

**From:** s22(1)(a)(ii)  
**To:** s47F(1) s22(1)(a)(ii)  
**Cc:** s22(1)(a)(ii)  
**Subject:** RE: Santos half-year report [SEC=OFFICIAL]  
**Date:** Tuesday, 17 August 2021 3:36:00 PM

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**OFFICIAL**

Hi s47F(1)

Thanks for sharing a copy of the half-year results presentation and highlighting the slides relevant for us.

It looks like the company had a very good first six months of the year. s47F(1)

s22(1)(a)(ii) and s22(1)(a)(ii) – for your information.

Regards

s22(1)(a)(ii)

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**From:** s47F(1)  
**Sent:** Tuesday, 17 August 2021 3:02 PM  
**To:** s22(1)(a)(ii)  
**Subject:** [EXTERNAL] Santos half-year report

**CAUTION:** This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender.

Hi s22(1)(a)(ii) & s22(1)(a)(ii)

Fyi, please see attached the Santos half-year result, released to the ASX this morning. The company posted record production of 47.3 mmboe, an underlying profit of US\$317 million and an interim dividend of US5.5 cents per share fully-franked.

From a Timor perspective, it's worth noting the following:

- the statement: "While Barossa FID is a visible benefit of the acquisition of the ConocoPhillips assets in Northern Australia and Timor-Leste, I am also pleased with the very strong result from the first infill well drilled at Bayu-Undan, with initial gas rate of 178 million standard cubic feet per day and liquids rate of 11,350 barrels per day. The infill campaign adds immediate value and extends the life of Bayu-Undan. We are extremely appreciative of the positive working relationship we have with the Timor-Leste regulator Autoridade Nacional do Petr leo e Minerais (ANPM) and the Timor-Leste Government, whose support enabled this late-life infill campaign. Our Moomba carbon capture and storage (CCS) project is FID ready, subject to eligibility for Australian Carbon Credit Units, which is expected in the fourth quarter. We are also assessing the feasibility of creating a

CCS hub at Bayu-Undan with the capacity of approximately 10 million tonnes per annum of CO<sub>2</sub> and providing a cost-effective solution for Barossa reservoir emissions as part of our roadmap to net-zero by 2040.”

- slide 9 on Moomba CCS project, which is FID-ready subject to Australian Carbon Credit Units eligibility and heads our ‘Infrastructure led carbon capture and storage strategy’ (see slide 12) which includes Northern Australia/Timor-Leste CCS
- slide 16 on Bayu-Undan 3C, generally

Don’t hesitate to give me a call if any questions etc

Cheers, s47F(1)

s47F(1)

17 August 2021

## Santos reports record half-year production and sales volumes, strong free cash flow and underlying earnings, and higher interim dividend

Half-year (US\$million)	2021	2020	Change
Production (mmboe)	47.3	38.5	23%
Sales volume (mmboe)	53.8	46.9	15%
Product sales revenue	2,040	1,668	22%
EBITDAX <sup>1</sup>	1,231	995	24%
Underlying profit <sup>1</sup>	317	212	50%
Net profit/(loss) after tax	354	(289)	222%
Free cash flow <sup>1</sup>	572	431	33%
Interim dividend (UScps)	5.5	2.1	162%

Santos today announced its half-year results for 2021, reporting record production of 47.3 mmboe and record sales volumes of 53.8 mmboe, free cash flow of US\$572 million and underlying profit of US\$317 million. The results reflect higher oil prices compared to the corresponding period due to recovery in demand but were offset by lower average LNG prices due to lagged oil-linked pricing in long-term LNG offtake contracts.

The reported net profit after tax of US\$354 million includes net gains on asset sales and is significantly higher than the corresponding period mainly due to impairments included in the previous half-year result.

The Board has resolved to pay an interim dividend of US5.5 cents per share fully-franked, 162 per cent higher than the previous interim dividend. The dividend equates to 20 per cent of first half free cash flow, in-line with the company's sustainable dividend policy which targets a range of 10 per cent to 30 per cent payout of free cash flow.

Santos Managing Director and Chief Executive Officer Kevin Gallagher said Santos delivered record production and sales volumes in the first half of 2021, and strong free cash flow of US\$572 million despite lower average LNG prices.

"These results again demonstrate the resilience of our cash-generative base business and strong operational performance across our diversified asset portfolio.

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"Consistent application of our low-cost disciplined operating model continues to deliver cost reductions and efficiencies despite cost challenges across the industry and COVID-related cost impacts in the base business.

"We will remain disciplined and cost focused as we enter our next phase of growth and progress the proposed merger with Oil Search.

"The proposed merger is a compelling combination of two industry leaders to create an unrivalled regional champion of size and scale with a unique diversified portfolio of long-life, low-cost oil and gas assets.

"The merged company would have strong cash generation from a diverse range of assets which provides a strong platform for sustainable growth and continued shareholder returns.

"The merger would also build on our industry-leading approach to ESG through the combination of Santos' net-zero 2040 pathway, including its sector-leading CCS projects, and Oil Search's unique social programs in PNG, underpinned by a strong balance sheet to fund the transition to a lower-carbon future.

"I am pleased with the progress we are making on due diligence and look forward to the signing of a binding Merger Implementation Deed in the coming weeks.

"Since taking FID on Barossa in March, the project is off to a great start including the cutting of first steel for the FPSO turret, commencing manufacturing of subsea and export flowlines, and the assembly of subsea trees. FPSO hull build and topsides fabrication is scheduled to commence in the third quarter. The project is on track for first gas in the first half of 2025.

"While Barossa FID is a visible benefit of the acquisition of the ConocoPhillips assets in Northern Australia and Timor-Leste, I am also pleased with the very strong result from the first infill well drilled at Bayu-Undan, with initial gas rate of 178 million standard cubic feet per day and liquids rate of 11,350 barrels per day. The infill campaign adds immediate value and extends the life of Bayu-Undan.

"We are extremely appreciative of the positive working relationship we have with the Timor-Leste regulator Autoridade Nacional do Petróleo e Minerais (ANPM) and the Timor-Leste Government, whose support enabled this late-life infill campaign.

"Our Moomba carbon capture and storage (CCS) project is FID ready, subject to eligibility for Australian Carbon Credit Units, which is expected in the fourth quarter. We are also assessing the feasibility of creating a CCS hub at Bayu-Undan with the capacity of approximately 10 million tonnes per annum of CO<sub>2</sub> and providing a cost-effective solution for Barossa reservoir emissions as part of our roadmap to net-zero by 2040.

"We have also made significant progress on our exciting Dorado project with FEED entry on an integrated oil and gas project taken in June. We are targeting FID in mid-2022 on the first phase of liquids production, with FID on a second phase of gas development to backfill our Western Australia domestic gas infrastructure likely to occur in the second half of the decade.

"Our strongly cash-generative base business, diversified portfolio and disciplined approach to capital allocation means that we are well positioned to drive free cash flow and sustainable shareholder returns," Mr Gallagher said.





## Live webcast

A video presentation on the 2021 half-year results is available on Santos' website. A live question and answer webcast for analysts and investors will be held today at 12:30pm AEST.

To access the live webcast, register on Santos' website at [www.santos.com](http://www.santos.com).

*This ASX announcement was approved and authorised for release by Kevin Gallagher, Managing Director and Chief Executive Officer.*

<sup>1</sup> EBITDAX (earnings before interest, tax, depreciation, depletion, exploration, evaluation and impairment), underlying profit and free cash flow (operating cash flows less investing cash flows net of acquisitions and disposals) are non-IFRS measures that are presented to provide an understanding of the performance of Santos' operations. Underlying profit excludes the impacts of asset acquisitions, disposals and impairments, hedging as well as items that are subject to significant variability from one period to the next. The non-IFRS financial information is unaudited however the numbers have been extracted from the financial statements which have been subject to review by the auditor. A reconciliation between net profit after tax and underlying profit is provided in the Appendix of the 2021 half-year results presentation released to ASX on 17 August 2021.

# Santos 2021 Half-year results

17 August 2021

**Santos**



# Disclaimer and important notice



This presentation contains forward looking statements that are subject to risk factors associated with the oil and gas industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, geotechnical factors, drilling and production results, gas commercialisation, development progress, operating results, engineering estimates, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates.

All references to dollars, cents or \$ in this document are to United States currency, unless otherwise stated. The symbol “~” means approximately.

Underlying profit, EBITDAX (earnings before interest, tax, depreciation, depletion, exploration and evaluation expensed, change in future restoration assumptions and impairment) and free cash flow (operating cash flows, less investing cash flows net of acquisitions and disposals and major growth capex, less lease liability payments) are non-IFRS measures that are presented to provide an understanding of the performance of Santos’ operations. The non-IFRS financial information is unaudited however the numbers have been extracted from the financial statements which have been subject to review by the auditor. Free cash flow breakeven is the average annual oil price at which cash flows from operating activities (before hedging) equals cash flows from investing activities. Forecast methodology uses corporate assumptions. Excludes one-off restructuring and redundancy costs, costs associated with asset divestitures and acquisitions, major growth capex and lease liability payments.

The estimates of petroleum reserves and contingent resources contained in this presentation are as at 31 December 2020. Santos is not aware of any new information or data that materially affects the estimates of reserves and contingent resources and the material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. Santos prepares its petroleum reserves and contingent resources estimates in accordance with the 2018 Petroleum Resources Management System (PRMS) sponsored by the Society of Petroleum Engineers (SPE). Unless otherwise stated, all references to petroleum reserves and contingent resources quantities in this presentation are Santos’ net share. Reference points for Santos’ petroleum reserves and production are defined points within Santos’ operations where normal exploration and production business ceases, and quantities of produced product are measured under defined conditions prior to custody transfer. Fuel, flare and vent consumed to the reference points are excluded. Petroleum reserves are aggregated by arithmetic summation by category and as a result, proved reserves may be a very conservative estimate due to the portfolio effects of arithmetic summation. Petroleum reserves are typically prepared by deterministic methods with support from probabilistic methods. Petroleum reserves replacement ratio is the ratio of the change in petroleum reserves (excluding production) divided by production. Organic reserves replacement ratio excludes net acquisitions and divestments. Conversion factors: 1PJ of sales gas and ethane equals 171,937 boe; 1 tonne of LPG equals 8.458 boe; 1 barrel of condensate equals 0.935 boe; 1 barrel of crude oil equals 1 boe.

The proposed merger of Santos and Oil Search outlined in this presentation (**Proposal**) is non-binding and indicative only and is subject to due diligence and the agreement of a binding Merger Implementation Agreement. There is no certainty that a binding transaction will result from the Proposal. In addition, any binding Merger Implementation Agreement entered into between the parties would be subject to a number of additional conditions to completion of the merger, such as regulatory approvals.

The information set out in this presentation does not take into account any person’s individual financial objectives or circumstances.

Cover image: Valaris MS1 mobile offshore drilling unit, Van Gogh Phase 2 <sup>7</sup>infill program

# 2021 Strategic priorities

Santos

Base business performing strongly and achieved key milestones on major growth projects

1	Maintain strong base business with FCF breakeven <\$25/bbl <sup>1</sup>	✓ On track
2	FID Barossa	✓ FID taken in March 2021
3	FID Moomba CCS	On track for 2H21
4	FEED Dorado	✓ Achieved in June 2021
5	Commence appraisal drilling at Narrabri	Pending appeal in 2H21

<sup>1</sup> Before hedging.

# 2021 Half-year highlights

**Santos**

Disciplined low cost operating model continues to underpin strong free cash flows from the base business and position the company for growth

## Strong and diversified base business



- + Diversified portfolio of 5 core assets
- + Record sales volumes and revenue
- + Value accretive, low cost of supply offshore infill developments

## 2021 volume and cost guidance ranges upgraded



- + Production at 87-91 mmboe
- + Sales volume at 100-105 mmboe
- + Lowered upstream production costs to \$7.90-8.30/boe

## Strong free cash flow and low free cash flow breakeven



- + \$572 million FCF in the first half
- + On track to deliver over \$1.1 billion in 2021 assuming current oil prices

## Achieved growth milestones



- + Completed sell-downs in Bayu-Undan and DLNG to SK E&S
- + Commenced all major work scopes for Barossa following FID
- + Entered FEED for Dorado integrated oil and gas project

## Energy transition to cleaner fuels



- + Infrastructure-led, three hub CCS strategy
- + Moomba CCS project is FID-ready, subject to confirmation of eligibility for Australian Carbon Credit Units

## Strengthened balance sheet



- + Issued US\$1 billion 10-year senior unsecured fixed rate bond in the US 144A/Reg-S market
- + Reduced gearing to 31.8%



# 2021 Half-year results

**Santos**

Our disciplined operating model and improving commodity prices have delivered strong first half results

## FREE CASH FLOW<sup>1</sup>

**\$572**


33%

million

## REPORTED NPAT<sup>2</sup>

**\$354**


222%

million

## UNDERLYING PROFIT<sup>2</sup>

**\$317**


50%

million

## SALES REVENUE

**\$2,040**


22%

million

## EBITDAX

**\$1,231**


24%

million

## INTERIM DIVIDEND

**5.5c**


162%

US cents per share

<sup>1</sup> Operating cash flows less investing cash flows (net of acquisitions and disposals and major growth capex) less lease liability payments.

<sup>2</sup> A reconciliation between net profit after tax and underlying profit is provided in the Appendix. Underlying profit excludes the impacts of costs associated with asset acquisitions, disposals and impairments, commodity hedging and items that are subject to significant variability from one period to the next.

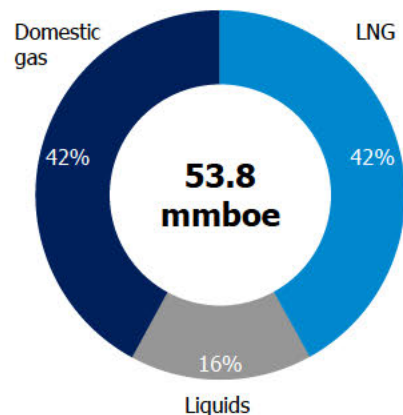
# Cash generative base business through the cycle

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At current oil prices, forecast to generate over US\$1.1 billion in 2021

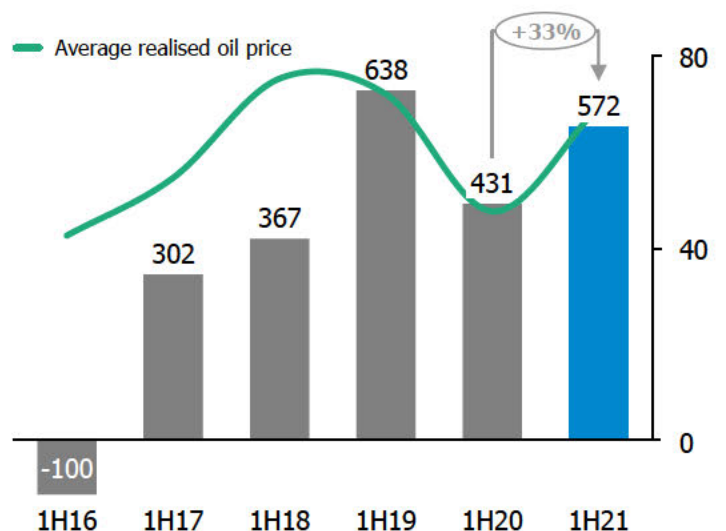
## 1H21 sales volume

mmboe



## Free cash flow<sup>1</sup>

\$million



<sup>1</sup> Operating cash flows less investing cash flows (net of acquisitions and disposals and major growth capex) less lease liability payments.

