# **Santos**

### **ASX / Media Release**

22 November 2023

### 2023 Investor Day

Santos today reaffirmed its strategy to deliver long-term shareholder value, provide reliable, affordable energy for customers and achieve net-zero emissions (scope 1 and 2, equity share) by 2040.

Speaking at the company's Investor Day in Sydney, Managing Director and Chief Executive Officer Kevin Gallagher said Santos's purpose and strategy reflects the critical role of reliable, affordable energy in modern life as well as emphasising the need to meet the world's climate goals.

"We are focused on delivering our strategy through backfilling and sustaining our upstream production and midstream infrastructure, decarbonising our assets and developing the low-carbon fuel opportunities the world needs. Santos is now able to generate compelling cash flows to drive shareholder returns, develop major energy and CCS projects whilst maintaining a strong balance sheet. This is against a backdrop of a volatile global environment which is driving further consolidation across the energy sector," Mr Gallagher said.

"Energy security is a top priority for the giant energy-consuming economies in our region. We cannot turn off the taps on oil and gas before replacement technologies are technically feasible, affordable and available. "Oil and Gas will be required for many decades to come. Therefore, a meaningful decarbonisation strategy must include pathways to abate emissions from these fuels. Our strategy includes a strong focus on abatement through large-scale carbon capture and storage, and technologies such as direct air capture."

While we seek to develop low-carbon fuels as customer demand and technology evolves, Santos is committed to supplying oil and gas, and abating our own and our customers emissions through carbon capture and storage, energy efficiency projects, utilising renewables in our operations and high-quality offsets.

The Santos portfolio is value accretive and resilient across a range of decarbonisation scenarios. Santos has a climate transition action plan that will continue to evolve as technology and markets change over time.

"Our tier one LNG portfolio is backed by long-term contracts with tier one buyers and flexible contract terms that allow us to manage LNG spot exposure to provide risked upside potential," Mr Gallagher said.

"The proximity of our LNG projects to key Asian markets means not only are scope three emissions approximately two and a half times lower from our LNG shipments than our US peers, CO2 imports are more viable, offering customers and hard to abate industries a way to manage emissions by taking advantage of our large-scale carbon storage resources.

"Execution of our Alaska, Barossa and Moomba CCS projects continues. Alaska is now 29 per cent complete. We have a highly capable team in place, supportive stakeholders and partners, including our

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Indigenous communities. Alaska is a low-risk jurisdiction with world class environmental standards and values its resources sector.

"Barossa is 64 per cent complete. Despite the challenging approvals, regulatory and third-party litigation environment in Australia, we continue to progress work on our FPSO with the hull arriving in Singapore on November 15 for topside installation.

"Our Moomba CCS project is 75 per cent complete with first CO2 injection expected in the first half of 2024. Moomba CCS will be one of the world's largest and lowest-cost CCS projects. On completion of Phase 1, Moomba CCS will be capable of permanently storing annual CO2 volumes of up to 1.7 million tonnes per annum, equivalent to more than 25 per cent of the total emissions reduction achieved in Australia's electricity sector over the full year to March 2023.

"We have a strong balance sheet supportive of disciplined growth with a business model, assets, infrastructure and team to generate strong shareholder returns through the global energy evolution.

"We are disappointed with recent share price performance and have been discussing this with shareholders. Santos remains focussed on delivering shareholder value, we continually review alternatives and are confident we can unlock value for shareholders through executing our strategy and priorities as outlined today."

### Guidance

2023 production guidance is maintained at 89 to 93 million barrels of oil equivalent (mmboe) and sustaining capital expenditure guidance is slightly lowered to ~\$1.1 billion dollars. Major projects capital expenditure in 2023 is maintained at \$1.5-\$1.6 billion dollars.

Production guidance for 2024 is expected to be in the range of 84 to 90 mmboe, influenced by the end of field life at Bayu-Undan and WA offshore field decline.

Sustaining capital expenditure, including decommissioning capex in 2024 is expected to be approximately \$1.25 billion and major projects capital expenditure is expected to be approximately \$1.6 billion (including the Barossa, Pikka Phase 1, Papua LNG and Moomba CCS projects).

Guidance for 2023 provided in this release and in the attached Investor Day presentation assumes Santos' existing 42.5 per cent in PNG LNG. Guidance will be revised once the expected sell-down has completed.

### Live Webcast

A live webcast of the 2023 Investor Day will be available on Santos website at <a href="www.Santos.com">www.Santos.com</a> from 8.30am ACDT today.

### Ends.

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

<sup>1</sup> https://www.dcceew.gov.au/about/news/greenhouse-gas-emissions-march-update-2023



# Disclaimer and important notice

This presentation contains forward looking statements that are subject to risk factors associated with the oil and gas industry, and the carbon capture and storage and carbon emissions reduction technologies industries. 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 on any products we produce, store, trade or capture, 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, carbon emissions reduction and associated technology risks, physical risks, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals, conduct of joint venture participants and contractual counterparties and cost estimates. The forward-looking information in this presentation is based on management's current expectations and reflects judgements, assumptions, estimates and other information available as at the date of this document and/ or the date of Santos' planning processes. Except as required by applicable regulations or by law, Santos does not undertake any obligation to publicly update or review any forward looking statements, whether as a result of new information or future events. Forward looking statements speak only as of the date of this presentation or the date planning process assumptions were adopted, as relevant. Our strategies and targets will adapt given the dynamic conditions in which we operate; it should not be assumed that any particular strategies, targets or implementation measures are inflexible or frozen in time.

No representation or warranty, express or implied, is given as to the accuracy, completeness or correctness, likelihood of achievement or reasonableness of any forward looking information contained in this presentation. Forward looking statements do not represent guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond Santos' control, and which may cause actual results to differ materially from those expressed in the statements contained in this presentation.

All references to dollars, cents or \$ in this document are to United States currency, unless otherwise stated.

Underlying profit, EBITDAX (earnings before interest, tax, depreciation, depletion, exploration and evaluation expensed, change in future restoration assumptions and impairment) and free cash flow from operations (operating cash flows less investing cash flows net of acquisitions and disposals and major project 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 audited financial statements where appropriate. 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 project capex and lease liability payments.

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).

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; 1 barrel of crude oil equals 1 boe.

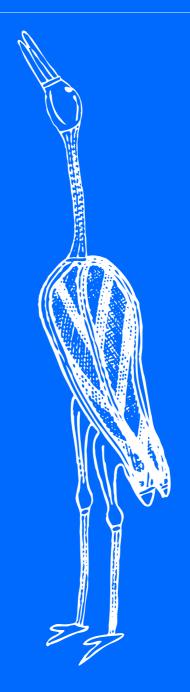


# **Agenda**

**Session One Session Two Delivering long term shareholder value Alaska** 10:40 am 09:00 am Mark Ireland Senior VP Subsurface Alaska Kevin Gallagher Managing Director and Chief Executive Officer **Markets update Santos Energy Solutions** 09:40am 10:50 am **Anthony Neilson** Chief Commercial Officer Alan Stuart-Grant EVP Santos Energy Solutions **Eastern Australia & PNG Finance and capital management** 09:50 am 11:15 am **Brett Darley** EVP Eastern Australia & PNG Anthea McKinnell Chief Financial Officer **Western & Northern Australia & Timor-Leste** Wrap up and Q&A 10:10 am 11:30 am Vince Santostefano EVP WA, NA & TL **Morning tea break** 10:25 am

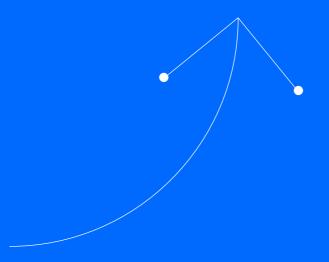
Santos acknowledges that we are meeting on the traditional land of the Gadigal people of the Eora Nation and pays respect to Elders past, present and emerging.

We would also like to extend that respect to all First Nations people here today, and to all the First Nations people across Santos operations in Australia, Timor-Leste, Papua New Guinea and Alaska.



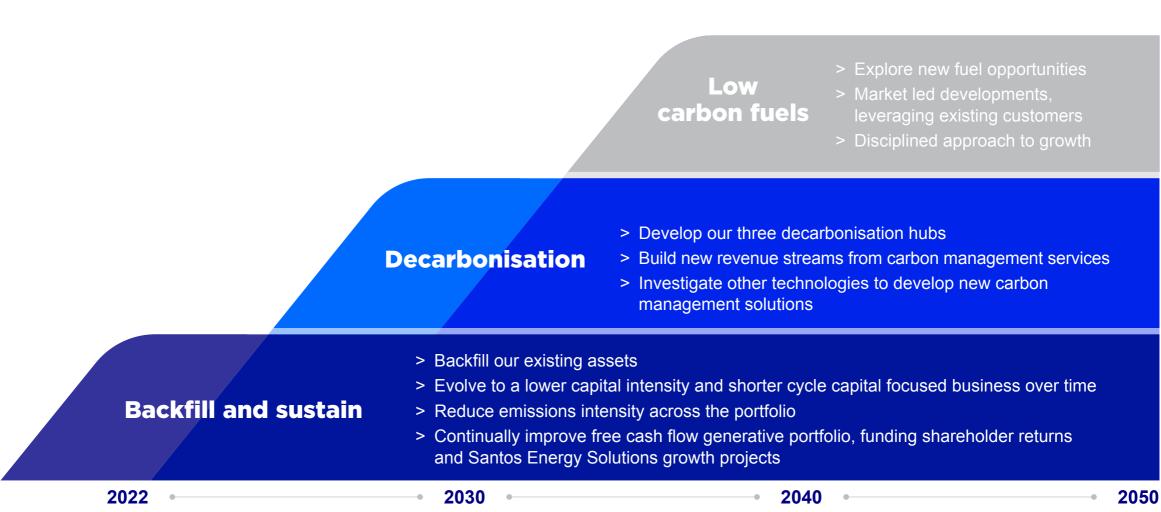
# Delivering long term shareholder value

**Kevin Gallagher** Managing Director and Chief Executive Officer



# Santos' strategy

Our purpose is to provide reliable and affordable energy to help create a better world for everyone



# **Capital Management Framework**

Right balance of disciplined and phased major project spend, returns to shareholders and investment in the energy transition



### **Maintain strong balance sheet**

- Target gearing range of 15-25%
- Maintain investment grade credit rating

### **Returns to shareholders**

- > At least 40% of free cash flow from operations<sup>2</sup> generated per annum
- > Shareholder returns distributed through cash dividends and/or share buybacks, subject to market conditions and Board approval

### Invest in major projects

- > Focused, disciplined and phased investment around existing infrastructure
- > Prioritise investments in supportive regulatory jurisdictions
- > Increasingly prioritise shorter cycle capex, higher return investments

### **Invest in energy transition**

- > Fund decarbonisation and energy transition projects as per Climate Transition Action Plan
- > Investments must meet return hurdles and be underpinned by customer demand

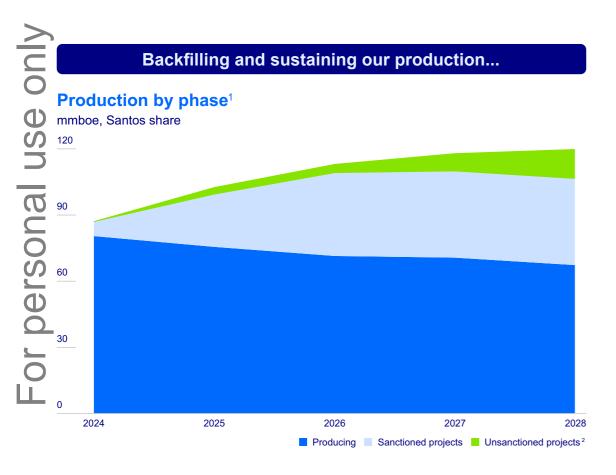
<sup>1.</sup> Predominantly comprises short cycle sustaining capex, exploration and decommissioning

<sup>2.</sup> Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure less lease liability payments. The Board will have the discretion to adjust free cash flow for individually material items



### **Backfill and sustain**

### Strong base business and stable production



### ...with world class projects

First gas
targeted
1H 2025

Pikka phase 1
First oil
targeted
2026

In FEED, targeting FID in 2024

### **Development opportunities**

- > Dorado
- > Narrabri
- > Pikka phases two and three
- > Quokka phases one and two
- > P'nyang
- > EQ Growth

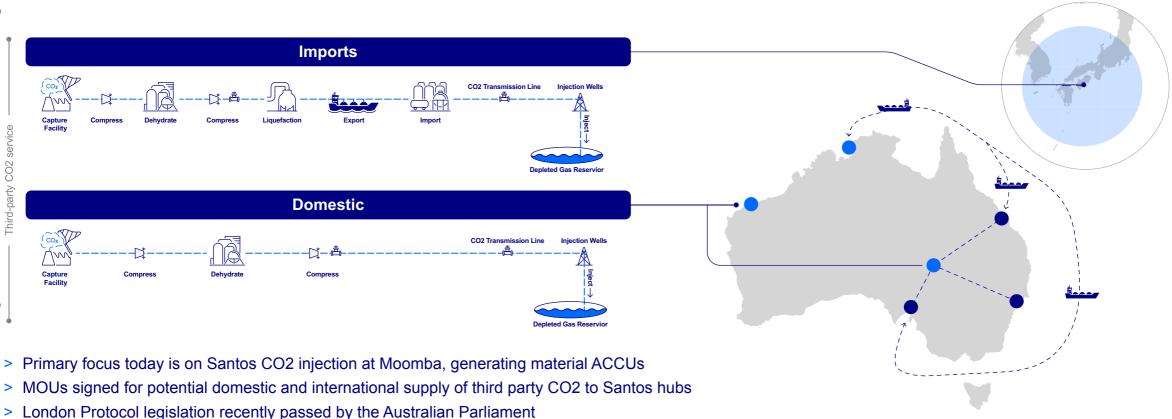
Leveraging existing infrastructure to sustain low-cost production

<sup>1.</sup> This chart should not be construed as production guidance from the Company now or into the future. Potential production is subject to a range of contingencies which may affect performance, including necessary permits, regulatory requirements, joint venture and Board approvals.

