23.85%	Drilling	
FV11-77-21	Fairview	23.85%	C&S, successful	
FV11-84-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV11-85-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV11-86-1	Fairview	23.85%	Drilling	
FV11-88-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV12-44-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV13-26-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV13-33-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV13-34-1 (top hole)	Fairview	23.85%	Suspended for later deepening	
FV13-67-1 (top hole)	Fairview	23.85%	Suspended for later deepening	



FV18-47-1 (top hole)	Fairview	23.85%	Suspended for later deepening
FV18-55-1 (top hole)	Fairview	23.85%	Suspended for later deepening
FV18-57-1	Fairview	23.85%	Suspended for later
(top hole)		23.0370	deepening
FV18-58-1 (top hole)	Fairview	23.85%	Suspended for later deepening
FV18-61-1	Fairview	23.85%	C&S, successful
RM02-38-5	Roma	30%	C&C, successful
RM07-102-1	Roma	30%	C&S, successful
RM07-103-1	Roma	30%	C&S, successful
RM09-09-5	Roma	30%	C&C, successful
RM09-26-5	Roma	30%	C&S, successful
RM09-31-5	Roma	30%	C&C, successful
RM09-77-1	Roma	30%	C&S, successful
RM13-15-5	Roma	30%	C&C, successful
RM13-42-1	Roma	30%	C&C, successful
RM15-02-1	Roma	30%	C&S, successful
RM15-03-1	Roma	30%	C&S, successful
RM15-06-1	Roma	30%	C&S, successful
RM15-07-1	Roma	30%	C&S, successful
RM15-08-1	Roma	30%	C&S, successful
RM15-09-1	Roma	30%	C&S, successful
RM15-10-1	Roma	30%	C&S, successful
RM15-12-1	Roma	30%	C&S, successful
RM15-13-1	Roma	30%	C&S, successful
RM49-106-1	Roma	30%	C&S, successful
RM49-107-1	Roma	30%	C&S, successful
RM49-45-1	Roma	30%	C&S, successful
RM49-57-1	Roma	30%	C&S, successful
RM49-68-1	Roma	30%	C&S, successful
RM49-77-1	Roma	30%	C&S, successful
RM49-82-1	Roma	30%	C&S, successful
RM49-94-1	Roma	30%	C&S, successful
RM49-95-1	Roma	30%	C&S, successful
RM50-10-1	Roma	30%	C&S, successful
RM50-11-1	Roma	30%	C&S, successful
RM50-12-1	Roma	30%	C&S, successful
RM50-13-1	Roma	30%	C&C, successful
RM50-18-1	Roma	30%	C&S, successful
RM50-19-1	Roma	30%	C&S, successful
RM50-20-1	Roma	30%	C&S, successful
RM50-21-1	Roma	30%	C&S, successful
RM50-22-1	Roma	30%	C&S, successful
RM50-23-1	Roma	30%	C&C, successful
RM50-28-1	Roma	30%	C&S, successful
RM50-29-1	Roma	30%	C&S, successful
	Kontu	2070	

RM50-30-1	Roma	30%	C&S, successful
RM50-31-1	Roma	30%	C&S, successful
RM50-32-1	Roma	30%	C&S, successful
RM50-35-1	Roma	30%	C&S, successful
RM50-39-1	Roma	30%	C&S, successful
RM50-40-1	Roma	30%	C&S, successful
RM50-41-1	Roma	30%	C&S, successful
RM50-42-1	Roma	30%	C&S, successful
RM50-43-1	Roma	30%	C&S, successful
RM50-45-1	Roma	30%	C&C, successful
RM50-51-1	Roma	30%	C&S, successful
RM50-52-1	Roma	30%	C&S, successful
RM50-53-1	Roma	30%	C&S, successful
RM50-62-1	Roma	30%	C&S, successful
RM50-72-1	Roma	30%	C&S, successful
RM50-82-1	Roma	30%	C&S, successful
Scotia 46 (re- entry)	Scotia	30%	C&S, successful

Queensland -	Eastern Que	ensland	gas (EQ)
Well name	Basin/area	Santos	Well status
Muggleton 57 <sup>#</sup>	Combabula	7.28%	C&S, successful
Muggleton 81 <sup>#</sup>	Combabula	7.28%	C&S, successful
Muggleton 105#	Combabula	7.28%	C&S, successful
Muggleton 177 <sup>#</sup>	Combabula	7.28%	C&S, successful
Muggleton 201 <sup>#</sup>	Combabula	7.28%	C&S, successful
Muggleton 360 <sup>#</sup>	Combabula	7.28%	C&S, successful
Pine Hills 294#	Combabula	7.28%	C&S, successful
Pine Hills 300 <sup>#</sup>	Combabula	7.28%	C&S, successful
Pine Hills 301#	Combabula	7.28%	C&S, successful
Pine Hills 328 <sup>#</sup>	Combabula	7.28%	C&S, successful
Pine Hills 329#	Combabula	7.28%	C&S, successful
Pine Hills 330 <sup>#</sup>	Combabula	7.28%	C&S, successful
Pine Hills 379#	Combabula	7.28%	C&S, successful
Reedy Creek 14#	Combabula	7.28%	C&S, successful
Reedy Creek 15#	Combabula	7.28%	C&S, successful
Reedy Creek 16#	Combabula	7.28%	C&S, successful
Reedy Creek 17#	Combabula	7.28%	C&S, successful
Reedy Creek 18#	Combabula	7.28%	C&S, successful
Reedy Creek 19#	Combabula	7.28%	C&S, successful
Reedy Creek 23#	Combabula	7.28%	C&S, successful
Reedy Creek 25#	Combabula	7.28%	C&S, successful
Reedy Creek 26#	Combabula	7.28%	C&S, successful
Reedy Creek 27#	Combabula	7.28%	C&S, successful
Reedy Creek 28#	Combabula	7.28%	C&S, successful
Reedy Creek 31#	Combabula	7.28%	C&S, successful