- + Diversified and balanced portfolio providing defense through the cycle
- + Record half year sales volume and revenue of \$2,040 million
- + Strong first half free cash flow \$572 million
- + 2021 forecast free cash flow sensitivity of ~\$330 million per annum for every \$10 above the breakeven oil price, before hedging
- + Targeting 2021 free cash flow breakeven oil price of <\$25 per barrel before hedging with higher sustaining capex than 2020

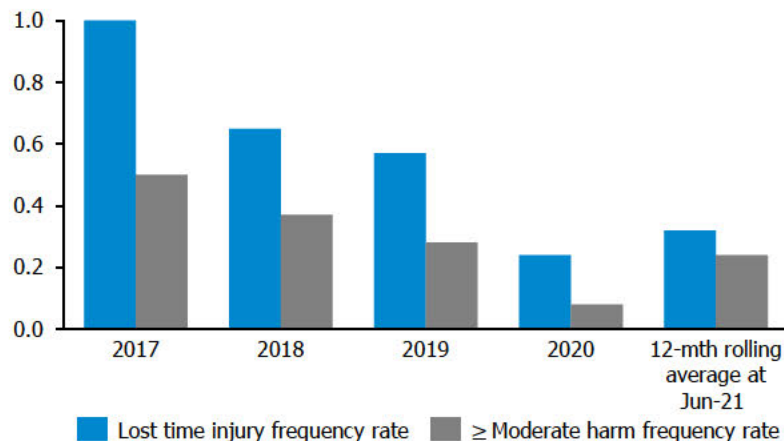
# Health, safety and environment

**Santos**

Our "Always Safe" value is at the centre of everything we do

## Injury frequency rates

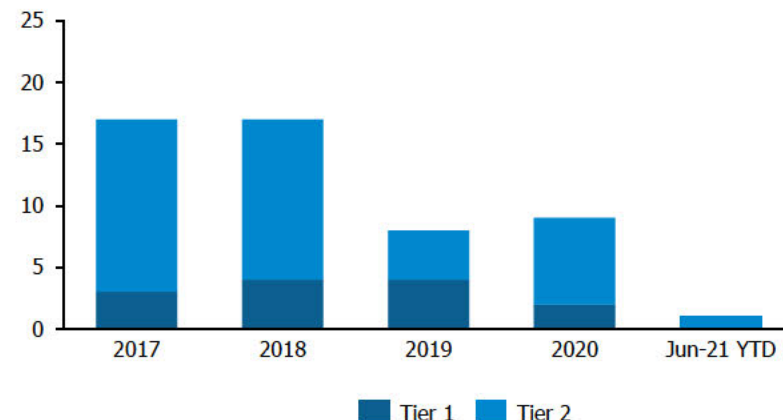
Number of injuries per million hours worked



- + Disappointing start to the year with injury frequency rates increasing due to three lost time injuries, associated with slips and/or trips

## Loss of containment

Number of Tier 1 and Tier 2 incidents



- + Continued integrity management focus has delivered a substantial reduction in loss of containment incidents

# Barossa investment decision announced in March 2021

**Santos**

Targeting cash cost of production of ~\$2.00/mmBtu and first gas in first half 2025

## Barossa development

- + Capex estimated at ~\$3.6 billion gross FID to first gas, including a FPSO service contract with upfront pre-payment and option to buy-out
- + ~80% of project costs are under fixed-price contracts, which were executed under favourable market conditions
- + Initiated major workstreams including cutting first steel for the FPSO turret, commencing manufacturing of subsea and export flowlines, and assembly of subsea trees
- + Hull build and topsides fabrication scheduled to commence in Q3 2021

## Equity sell-downs

- + Completed 25% sell-down in DLNG and Bayu-Undan to SK E&S at the end of April for net cash proceeds of \$186 million
- + Finalising 12.5% Barossa sell-down to JERA



## Darwin LNG life extension project

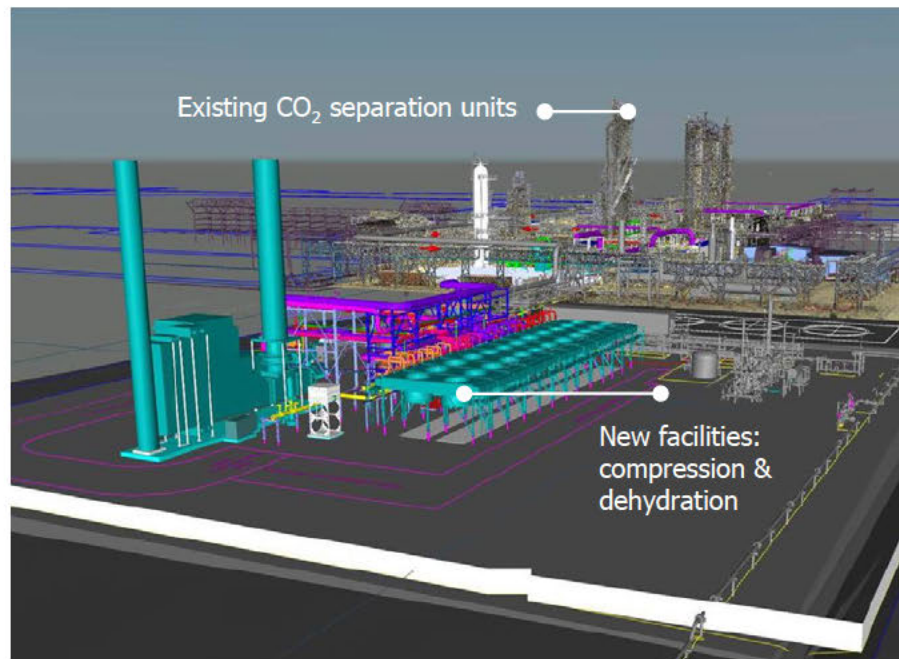
- + DLNG and Barossa have approved and executed all agreements to transport and process Barossa gas
- + Barossa FID paves the way for the US\$600 million DLNG life extension and pipeline tie-in projects, which will extend the plant life for around 20 years
- + Pipeline subsea tie-in EPCI contract awarded
- + Darwin life extension project on track to meet Barossa first gas



# Moomba CCS provides step change in emission reduction

**Santos**

Lowest cost (<US\$24/t lifecycle) and one of the largest CCS project globally. Project is FID-ready, subject to Australian Carbon Credit Units eligibility



<sup>1</sup> Forecast assumes US\$50/tonne carbon price by 2030. All Santos-operated assets subject to Australia's Safeguard Mechanism are currently operating below their designated facility baselines.

## + Low cost CCS project due to

- + Existing separation equipment delivering high purity CO<sub>2</sub>
- + Existing wells which can be repurposed
- + Depleted reservoirs with proven rock seal and potential to scale-up to ~20 mtpa across the basin
- + Awarded A\$15 million grant under the Federal Government CCUS Development Fund
- + US\$165m capex phased over three years and cash cost in operation ~US\$6-8/tCO<sub>2</sub>
- + Forecast IRR ~20%<sup>1</sup>
- + Phase 1 project has the capacity to capture and store ~44 million tonnes of CO<sub>2</sub> by 2050
- + CCS is a critical enabler for zero-emissions hydrogen
- + Expect ACCU Methodology to be in place Q4 2021
- + Expect to book CO<sub>2</sub> storage 2P capacity per PRMS guidelines at year-end



# Dorado Development

**Santos**

FEED commenced, with FID targeted for mid 2022

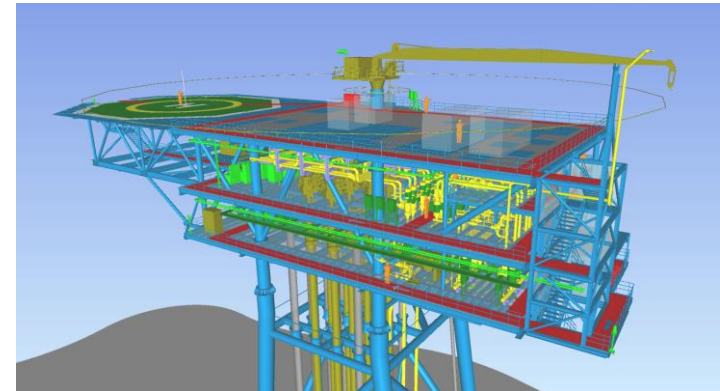
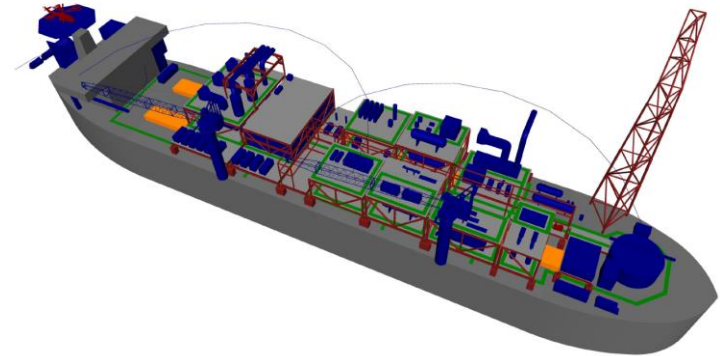
## Phase 1 liquids development

- + FEED underway with FID targeted for mid 2022
- + Estimated capital cost of ~\$2 billion, delivering competitive cost of supply<sup>1</sup>
- + Low CO<sub>2</sub> (~1.5%) and high-quality fluid expected to earn a premium to regional pricing benchmarks
- + Stage 1 Assessment of Offshore Project Proposal (OPP) approved by NOPSEMA and released for public consultation
- + Production Licence application planned by 4Q21

## Phase 2 gas development

- + Integrated development concept established for both liquids and gas
- + Gas export is a source of supply for Santos' existing WA domestic gas infrastructure
- + Flexibility retained for tieback of future exploration success
- + Exploration wells Apus and Pavo scheduled for 1Q22

<sup>1</sup> Subject to detailed FEED for build and own FPSO.



# Sustainability

**Santos**

Sustainability is core to our strategy to drive long-term shareholder value



## Environmental

- + Reduce Scope 1 and 2 absolute equity emissions by 26-30% by 2030
- + Net-zero Scope 1 and 2 emissions by 2040, supported by a clear roadmap
- + Moomba carbon capture and storage project provides a step-change in emissions reduction
- + West Arnhem Land Fire Abatement project is a world-leading nature-based carbon offset project
- + Targeting zero net-abstraction from the Great Artesian Basin by 2030



## Social

- + In 2020, A\$17 million invested in community partnerships and local infrastructure projects
- + Community perception surveys are completed to understand and support local priorities
- + Working in partnership with 21 Traditional Owner Groups with over 2,000 active land access agreements
- + Sites of cultural heritage are identified, protected and avoided



## Governance

- + Executive remuneration linked to ESG and emissions reduction targets
- + Non-binding advisory shareholder Say on Climate vote at the 2022 AGM
- + Industry Associations climate positions review released in 2020
- + EHSS and PRC Board Committees provide oversight on all ESG matters
- + Robust Enterprise Risk Management process

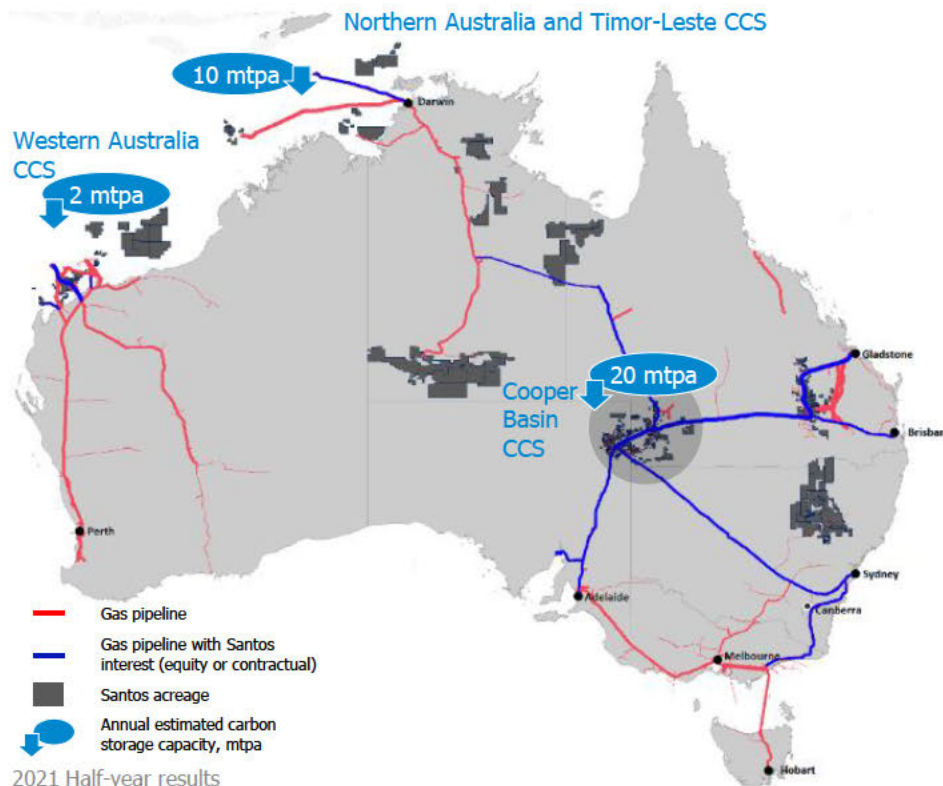
## Reporting

- + Released fourth-annual **Climate Change Report** consistent with the TCFD guidelines in February 2021
- + Released new format annual **Sustainability Report** in April 2021
- + Released second-annual **Modern Slavery Statement** in June 2021

# Infrastructure-led carbon capture and storage strategy

**Santos**

Our extensive infrastructure position provides a competitive advantage for decarbonisation with more than 30 mtpa of carbon storage capacity across three Santos-operated hubs



## 1. Cooper Basin CCS

- + Moomba CCS Phase 1 at 1.7 mtpa, FID-ready subject to confirmation of eligibility for Australian Carbon Credit Units
- + Capacity: ~20 mtpa across the basin
- + Work continues on the Moomba Zero Emissions Hydrogen project including pursuing market development opportunities to secure offtake arrangements

## 2. Northern Australia and Timor-Leste CCS

- + Capacity: ~10 mtpa at Bayu-Undan once the field is depleted
- + Existing wells can be repurposed for CO<sub>2</sub> injection. Pipeline is CO<sub>2</sub> compatible
- + MOU signed with ENI to investigate repurposing Bayu-Undan to store CO<sub>2</sub> for projects in the region
- + Targeting project start up to coincide with Barossa production subject to reaching agreements with Timor-Leste, Federal and Territory governments, and existing partners

## 3. Western Australia CCS

- + Desktop studies commenced to confirm CO<sub>2</sub> injection capacity



# Oil Search merger strategic rationale

**Santos**

Merger will create a regional champion of scale and provide shareholders with an opportunity to participate in a new company that can optimally fund the development of a diverse portfolio of high-quality O&G assets

- |          |  |   |
|----------|--|---|
| <b>A</b> | <b>CREATES A REGIONAL CHAMPION OF SIZE AND SCALE</b>                           | <ul style="list-style-type: none"> <li>✓ Positioned within S&amp;P ASX-20 index and top 20 largest global O&amp;G companies<sup>1</sup></li> <li>✓ Operated footprint gives ability to control cost and deliver growth</li> </ul> |
| <b>B</b> | <b>DIVERSIFIED PORTFOLIO OF LONG-LIFE, LOW COST ASSETS WITH GROWTH OPTIONS</b> | <ul style="list-style-type: none"> <li>✓ Balanced portfolio of geographically and product differentiated assets</li> <li>✓ Robust development pipeline with flexibility</li> </ul>  |
| <b>C</b> | <b>STRONG BALANCE SHEET AND INVESTMENT GRADE FUNDING PLATFORM</b>              | <ul style="list-style-type: none"> <li>✓ &gt;US\$5.5bn of liquidity<sup>2</sup> and an investment grade credit rating</li> <li>✓ Sufficient capacity to self-fund development pipeline</li> </ul>                                 |
| <b>D</b> | <b>UNLOCKS SYNERGIES AND LATENT SHAREHOLDER VALUE</b>                          | <ul style="list-style-type: none"> <li>✓ Substantial potential combination synergies to the benefit of all shareholders</li> </ul>  |
| <b>E</b> | <b>PORTFOLIO OPTIMISATION OPPORTUNITIES</b>                                    | <ul style="list-style-type: none"> <li>✓ Opportunities to align joint venture interest across PNG projects</li> <li>✓ Optimise portfolio to further strengthen balance sheet and high grade portfolio</li> </ul>                  |