<sup>2.</sup> Unsanctioned projects include Papua LNG, Narrabri and EQ Growth.

### **Decarbonisation**

Our three depleted reservoir CCS hubs offer low-cost solutions for Santos and third party emissions



- Edition 1 Total and 1 Total an
- > Bayu-Undan and Reindeer both targeting first injection in 2028 under tolling model
- > Direct air capture technology trials ongoing in Cooper Basin targeting <A\$100/t CO2 capture costs

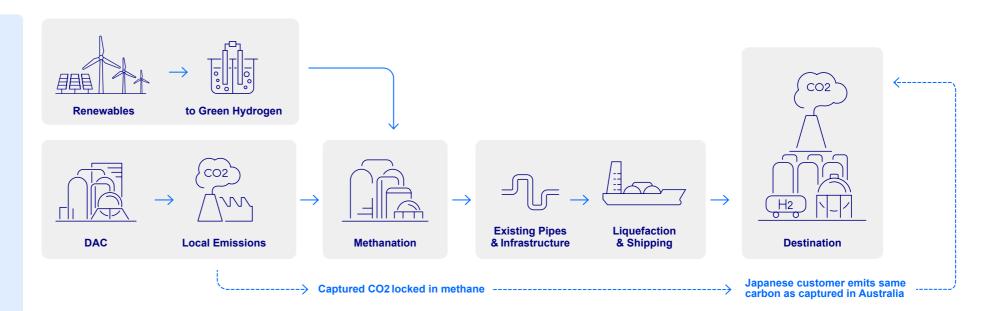


# Low carbon fuels

Demand from existing and new customers is forecast to increase materially by 2030 and beyond

E-methane
pre-FEED studies
underway with
Osaka Gas &
Tokyo Gas to supply
into Japanese
market

Japan targeting 1% e-methane in gas supply to existing networks by 2030

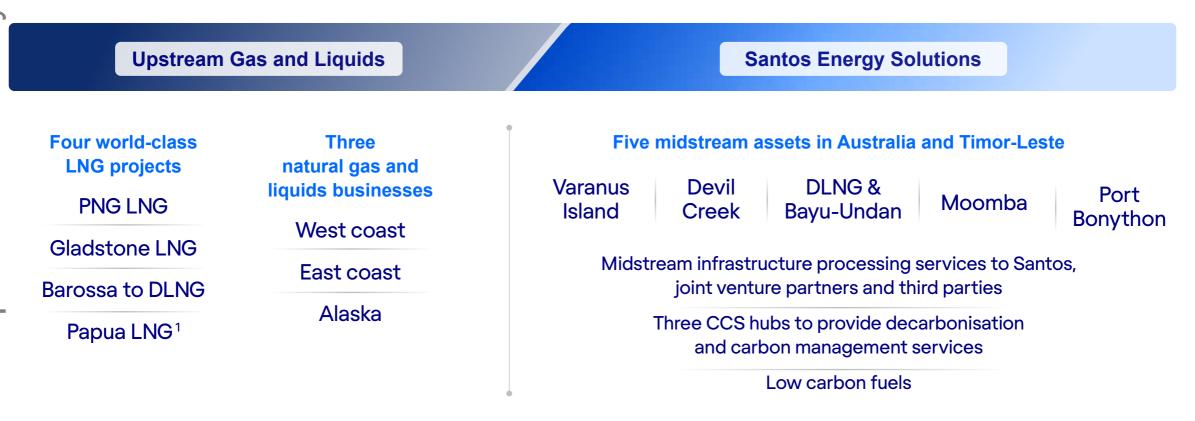


E-methane, Ammonia, Hydrogen, others over time



## **Business overview**

Upside exposure to LNG, domestic gas, liquids, carbon management and low carbon fuels markets



### **Santos Foundation – Investing in our communities**



# **LNG** portfolio

### High quality, low emissions intensity LNG portfolio to meet growing Asian demand

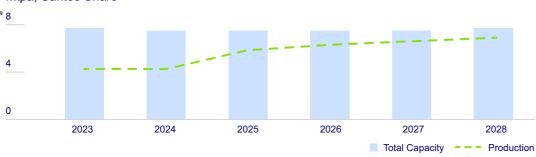
### High quality portfolio of assets

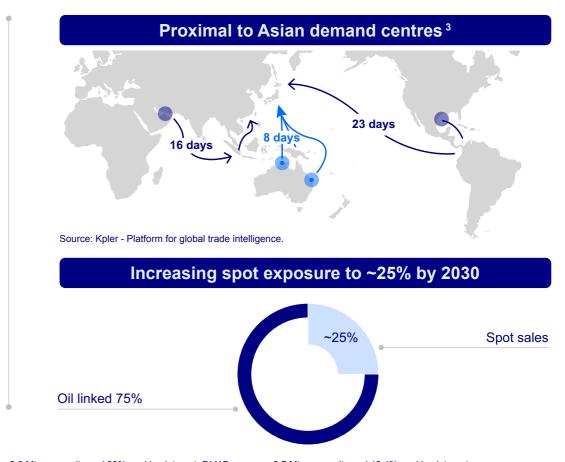
- > Four world class LNG assets sustaining Santos capacity of ~7.7 Mtpa<sup>1</sup> and increasing production
- > Infrastructure footprint provides foundation for lower cost backfill opportunities
- > Developing a low emissions intensity LNG Portfolio
- Bayu-Undan and Papua CCS projects provide potential to reduce Scope 1 emissions
- Barossa reservoir emissions offset until CCS project is approved and online
- Close proximity to Asian markets reduces scope 3 emissions from shipping, with US to Japan 2.5x greater than Australia to Japan<sup>2</sup>
- > Long-term contracts with flexible terms to manage spot exposure

Sustaining Santos capacity of ~7.7 Mtpa and increasing production

### LNG nominal capacity and production<sup>1</sup>

Mtpa, Santos Share





- 1. PNG LNG assumes 8.3 Mtpa and 42.5% working interest in 2023 and selldown from 42.5% to 39.9% working interest in 2024. GLNG assumes 8.6 Mtpa capacity and 30% working interest. DLNG assumes 3.7 Mtpa capacity and 43.4% working interest. Papua LNG project assumes 5.6 Mtpa capacity and 17.7% working interest, which includes 2 Mtpa capacity reservation from PNG LNG.
- 2. Source: Thunder Said Energy, Emissions of Producing Natural Gas Calculator, CO2 intensity of natural gas value chains.
- 3. Estimated shipping duration to Futtsu Japan, assuming vessel speed of 17 knots.

# **Upstream Gas and Liquids**

Diversified portfolio with strong cash flows and backfill opportunities to sustain production

### **East coast**









### **Cooper Basin**

- > 2C: 266 mmboe
- Decarbonising through electrification and development of Moomba CCS
- Increased production from proving economics of Patchawarra and Granite Wash

### **Queensland & NSW**

- > 2C: 513 mmboe
- > Well productivity >15x higher than vertical stimulated wells
- Backfill opportunities for GLNG JV

### **Western Australia**

- > 2C: 437 mmboe
- > Leading domestic gas position
- Attractive exposure to increasingly undersupplied markets
- > Value over volume
- Steady state production, funding phased decommissioning

### **Northern Aust & Timor-Leste**

- > 2C: 766 mmboe
- > Barossa project backfill to DLNG
- > Bayu-Undan CCS FEED work underway

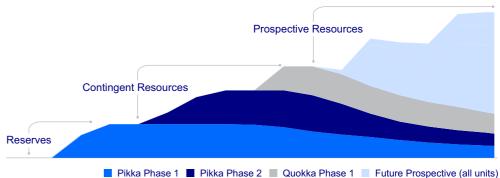
### **Santos**

### **Alaska**

### Right project at the right time in the right location

- > Pikka Phase 1: 29% complete 1
- > World-class resource space
- > Significant free cash flow
- > Leveraging significant infrastructure
- > Highly experienced operational team
- > Stable regulatory environment
- > Community projects essentially complete
- > Low emissions-intensity project





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# Australian regulatory environment update

Environmental approvals uncertainty impacting all offshore activity

- > Industry needs a regulatory regime that provides reasonable upfront certainty on the rules required to obtain approvals
- Industry must be able to rely on approvals given when they invest and when they commence activities
- > Santos is working with industry participants and government to remove regulatory uncertainty
- > Australia must compete for capital in a portfolio that includes world-class assets in other low sovereign risk jurisdictions

# **Santos Energy Solutions**

Clear strategy to complement core Upstream Gas and Liquids business by building a profitable and targeted portfolio focused on decarbonising our base business, providing carbon management services and low carbon fuels

Established high cash flow generating assets

Commercial opportunity to build new earnings streams providing carbon management services to Santos and third party customers

Target net-zero
Scope 1 and 2
emissions by 2040

Midstream infrastructure

Carbon capture and storage (CCS)

**Carbon solutions** 

Low carbon fuels

Asset decarbonisation

### Five midstream assets

- > Moomba
- > Port Bonython
- > Darwin LNG
- > Varanus Island
- > Devil Creek

Establishing three CCS hubs leveraging existing infrastructure to provide carbon management services

- > Moomba CCS
- > Bayu-Undan CCS
- > Reindeer CCS

Leveraging Santos' global footprint and land position to develop nature-based emissions reduction projects Leveraging existing infrastructure to develop low carbon fuels to supply current and new customers into the future as markets develop

Assisting Santos to achieve its 2030 absolute emissions and emissions intensity targets, and to achieve Scope 1 and 2 net zero by 2040

# **Energy Solutions - Midstream infrastructure**

Running strong portfolio of strategic assets for value

	Eastern Australia Hub		Northern Hub	Western Australia Hub	
	Moomba	Port Bonython	Darwin LNG	Varanus Island	Devil Creek
Nameplate throughput capacity	Gas: 400 TJ/d Storage: 70 PJ	Liquids: 20mmboe per annum	LNG: 3.7 Mtpa, approvals up to 10 Mtpa <sup>1</sup>	Gas: 390 TJ/d	Gas: 220 TJ/d
2023 throughput (gross) <sup>2</sup>	238 TJ/d	7.4 mmboe	0.51 Mtpa	178 TJ/d	39 TJ/d
WAL <sup>3</sup>	< 5 years rolling		>15 years		
Existing tolling structure	Internal and external tolls		Internal tolls		

<sup>1.</sup> Approvals referring to development of potential Train 2 and Train 3 at Darwin LNG.

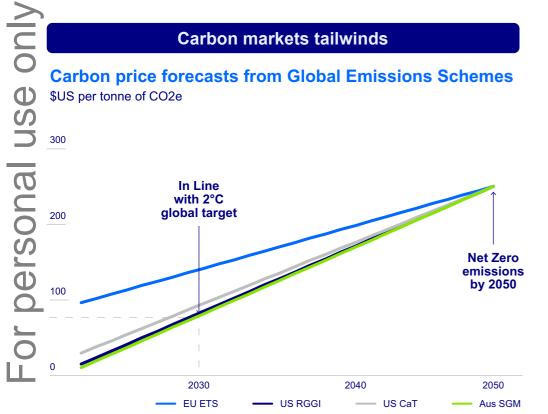
<sup>2. 2023</sup> throughput (gross) year to date, as at 31 Oct 2023.

<sup>3.</sup> Weighted Average Life of contracts.



### **Carbon solutions**

Creating a portfolio of high-quality units to allow Santos achieve its compliance requirements in Australia and Alaska, plus stated objectives. Activities will also facilitate access to third-party markets over time



### Established developer of domestic and global nature-based solutions



- > Santos Land Bank Development
- > Greater than 40,000 ha of land assets under management in Australia
- > Human Induced Regeneration (HIR) project registered 2023
- Establishing additional nature projects under the ACCU scheme



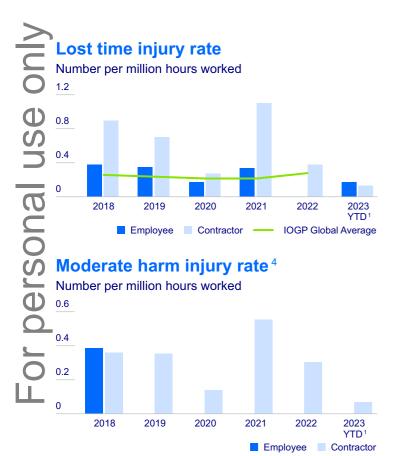
- PNG afforestation/reforestation project<sup>1</sup>
   first issuance 2023
- > 8 Mt CO2e across 12,000ha from mixed species planting on degraded grasslands
- Supports local jobs and relationships with landowners

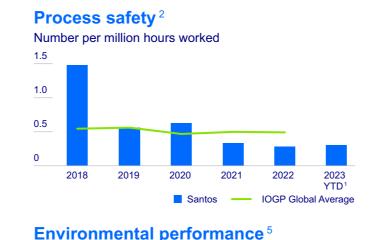
Source: World Bank Carbon Pricing Dashboard; IMF Climate Change Blog; International Energy Agency (2023), Global Energy and Climate Model Documentation 2023, IEA, Paris, Net Zero Emissions by 2050 Scenario.