Reedy Creek 32# Combabula 7.28% C&S, successful Reedy Creek 33# Combabula 7.28% C&S, successful 7.28% Reedy Creek 34# Combabula C&S, successful Reedy Creek 35# Combabula 7.28% C&S, successful Reedy Creek 36# Combabula 7.28% C&S, successful Reedy Creek 37# Combabula 7.28% C&S, successful Reedy Creek 40# Combabula 7.28% C&S, successful Reedy Creek 41# Combabula 7.28% C&S, successful Reedy Creek 42# Combabula 7.28% C&S, successful Reedy Creek 43# Combabula 7.28% C&S, successful Reedy Creek 46# Combabula 7.28% C&S, successful Reedy Creek 51# Combabula 7.28% C&S, successful Reedy Creek 52# Combabula 7.28% C&S, successful Reedy Creek 57# 7.28% Combabula C&S, successful Reedy Creek 60# 7.28% Combabula C&S, successful Reedy Creek 61# Combabula 7.28% C&S, successful Reedy Creek 92# Combabula 7.28% C&S, successful Reedy Creek 93# Combabula 7.28% C&S, successful Reedy Creek 117# Combabula 7.28% C&S, successful Reedy Creek 118# Combabula 7.28% C&S, successful Reedy Creek 151# Combabula 7.28% C&S, successful Reedy Creek 152# Combabula 7.28% C&S, successful Reedy Creek 153# Combabula 7.28% C&S, successful

Reedy Creek 176#	Combabula	7.28%	C&S, successful
Reedy Creek 177#	Combabula	7.28%	C&S, successful
Reedy Creek 178 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek 207#	Combabula	7.28%	C&S, successful
Reedy Creek 244#	Combabula	7.28%	C&S, successful
Reedy Creek 250#	Combabula	7.28%	C&S, successful
Reedy Creek 270#	Combabula	7.28%	C&S, successful
Reedy Creek 276#	Combabula	7.28%	C&S, successful
Reedy Creek 277#	Combabula	7.28%	C&S, successful
Reedy Creek 278#	Combabula	7.28%	C&S, successful
Reedy Creek 279#	Combabula	7.28%	C&S, successful
Reedy Creek South 5 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek South 33 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek South 44 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek South 48 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek South 58 <sup>#</sup>	Combabula	7.28%	C&S, successful
Reedy Creek South 86 <sup>#</sup>	Combabula	7.28%	C&S, successful
Durham Ranch West LB023 <sup>#</sup>	Spring Gully	4%	C&S, successful

# Not operated by Santos

\*\* LTAP = Less than all parties

## Seismic activity

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

Permit	Basin/area	Survey	Туре	km/km <sup>2</sup>	Status
EP82, EP112, EP125	Amadeus	Southern Amadeus 2D Phase 2	2D	277.3 km <sup>2</sup> of 402 km <sup>2</sup>	100% complete
NTP85, NTP82	Bonaparte	Bethany 3D Offshore	3D	4,031 km <sup>2</sup> of 4,364 km <sup>2</sup>	100% complete
SS-11	Bengal	Sheemanto 3D Offshore	3D	304 km <sup>2</sup> of 304 km <sup>2</sup>	100% complete

# **Santos**

## Abbreviations and conversion factors

	AUUI
	C&C
	C&S
	gas
	DES
	FPSO
$(\bigcirc)$	GJ
	kbbls
615	kt
((D))	LNG
20	LPG
$\bigcirc \bigcirc $	m
	mmb
	mmb
	mmB
	mmso
	mt
60	mtpa
	NFE
	P&A
$(\bigcirc)$	ра
20	PJ
(0)	PSC
	t
615	TJ
QD	
$\overline{\bigcirc}$	
$\underline{\square}$	
$\bigcirc$	
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1 п	

Abbreviations		Conversion factors	
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
gas	coal seam gas	Condensate, 1 barrel	0.935 boe
DES	delivered ex ship	LPG, 1 tonne	8.458 boe
FPSO	floating production, storage and offloading	LNG, 1 PJ	18,040 tonnes
)) GJ	Gigajoules	LNG, 1 tonne	52.54 mmBtu
kbbls	thousand barrels		
kt	thousand tonnes		
)) lng	liquefied natural gas		
LPG	liquefied petroleum gas		
ノ m	Million		
3 mmbbl	million barrels		
mmboe	million barrels of oil equivalent		
mmBtu	million British thermal units		
mmscf	million standard cubic feet		
mt	million tonnes		
mtpa	million tonnes per annum		
NFE	near-field exploration		
P&A	plugged and abandoned		
)) pa	per annum		
PJ	petajoules		
PSC	production sharing contract		
t	tonnes		
СТ	terajoules		
))			