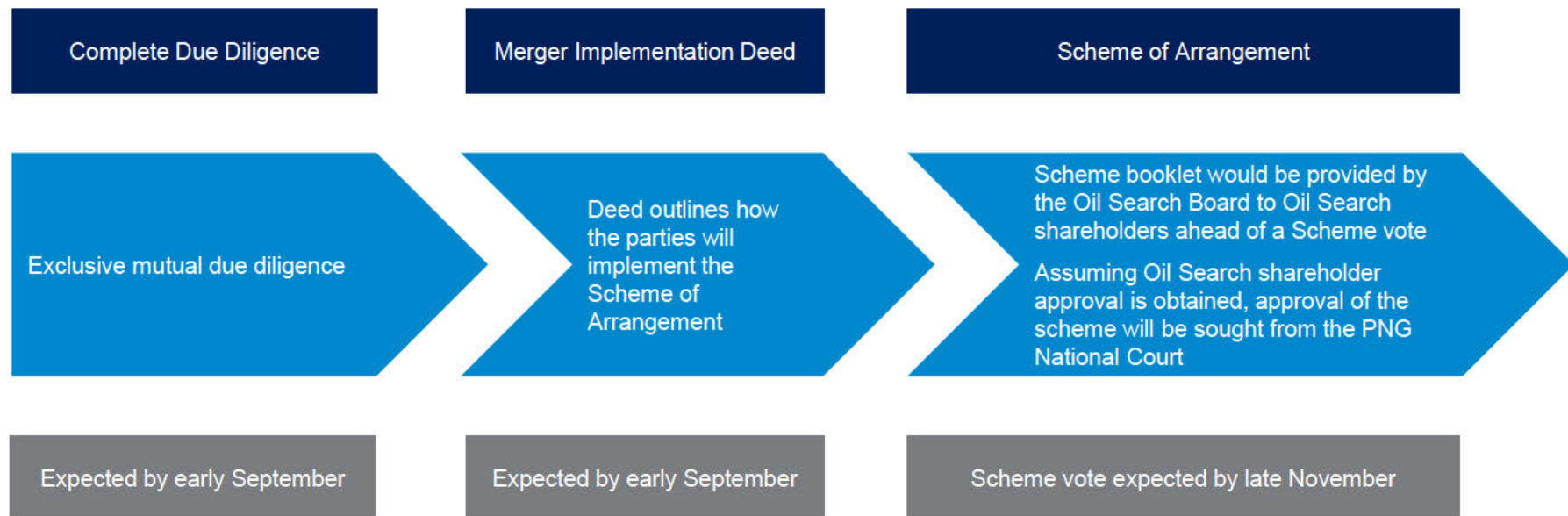
<sup>1</sup> Based on market data as at 30 July 2021.

<sup>2</sup> Based on Oil Search and Santos balance sheet data as at 30 June 2021.

# Merger process update

**Santos**

Exclusive mutual due diligence underway. Targeting to execute binding Merger Implementation Deed in September and Scheme vote by late November





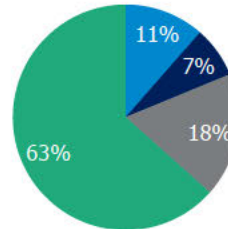
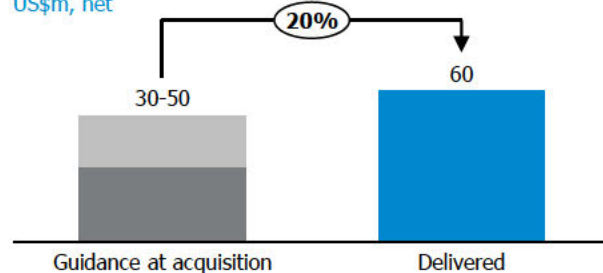
# Proven track record of delivering integration synergies

**Santos**

Delivered more than \$160 million in synergies from the Quadrant and ConocoPhillips transactions. Substantial potential combination synergies expected from Oil Search merger

## Quadrant integration pre-tax synergies

US\$m, net

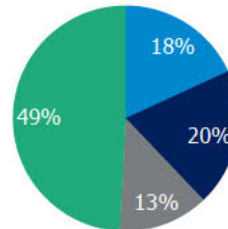
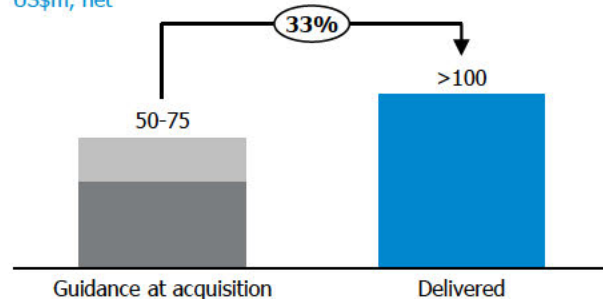


## US\$50-60m synergies delivered through:

- + Gas marketing and operational efficiencies
- + Removal of non-operated duplication for WA gas assets
- + Reduced corporate costs by consolidating Perth offices, support functions, IT costs and insurance

## ConocoPhillips AW integration pre-tax synergies

US\$m, net



## More than US\$100m synergies delivered through:



- + Significant reductions in corporate and IT costs from global parent and local office
- + Optimisation of operational activities across the asset portfolio
- + Restructured to an integrated organisation



# Delivering incremental value through acquisitions

**Santos**

Short-cycle, low-risk, high-value developments delivering production in 2021 and extending life

	Bayu-Undan Phase 3C	Van Gogh Infill Phase 2
		
Description	2 platform and 1 subsea wells developing gas and liquids	3 dual lateral wells, infilling existing Van Gogh development
Startup	3Q 2021	4Q 2021
STO working interest	43.4%	52.5%
2P reserves (YE20)	23 mmboe gross 10 mmboe net <sup>1</sup>	10 mmbbl gross 5 mmbbl net
Total capex (gross)	US\$235m	US\$225m
Breakeven cost of supply	US\$2.80/mmBtu	US\$25/bbl
Initial well production rates	178 mmscf/d and 11,350 bbl/d liquids	23,200 bbl/d

<sup>1</sup> Net working interest at 43.4% following completion of the 25% sell-down to SK E&S on 30 April 2021.

# Finance and Capital Management

Anthony Neilson  
Chief Financial Officer

**Santos**

# Financial discipline

**Santos**

## Strong base business and balance sheet supportive of disciplined and phased growth

### Strong, cash-generative base business with steady production

- + Generated \$572 million free cash flow in the first half of 2021
- + Targeting 2021 free cash flow breakeven oil price of less than \$25 per barrel before hedging
- + 2021 free cash flow sensitivity of ~\$330 million per annum for every \$10 above the breakeven oil price. At current oil prices, 2021 forecast FCF is greater than \$1.1 billion including hedging<sup>1</sup>

### Disciplined capital allocation

- + Consistent with the disciplined low cost operating model, growth projects are phased and equity levels reviewed
- + Completed 25 per cent sell-down in Bayu-Undan and DLNG to SK E&S
- + 12.5 per cent Barossa sell-down to JERA progressing well and expected 2H21

### Strengthened balance sheet and prepared to fund growth

- + Issued \$1 billion 10-year senior unsecured fixed-rate bond in the US 144A/Reg-S market with liquidity ~\$4.5 billion
- + Strong cash flows reduced net debt (including leases) to \$3.4 billion and gearing to 31.8% at end June 2021. At current oil prices, gearing would be ~30% by year end
- + Secured second investment grade credit rating: Fitch BBB/Stable
- + No significant debt maturities until 2024

<sup>1</sup> Assumes an average 2021 oil price of US\$60 per barrel and 7.7 million barrels of oil hedged in the second half of 2021 at an average ceiling price of US\$55 per barrel.

# 2021 Half-year financial snapshot

**Santos**

Strong base business generated \$572 million of free cash flow

\$ million	1H21	1H20	Change
Product sales revenue	2,040	1,668	22%
EBITDAX	1,231	995	24%
Underlying profit <sup>1</sup>	317	212	50%
Net profit/(loss) after tax	354	(289)	222%
Operating cash flow	942	838	12%
Free cash flow <sup>2</sup>	572	431	33%
Interim dividend (UScps)	5.5	2.1	162%

<sup>1</sup> For a reconciliation of 2021 half-year net profit after tax to underlying profit, refer to Appendix.

<sup>2</sup> Operating cash flow less investing cash flows (net of acquisitions and disposals and major growth capex) less lease liability payments.



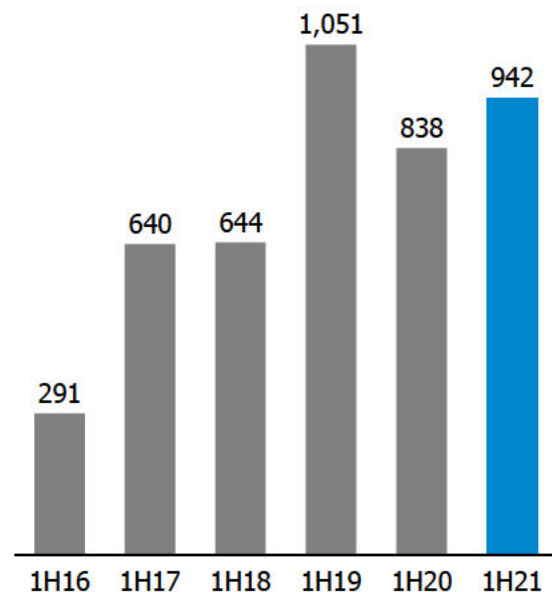
# Strong free cash flow generation

**Santos**

At current oil prices, forecast to generate over US\$1.1 billion in 2021

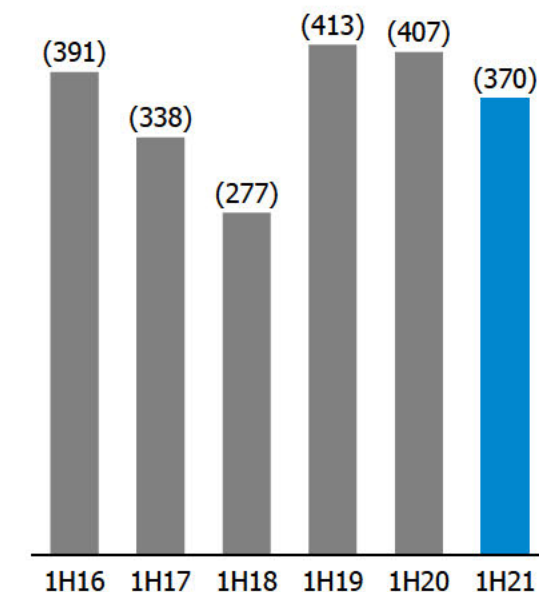
## Operating cash flow

\$ million



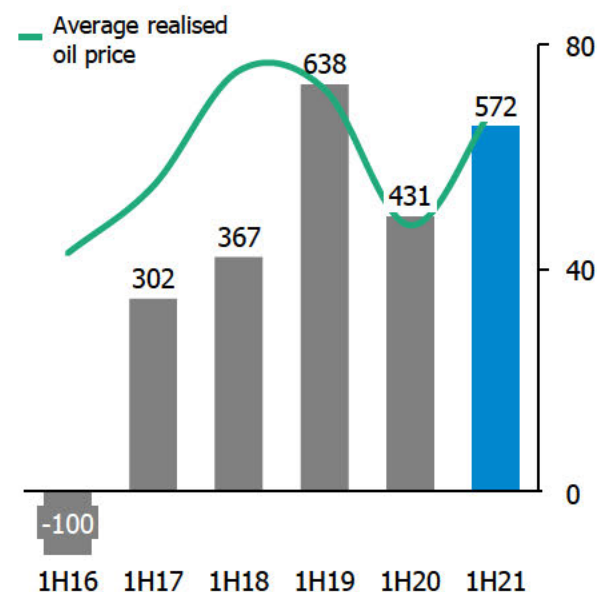
## Investing cash flow<sup>1</sup>

\$ million



## Free cash flow<sup>1</sup>

\$ million



# Underlying earnings

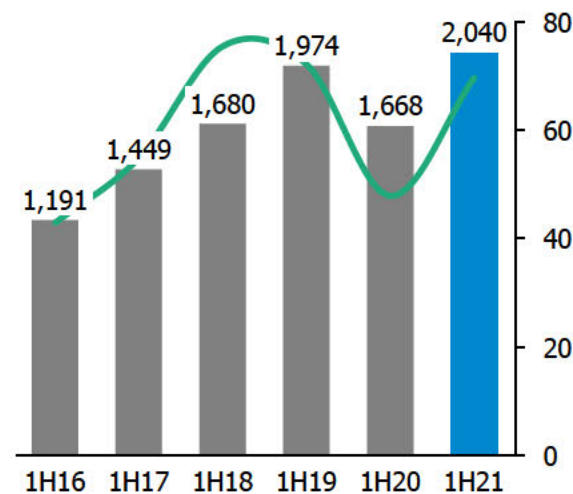
Santos

Generated >\$1.2 billion in EBITDAX predominantly reflecting improved commodity prices and lower unit costs. Higher depreciation, primarily in Western Australia, impacted underlying profit

## Product sales revenue

\$ million

— Average realised oil price

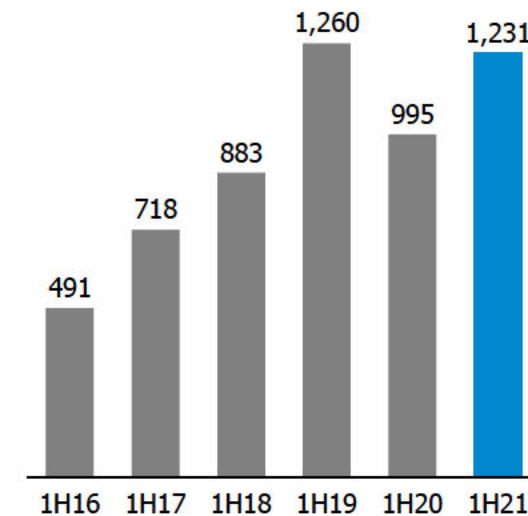


## Oil price

US\$/bbl

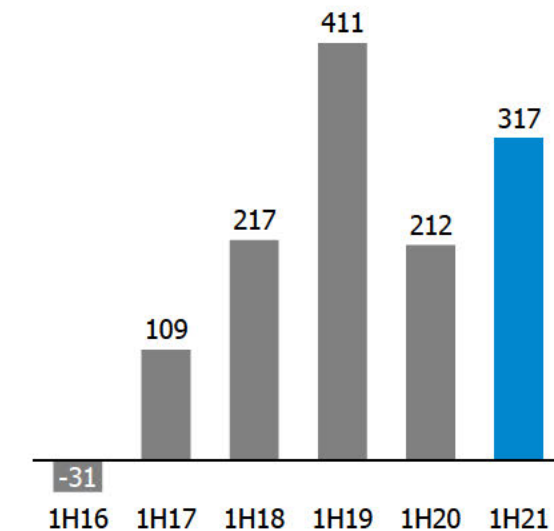
## EBITDAX

\$ million



## Underlying profit<sup>1</sup>

\$ million



<sup>1</sup> Underlying profit excludes the impacts of asset acquisitions, disposals and impairments, and the impact of commodity hedging.