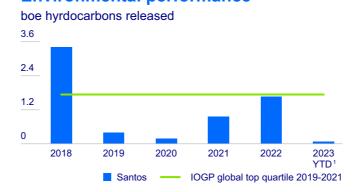


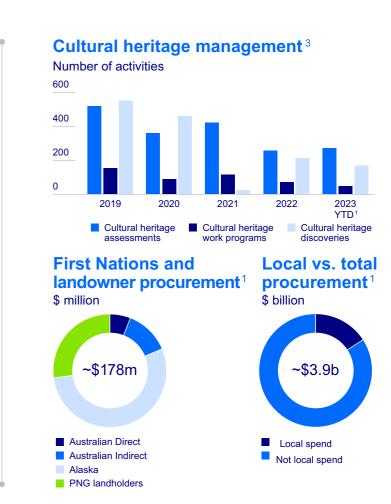
# Personal and process safety performance

'Always safe' is a core value at Santos, our focus is now on contractor management improvements









<sup>1. 2023</sup> YTD represents data as of 30 September 2023.

<sup>2.</sup> Loss of Containment here is referring to an incident where primary and secondary containment has been breached.

<sup>3.</sup> Cultural heritage management across Australia and Alaska

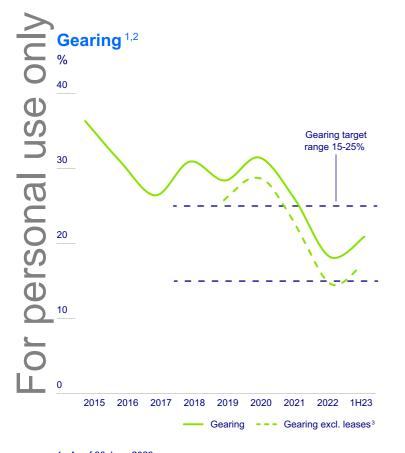
<sup>4.</sup> Moderate harm injury is an injury where the worker does not fully recover within three months

<sup>5.</sup> Releases to environment greater than one barrel.

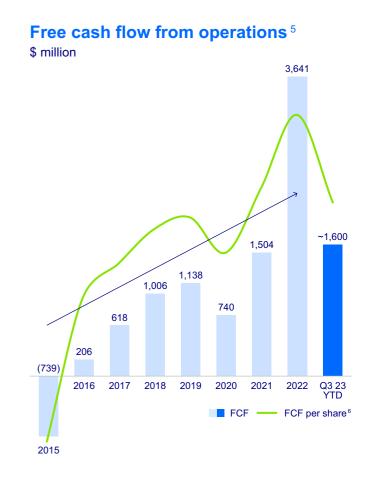


# Disciplined and consistent execution of strategy

### Strategy continues to deliver strong results







- 1. As of 30 June 2023.
- 2. Includes assets held for sale in 2022 and 2023.
- 3. Gearing excluding leases included from 2019 as IFRS 16 Leases was effective from 1 January 2019.
- 4. Excludes Bayu-Undan in 2023, 1H23 unit production cost including Bayu-Undan is \$8.52/boe.
- 5. Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure, less lease liability payments.
- 6. Assumes weighted average number of shares on issue each year.



# Free cash flow from operations

Continuing cash flow generation targeting significant returns to shareholders



Free cash flow sensitivity for every \$10 above the breakeven oil price

- 1. Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure less lease liability payments.
- 2. Assumes weighted average number of shares on issue each year.
- 3. ROACE is defined as Return on Average Capital Employed (EBIT / (Average Total Equity + Net Debt)). ROACE range is due to base assumption of Brent of \$75/bbl (2023) and JKM of \$12/mmBtu (2023 real) and upside assumption of Brent of \$90/bbl (2023) and JKM of \$14/mmBtu (2023 real).
- 4. Modelled FCF from operations for Papua LNG is assumed to be independent of corporate structuring.
- 5. 2026F and 2028F assumes a base assumption of Brent of \$75/bbl (2023 real) and JKM of \$12/mmBtu (2023 real).

# **Performance highlights**

Strong performance and positive outlook

### Recent business performance highlights

Total free cash flow 1 since January 2022

\$5.2 billion \$2.0 billion

Total shareholder returns<sup>2</sup> since January 2022

Reduction in net debt<sup>3</sup> since January 2022

\$1.4 billion

Moomba CCS construction

>75% complete

### Five year outlook

**Target production growth** from 2024 to 2028

~6%cagr

Target free cash flow from 2024 to 20284

~\$14 billion

**Target** shareholder returns<sup>5</sup>

40%

**Target annual** CO<sub>2</sub> injection<sup>6</sup>

- 1. Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure, less lease liability payments, as from 1 January 2022 to 30 September 2023.
- 2. Includes dividends paid and on-market share buybacks executed from 1 January 2022 to 30 September 2023
- 3. Reduction in debt from 1 January 2022 to 30 September 2023.
- 4. Free cash flow from operations as defined per footnote 1, assumes ~\$75/bbl Brent price (2023 real) and JKM of ~\$12/mmBtu (2023 real).
- 5. Target shareholder return is based on free cash flow from operations generated per annum.
- 6. Target annual CO2 injection is gross.

# Santos' investment proposition

A diversified and cash generative portfolio driving shareholder returns and well positioned for the energy transition

# A high-quality portfolio of diversified assets

- > Geographic and product differentiated asset base
- > Project execution targeting ~6% production CAGR from 2024 to 2028
- > Disciplined cost management

# **Strong cash generation supports higher returns**

- > Targeting total free cash flow of US\$14bn from 2024 to 2028<sup>1</sup>
- > Strong balance sheet with targeted gearing of 15-25%
- > Targeting shareholder returns of a minimum of 40% of FCF<sup>2</sup>

# Decarbonising our business

- Net zero Scope 1 and 2 emissions by 2040
- > 30% reduction in Scope 1 and 2 emissions by 2030

# Developing new earnings streams

- Third party carbon management opportunities targeting ~30Mt CO2e of annual storage capacity
- Developing low carbon fuels for new and existing customers

<sup>1.</sup> Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure, less lease liability payments, assumes ~\$75/bbl Brent price (2023 real) and JKM of ~\$12/mmBtu (2023 real).

<sup>2.</sup> Target shareholder return is based on free cash flow from operations generated per annum.

# 2024 strategic priorities

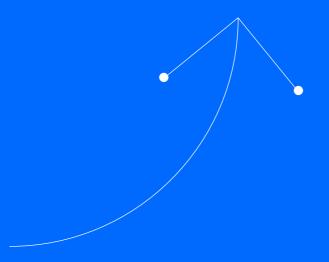
Multiple near-term catalysts to unlock value for shareholders

- 1 Deliver safe and reliable production within our base business
- 2 Progress major projects in execution Barossa, Pikka and Papua LNG to FID
- 3 Backfill and sustain production across our East Coast and Western Australia assets
- 4 Deliver Moomba CCS
- 5 Progress Bayu-Undan and Reindeer CCS projects and secure binding third party supply agreements
- 6 Progress low carbon fuels studies and e-methane project
- 7 Continue to assess structural alternatives, portfolio optimisation and strategic opportunities



# Markets Markets Update **Anthony Neilson**

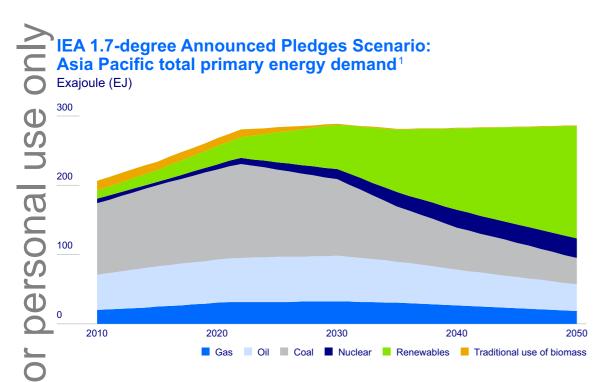
**Chief Commercial Officer** 





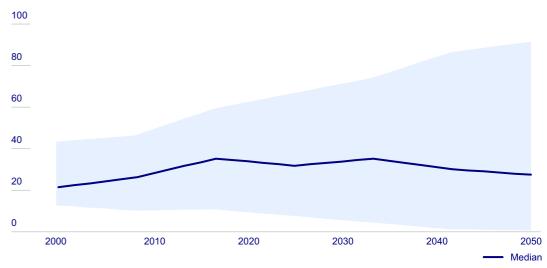
# Oil and gas required beyond 2050

Oil and gas will have a place in the Asia Pacific energy mix for decades to come



- Sustained energy demand in the Asia Pacific region with population and GDP growth
- Oil and gas demand remains relatively flat over the period to 2050 and supplies ~20% of the energy demand in 2050





- We believe natural gas has a key role to play in the energy transition, particularly in supplying growing Asian markets including Japan, South Korea, China, and India
- Gas remains a significant portion of the primary energy mix with the median demand scenario increasing slightly by 2050

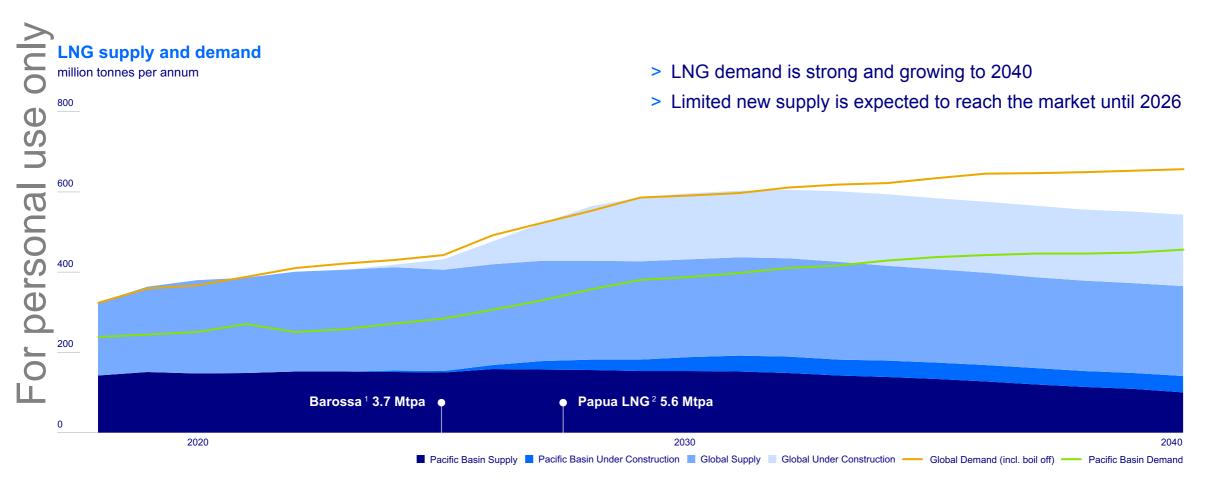
<sup>1.</sup> IEA, World Energy Outlook 2023, October 2023, Announced Pledges Scenario (APS), expected to result in a 1.7-degree temperature change

<sup>2.</sup> Intergovernmental Panel on Climate Change (IPCC) AR6 report, April 2022. Subset of scenarios represent a climate future where global temperature increase is limited to 1.5 degrees with low or no overshoot.



# **Strong long-term LNG demand**

Santos is geographically advantaged to supply LNG to meet growing Asia Pacific demand



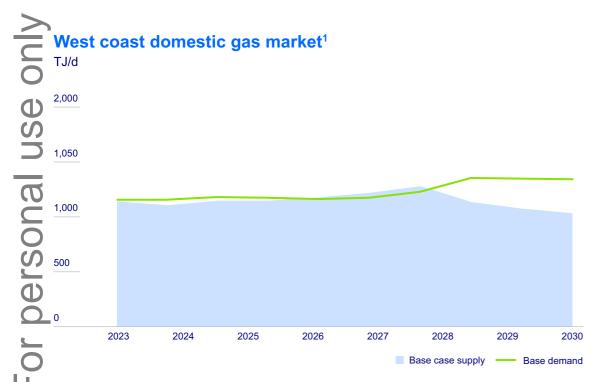
Source: Wood Mackenzie LNG Tool, Q3 2023, Wood Mackenzie, Oct 23. Santos project figures are gross capacity.

- 1. Targeting online date on 1H 2025, gross nominal capacity.
- 2. Targeting online date 2028, gross nominal capacity.