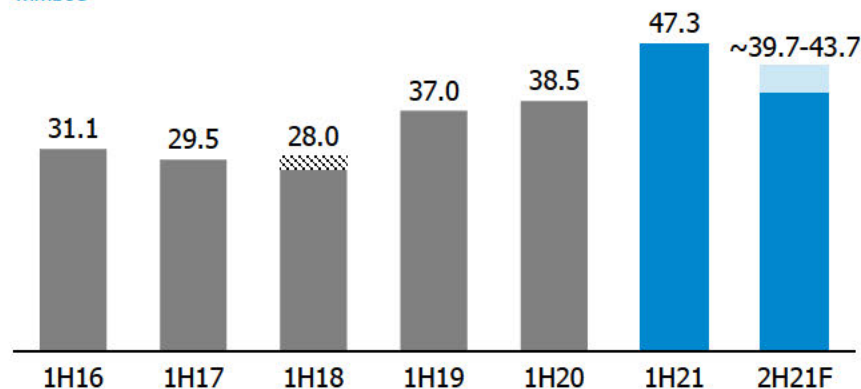
# Record production and sales volumes

Santos

Strong first half performance. Volumes expected to be lower in the second half due to the 25 per cent sell-down in Bayu-Undan and DLNG which completed on 30 April

## Half year production volume

mmboe

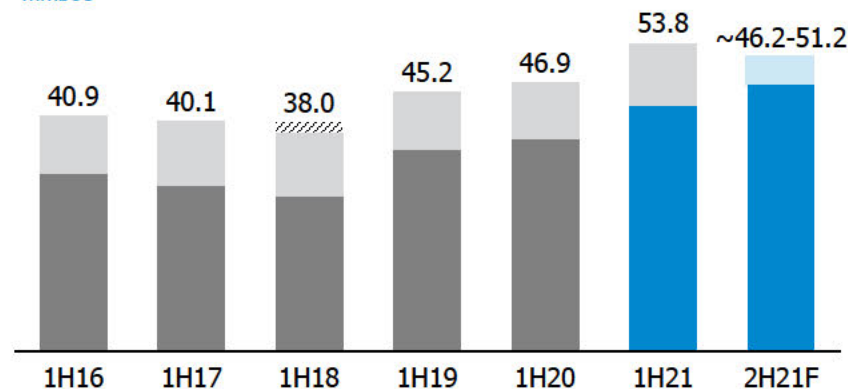


Major shutdown + PNG earthquake impact

- + Record 1H21 production volumes were driven by average higher equity in Bayu-Undan, strong upstream performance at GLNG and Western Australia oil and gas
- + 2021 full-year production guidance maintained at 87-91 mmboe

## Half year sales volume

mmboe



Own product Third party Major shutdown + PNG earthquake impact

- + Record 1H21 production volumes resulted in a corresponding increase in sales volumes for the first half
- + 2021 full-year sales volume guidance maintained at 100-105 mmboe

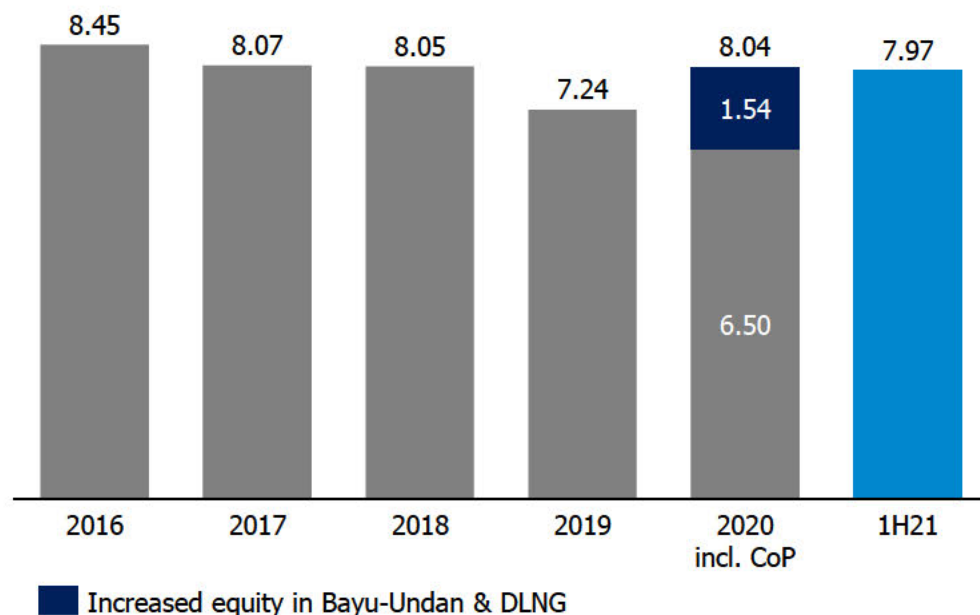
# Production costs

Santos

Unit production costs lower despite COVID-19 and unfavourable foreign exchange impacts

- + Greater than \$100 million of pre-tax synergies have been delivered in Northern Australia which is reflected in the ~30% reduction in unit costs to US\$13.95/boe in 1H21
- + Partially offset by increased COVID-related costs to maintain safe and continual operations combined with increased AUD/USD exchange rate resulted in the following group-level impacts for the first half
  - + \$0.35/boe COVID-related costs, particularly for Bayu-Undan where increased quarantine periods were required, both prior to departure and upon return from offshore operations
  - + \$0.55/boe foreign exchange impact for our Australian dollar denominated cost base, mainly for our onshore business
- + 2021 upstream production cost guidance maintained at \$7.90-\$8.30/boe

Upstream unit production costs<sup>1</sup>  
\$/boe



<sup>1</sup>Includes all planned shutdown activity and PNG earthquake recovery costs.



# Upstream unit production costs

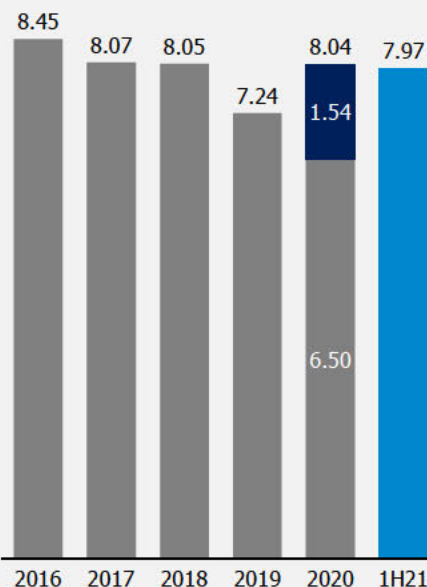
**Santos**

Synergy cost reductions realised in Northern Australia. Partially offset by COVID-19 related costs and foreign exchange increases in the first half

## Disciplined Operating Model

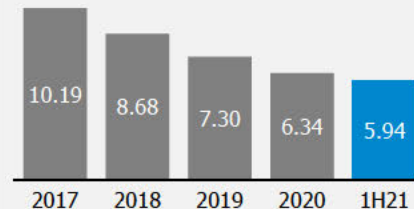
- + Core portfolio free cash flow breakeven at  $\leq \$35/\text{bbl}$  oil price through the oil price cycle
- + Each core asset free cash flow positive at  $\leq \$35/\text{bbl}$ , pre-major growth spend

### Total unit production cost<sup>1</sup> \$/boe

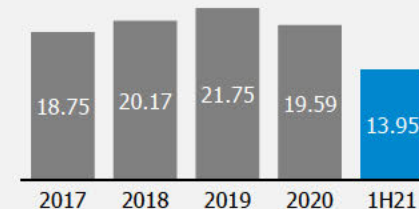


<sup>1</sup> 2020 \$6.50/boe excluding CoP acquisition and \$8.04/boe including CoP acquisition.

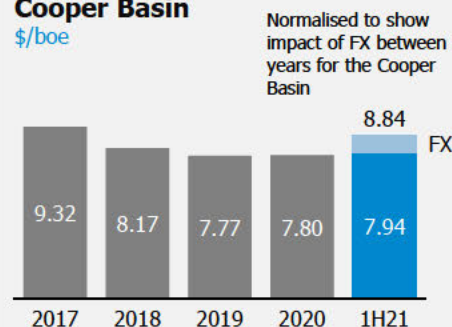
### Western Australia \$/boe



### Northern Australia \$/boe



### Cooper Basin \$/boe



### Queensland & NSW \$/boe



# Cash generative Operating Model continues to drive value

**Santos**

EBITAX margin improved to 58% due to higher commodity prices and lower unit costs

## 2021 Half-year results summary<sup>1</sup>

	Cooper Basin	Qld & NSW	PNG	Nth Aust & T-L <sup>2</sup>	WA	Santos
<b>Total revenue</b> \$million	507	383	264	383	504	2,112
<b>Production cost</b> \$/boe	8.84	5.55	4.04	13.95	5.94	7.97
<b>Capex</b> \$million	141	79	4	148	134	535
<b>EBITDAX</b> \$million	211	183	213	286	388	1,231
<b>EBITDAX</b> margin	42%	48%	81%	75%	77%	58%

- + Cost reductions are occurring across our operated assets. Acquisition synergies are reflected in the Offshore Division in our Northern and Western Australian assets
- + This is partially offset by cost impacts related to managing the response to COVID-19 and foreign exchange impacts
- + Cooper Basin unit production cost increase compared to FY20 is due to foreign exchange impacts (\$0.90/boe)<sup>3</sup> and COVID-19 related costs of ~\$1 million
- + Group EBITDAX margin remains strong at 58%

<sup>1</sup> Corporate segment not shown.

<sup>2</sup> Reduced equity in Bayu-Undan & DLNG from 68.4% to 43.4% from 30 April 2021.

<sup>3</sup> Impact reflects the average FY20 AUD/USD FX rate, to allow comparison with 1H21 on a \$/boe basis.

# Capital expenditure

Santos

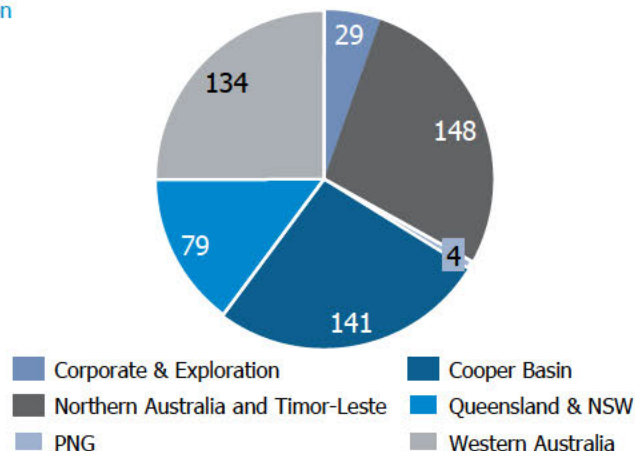
2021 guidance maintained at ~\$900m for sustaining capex and ~\$700m for major growth with spend expected to be weighted to the second half

## 1H21 capital expenditure \$535 million<sup>1</sup>

- + Comprising \$340m sustaining and \$195m major growth, predominantly related to the Barossa project
- + 28 wells drilled in the Cooper Basin with a fourth rig added for the second half
- + 110 wells drilled across the GLNG acreage

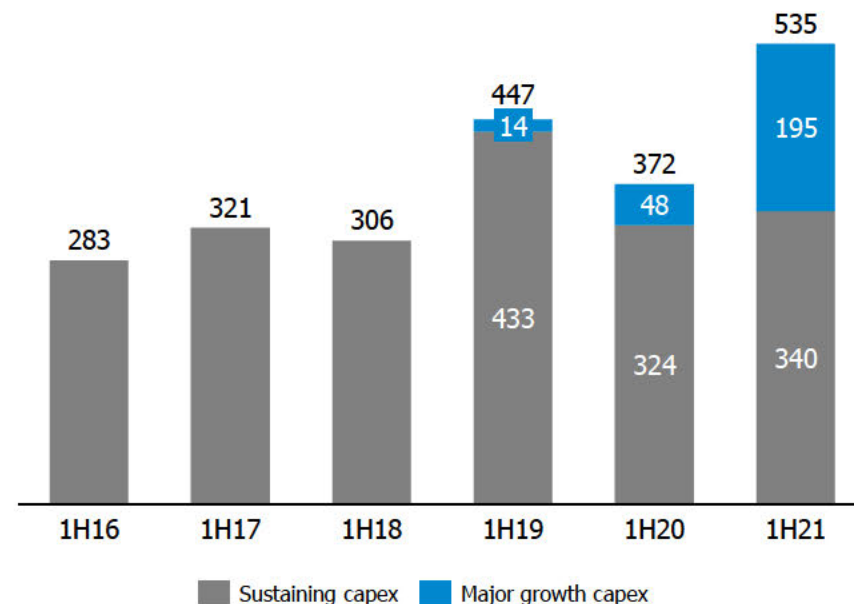
## 1H21 capex by segment

\$million



## Capex by type

\$million








<sup>1</sup> Capital expenditure incurred includes abandonment expenditure but excludes capitalised interest.

# Creating value from midstream infrastructure portfolio

**Santos**

Unique portfolio of strategic midstream infrastructure assets generating stable and material EBITDA of ~\$400 million per annum, excluding GLNG which could add an extra ~\$95 million

	MIDSTREAM INFRASTRUCTURE ASSETS					ADDITIONAL OPPORTUNITIES
	Moomba	Port Bonython	DLNG	Varanus Island	Devil Creek	
						
Annual capacity	Gas: 400 TJ/d Storage: 70 PJ	Liquids: 20 mmboe	LNG: 3.7 mtpa with approvals up to 10 mtpa	Gas: 390 TJ/d	Gas: 220 TJ/d	<b>GLNG synthetic toll based on the recent TotalEnergies transaction values Santos 30% share at ~US\$820m with EBITDA of ~US\$95m<sup>2</sup> p.a</b>  <b>Future opportunities include:</b> Macedon (synthetic) Narrabri McArthur DLNG expansion CCS + hydrogen  Cost savings of US\$60m per annum by 2025 also identified to further improve margins
1H21 throughput (gross)	348 TJ/d	7.2 mmboe	1.6 mt	293 TJ/d	146 TJ/d	
Utilisation (%)	87	69	88	75	67	
Existing tolling structure	Internal and external tolls	Internal and external tolls	Internal tolls	Internal tolls	Internal tolls	
1H21 EBITDA	~\$217 million <sup>1</sup>					

<sup>1</sup> This amount is already included in Santos financials as existing earnings and costs at asset level.

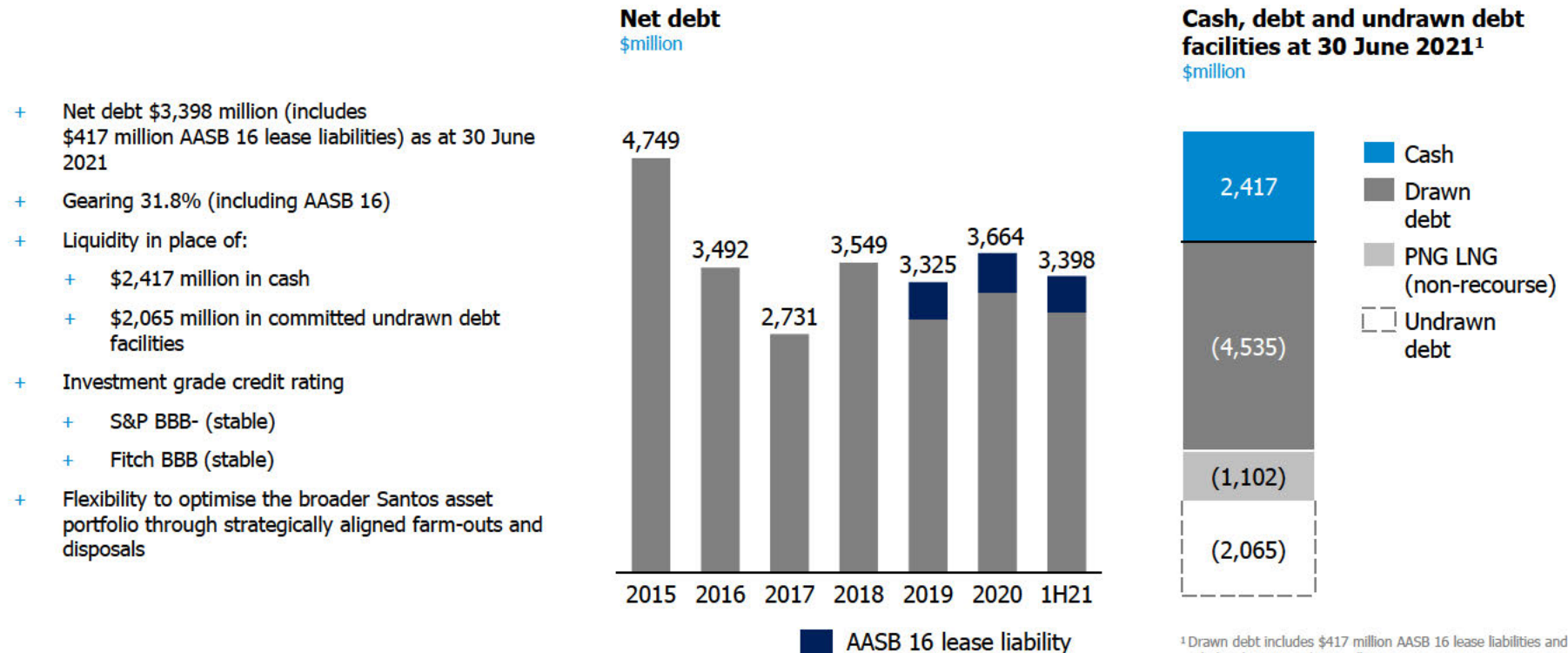
<sup>2</sup> ~\$95 million reflects Santos' 30% interest in GLNG on a 2021 annualised basis and assumes a processing toll that is like-for-like with the TotalEnergies and GIP transaction, effective as of 1 January 2021.



# Debt and liquidity

**Santos**

Gearing reduced to 31.8% and balance sheet ready for growth with net debt \$3.4 billion and liquidity of ~\$4.5 billion



# Summary

Santos

Disciplined low-cost operating model ensures we can sustain our base business and remain resilient through the cycle

## Disciplined approach

- + Disciplined, low-cost operating model sets the framework to deliver value
- + Targeting 2021 free cash flow breakeven of less than \$25 per barrel before hedging
- + 2021 free cash flow sensitivity of ~\$330 million per annum for every \$10 above the breakeven oil price. At current oil prices, 2021 forecast FCF is greater than \$1.1 billion including hedging<sup>1</sup>
- + Sustainable dividend in accordance with our 10-30% FCF payout ratio

## Strong free cash flow and liquidity

- + Strong operational and cost focus delivered \$572 million of free cash flow in first half
- + Strong balance sheet. Liquidity of over ~\$4.5 billion, comprising \$2.4 billion in cash and \$2.1 billion in committed undrawn debt facilities
- + Strong cash flows reduced net debt, including leases, to \$3.4 billion and gearing to 31.8% at end June 2021. At current oil prices, gearing would be ~30% by year end
- + Investment grade credit rating

<sup>1</sup> Assumes an average 2021 oil price of US\$60 per barrel and 7.7 million barrels of oil hedged in the second half of 2021 at an average ceiling price of US\$55 per barrel.

# Asset Performance

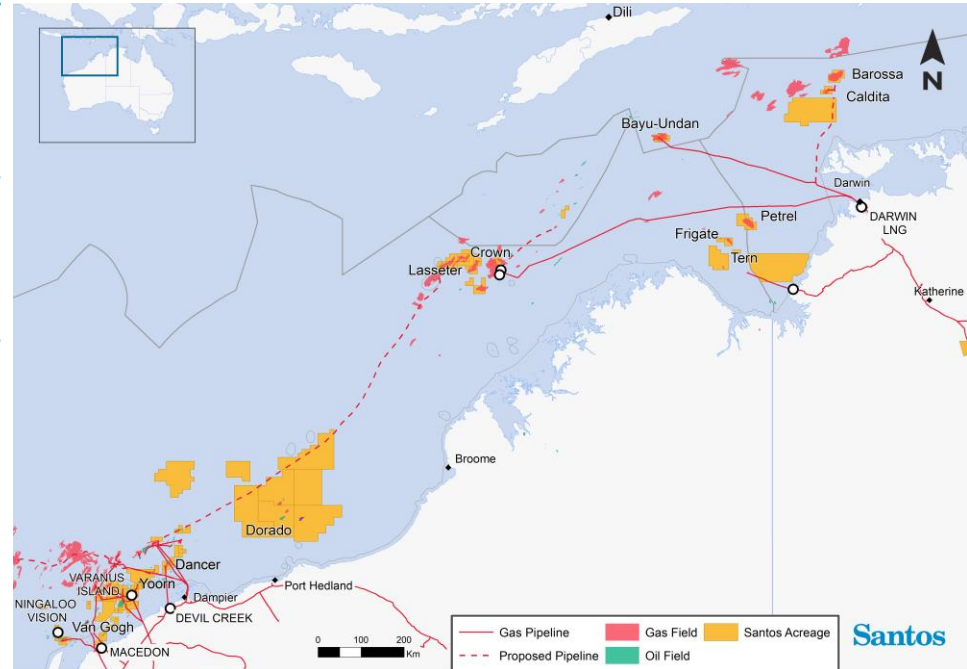
**Santos**

# Offshore conventional business

**Santos**

Santos supplies ~45% of Western Australia's domestic gas requirements and Northern Australia synergies are reducing upstream production costs

<b>Strong cash margin, low-cost operating business</b>	<ul style="list-style-type: none"> <li>+ Western Australia EBITDAX margin improved to 77%</li> <li>+ WA unit production cost \$5.94 per boe, down 42% since 2017</li> </ul>
<b>Near term, near-field growth opportunities utilising existing infrastructure</b>	<ul style="list-style-type: none"> <li>+ Northern Australia EBITDAX margin strengthened to 75%</li> <li>+ NA unit cost lowered ~30% to \$13.95/boe since assuming operatorship</li> <li>+ Bayu-Undan infill drilling underway with successful startup achieved from first well</li> <li>+ Van Gogh infill drilling underway with successful startup achieved from first well</li> <li>+ FID taken on Spartan gas backfill to VI</li> <li>+ FID taken on Pyrenees Ph IV Infill</li> <li>+ Varanus Island compression to recover low pressure reserves startup 4Q 21</li> </ul>





# Growing production and improving efficiency

**Santos**

Quadrant and ConocoPhillips acquisitions have transformed the scale of the Offshore business

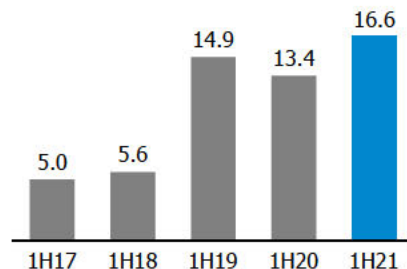
## Strong gas production

- + Domestic gas production and sales have been strong averaging 475 TJ/d in 1H21
- + Three well Van Gogh Phase 2 oil infill program underway and will deliver incremental production in 2021

<sup>1</sup> Includes Quadrant Energy acquisition from 27 Nov 2018.

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

mmboe

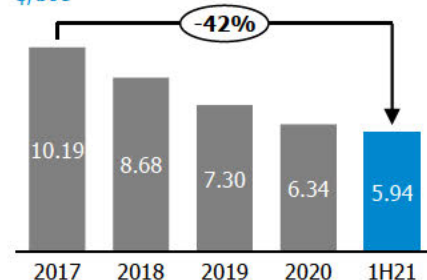


## Lowered production costs

- + Production volumes increased and unit production costs reduced by 42% since 2017

## Western Australia upstream production cost

\$/boe



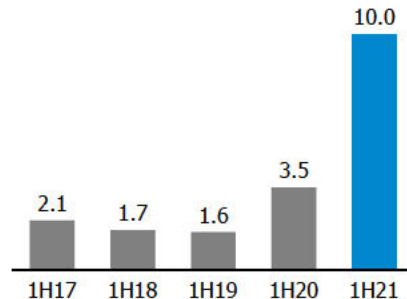
## Bayu-Undan exceeding expectations

- + Continued strong reservoir and facility performance
- + Three well Bayu-Undan Phase 3C infill program underway and will deliver incremental production in 2021

<sup>1</sup> Includes Bayu-Undan at 68.4% from 28 May 2020 to 30 April 2021 and 43.4% thereafter.

## Northern Australia production<sup>1</sup>

mmboe

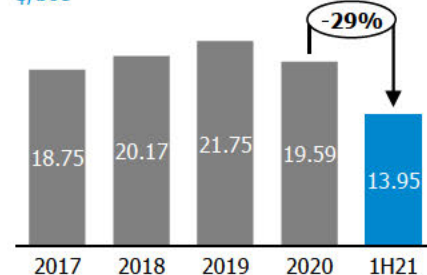


## Delivering acquisition synergies

- + Since commencing operatorship, production costs have reduced by ~30% in the first half of 2021 through the application of Santos' disciplined operating model and acquisition synergies

## Northern Australia upstream production cost






\$/boe



# High value infrastructure led development

**Santos**

Operated portfolio of infrastructure led gas supply and oil infill development at a low cost of supply, generating high value and delivering incremental production

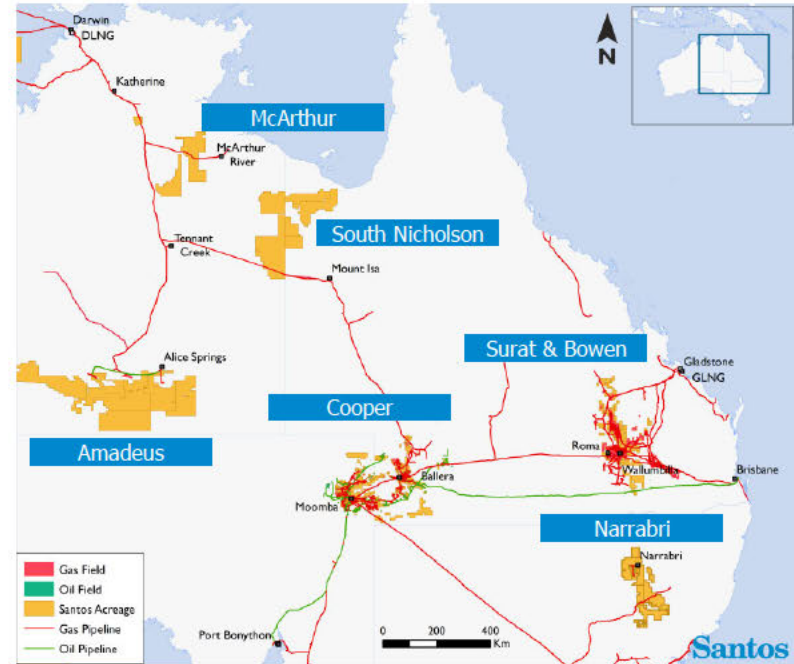
	Bayu-Undan Phase 3C	Van Gogh Infill Phase 2	Pyrenees Infill Phase 4	Varanus Island Compression	Spartan Development
					
Description	2 platform and 1 subsea wells developing gas and liquids	3 dual lateral wells, infilling existing Van Gogh development	1 dual lateral, and water shut-off intervention	Low pressure reserves recovery maintaining facility plateau	New supply subsea tieback to John Brookes
Startup	3Q 2021	4Q 2021	1Q 2023	4Q 2021	1Q 2023
STO working interest	43.4%	52.5%	29%	100%	100%
2P reserves (YE20)	23 mmbbl gross 10 mmbbl net <sup>1</sup>	10 mmbbl gross 5 mmbbl net	10 mmbbl gross 2.9 mmbbl net	44 mmbbl gross and net	15 mmbbl gross and net
Total capex (gross)	US\$235m	US\$225m	US\$110m	US\$250m <sup>2</sup>	US\$120m
Breakeven cost of supply	US\$2.80/mmBtu	US\$25/bbl	US\$18/bbl	A\$2.40/GJ	A\$3.20/GJ

# Integrated onshore business with market optionality

**Santos**

Onshore assets connected to domestic markets and long-term Asian demand for LNG with strong growth options

<b>Australia's lowest cost onshore operator</b>	<ul style="list-style-type: none"> <li>+ Growth self-funded within the low cost disciplined Operating Model</li> <li>+ Driving capital efficiency to unlock additional resources</li> <li>+ COVID-19 and joint venture budget constraints in 1H 2021 impacted activity levels</li> </ul>
<b>Cooper Basin high value swing producer</b>	<ul style="list-style-type: none"> <li>+ Increased focus on oil development to complement stable gas production program</li> <li>+ Using underbalanced drilling and enhanced stimulation technology to improve deliverability</li> </ul>
<b>GLNG</b>	<ul style="list-style-type: none"> <li>+ Upstream production supports GLNG sales above 6.2 mtpa in 2021</li> <li>+ Arcadia production exceeding expectation and now lowest upstream unit cost field</li> </ul>
<b>Narrabri Gas Project</b>	<ul style="list-style-type: none"> <li>+ Appraisal on hold, pending an appeal against the NSW Independent Planning Commission approval. A hearing is scheduled for August 2021</li> </ul>
<b>Northern Territory</b>	<ul style="list-style-type: none"> <li>+ First of two horizontal wells commenced drilling in 2Q 2021</li> </ul>





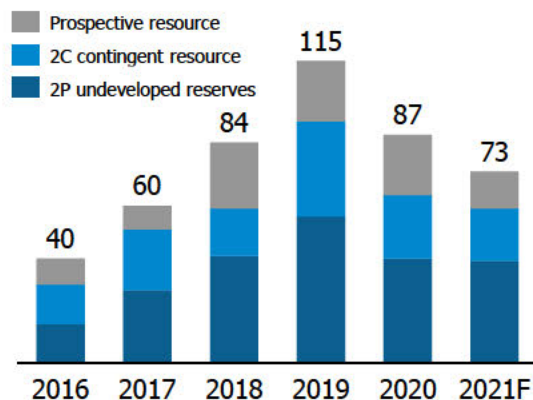
# Cooper Basin operating model

Santos

Increased activity levels in second half including an additional rig to drill oil wells

## Wells drilled Targeting ~73 wells in 2021

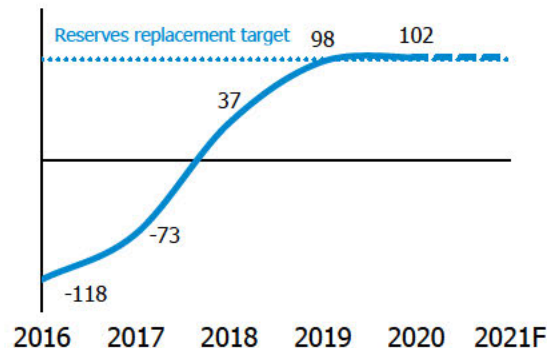
Number per year



- + Well count is subject to well type and joint venture participation levels
- + Focus on increased activity levels including the recent addition of fourth rig in second half to drill oil wells

## 2P reserves replacement ratio Targeting >100% RRR

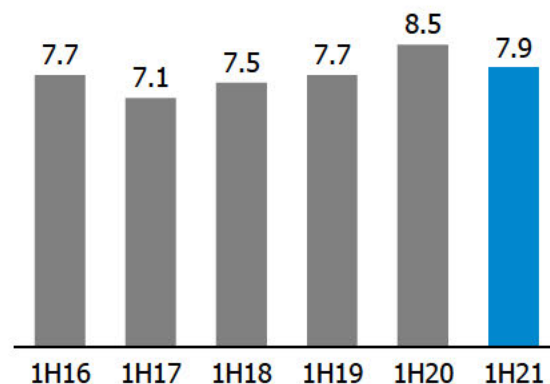
% three-year rolling average



- + Focus on area and play based development expected to result in larger, discrete reserves bookings
- + 2C resource to 2P appraisal well success rate on a three-year rolling average is ~69%

## First half production volume

mmbœ



- + Lower 1H 21 production primarily due to higher unplanned surface downtime and lower drilling activity due to impact of COVID on joint venture budgets



# Strong GLNG upstream production and cost out

**Santos**

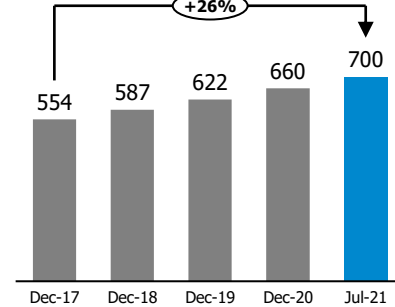
Record upstream GLNG production driven by strong ramp-up at Roma and Arcadia supporting higher than 6.2 mtpa LNG run-rate in 2021