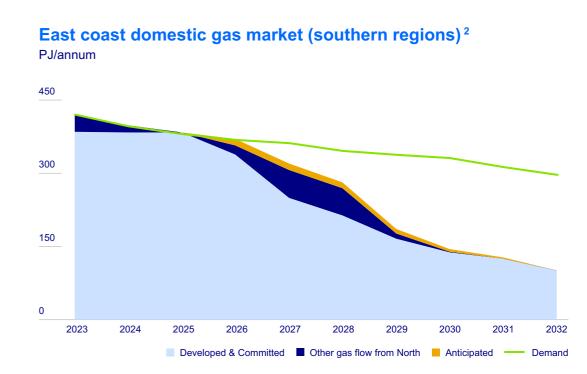
# Domestic gas supply critical to energy reliability

New supply required to meet demand and ensure affordable gas prices, supportive conditions for pricing



### West coast domestic gas market

- Tight market has spot prices and look through transaction prices (long-term) increasing significantly (~A\$9/GJ)
- > Santos holds growth potential near domestic infrastructure



### East coast domestic gas market

- Annual demand shortfall forecast to begin later this decade with limited new supply
- > Narrabri project can support southern regions<sup>2</sup>, forecast to be in shortfall without LNG imports

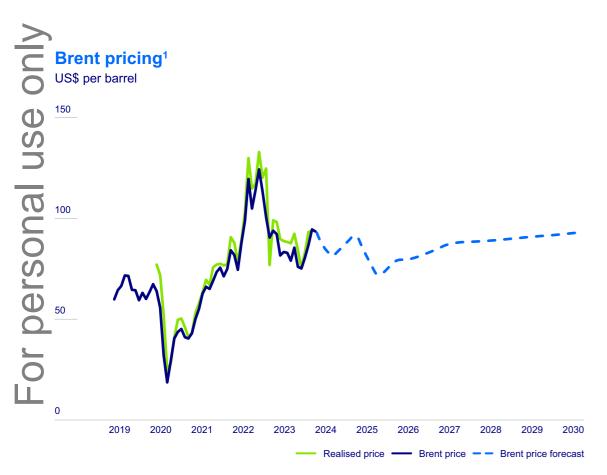
<sup>1.</sup> WA GSOO Base Scenario, AEMO, Dec 2022

<sup>2.</sup> Data includes the southern regions only (NSW, VIC, ACT, TAS, SA). GSOO Orchestrated Step Change (1.8°C) Scenario, AEMO, Mar 2023. Excludes LNG imports and gas diverted from LNG export.



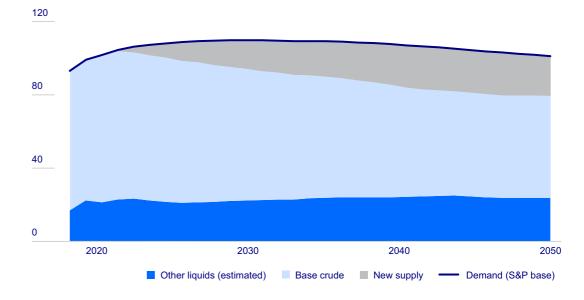
# Oil demand growing this decade

Santos oil assets are positioned to meet growing global demand









- > Oil demand remains strong through to 2040
- > New supply is needed
- > Growth projects are positioned for any future demand scenario

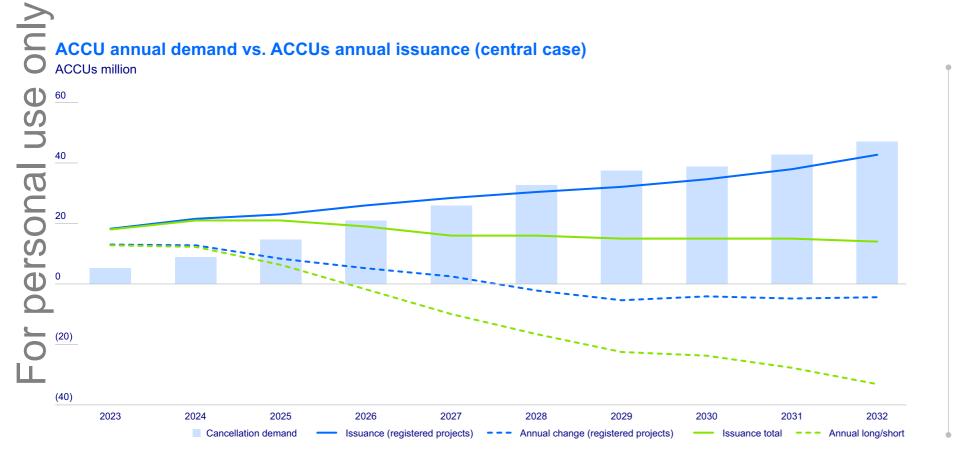
<sup>1.</sup> S&P Commodity Insights, Global Crude Oil Markets Short Term Outlook Fundamentals, November 2023. S&P Global Oil Prices Outlook (Annual), Q3 2023, nominal prices.

<sup>2.</sup> S&P Commodity Insights, Annual Long Term Strategic Planning Workbook 2023, April 2023 and US Energy Information Agency, Annual Energy Outlook, March 2023.



## **Australian carbon market**

Forecast demand growth for emissions reduction units in the Australian market driven by Safeguard Mechanism facilities, with the market expected to be short later this decade



- Forecast annual demand for ACCUs dominated by compliance requirements, potential for growth of over 40 million by 2032
- Market will be short from around 2027 as supply from existing ACCUs method slows, despite new sources of supply beginning to scale up

Source: RepuTex Energy, 2023.

# Market fundamentals support our strategy

Our products are essential to support energy security, and economic development. Santos has a low cost and lower carbon LNG portfolio with competitive advantage of being close to our Asian market customers

Low Cost and lower carbon LNG
Asia Pacific energy supply

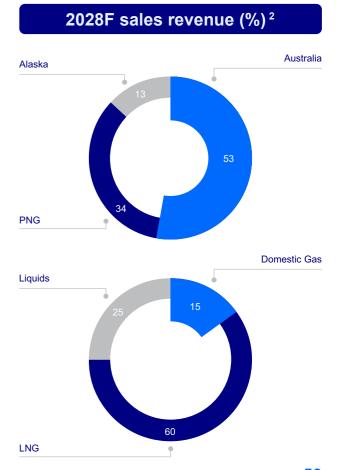
- > Barossa, PNG LNG backfill plus Papua LNG expansion to supply increasing Asia Pacific market demand
- > Strong customer demand for LNG from Asian customers for 10+ year contracts
- > Papua LNG marketing well advanced and progressing well
- > Building capability in LNG and carbon trading with Singapore trading hub and Toyko office

Domestic Gas <sup>1</sup>
Australian west and east coast markets

- > Santos provides domestic supply on East and West coasts to support energy security and affordability
- > Additional domestic supply available through developing Narrabri and WA backfill opportunities

**Liquid hydrocarbons** 

> Intending to develop Alaska and Dorado to meet oil demand this decade

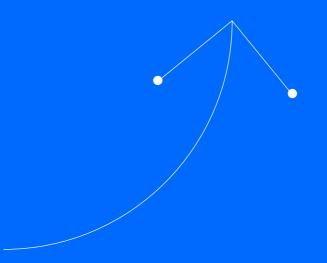


<sup>1.</sup> Domestic gas includes Cooper Basin and Eastern Queensland volumes flowing to GLNG.

<sup>2.</sup> Product sales revenue at ~\$90/bbl Brent price (2023 real) and JKM of ~\$14/mmBtu (2023 real).

# Eastern Australia & PNG

**Brett Darley EVP Eastern Australia & PNG** 



**East Coast Australia** 

### **Eastern Australia and PNG**

**PNG** 

Diversified portfolio with a combination of strong cash flows and backfill opportunities to sustain production

			A Company		
	PNG LNG	Papua LNG	GLNG	Cooper Basin	Narrabri
Status	> Producing	> Unsanctioned (Target FID-ready 2024)	> Producing	> Producing	> Unsanctioned (Target FID-ready 2025) <sup>1</sup>
Capacity, Santos share	> ~3.5 Mtpa <sup>2</sup>	> ~1 Mtpa <sup>3</sup>	> ~2.6 Mtpa <sup>2</sup>	> ~270 TJ/d	> ~150 TJ/d <sup>4</sup>
Reservoir type	> Conventional	> Conventional	> Unconventional	> Conventional / Unconventional	> Unconventional
Backfill and sustain	<ul> <li>Angore, Associated Gas Fields (Kutubu/ Agogo/ Moran) and Juha</li> <li>Future backfill from Papua and P'nyang</li> </ul>	<ul> <li>&gt; Progressing FEED</li> <li>&gt; Progressing key contracts tender process</li> <li>&gt; Regulatory licence application submitted</li> </ul>	<ul> <li>Evaluating potential opportunities beyond these fields</li> <li>Continued phased development of four coal seam gas fields</li> </ul>	<ul> <li>Low-cost development plan to convert large resource base</li> <li>Emerging resource plays including Granite Wash and Deep Source opportunities</li> </ul>	<ul> <li>Supports long term production to a tightening east coast market</li> <li>Progressing land access agreements and environmental surveys to finalise pipeline approvals</li> </ul>
Decarbonisation	<ul><li>Low CO2 asset</li><li>Potential for nature-based opportunities</li></ul>	<ul><li>Low CO2 emissions</li><li>Potential for CCS and electrification</li></ul>	<ul><li>&gt; Low CO2 asset</li><li>&gt; Potential for electrification and renewables integration</li></ul>	<ul> <li>Moomba CCS         expected online in 2024</li> <li>Field compression electrification and rationalisation</li> </ul>	> Electrification of major equipment including compression

<sup>1.</sup> Timing is subject to securing pipelines approvals and Native Title Determination

<sup>2.</sup> Prior to completion of 2.6% sell down to Kumul Petroleum Holdings Limited. PNG LNG and GLNG capacity as of 30 September 2023. PNG assumes 8.3 Mtpa (gross) and 42.5% working interest, GLNG assumes 8.6 Mtpa and 30% working interest.

<sup>3.</sup> Based on 5.6 Mtpa capacity at 17.7% STO share, post PNG government back-in.

<sup>4.</sup> Full Narrabri Expansion case pending initial development and appraisal results.



# **Moomba CCS project update**

Moomba CCS on track to deliver Santos' first major decarbonisation project with up to 1.7 Mtpa CO2 injection

Moomba CCS ~75% complete 1, first injection expected in 1H 2024

Expected cost to complete ~\$220 million, targeting life cycle cost of ~\$US24 per tonne

First certification of ACCU generation expected late 2024

Third-party customer discussions underway

100 Mt CO2 storage bookings available in the Cooper Basin

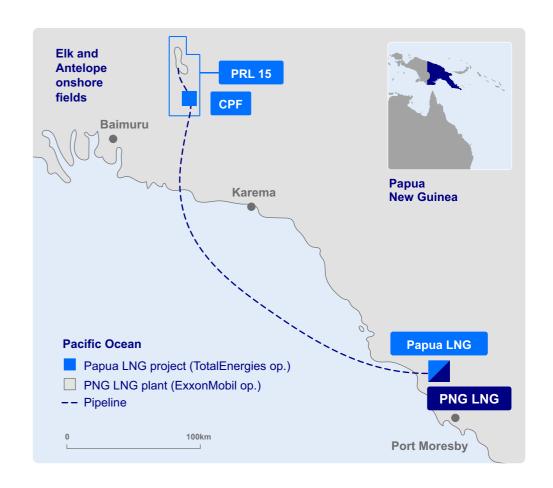




# Papua LNG project overview

## Continue growth in supply of low intensity LNG to meet South East Asian demand

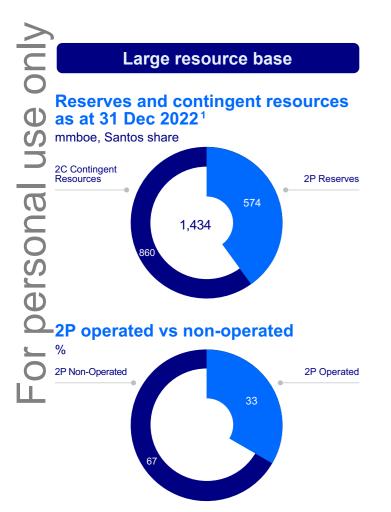
	Project overview
Capacity	Up to 6 Mtpa
Development	9 production wells, 1 water injection well, 1 CO2 reinjection well, 1 gas processing plant, 320km of pipeline (out of which 60km are onshore)
Reserves	Over 1 billion barrels of oil equivalent
Production	Early 2028
LNG Plant	Electrical LNG trains with a cumulative capacity of 4 Mtpa to be developed within the existing liquefaction plant in Caution Bay, in which it has secured up to 2 Mtpa additional capacity
Status	FID 2024
Carbon	Native CO2 reinjection from first day of operation
Emissions intensity	8kg CO2 / boe (upstream) 18kg CO2 / boe (downstream)
Santos interest	22.83% (pre state back-in)

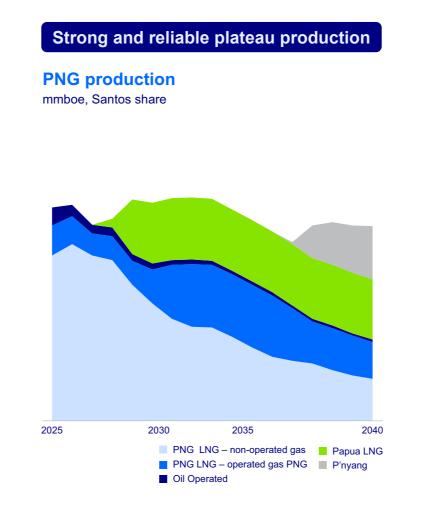


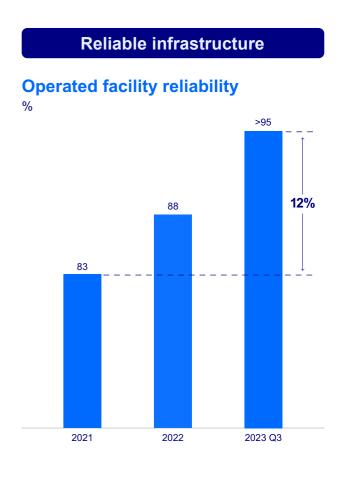


# PNG LNG: low-cost LNG to Asia Pacific

Capitalising on an enormous resource base and infrastructure position to provide reliable production to Asian markets