## Strong GLNG gas production

- + Record upstream production at 700TJ/d
- + Roma Field continuing to increase production, approaching 200TJ/d
- + Arcadia ramp-up, field and facilities debottlenecking delivering >90TJ/d combined with low well failure rate

## GLNG sales gas production

TJ/d (gross)

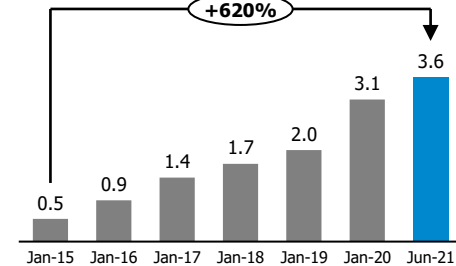


## Driving down operating cost and increasing production

- + Implementation of new well design
- + Innovative operational tools to mitigate solids-related failures
- + Continuous improvement of technologies and processes

## Mean time between failure

Years (Roma)

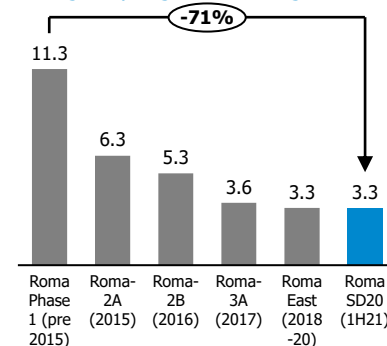


## Fit for purpose rigs, experienced crews

- + Fit for purpose rigs, experienced crews
- + High volume, sequential and repeatable scope
- + Technical limit focus

## Days - development drilling

Average days rig release to rig release

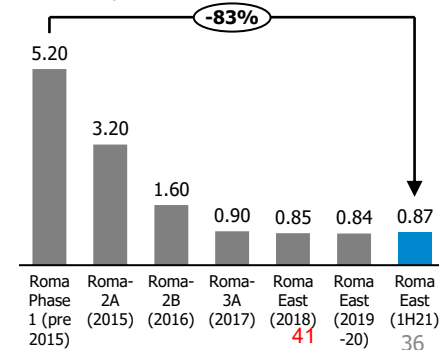


## Maintaining well cost discipline

- + Relentless focus on lowering well cost
- + Expect to drill ~180 wells in 2021 (3 rigs) and ~350 wells in 2022 (4 rigs)

## Roma well cost - GLNG<sup>1</sup>

\$million per well

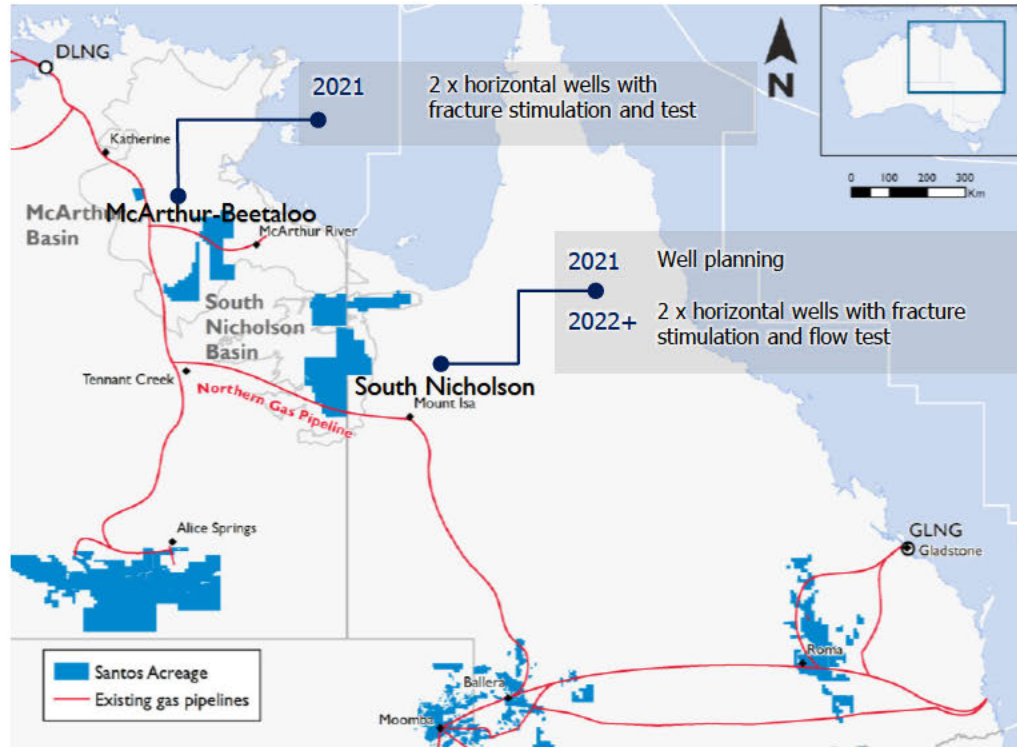


<sup>1</sup> Drill, complete, connect.

# McArthur-Beetaloo and South Nicholson opportunities

**Santos**

Multi-Tcf shale gas potential in two basins with proven flow at Tanumbirini-1



## Strategic Opportunities

- + Options to satisfy north and east coast gas markets

## McArthur-Beetaloo Project

- + Strong performance from Tanumbirini-1 flow test:
  - + 10 mmscf/d peak gas flow rate
  - + 1.5 mmscf/d average rate from first 9 days of testing
- + First of two horizontal wells, Tanumbirini 2H ST1, commenced drilling in 2Q21:
  - + Reached a TD at 4,598mMDRT with >1,000m of horizontal section drilled

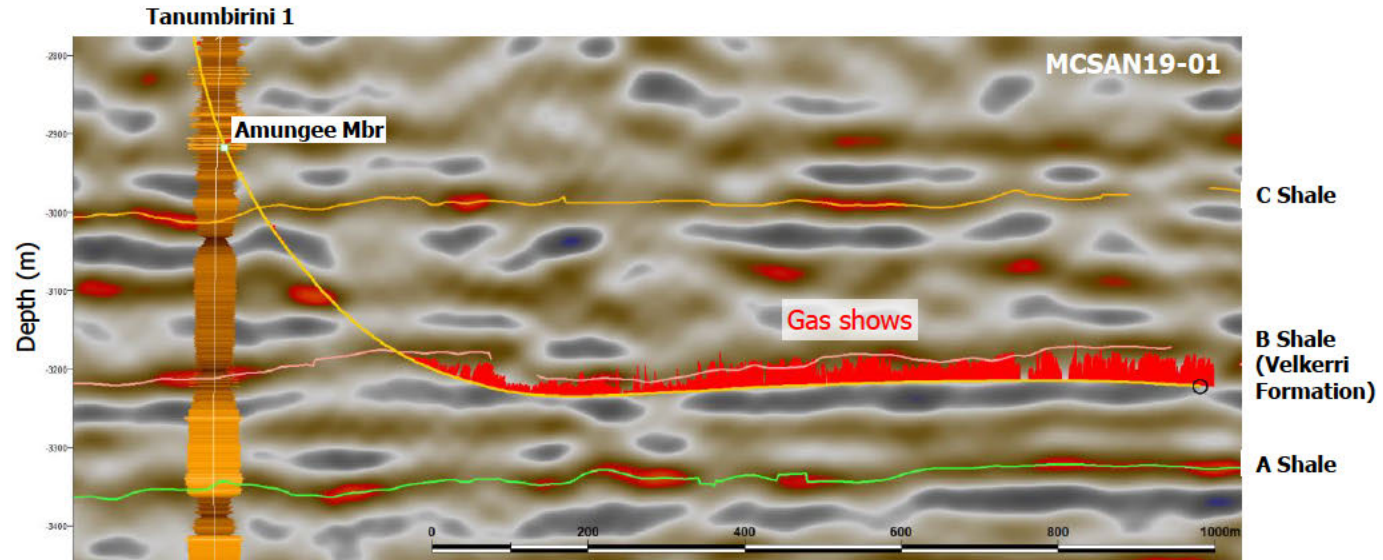
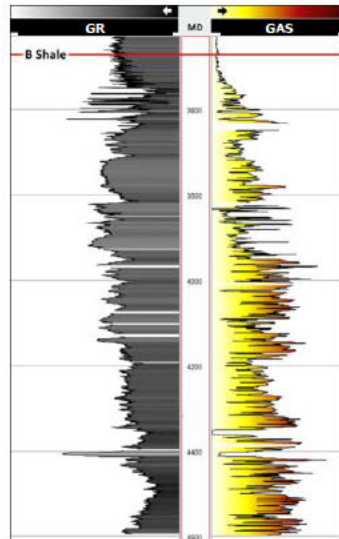
## South Nicholson Project

- + Analogous play to McArthur-Beetaloo Project
- + Multi-TCF gas potential
- + Play fairways and permits straddle QLD and NT border

# Tanumbirini 2H ST1 update

Santos

Excellent gas shows while drilling. Well cased and suspended for testing in October



## First of two horizontal wells, Tanumbirini 2H ST1, commenced drilling in 2Q21:

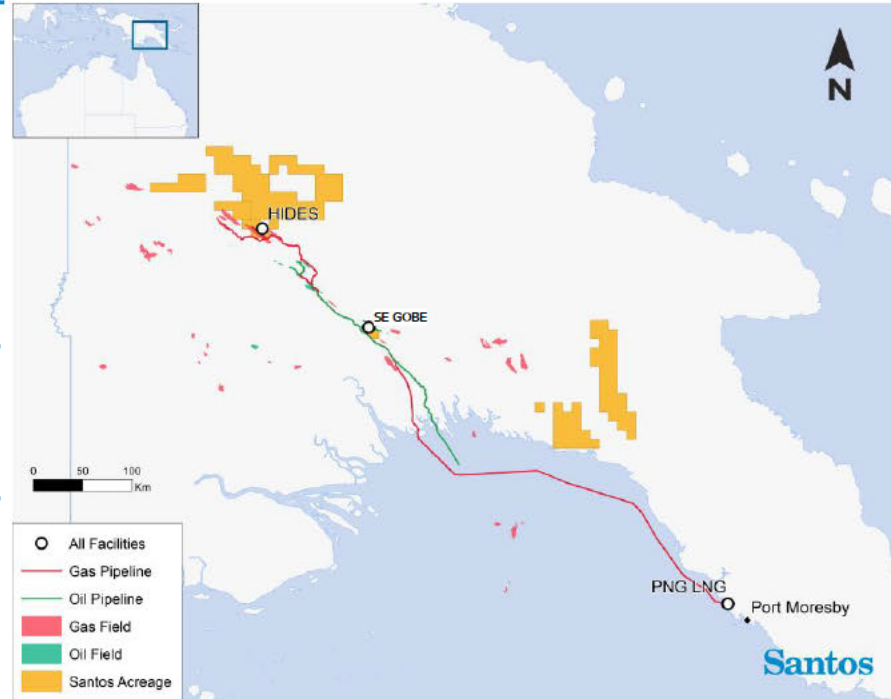
- + Reached a TD at 4,598mMDRT with >1,000m of lateral section in well developed Velkerri Formation "B Shale" reservoir
- + Excellent drill gas shows
- + Well cased and suspended for testing
- + Rig currently moving to rig up on Tanumbirini 3H location

# Papua New Guinea

**Santos**

PNG LNG is a world-class, low-cost asset consistently delivering above nameplate production with future backfill options

<b>Strong cash margin, low-cost operating asset with consistent production performance</b>	<ul style="list-style-type: none"> <li>+ PNG EBITDAX margin improved from 78% for FY20 to 81% in 1H21</li> <li>+ 1H 2021 production cost \$4.04/boe</li> <li>+ Increased cash flow ~2026 once project finance repaid</li> <li>+ 1H21 annualised production of ~8.2 mtpa. Peak rates restored following planned maintenance activities</li> </ul>
<b>Progressing Development opportunities</b>	<ul style="list-style-type: none"> <li>+ FID on Angore Development</li> <li>+ Recommended discussions with Papua LNG JV in July 2021</li> </ul>
<b>Future backfill options to extend PNG LNG plateau</b>	<ul style="list-style-type: none"> <li>+ Hides F2</li> <li>+ P'nyang<sup>1</sup></li> <li>+ Muruk</li> <li>+ Working with JV partners and PNG Government</li> </ul>



<sup>1</sup> Santos P'nyang (PRL 3) farm-in subject to the execution of a sale and purchase agreement and government approval.



# Summary

**Santos**

- 1 Strong free cash flow and low free cash flow breakeven oil price
- 2 Disciplined, low-cost operating model is delivering consistent results
- 3 Barossa FID and Dorado FEED entry achieved in first half
- 4 Infrastructure-led carbon capture and storage strategy
- 5 Proposed Oil Search merger to create a regional champion of size and scale



# Appendix

**Santos**

# Financial performance

EBITDAX up 24% to \$1,231 million and underlying profit up 50% to \$317 million

\$million	1H21	1H20	Variance
Total revenue	2,112	1,728	22%
Production costs	(377)	(284)	33%
Other operating costs	(165)	(132)	25%
Third-party product purchases	(324)	(309)	5%
Other <sup>1</sup>	(15)	(8)	88%
<b>EBITDAX</b>	<b>1,231</b>	<b>995</b>	<b>24%</b>
Exploration and evaluation expense	(41)	(25)	64%
Depreciation and depletion	(614)	(486)	26%
Impairment losses	(8)	(756)	nm
Change in future restoration	20	5	300%
<b>EBIT</b>	<b>588</b>	<b>(267)</b>	<b>320%</b>
Net finance costs	(109)	(124)	(12%)
<b>Profit/(loss) before tax</b>	<b>479</b>	<b>(391)</b>	<b>223%</b>
Tax expense	(125)	102	223%
<b>Profit/(loss) after tax</b>	<b>354</b>	<b>(289)</b>	<b>222%</b>
<b>Underlying profit</b>	<b>317</b>	<b>212</b>	<b>50%</b>

- + Total revenue up 22% due to higher realised oil prices and higher sales volumes, offset by lower average lagged oil-linked LNG prices
- + Average realised oil price up 45% to \$69.57/bbl and average realised LNG price down 21% to \$6.74/mmBtu
- + Lower unit production costs/boe. Absolute production costs higher due to ConocoPhillips acquisition
- + Higher depreciation, primarily due to a reserves revision in Western Australia gas at year end 2020
- + The \$643 million increase in net profit is predominantly due to \$526 million after tax impairments in 1H20 combined with higher oil prices and sales volumes in 1H21
- + Normalised effective tax rate 43% including royalty related taxes (excluding impacts of gain on disposal of 25% interests in Bayu-Undan and Darwin LNG and other one-off items)

<sup>1</sup> Other includes product stock movement, corporate expenses, other expenses, other income and share of profit of associates.

# Sales revenue

**Santos**

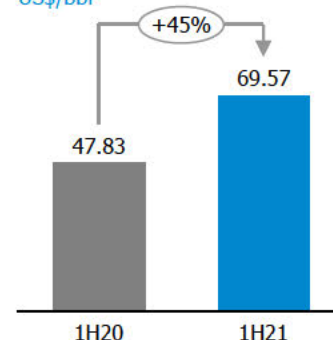
Record sales revenue reflecting improved oil prices and higher sales volumes, offset by lower average lagged oil-linked LNG prices

\$million	1H21	1H20	Variance
<b>Sales Revenue (incl. third-party)</b>			
Gas, ethane and liquefied gas	1,452	1,253	16%
Crude oil	312	274	14%
Condensate and naphtha	203	102	99%
Liquefied petroleum gas	73	39	87%
<b>Total<sup>1</sup></b>	<b>2,040</b>	<b>1,668</b>	<b>22%</b>

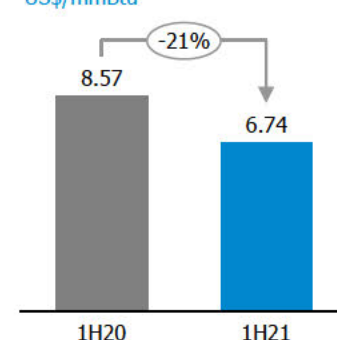
<sup>1</sup> Total product sales include third-party product sales of \$429 million (1H20: \$408 million)

- + Sales revenue up 22% to \$2.0 billion
- + Average realised oil price up 45% to \$69.6/bbl
- + Average realised LNG price down 21% to \$6.7/mmBtu
- + Average realised east coast domestic gas price up 16% to \$5.33/GJ
- + Average realised west coast domestic gas price up 40% to \$4.31/GJ

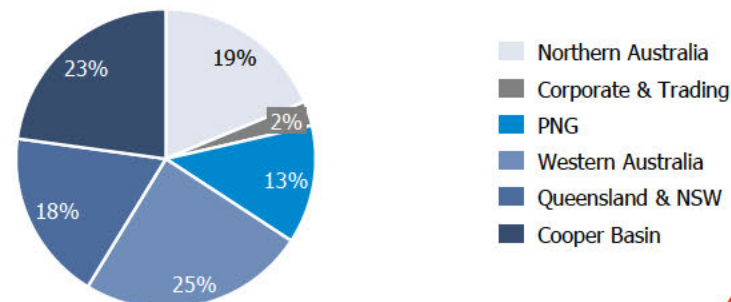
**Average realised crude oil price**  
US\$/bbl



**Average realised LNG price**  
US\$/mmBtu



**1H21 Sales revenue by asset**  
%



# Free cash flow



## Calculation of 2021 half-year free cash flow

\$million	1H21
<b>Operating cash flows</b>	<b>942</b>
Deduct Investing cash flows	(334)
Add Net acquisitions and disposals	(169)
Add Major growth capex	195
Deduct Lease liability payments	(62)
<b>Free cash flow</b>	<b>572</b>

Lease liability payments are now treated as financing cash flows under AASB 16. To ensure like-for-like comparisons with prior periods, the definition of free cash flow reflects operating cash flows less investing cash flows (net of acquisition and disposal payments and major growth capex) less lease liability payments.

Free cash flow is a non-IFRS measure that is presented to provide an understanding of the performance of Santos' operations. The non-IFRS information is unaudited however the numbers have been extracted from the financial statements which have been subject to review by the auditor.

# Significant items

**Santos**

## Reconciliation of half-year net profit/(loss) to underlying profit

\$million	1H21	1H20
<b>Net profit/(loss) after tax</b>	<b>354</b>	<b>(289)</b>
Add/(deduct) significant items after tax		
Net gain on disposal of a group of assets	(51)	-
Impairment losses	6	526
Fair value losses/(gains) on commodity hedges	39	(27)
One-off acquisition and disposal costs	1	2
One-off PRRT credit	(32)	-
<b>Underlying profit</b>	<b>317</b>	<b>212</b>

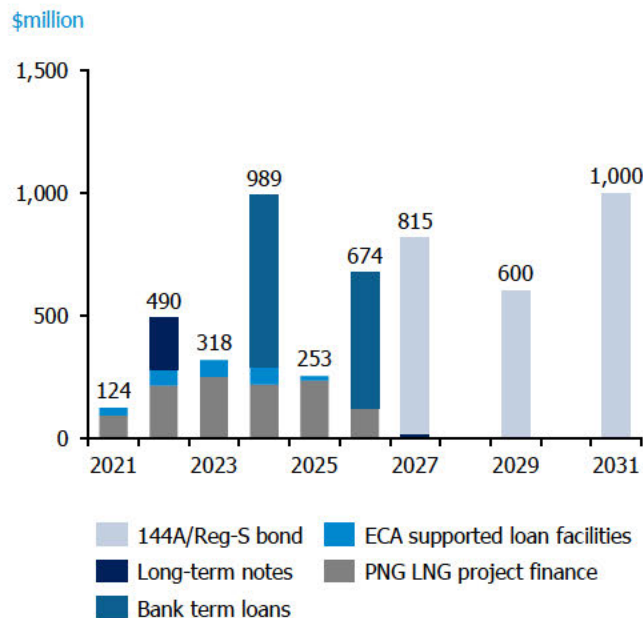


# Drawn debt maturity profile

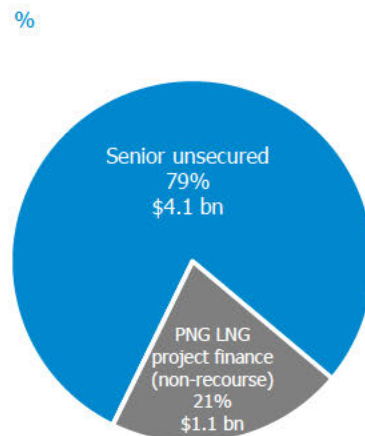
**Santos**

No significant near-term debt maturities until 2024 and \$452 million of debt repaid since 30 June 2021. \$1 billion raised from recent US144A/Reg-S bond

## Drawn debt maturity profile<sup>1</sup>

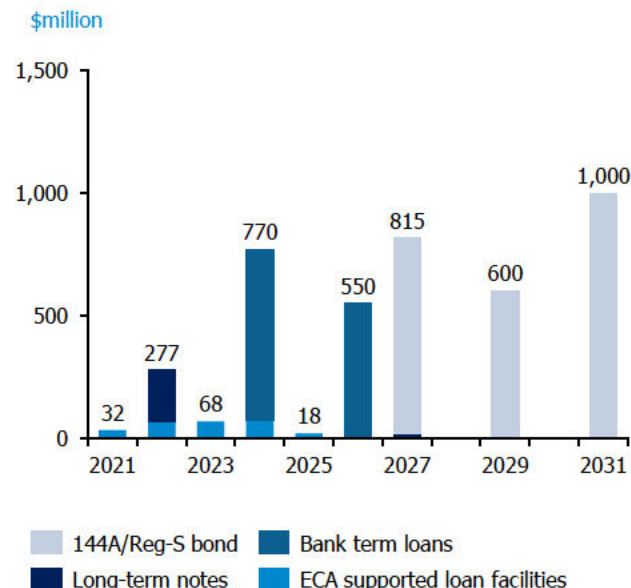


## Breakdown of drawn debt facilities<sup>1</sup>



+ Weighted average term to maturity ~5.3 years

## Drawn debt maturity profile excluding PNG LNG project finance<sup>1</sup>



<sup>1</sup> As at 30 June 2021. Excludes leases and derivatives.

# Liquidity and net debt as at 30 June 2021

**Santos**

Net debt \$3.4 billion and liquidity of \$4.5 billion

Liquidity (\$million)		30 Jun 2021	31 Dec 2020
Cash		2,417	1,319
Undrawn bilateral bank debt facilities		2,065	1,870
<b>Total liquidity</b>		<b>4,482</b>	<b>3,189</b>
Debt (\$million)			
Export credit agency supported loan facilities	Senior, unsecured	252	283
Bank term loan facilities	Senior, unsecured	1,242	1,441
US Private Placement	Senior, unsecured	246	252
144A and Reg-S bonds	Senior, unsecured	2,378	1,382
PNG LNG project finance	Non-recourse, secured	1,102	1,184
Leases	Leases	417	457
Other	Derivatives	178	(16)
<b>Total debt</b>		<b>5,815</b>	<b>4,983</b>
<b>Total net debt</b>		<b>3,398</b>	<b>3,664</b>

# 2021 guidance



## 2021 guidance maintained

2021 guidance item	Guidance
Production	87-91 mmboe
Sales volumes	100-105 mmboe
Capital expenditure – base	~\$900 million
Capital expenditure – major growth	~\$700 million
Upstream production costs	\$7.90-8.30/boe
Depreciation, depletion and amortisation	\$1.15-1.25 billion

# 2021 Half-year segment results summary

**Santos**

US\$million	Cooper Basin	Queensland & NSW	PNG	Northern Australia <sup>1</sup>	Western Australia	Corporate explor'n & elimins	Total
<b>Revenue</b>	<b>507</b>	<b>383</b>	<b>264</b>	<b>383</b>	<b>504</b>	<b>71</b>	<b>2,112</b>
Production costs	(70)	(37)	(25)	(139)	(99)	(7)	(377)
Other operating costs	(48)	(57)	(21)	-	(2)	(37)	(165)
Third-party product purchases	(184)	(81)	(1)	-	-	(58)	(324)
Inter-segment purchases	-	(28)	-	-	-	28	-
Product stock movement	3	(9)	1	-	2	-	(3)
Other income	10	14	-	27	1	-	52
Other expenses	(7)	(2)	(5)	1	(18)	(20)	(51)
FX gains and losses	-	-	-	-	-	28	28
Fair value gains on hedges	-	-	-	-	-	(55)	(55)
Share of profit of associates <sup>1</sup>	-	-	-	14	-	-	14
<b>EBITDAX</b>	<b>211</b>	<b>183</b>	<b>213</b>	<b>286</b>	<b>388</b>	<b>(50)</b>	<b>1,231</b>

# 2020 Half-year segment results summary



US\$million	Cooper Basin	Queensland & NSW	PNG	Northern Australia <sup>1</sup>	Western Australia	Corporate explor'n & elimins	Total
<b>Revenue</b>	<b>471</b>	<b>506</b>	<b>273</b>	<b>146</b>	<b>285</b>	<b>47</b>	<b>1,728</b>
Production costs	(66)	(36)	(32)	(71)	(88)	9	(284)
Other operating costs	(27)	(39)	(19)	-	(2)	(45)	(132)
Third-party product purchases	(142)	(119)	-	-	-	(48)	(309)
Inter-segment purchases	-	(29)	-	-	-	29	-
Product stock movement	(40)	(8)	1	(1)	15	-	(33)
Other income	4	16	7	-	3	-	30
Other expenses	(6)	(1)	(6)	(16)	(12)	(6)	(47)
FX gains and losses	3	4	-	-	4	(26)	(15)
Fair value gains on hedges	-	-	-	-	-	39	39
Share of profit of associates <sup>1</sup>	-	-	-	18	-	-	18
<b>EBITDAX</b>	<b>197</b>	<b>294</b>	<b>224</b>	<b>76</b>	<b>205</b>	<b>(1)</b>	<b>995</b>



# Oil price hedging



Open oil price positions as at 30 June 2021	2021	2022
Zero cost collars (barrels)	7,748,792	4,000,000
Average floor price (\$/bbl)	42	50
Average ceiling price (\$/bbl)	55	66
Re-participating 3-ways (barrels)		2,000,000
Average floor price (\$/bbl)		50
Average ceiling price (\$/bbl)		60
Average re-participation price (\$/bbl)		65

s22(1)(a)(ii)

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**From:** s47F(1)

**Sent:** Tuesday, 14 September 2021 8:39 AM

**To:** s22(1)(a)(ii)

**Subject:** [EXTERNAL] Bayu-Undan CCS MOU with Timor-Leste

**CAUTION:** This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender.

Hey s22(1)(a)(ii), see attached the ASX/media release, released to the stock exchange a short time ago, on the BU CCS signing.

Please again thank s22(1)(a)(ii) for his participation

Cheers

s47F(1)

14 September 2021

## Bayu-Undan Joint Venture and Timor-Leste's ANPM sign MOU on Bayu-Undan Carbon Capture and Storage

Santos, as operator of the Bayu-Undan Joint Venture, today announced it had signed a Memorandum of Understanding (MOU) with the Timor-Leste regulator Autoridade Nacional do Petróleo e Minerais (ANPM) to progress Carbon Capture and Storage (CCS) at Bayu-Undan in the Timor Sea.

The MOU details the areas the Bayu-Undan Joint Venture and the ANPM, with the support of the Timor-Leste Government, will work on collaboratively to test the viability of repurposing the existing Bayu-Undan facilities and using the Bayu-Undan reservoir for CCS. These include sharing technical, operational and commercial information, assessing the regulatory framework, evaluating local capacity opportunities and establishing a decision timeline.

Santos Managing Director and Chief Executive Officer Kevin Gallagher said: "We believe the Bayu-Undan reservoir and facilities have the potential to be a world-leading CCS project and we are delighted to be working together with the ANPM and the Timor-Leste Government to progress this opportunity.

"CCS is recognised by the International Energy Agency and the Intergovernmental Panel on Climate Change as being a critical technology to achieve the world's climate goals. Santos' experience with the globally-competitive Moomba CCS project in outback South Australia will bring invaluable experience to the project.

"CCS at Bayu-Undan has potential capacity to safely and permanently store approximately 10 million tonnes per annum of CO<sub>2</sub> and could build a new job-creating and revenue-generating industry for Timor-Leste.

"This has the potential to be a win-win; good for the environment, good for industry and opening up an exciting opportunity for the people of Timor-Leste, so we look forward to progressing this MOU in partnership with the ANPM."

ANPM President Florentino Soares Ferreira said: "This is a milestone for Timor-Leste. With the signing of the CCS MOU between Santos (representing its Joint Venture partners) and ANPM proves that Timor-Leste is proactively taking the lead in integrating its oil and gas sector towards Timor-Leste's commitment of accelerating decarbonization and meeting the U.N. net zero target by 2050.

"Despite Timor-Leste being one of the lowest emission countries in the world, and that the Paris Agreement provides waiver or concession to the developing and less developed nations such as Timor-Leste; we understand that carbon trading or carbon credits market is an integral part of our future economy. We don't want to miss this opportunity; and I believe this will become one of the largest CCS projects in the Southern Hemisphere. This will enable both Timor-Leste and Australia to exploit its untapped resources in meeting energy

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demands as well as offsetting its carbon emissions and transitioning towards carbon neutral economies.”

Santos has a 43.4% operated interest in Bayu-Undan. The remaining interest is held by SK E&S (25%), INPEX (11.4%), Eni (11%) and Tokyo Timor Sea Resources (9.2%).

**Ends.**



*This ASX announcement was approved and authorised for release by Kevin Gallagher, Managing Director and Chief Executive Officer.*



**From:** s47F(1)  
**To:** s22(1)(a)(ii)  
**Subject:** [EXTERNAL] FID on Moomba CCS  
**Date:** Wednesday, 3 November 2021 7:06:35 PM  
**Attachments:** [211101 - Moomba CCS FID.pdf](#)

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**CAUTION:** This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender.

Hi s22(1)(a)(ii)

Fyi, better late than never...

Please see attached an ASX statement released on Monday afternoon on FID for the Moomba carbon capture and storage (CCS) project.

Moomba CCS is at the forefront of the company's 3 hub strategy for CCS, with BU the next cab off the rank

Cheers, s47F(1)

s47F(1)

1 November 2021

## Santos announces FID on Moomba carbon capture and storage project

Santos and joint venture partner Beach Energy today announced a final investment decision to proceed with the US\$165 million (A\$220 million) Moomba carbon capture and storage (CCS) project in South Australia, with startup expected in 2024.

Santos has successfully registered the Moomba CCS project with the Clean Energy Regulator.

The Clean Energy Regulator's CCS method provides a crediting period of 25 years, over which period the project will qualify for Australian Carbon Credit Units for emissions reduction from Moomba CCS.

Santos Managing Director and Chief Executive Officer Kevin Gallagher welcomed the Regulator's registration of this globally significant project.

"This carbon reduction project in the South Australian outback will be one of the biggest and lowest cost in the world and will safely and permanently store 1.7 million tonnes of carbon dioxide per year in the same reservoirs that held oil and gas in place for tens of millions of years," Mr Gallagher said.

"We forecast a full lifecycle cost of less than US\$24 per tonne of CO<sub>2</sub> including cash costs in operation of US\$6-8 per tonne of CO<sub>2</sub>, with first injection targeted for 2024.

"This decision is a critical step in decarbonising natural gas on our path to new low-emissions and clean-burning fuels such as hydrogen.

"It is also an important milestone in our plan for Santos to achieve net-zero Scope 1 and 2 emissions by 2040."

The International Energy Agency's (IEA's) Sustainable Development Scenario requires a hundredfold increase in CCS between now and 2050 to achieve the world's climate goals – going from 40 million tonnes of CO<sub>2</sub> stored each year today to 5.6 billion tonnes in just 30 years time.

IEA Executive Director Fatih Birol said recently: "Our numbers show that reaching net-zero goals without CCS will be almost impossible."