# **GLNG:** record field performance

Proven strong performance with record high production, and with significant remaining resources to develop

### **Record field performance**

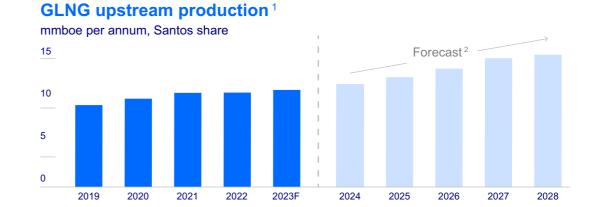
2P Reserves >300 mmboe Santos share, across all QLD CSG with >20-year reserve life

Fairview – reversing the natural decline through continued development and horizontal drilling

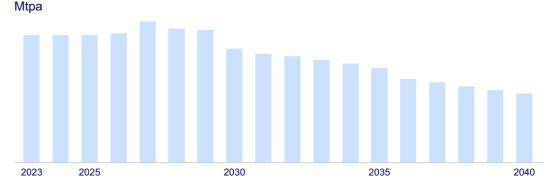
### Scotia – outperforming expectations

- Production increasing quarter on quarter with highest daily rate of 100 TJ/d
- Set up for growth in 2024 and 2025 with additional compression and development drilling

Roma – flat production







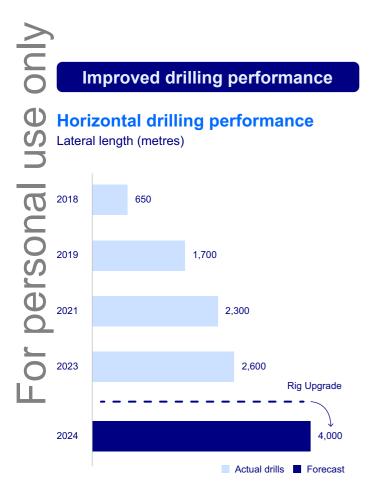
 <sup>2019-2023</sup> assumes current GLNG working interest

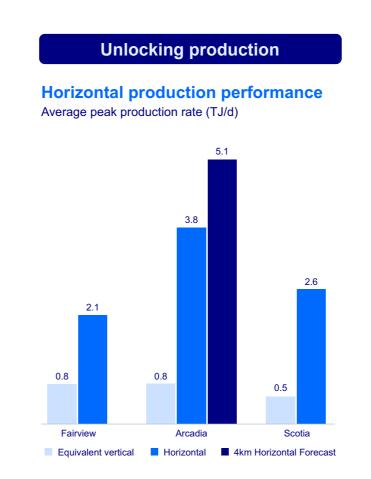
<sup>2.</sup> Indicative forecast only and shouldn't be construed as production guidance.

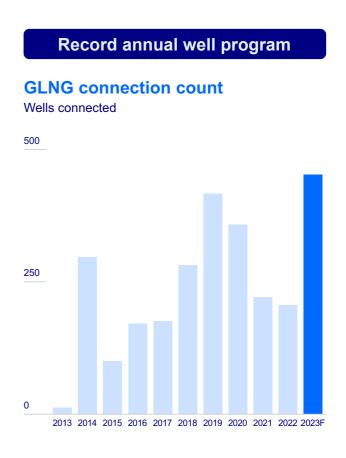


# **GLNG: CSG Horizontal wells enhancing well productivity**

Improvements in drilling capability, excellent production performance in well trials, record wells online in 2023









# **Cooper Basin: New life into mature fields**

Extending basin life from mature fields with low cost, high value, short cycle investment

### **Extending Cooper life**

- > ~40% of total conventional gas production close to Moomba infrastructure
- Successfully drilling in Moomba to unlock booked reserves and resources
- Increasing high value South West Queensland supply through exploration success

# Cooper upstream equity supply

mmboe, Santos share

Developed Undeveloped

2019

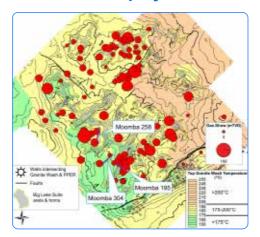
2023

2028

### **Granite Wash: Extending basin life**

- Proven unconventional resource below our current producing formations
- > Horizontal well successfully drilled and flowing at more than ~9 mmscf/d
- > High temperature drilling technical success unlocking hotter parts of field
- > Potential to double or triple 2C opportunity size

### **Granite Wash play**



### Oil delivering high value

- > High success rate in oil campaigns of 15 shallow vertical wells and 5 horizontal wells
- > Production exceeded expectations, 1.425 bbl/d vs 820 bbbl/d
- > Development cost ~US\$21/boe
- > Additional 15 follow up opportunities targeting an additional 1,200 bbl/d

## Linear rod pump lease package installation





# **Cooper Basin: Patchawarra unlocking potential**

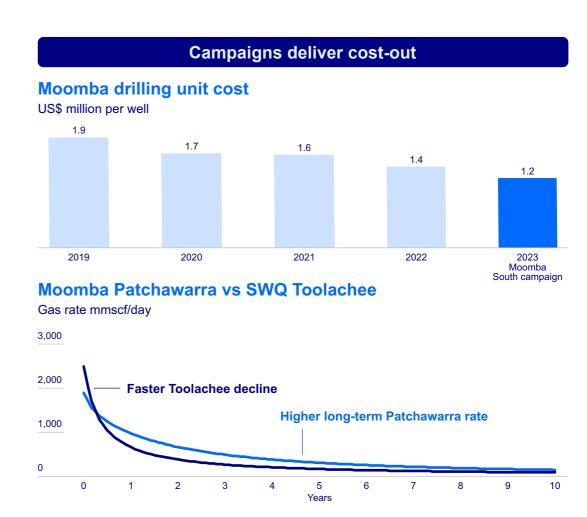
Patchawarra should see higher longer-term, lower risk production

Patchawarra development in Moomba area has added 80 mmscf/d production in last 12 months

Learnings on lowering unit costs in Moomba area being used to unlock additional volumes

Lower reservoir risk and demonstrated deliverability

Potential to increase the Patchawarra 2C volumes by 30%



# **EA and PNG decarbonisation**

2025 emissions reduction target met, with net-zero emissions 2040 pathway from improving operational efficiencies and carbon capture

### 2040 net-zero emissions pathway

### Cooper

- > Moomba CCS
- > Field and facility electrification and optimisation

### **QLD & NSW**

- > Field and facility electrification and optimisation
- > Solar projects in Roma and NGP
- > QLD power grid emissions initiatives
- > Integration of nature based offsets projects

### **PNG**

- > Papua CCS, PNG LNG emissions reductions
- > Efficiency initiatives in the operated business



# **Eastern Australia and PNG**

Low-cost development focus supporting low emission intensity production to domestic and Asian markets

PNG LNG: Tier 1 LNG asset with material backfill opportunities to sustain production

Papua LNG: High margin expansion project leveraging existing infrastructure position

**GLNG**: Improved drilling performance, unlocking production and cash flows

Cooper Basin: Lower development costs and modernisation extending the life of the Cooper

Narrabri: 100% domestic gas option into supply constrained market

# Western & Northern Australia & Timor-Leste

Vincent Santostefano EVP WA, NA & TL

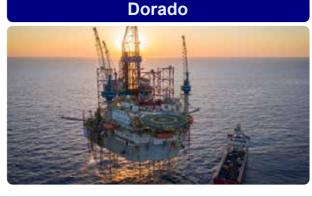
**Decarbonisation** 

# Western, Northern Australia & Timor-Leste

Diversified portfolio with a combination of strong cash flows and backfill opportunities to sustain production

# Western Australia Status Producing





	Ç
Capacity	> 610 TJ/d (Varanus Island and Devil Creek) (gross)
Equity share	> Various
Reservoir type	> Conventional
Backfill and sustain	> Bedout Basin to provide long-term gas backfill to WA domestic gas business
	> Spartan first new gas development in WA in 10 years
l	> Reindeer cycling success, prolonging field life
	Spar-Halyard infill – drilling planned for 2024
	> Pyrenees Phase 4 infill well online

Low reservoir CO2 feedstockEnergy efficiency projects

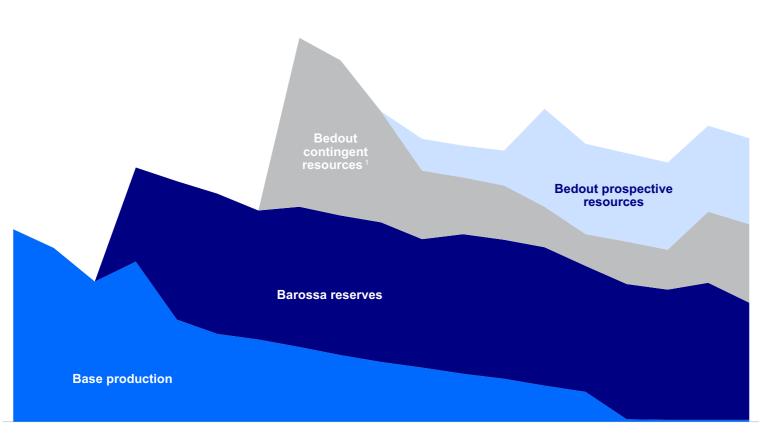
> Barossa: Targeting first production 1H25	> Unsanctioned > Target FID-ready 2024
> ~1.6 Mtpa ¹	> Optimised development plan of ~80 kbbl/d (gross)
> 50% (Barossa), 43.4% (Bayu-Undan and DLNG)	> 70-80%
> Conventional	> Conventional
> Barossa project to backfill Darwin LNG first gas expected in 1H 2025	<ul> <li>Liquids development, diversifying production and providing resilient cash flows to support backfill and sustain horizon</li> <li>Dorado phase 1 liquids development with a focus on Pavo integration and opportunities to reduce the overall development cost</li> <li>Advancing gas exploration targets to enhance the phase 2 gas development value proposition</li> <li>Offshore Project Proposal approved by NOPSEMA</li> </ul>
<ul><li>&gt; Barossa project will be CO2 export ready</li><li>&gt; CCS via Bayu-Undan</li></ul>	> On-going carbon footprint optimisation through design phases

1. DLNG 3.7 Mtpa capacity and 43.4% working interest.

> G-11-AP GHG Exploration Permit

# Western & Northern Australia production

Diversified portfolio with a combination of strong cash flows and backfill opportunities to sustain production



- Significant growth in the Offshore Business with Barossa
- > Exploration is targeted in the Bedout Basin to further backfill
- Growth optionality in Bedout with Dorado development

a



# **Western Australia**

## WA utilising existing infrastructure to backfill and sustain

## Halyard infill project 1

- Reusing existing infrastructure
- > Low incremental opex and low breakeven price
- > ~8 mmboe of additional production from capex light investment
- > Highly cash flow accretive, quick payback period

## **Supplying Domestic Markets**

- Spartan Gas Field online supplying 100% to domestic gas market, first new development in WA in 10 years
- > Bringing incremental supply to a tightening gas market
- > Diverse portfolio supply increases customer supply certainty

## Decommissioning

- > Campbell platform removal
- > Progressing phased HJV (Harriet and Simpson assets) decommissioning
- Continuing to progress phased Mutineer-Exeter, Fletcher and Finucane (MEFF) decommissioning programme

- Focus on capital discipline
- Phased and responsible decommissioning
- Lean opex
- Decarbonising production
- Re-purposing infrastructure for CCS
- Supply in a tight market

Subject to regulatory approval.

# **Barossa project update**

Santos is fully committed to deliver the world-class Barossa Gas Project

Barossa snapshot				
Progress	> 64% complete			
Current Status	> FPSO hull departed Korea and arrived in Singapore on 15 November 2023 to commence integration			
	> FPSO topside modules fabrication in Singapore on track			
	> FPSO turret and mooring system progressing to plan			
	> Allseas completed mobilisation for Gas Export Pipelay campaign			
	<ul> <li>Loadout of risers and umbilical in Europe completed SURF installation vessels in transit to Singapore</li> </ul>			
	> DPD line pipe coating and rock quarrying in progress			
Capex	> FID sanction: US\$3.7 billion gross			
	> Including DPD FID sanction: US\$4.3 billion gross			
Schodulo	> RESIL Forecast = 1H 2025			



# Western, Northern Australia & Timor-Leste

Optimising existing assets in an increasingly under supplied domestic market and delivering the Barossa project

Leading dedicated domestic gas position: Attractive exposure to increasingly undersupplied markets

**Innovation:** Using technology to become more cost efficient

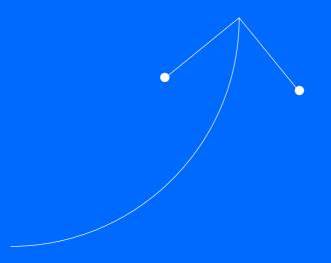
**Asset optimisation: Leveraging existing facilities for CCS** 

Dorado / Bedout basin: World-class liquids project with exploration and value upside

Barossa: High quality, low-cost and long-life LNG asset backfilling existing infrastructure

# Alaska Sound need only and sound need on the sound need

**Mark Ireland Senior Vice President Subsurface and Exploration** 





# Pikka Phase 1 project overview

# The right project at the right time in the right location

### Portfolio overview

Development plan	Optimised using existing pipeline capacity, single small footprint drilling pad and electrified field operations – standardised, modular facility design
Reservoir type	Conventional oil
First oil	2026
<b>Expected nameplate</b>	80,000 barrels of oil per day gross
Expected plateau	~5-6 years
Status	29% complete <sup>1</sup>
2P Reserves	165 mmbbl Santos share (net royalties) 397 mmbbl gross
Capex to nameplate capacity	US\$1.3 billion Santos-share at 51% interest (2022 real)
Annual opex	~US\$150 million gross
Crude pricing	Alaska North Slope marker (slight premium to Brent)
Forecast IRR	~19% @ US\$60/bbl long-term oil price (2022 real)
Lifecycle b/e	~US\$40 per barrel
Emissions intensity	Net-zero <sup>2</sup> Scope 1 and 2 from first production – top quartile of projects globally

### **Project status**

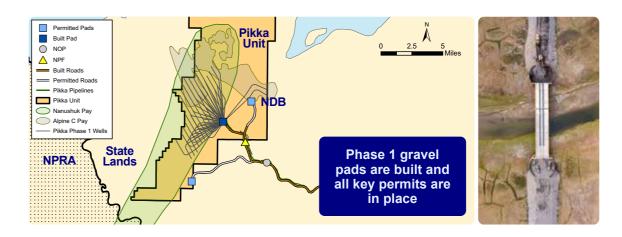
- > Contract commitments totaling over US\$2 billion to date
- > ~60% of spend on fixed cost basis

# Project on schedule

- > Drilling on schedule; currently drilling 5th well
- > Preparation underway for 2023/2024 winter program
- > Pipeline orders placed, materials being delivered and fabrication underway
- > Community projects essentially complete

# Net-zero emissions

- > Executed agreement with Alaska Native landowner to secure nature-based carbon offsets
- > Consortium DAC 3 CCS hub application selected for award of federal funds



or personal

As at 30 October.