Mr Gallagher said: "If we do not decarbonise the hydrocarbon fuels that still make up just over 80 per cent of global primary energy and provide 60 per cent of the world's clothing fibres along with other essential everyday products, then the world will simply not reach net-zero by 2050.

### Media enquiries

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"2050 is only 30 years away and over the last 30 years since the first climate change conference in 1992, the world's consumption of hydrocarbon fuels has increased in absolute terms and decreased by only 4 per cent in terms of primary energy share.

"Santos is already receiving significant international interest in our CCS and hydrogen plans.

"Just as Australian LNG is valued in Asian markets without their own energy resources, carbon storage is now valued because many other countries lack the geological storage or land required for nature-based offsets.

"Australia has a comparative advantage in carbon storage and the Australian Government's focus on CCS and other low-emission technologies is setting the nation up to capitalise on our natural assets and become a carbon storage superpower, building on the position we have established as an energy superpower over more than half a century.

"Santos is playing a leading role in driving the energy transition, including our 1.7 million tonnes per year Moomba CCS Project in South Australia and our proposed plan to use the Bayu-Undan facilities in Timor-Leste to safely and permanently store up to 10 million tonnes of CO2 per year once gas production ceases," Mr Gallagher said.

Beach Energy Managing Director and Chief Executive Officer Matt Kay said the Moomba CCS project would deliver a step change in Beach's CO2 emissions profile.

"For more than 50 years, natural gas-filled reservoirs in the Cooper Basin have played an important role in delivering Australia's energy needs, so in many ways it is fitting some of these same reservoirs will play a role in reducing Australia's emissions." Mr Kay said.

"Once operational, this Project will deliver a material reduction to Beach's emissions and forms a key pillar of our aspiration to reach Net Zero emissions by 2050.

"Natural gas will continue to be a critical source of energy, even in a lower carbon future, and we are committed to playing our part in reducing our emissions footprint - our participation in the Moomba CCS Project is a clear indication of that.

"I want to thank Project operator Santos for its efforts to date, as well as the Commonwealth and State Governments for their support in enabling the Project to go ahead."

Santos has a 66.7 per cent interest in the Moomba CCS project and is operator. The remaining interest is held by Beach Energy.

Ends.

*This ASX announcement was approved and authorised for release by Kevin Gallagher, Managing Director and Chief Executive Officer.*

**From:** s47F(1)  
**To:** s22(1)(a)(ii)  
**Subject:** RE: [EXTERNAL] FID on Moomba CCS [SEC=OFFICIAL]  
**Date:** Wednesday, 3 November 2021 7:22:44 PM  
**Attachments:** [211027-CEO-speech-to-SEAAOC.pdf](#)

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Yes, sorry s22(1)(a)(ii) – I should have sent them too! See attached, just in case you didn't see them,  
s22(1)(a)(ii)

Cheers

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**From:** s22(1)(a)(ii)  
**Sent:** Wednesday, 3 November 2021 4:19 PM  
**To:** s47F(1) s22(1)(a)(ii)  
**Subject:** ![EXT]: RE: FID on Moomba CCS [SEC=OFFICIAL]

## OFFICIAL

Hi s47F(1)

Thanks. It's certainly attracted a lot of media coverage!

We also read s47F(1) comments on Bayu-Undan in Darwin last week with interest.

All the best

s22(1)(a)(ii)

s22(1)(a)(ii)

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Director | Timor-Leste Section  
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Department of Foreign Affairs and Trade  
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[Web](#) | [Twitter](#) | [YouTube](#) | [Flickr](#)

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**From:** s47F(1)  
**Sent:** Wednesday, 3 November 2021 7:03 PM  
**To:** s22(1)(a)(ii)  
**Subject:** [EXTERNAL] FID on Moomba CCS

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Hi s22(1)(a)(ii)

Fyi, better late than never...

Please see attached an ASX statement released on Monday afternoon on FID for the Moomba carbon capture and storage (CCS) project.

Moomba CCS is at the forefront of the company's 3 hub strategy for CCS, with BU the next cab off the rank

Cheers, s47F(1)

s47F(1)



## CEO speech – SEAAOC 2021

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The Santos logo, consisting of the word "Santos" in a blue, sans-serif font.

Thank you, Shaun.

Good morning everyone.

I'd like to start by acknowledging the Larrakia People as the traditional custodians of the land where we are meeting and pay our respects to Elders past, present and emerging.

It's a pleasure to be with you again in person for this conference, which is always a thought-provoking event and comes at an important time in the national conversation just a week before the global community comes together for COP26 in Glasgow.

This year the Northern Territory has been front and centre for Santos.

Back in March we announced a final investment decision for our A\$5 billion Barossa Gas Project offshore the NT – the biggest investment in this sector in Australia for almost a decade.

Barossa also paves the way for the A\$800 million life extension of Darwin LNG, setting it up for at least another 20 years.

That's good news for jobs and local business opportunities here in the Northern Territory with 600 construction jobs, 350 long-term operational jobs and about A\$2.5 billion to be spent locally.

I am personally committed to maximising opportunities for Territorians – this will not be a FIFO project.

If your work is here, you will live here – and that will bring more families to Darwin which is good for Territory communities and good for our people as well, providing a better work-life balance.

It's not by chance that we are investing here in the Northern Territory – these job-creating decisions can only occur when companies have confidence in the stability of the regulatory environment and open, competitive markets.

Importantly, our industry enjoys bi-partisan support here and that gives us the confidence to make these multi-decade, multi-billion dollar investments which will shape the Territory's future.

Work on Barossa is running on schedule, first steel was cut for the Floating Production System's turret in July, the hull of the FPSO has also now been cut and manufacturing of subsea flowlines and trees is underway.

Cutting first steel for the hull only five months after contract award and three months earlier than planned is the result of a huge effort across Santos and our contractors.

All in all, I'm very happy with how the project is progressing, it's now 15 per cent complete and, pleasingly, within budget.



This fantastic start to work by the team means we are on track for first gas in the first half of 2025.

And the timing could not be better.

A spike in energy demand as the world opens up after COVID and a supply shortage has seen LNG spot prices go to record highs of nearly \$US60 per million British thermal units this month.

This has shaken energy markets in Britain, Europe and parts of Asia, reminding everyone that gas remains a very important part of the energy mix – and I believe it will continue to be so for at least the next two decades.

This is good for the Northern Territory and good for Australia with Barossa being one of the lowest-cost new LNG supply projects in the world – a great competitive advantage to have.

Building on that advantage, we are also rapidly transforming our business to capture the new opportunities that are opening up in low-carbon and clean-burning fuels.

This includes carbon-neutral LNG cargoes and hydrogen, enabled through carbon capture and storage, and nature-based carbon offsets.

On this front, the Northern Territory is also taking a leading position, announcing at the end of September a proposal to fast-track Darwin as an emissions reduction hub.

Santos is proud to be part of this proposal, partnering with the Northern Territory Government, Australia's national science agency, the CSIRO, and other industry participants to assess the viability of a large-scale, low emissions carbon capture, utilisation and storage hub based at Middle Arm.

At the same time, Santos is moving forward with our proposal to repurpose the existing Bayu-Undan facilities and pipeline to Darwin as a CCS project starting up in 2025.

This project would mean more jobs and investment for one of our nearest neighbours, Timor-Leste, as well as for the Northern Territory.

It also has the potential to provide a carbon solution by the middle of this decade, unlocking other gas resources in the region.

These resources could underpin low-carbon LNG expansion, the development of a hydrogen industry and the attraction of new manufacturing industries to the Territory – where they would be close to low-cost gas supplies, close to Asian markets and where they have a CO<sub>2</sub> solution in a low-carbon energy future.

Importantly, Bayu-Undan CCS is supported by the Timor-Leste Government and I was very pleased last month to sign a Memorandum of Understanding with Timor-Leste's petroleum regulator, ANPM, to work together in taking the project forward.



The support of the Timor-Leste government and regulator is critical in the development of this potentially very large carbon reduction project.

We are looking at a storage capacity of around 10 million tonnes of CO2 per annum in Bayu-Undan once production from the field ceases.

We know we have some of the best offshore reservoirs in the region for gas injection because we have injected gas before to improve liquids production.

Bayu-Undan CCS would store Barossa reservoir emissions from project start-up and could provide carbon storage for other resource developments and large emitters in the Northern Territory.

The significant opportunity that exists at Bayu-Undan is attracting strong interest globally and I believe, even dealing with multiple governments and joint ventures, that we will succeed because the merits of the project are so compelling.

These include:

- + Potentially capturing and storing an additional 1.5 per cent of Australia's carbon emissions each year at relatively low cost using proven technology and existing infrastructure.
- + Enabling and accelerating other gas developments and new manufacturing and hydrogen industries to Darwin.
- + Supporting a new revenue-generating CCS industry in a developing country (Timor-Leste).
- + Building a new export industry for Australia to complement Australia's existing trade and investment relationships in LNG with future trade and investment in carbon credits and clean fuels like hydrogen and carbon-neutral LNG.

It's why, in the leadup to COP26 in Glasgow, I've been calling for the opening up of international carbon markets using Article 6 of the Paris Agreement.

Article 6.2 allows countries to strike bilateral and voluntary agreements to trade carbon credits.

Australia has a competitive advantage in carbon storage and international trading in carbon credits could pave the way for Australia to become a carbon storage superpower – just as we have established our position as an energy superpower over the last half century.

One of the most important outcomes that COP26 could deliver is the implementation of Article 6 of the Paris Agreement to facilitate bilateral or multilateral carbon trading between countries.

Carbon prices in some countries are much higher than in Australia, and the ability to sell Australian Carbon Credit Units to countries such as Japan and Korea could incentivise more CCS projects to be developed, providing scale for a stronger domestic carbon market as well.



Just as Australian LNG is valued in these markets because they lack their own energy resources, carbon storage is now valued because Japan and Korea lack the geological storage or land required for nature-based offsets.

On the other hand, because of its geology, Australia has a global competitive advantage in CCS with storage capacity of up to 300 million tonnes of CO<sub>2</sub> per year.

There are now 26 CCS projects operating around the world and storing almost 40 million tonnes of CO<sub>2</sub> each year.

One of the biggest of these is Chevron's 4 million tonnes per annum project at Gorgon here in Australia.

Very soon I am hoping to be able to make a final investment decision on Santos' 1.7 million tonnes per annum project at Moomba in South Australia.

Moomba will also be one of the biggest CCS projects in the world.

The IEA's Executive Director Fatih Birol recently said that reaching net zero goals without CCS will be almost impossible.

In fact, the IEA says we will need a hundredfold increase in CCS by 2050, going from 40 million tonnes a year today, to 5.6 billion tonnes.

This is because CCS is the only way to reduce emissions from hydrocarbons at scale.

With 80 per cent of global primary energy still coming from hydrocarbon fuels – roughly the same as 45 years ago – we must focus on making these fuels cleaner and eventually zero-emissions.

In 1992 when the first global climate conference was held, 87 per cent of primary energy came from hydrocarbons – today it is down to 83 per cent, but in absolute terms we are consuming more hydrocarbons today than we were 30 years ago.

So, you can see there remains a huge disconnect between the world's climate aspirations and our energy consumption patterns.

Energy transitions take a long time to achieve and we need to be careful about expectations – there are still almost a billion people today who still burn wood, dung and charcoal over open fires.

All forms of modern hydrocarbons and the technologies that use them are cleaner than that.

Renewables alone cannot replace hydrocarbons in many uses beyond electricity.

This includes direct heating, the feedstock for the fertilisers at the heart of our modern food production system, the feedstock for the synthetics that provide about 60 per cent of the world's clothing fibres – not to mention building products such as cement and poly pipe as



well as the plastics which are endemic in our everyday life such as milk bottles, toothpaste and bread wrappers.

So, over the next 30 years the world will continue to demand fossil fuels.

Barossa is a good example – we have already sold that gas on a 10-year supply and purchase agreement.

Therefore, zero-emissions technologies like CCS that make hydrocarbon fuels cleaner are essential to meet the world's emissions reduction targets and start the journey to a clean hydrogen future.

The IEA's recent Net Zero Report predicted that 50 per cent of natural gas produced in 2050 will be used to make hydrogen.

Earlier this month, US company Air Products announced FID on their US\$4.5 billion hydrogen project in Louisiana which is set to be one of the world's largest blue hydrogen schemes so far.

Hydrogen made using electrolyzers that harness the sun's energy – known as green hydrogen – uses twice as much water as hydrogen from natural gas.

And, to meet IEA forecasts you would need more electricity than the total available in the US and China today, combined, along with enormous amounts of land.

The goal is to get rid of emissions, so it doesn't matter at the end of the day whether you use natural gas or the sun to make zero emissions hydrogen and you can call it whatever colour you like.

Affordability is also a key goal – we must take into account the price that our customers will pay.

If we look at the costs today, the IEA in their recent report on the role of low-carbon fuels in the power sector have green hydrogen costing at least three times that of hydrogen made from natural gas with CCS.

The IEA report finds that natural gas with CCS is currently the lowest-cost production route for low-carbon or clean-burning fuels.

This cost advantage is what positions hydrogen made from natural gas with CCS so strongly – and don't our opponents know it!

The price is realistic and on the horizon can be competitive, whereas other types of hydrogen have a much longer lead time to become cost- competitive.

If we look at current prices in Australia, hydrogen made in Moomba from natural gas with CCS would be about A\$14 per gigajoule before transport.





Green hydrogen made at Port Kembla would be at least A\$38 per gigajoule before transport – a price Australian manufacturers could not pay.

So very similar to the IEA's estimate of a threefold price differential with green hydrogen.

This significant price barrier is why at Santos we are embarking on a very deliberate strategy to build our clean hydrogen strategy first through natural gas and eventually transition to renewable hydrogen technology.

This journey will be completed over the decades to come.

According to a recent study for the Clean Energy Finance Corporation, natural gas with CCS produces the lowest-cost clean hydrogen in Australia right through the 2030s until the costs of hydrogen made with electrolyzers becomes cheaper.

I believe the oil and gas industry has a competitive advantage in CCS and clean hydrogen production because we understand how to safely produce, process, store, transport and distribute flammable gaseous products.

We have the infrastructure, and existing customer base, safety protocols and the expertise that comes with more than 60 years of experience.

Just last week, former Australian chief scientist and current Special Adviser to the Australian Government on Low Emissions Technology, Dr Alan Finkel said *"Blue or green, our future with hydrogen is bright."*

In Dr Finkel's commentary he specifically highlighted the importance of CCS and called out those trying to differentiate hydrogen by colour.

He said, *"The existing colour code that refers to blue, green and other colours of hydrogen is emotive rather than focused on the only thing that counts: atmospheric emissions of carbon dioxide."*

In closing, as I said earlier this year when I announced the Barossa FID and Darwin life extension, Santos has locked in our long-term commitment to the Territory.

With much more activity to come in the lead up to Barossa first gas, preliminary civil work to prepare for the Darwin LNG life extension project has commenced.

We have also been working onshore in the McArthur Basin, drilling a horizontal well at Tanumbirini that encountered excellent gas shows.

A second well, Tanumbirini 3H, was spudded from the same drill pad on 23 August and we are looking forward to production testing of both wells which will prove up the potential of this exciting basin.

As always, there is plenty going on and I look forward to the week's discussion as part of this very important week for our industry and the Northern Territory more generally.



I hope to get around and speak to as many of you as possible over the coming days.

At Santos, we strive to be a part of the communities where we operate. We will do the right thing, protecting water and the environment, and we are committed to supporting local employment, local businesses and Indigenous communities in everything we do.

Thank you.





**From:** s47F(1)  
**To:** s22(1)(a)(ii)  
**Subject:** [EXTERNAL] Santos - DFAT catch up details  
**Date:** Wednesday, 1 June 2022 1:34:42 PM

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**CAUTION:** This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender.

Hi s22(1)(a)(ii)

Thanks for the call.

Santos meeting attendees for tomorrow will be myself and s47F(1)

We are hoping to provide a general update on the project and our plans.

Hope that's helpful.

Kind regards

s47F(

s47F(1)