Equity share

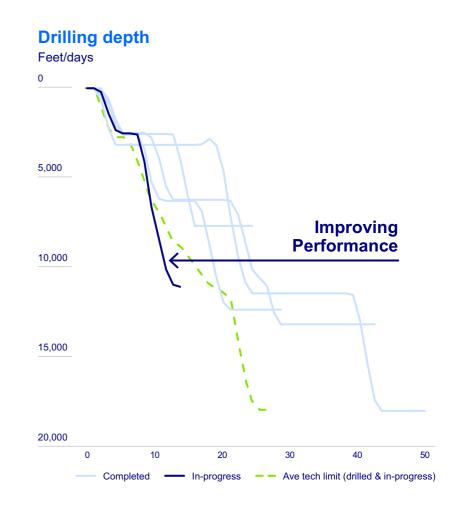
<sup>3.</sup> Direct Air Capture.

# **Drilling improvement**

Early learnings capture driving performance



- > Adjusted drilling mud properties to improve hole stability
- > Adjusted drilling practices to further improve hole stability
- > Trajectory changes improving lateral placement in reservoir
- > Optimising frac operations for gains in production performance



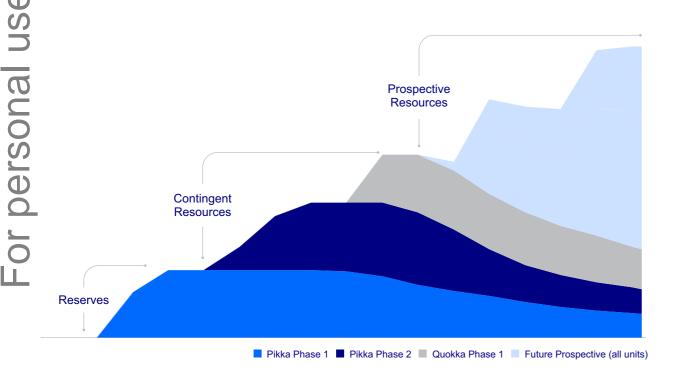


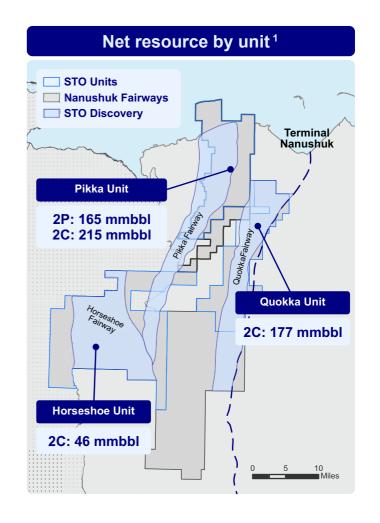
# Significant, long-term supply portfolio

Self-funding development pipeline plus providing significant returns

> Cash flow from Phase 1 will be very robust

> Self fund whilst providing returns to shareholders







# **Beyond Phase 1**

Lower capital requirements and breakeven, higher returns for subsequent phases

### Scalable facility concept

### **Expansions leverage Phase 1 infrastructure**

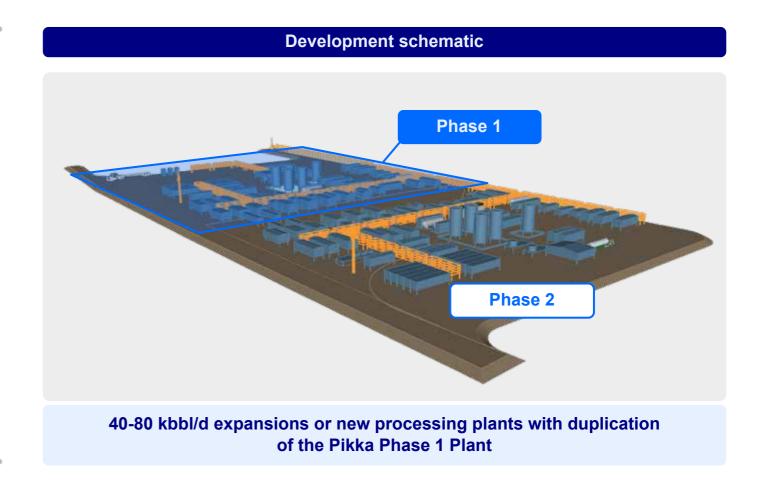
- > Roads and pipelines
- > Seawater treatment plant
- > Pad Space for facility expansion

### **Processing facility concept (future phases)**

- > Design once build multiple
- > Install proven module designs
- Significant cost savings targeted through:
  - Minimising North Slope work
  - Minimal footprint increase

### **Post-phase 1 activities**

- > Entered concept select for Phase 2
- > Evaluating expansion plans
- > High-grading well stock
- > Quokka delineation late 2024-2025



# **Alaska**

World-class resource in tier 1 jurisdiction, with significant optionality

World-class resource base of scale with 2P reserves of 165 mmboe and 2C of 438 mmboe<sup>1</sup>

Significant free cash flow: modular design can self-fund future development phases and fund returns to shareholders

Leveraging significant infrastructure in place

**Operational team with significant North Slope experience** 

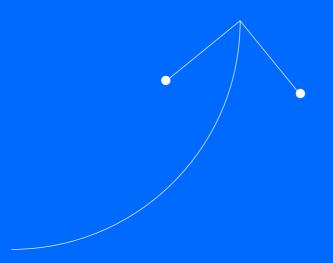
Stable regulatory environment and supportive stakeholders



# Santos Energy Solutions

**Alan Stuart-Grant** 

**Executive Vice President Santos Energy Solutions** 



# Global progress towards Net Zero

Government policy and emissions reduction targets are creating attractive commercial opportunities for Santos

	Global themes		Santos' key customer markets		Domestic
					*
2030 Emission Reduction Goal	50-52% vs. 2005	55% vs. 1990	46% vs. 2013	40% vs. 2018	43% vs. 2005
Required emissions reduction by 2030 <sup>1</sup>	3.8 Gtpa	3.1 Gtpa	0.6 Gtpa	0.3 Gtpa	0.3 Gtpa
Policy support	US\$3 trillion IRA investment over next decade	30% of budget on climate related projects	US\$14 billion <sup>2</sup> in green projects over next decade	US\$3 billion <sup>2</sup> allocated to energy transition funds	A\$20 billion of investment over next decade

Sources: USA = White House Fact Sheet; Goldman Sachs Research Carbonomics Report; US EPA. EU = European Council 'Fit for 55' Plan; European Commission 2021-2027 Budget. Japan = Japan's NDC; NEDO, Green Innovation Fund. South Korea = South Korea's NDC; South Korea Environment Ministry 2024 Budget. Australia's NDC; Australia's NDC; Australia's Long-Term Emissions Reduction Plan.

<sup>1.</sup> Represents reductions from each country or region's baseline year.

<sup>2.</sup> Government investing ¥2 trillion over the next decade via a Green Innovation Fund. FX rate assumed to be ¥147 / USD.

<sup>3.</sup> South Korea's environment ministry has allocated 3.686 trillion won in its 2024 budget to energy transition funds (based on analysis from Argus media). FX rate assumed to be 1,321 Won / USD.



# **Santos Energy Solutions Strategy**

Clear strategy to complement core Upstream Gas and Liquids business in decarbonising our assets whilst profitably providing carbon management services

Established cash flow generating assets

### Midstream infrastructure

- > Increase portfolio utilisation
- Develop multiple high value growth projects

Commercial opportunity to build new earnings streams providing carbon management services to Santos and third party customers

# Carbon Capture & Storage (CCS)

- Gross annual injection of 10Mt CO2 pa
- > International presence

### **Carbon solutions**

- Build portfolio of nature-based projects
- > Established third-party customer base

### Low carbon fuels

- > Market-led opportunities
- Manufacture of hydrogen and e-methane

Target net-zero Scope 1 and 2 emissions by 2040

### **Asset decarbonisation**

### **Emissions reduction targets**

- > 30% in Scope 1 & 2 (absolute)
- > 40% in Scope 1 & 2 (intensity)
- > At least 1.5 Mtpa of CO2e of customers' emissions

**Enablers** 

Technology & Capability

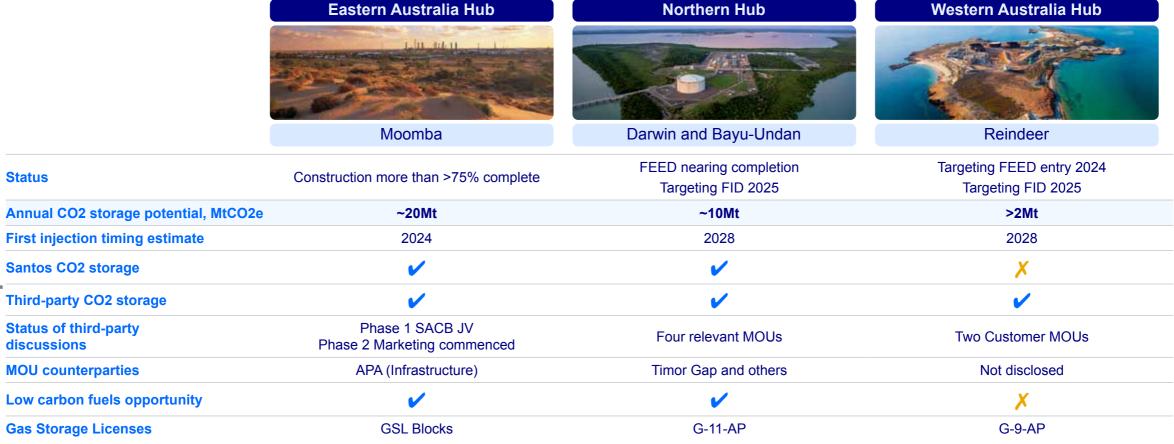
**External Capital** 

**Government & Regulations** 

**Customers & Partners** 

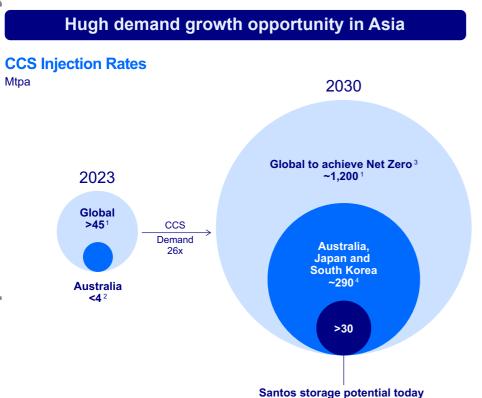
# Three operated CCS and low carbon fuels hubs

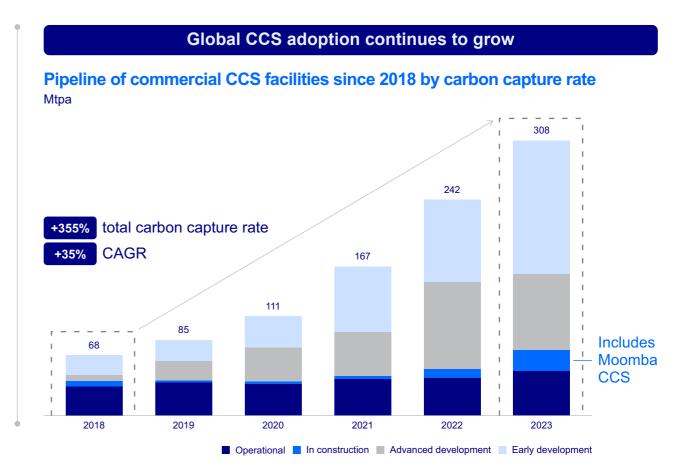
Repurposing existing infrastructure and depleted reservoirs to deliver new earnings streams



# **CCS** market growth

Significant opportunity to build a profitable carbon sequestration business; customer interest and policy support strong





<sup>1.</sup> IEA data.

<sup>2.</sup> Wood Mackenzie, LENS CCUS, Q3 2023.

Estimate of point source emissions compiled from Rystad Energy, CCUS Cube (industry and power) and Wood Mackenzie, Emissions Benchmarking Tool (upstream energy).

<sup>4.</sup> IEA 2023 Net Zero Emissions by 2050 Scenario.



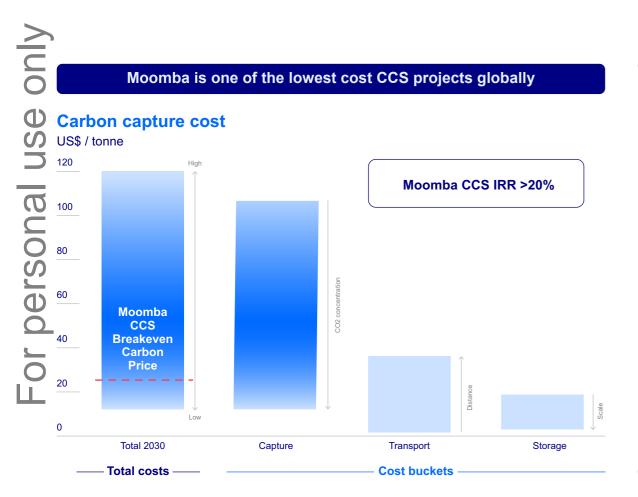
# CCS volumes: Santos first then third party Santos hubs offer low-cost solutions for Santos and third party emissions

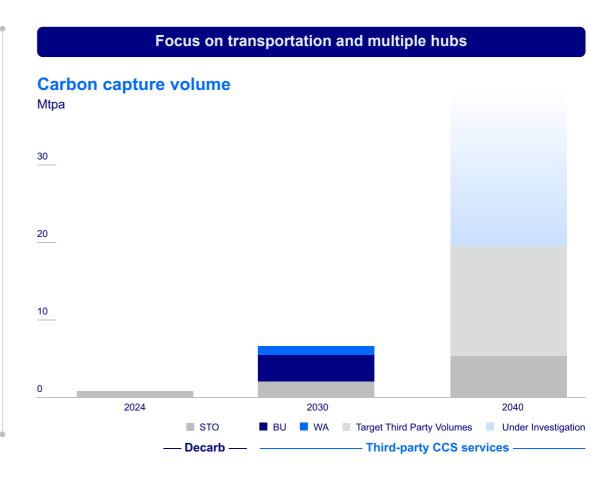
**Imports Domestic** Moomba will generate material ACCUs for 25 years > London Protocol legislation recently passed by the Australian Parliament



# **Compelling CCS value opportunity**

Leveraging core capabilities to capture attractive margins





# Low carbon fuels provides longevity to Santos

Santos will use its advantaged infrastructure and operations to develop a portfolio of decarbonisation technologies

### **Technology and collaborations**

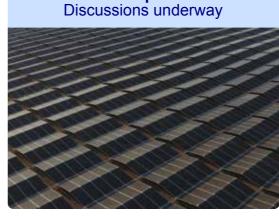
**CO2 gathering**Aggregators, shippers, APA



Direct Air Capture CSIRO agreement



Green power
Discussions underway



CCS Emitters, ADNOC



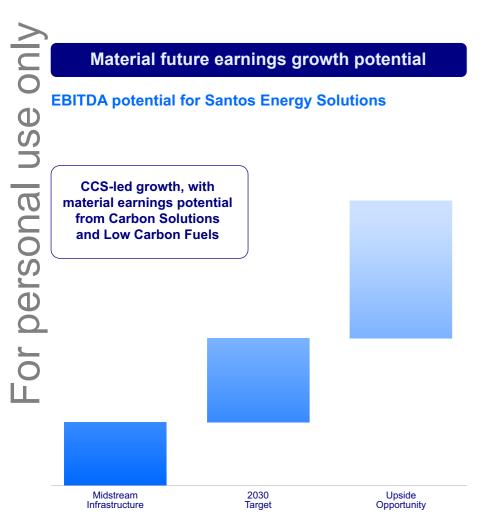
E-methane, Hydrogen, Ammonia, others over time

Current activity focused on joint pre-FEED studies underway with Japanese customers



# **Attractive commercial opportunity**

Multiple levers to use our assets, relationships and capabilities to grow earnings



### Actionable, attractive commercial opportunities

### **Midstream infrastructure**

> Increased utilisation to grow free cash flow available to recycle

### CCS

- > Moomba CCS tolling cash flow and ACCU generation from 2024
- > Work underway with APA and third-party emitters for expansion
- > International CCS collaboration being explored through ADNOC partnership

### Carbon solutions

- > Exposure to carbon markets tailwinds and DAC technology
- > Earnings from nature-based projects and customer solutions

### Low carbon fuels

- > Long-term opportunity including hydrogen, e-methane and ammonia
- Initial focus driven by 2030 Japanese government policy

# **Santos Energy Solutions**

Supportive Net Zero backdrop: policy environment and thematic tailwinds

Strategic infrastructure: strong free cash flow generation to fund transition

Asset repurposing strategy: deploys existing capabilities and relationships

Near-term new earnings: CCS first, then carbon solutions and low carbon fuels growth

**Cost of capital: future benefits expected for Santos** 

# Finance and capital management

**Anthea McKinnell Chief Financial Officer** 

# Finance and capital management

Continued capital management to provide shareholder returns and fund growth

**Disciplined capital allocation** 

Disciplined cost management and efficiency gains

Strong free cash flow from operations<sup>1</sup>, transitioning to a lower capital intensity phase

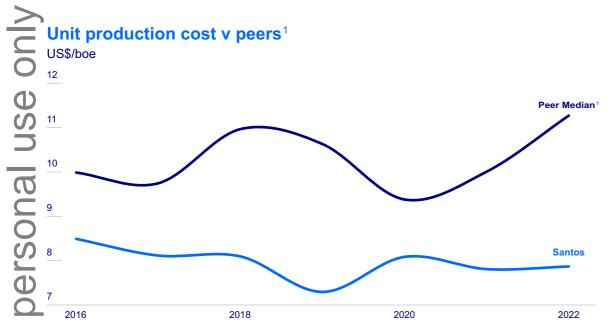
Well positioned to increase shareholder returns

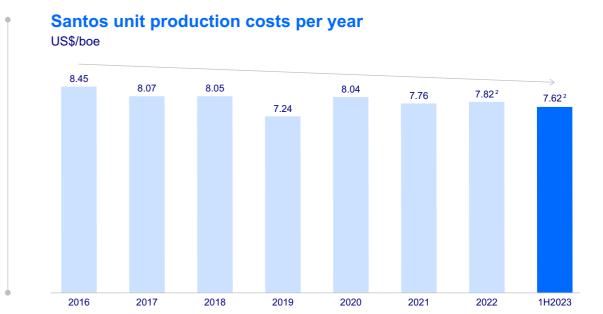
**Balance sheet supportive of strategy** 



# Unit production costs compared to peers

Santos maintains financial discipline through high inflationary periods



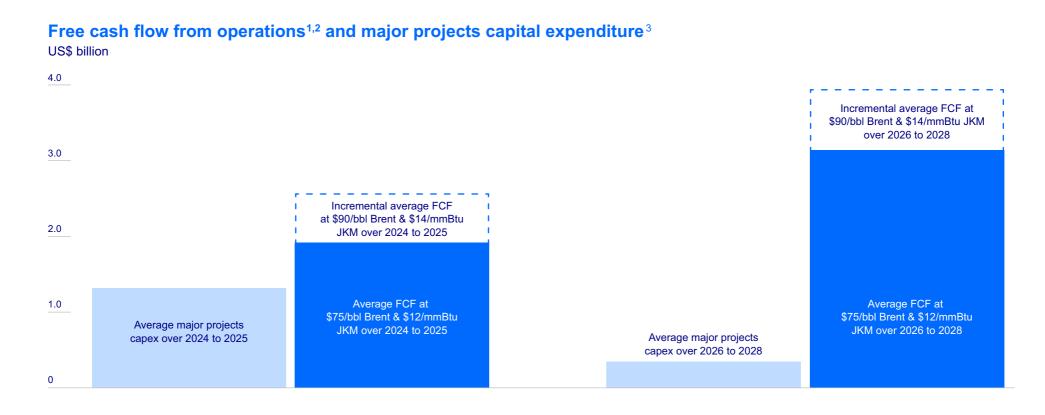


Source: Wood Mackenzie, Corporate Benchmarking Tool, Q3 2023.

- > Targeted unit production costs for 2023, excluding Bayu-Undan are slightly lower than 2022, and continue on a downward trajectory
- > Impact of inflation on production costs is being managed well, partially assisted by favourable FX rates on AUD costs
- > Targeting 2023 free cash flow breakeven at less than \$34 per bbl<sup>3</sup>
- > FX hedges in place for 2024: A\$970 million at an average all-in rate of 0.6440
- 1. Peer group includes mid and large capital international companies from Wood Mackenzie's peer group definition.
- 2. Excludes Bayu-Undan, 1H23 unit production cost including Bayu-Undan was \$8.52/boe.
- 3. Per market guidance presented within 2022 full year results announcement.

# Strong free cash flow generation

Free cash flow is increasing, and capital commitments are rapidly reducing



<sup>1.</sup> Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure less lease liability payments. Assumes \$75/bbl Brent price (2023 real) and JKM of \$12/mmBtu (2023 real) and assumes \$90/bbl Brent price (2023 real) and JKM of \$14/mmBtu (2023 real).

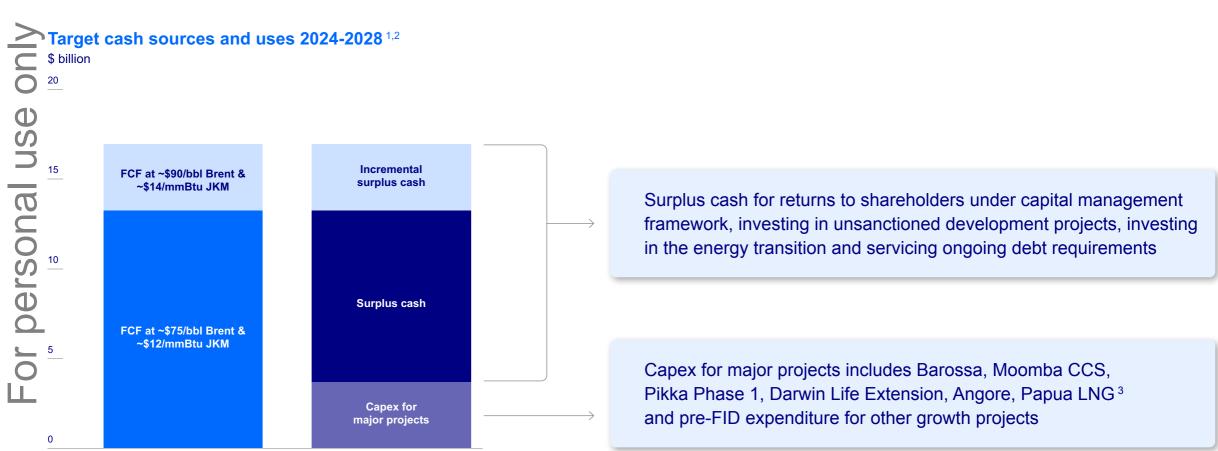
<sup>2.</sup> FCF from operations for Papua LNG is assumed to be independent of corporate structuring.

<sup>3.</sup> Capex for major projects includes Barossa, Moomba CCS, Pikka Phase 1, Darwin Life Extension, Angore, Papua LNG and pre-FID expenditure for other growth projects. Capex for Papua LNG assumes 60% project financing.



# **Growing shareholder returns**

Strong cash flows from projects online set to deliver significant returns to shareholders



- 1. Assumes ~\$75/bbl Brent price (2023 real) and JKM of ~\$12/mmBtu (2023 real).
- 2. Assumes ~\$90/bbl Brent price (2023 real) and JKM of ~\$14/mmBtu (2023 real).
- 3. Capex for Papua LNG assumes 60% project financing.

Sources<sup>4</sup>

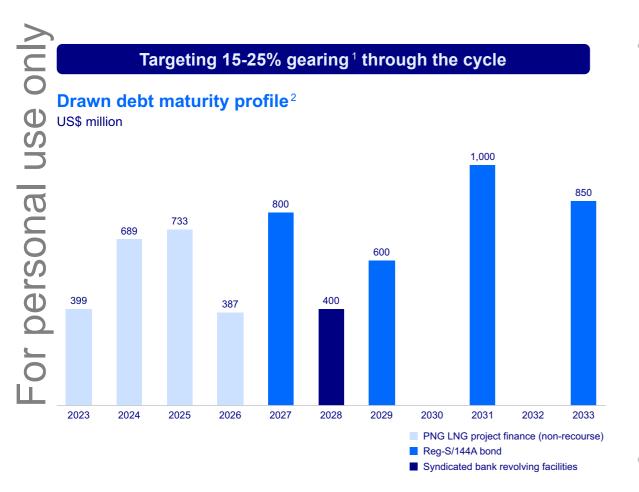
4 Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure less lease liability payments.

Uses

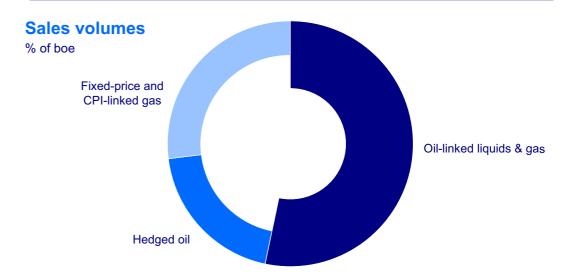


# **Balance Sheet positioned to deliver strategy**

Strong support received for recent debt issuance demonstrates strength of the business







### Liquidity of \$4,927 million <sup>2</sup>

- > \$2,262 million in cash
- > \$2,665 million in committed undrawn debt facilities

### **Investment Grade Ratings**

### **Investment Grade Ratings**

- > S&P: BBB- / Stable
- > Fitch: BBB / Stable
- > Moody's: Baa3 / Stable

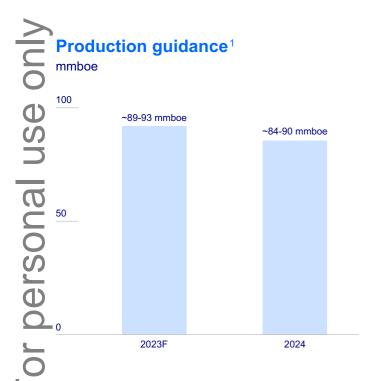
Including leases.

2. As at 31 October 2023



# **Production and Capex guidance**

## 2024 production guidance

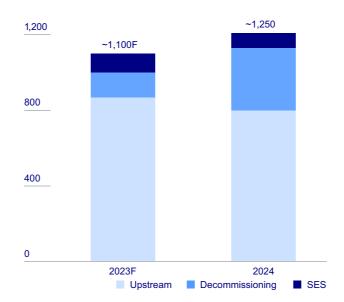


### **Factors influencing 2024 production**

- > Bayu-Undan end of field life
- > Reindeer end of field life
- Includes PNG LNG at 42.5% working interest.
- Excludes capitalised interest and DLNG.
- 3. Excludes payments for Equity accounted investments, which are ~\$200 million.

### **Sustaining capex**

Included in FCF from operations, \$ million



## **Factors influencing 2024 capex**

Upstream gas and liquids sustaining capex:

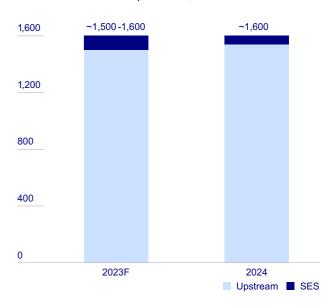
Increase in decommissioning spend year-on-year ~\$200 million

SES sustaining capex:

> Plant compliance, maintenance & repair costs

### **Major project capex** 1,2,3

Excluded from FCF operations, \$ million



### **Factors influencing 2024 capex**

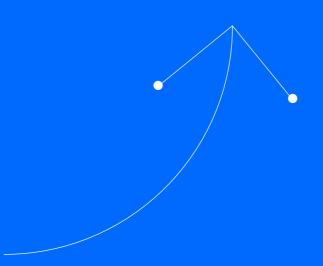
Upstream gas and liquids major projects:

- > Barossa, Pikka Phase 1 and Papua LNG FEED SES major projects:
- > Moomba CCS



# Final remarks and Q&A Kevin Gallagher

**Kevin Gallagher Managing Director and Chief Executive Officer** 





# Free cash flow from operations

Continuing cash flow generation targeting significant returns to shareholders



Free cash flow sensitivity for every \$10 above the breakeven oil price

- 1. Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure less lease liability payments.
- 2. Assumes weighted average number of shares on issue each year.
- 3. ROACE is defined as Return on Average Capital Employed (EBIT / (Average Total Equity + Net Debt)). ROACE range is due to base assumption of Brent of \$75/bbl (2023) and JKM of \$12/mmBtu (2023 real) and upside assumption of Brent of \$90/bbl (2023) and JKM of \$14/mmBtu (2023 real).
- 4. Modelled FCF from operations for Papua LNG is assumed to be independent of corporate structuring.
- 5. 2026F and 2028F assumes a base assumption of Brent of \$75/bbl (2023 real) and JKM of \$12/mmBtu (2023 real).

# Santos' investment proposition

A diversified and cash generative portfolio driving shareholder returns and well positioned for the energy transition

# A high-quality portfolio of diversified assets

- > Geographic and product differentiated asset base
- > Project execution targeting ~6% production CAGR from 2024 to 2028
- > Disciplined cost management

# **Strong cash generation supports higher returns**

- > Targeting total free cash flow of US\$14bn from 2024 to 2028<sup>1</sup>
- > Strong balance sheet with targeted gearing of 15-25%
- > Targeting shareholder returns of a minimum of 40% of FCF<sup>2</sup>

# Decarbonising our business

- Net zero Scope 1 and 2 emissions by 2040
- > 30% reduction in Scope 1 and 2 emissions by 2030

# Developing new earnings streams

- Third party carbon management opportunities targeting ~30Mt CO2e of annual storage capacity
- Developing low carbon fuels for new and existing customers

<sup>1.</sup> Free cash flow from operations is defined as operating cash flows less investing cash flows net of acquisitions and disposals and major growth capital expenditure, less lease liability payments, assumes ~\$75/bbl Brent price (2023 real) and JKM of ~\$12/mmBtu (2023 real).

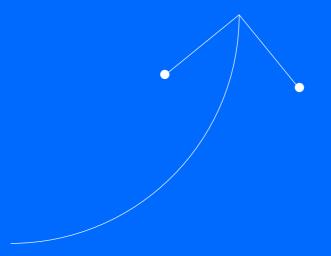
<sup>2.</sup> Target shareholder return is based on free cash flow from operations generated per annum.

# 2024 strategic priorities

Multiple near-term catalysts to unlock value for shareholders

- 1 Deliver safe and reliable production within our base business
- 2 Progress major projects in execution Barossa, Pikka and Papua LNG to FID
- 3 Backfill and sustain production across our East Coast and Western Australia assets
- 4 Deliver Moomba CCS
- 5 Progress Bayu-Undan and Reindeer CCS projects and secure binding third party supply agreements
- 6 Progress low carbon fuels studies and e-methane project
- 7 Continue to assess structural alternatives, portfolio optimization and strategic opportunities

# Lor bersonal rise only Appendix





# **Definitions and Abbreviations**

	Absolute	When used in reference to emissions reduction targets means reduction against the total emissions at the relevant point in time, rather than a relative or comparative amount
	ACCU	Australian Carbon Credit Unit. Each ACCU issued represents one tonne of carbon dioxide equivalent (tCO2e)
l USe	Barrel (bbl)	The standard unit of measurement for all oil and condensate production: one barrel equals 159 litres or 35 imperial gallons
	Carbon capture and storage (CCS)	Carbon Capture and Storage (CCS) is a process in which carbon dioxide (CO2) from industrial and energy-related sources is separated (captured), conditioned, compressed, transported and injected into a geological formation that provides safe and permanent storage deep underground
	Community investment	Includes agreements with social outcomes, sponsorships, grants and donations
or persona	Critical fuels	Oil and natural gas, being hydrocarbon fuels that supply 80 per cent of the world's primary energy supply1. Hydrocarbon fuels are critical to meet current and forecast energy demand and to the manufacturing of everyday products
	Decarbonise	To decarbonise is the process of avoiding, reducing or offsetting anthropogenic greenhouse gas emissions through operational activities or efficiencies, technology deployment and/or use of generated or acquired carbon credit units
	e-methane	Fuels produced by combining hydrogen with carbon dioxide to produce methane. This process is called methanation and it can potentially utilise carbon dioxide from direct air capture, emitters or other sources. E-methane is still under consideration by Santos, including the process and associated emissions. Depending on the net emissions in its production, processing, and use, e-methane has the potential to be a low carbon fuel
	Emissions intensity	The amount of greenhouse gas emissions per unit of specified output, such as production or facility throughput
	Emissions reduction units	An emissions reduction unit represents one tonne of carbon dioxide equivalent (tCO2e) emissions reduction or removal
ш	Gas	Natural gas
	Liquid hydrocarbon (liquids)	A sales product in liquid form for example, condensate and LPG
	Low carbon fuels	Fuels that Santos may seek to develop with materially lower net greenhouse gas emissions in their production, processing and use (including through reduction and / or equivalent emissions reduction units) compared to traditional fossil fuels. This term may encompass a range of fuels such as hydrogen, ammonia or e-methane
	Lower carbon energy	Energy sources that have lower net greenhouse gas emissions in their production, processing and use (including through reduction and / or equivalent emissions reduction units) compared to traditional fossil fuels. This includes lower carbon domestic gas, LNG and hydrocarbon liquids, and may also include low carbon fuels as they are developed by Santos

Net Zero	In relation to greenhouse gas emissions, is achieved when anthropogenic emissions of greenhouse gases are balanced by anthropogenic removal of greenhouse gases through means such as operational activities or efficiencies technology (e.g, CCS), offset through the use of carbon credit units, or other means	
Net-zero Scope 1 and 2 emissions / Net-zero emissions	Santos' equity share of net-zero Scope 1 and 2 greenhouse gas emissions	
Oil	A mixture of liquid hydrocarbons of different molecular weights	
Reserves	Those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must satisfy four criteria: they must be discovered, recoverable, commercial, and remaining (as of a given date) based on the development project(s) applied.	
Target	An outcome sought that Santos has identified a pathway, or pathways, toward delivery, subject to conditions and assumptions	
CO2	Carbon dioxide	
CO2e	Carbon dioxide equivalent, being a measure of greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide with the equivalent global warming potential as carbon dioxide when measured over a specific time	
FEED	Front-end engineering and design	
FID	Final investment decision	
IEA	International Energy Agency	
LNG	Liquified natural gas, being natural gas that has been liquified by refrigeration or pressure to store or transport it	
boe	barrels of oil equivalent	
mmbbl	million barrels	
mmboe	million barrels of oil equivalent	
mmBtu	million British thermal units	
MtCO2e	million tonnes of carbon dioxide equivalent	
Mtpa	million tonnes per annum	



# Our decarbonisation plan

Santos is committed to achieving Scope 1 and 2 net zero emissions by 2040 via our Climate Transition Action Plan



### **Our Climate Transition Action Plan**

### **Operational Efficiencies**

Broad range of initiatives designed to reduce Scope 1 and 2 emissions from our operations

### CCS

Step-change technology that will reduce emissions and pave the way for new revenue streams from future clean fuels and carbon solutions

### **Carbon Solutions**

Opportunities to reduce carbon emissions and generate offsets for Santos and customers

### **Low Carbon Fuels Hubs**

Leverage CCS hubs as a platform for low carbon fuels such as hydrogen (will be demand led)

### **Supply Chain Collaboration**

Working with customers to cultivate demand for lower-carbon fuels



# Respectful partnerships

# Proactively building enduring relationships delivering mutually beneficial outcomes

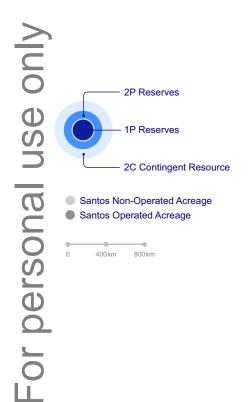
>				
For personal use onl	o constitue	Partnerships that deliver mutually beneficial outcomes	> Engaged ~400 Cultural Heritage Officers <sup>1</sup> > Completed ~1,800 Cultural Heritage Assessments <sup>2</sup>	
		Respectful relationships and respect for culture	> Indigenous Advisory Panel and Yarning Circle Forums > ~3,650 Santos employees have completed Cultural Awareness E-Learning since 2021 <sup>3</sup>	
		Community investment and participation	<ul> <li>Increasing procurement with Indigenous groups globally, ~\$155m spend on First Nations and landowner procurement in 2023<sup>4</sup></li> <li>New Community Investment Framework</li> </ul>	
		Employment and career pathways	<ul><li>~25% of our apprentices and trainees in Australia are Indigenous</li><li>~90% of our PNG workforce are PNG citizens</li></ul>	
	A positive legacy across our global footprint			

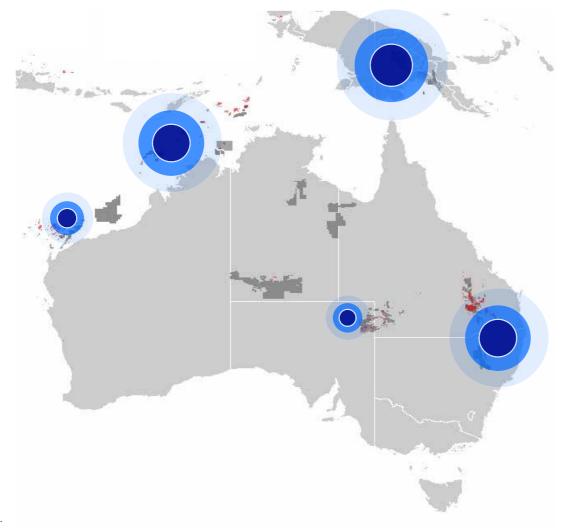
- 1. Based on a 5-year period, as at July 2023.
- $2. \ \ Cultural\ Heritage\ Assessments\ completed\ in\ Australia\ only,\ over\ a\ five\ year\ period\ to\ September\ 2023.$
- As at 31 October 2023
- 4. Indigenous spend on First Nations and landowner procurement as at August 2023.



# **Global Reserves and Resources**<sup>1</sup>

Significant reserves and resources position, providing optionality and diversification







Santos share	mmboe
1P Reserves	1,028
2P Reserves	1,745
2C Contingent Reserves	3,280

# Santos