Santos' Port Bonython, South Australia oil and gas processing plant powered by solar array
Source: Company Reports

Tribeca
Global Natural Resources

Santos (ASX:STO)

A Mis-priced and Undervalued Decarbonisation Story

Tribeca Global Natural Resources
Investor Update

March 2022

Signatory of:
PRI Principles for Responsible Investment

Climate Active Carbon Neutral ORGANISATION

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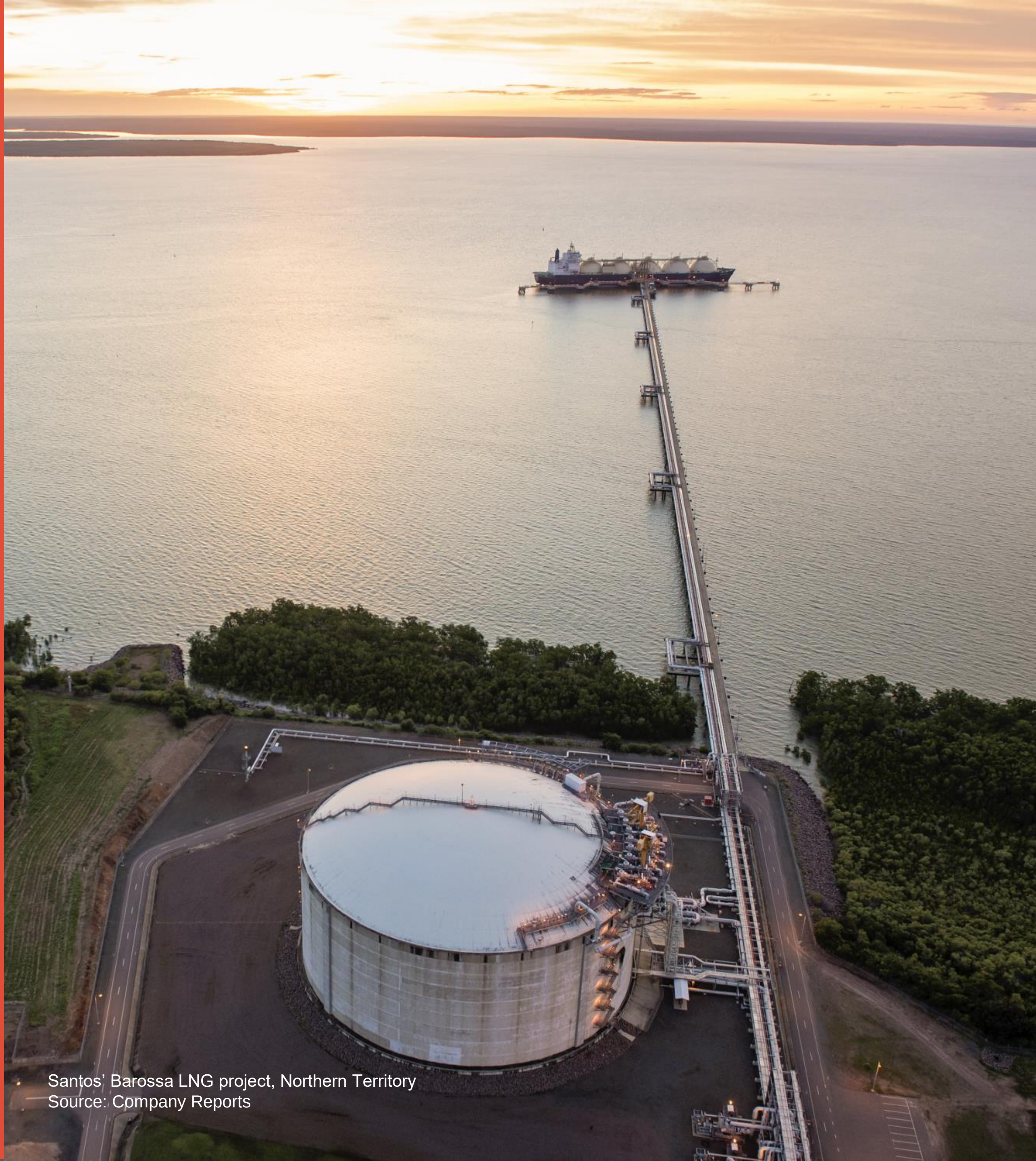


Santos' Barossa LNG project, Northern Territory
Source: Company Reports

Summary

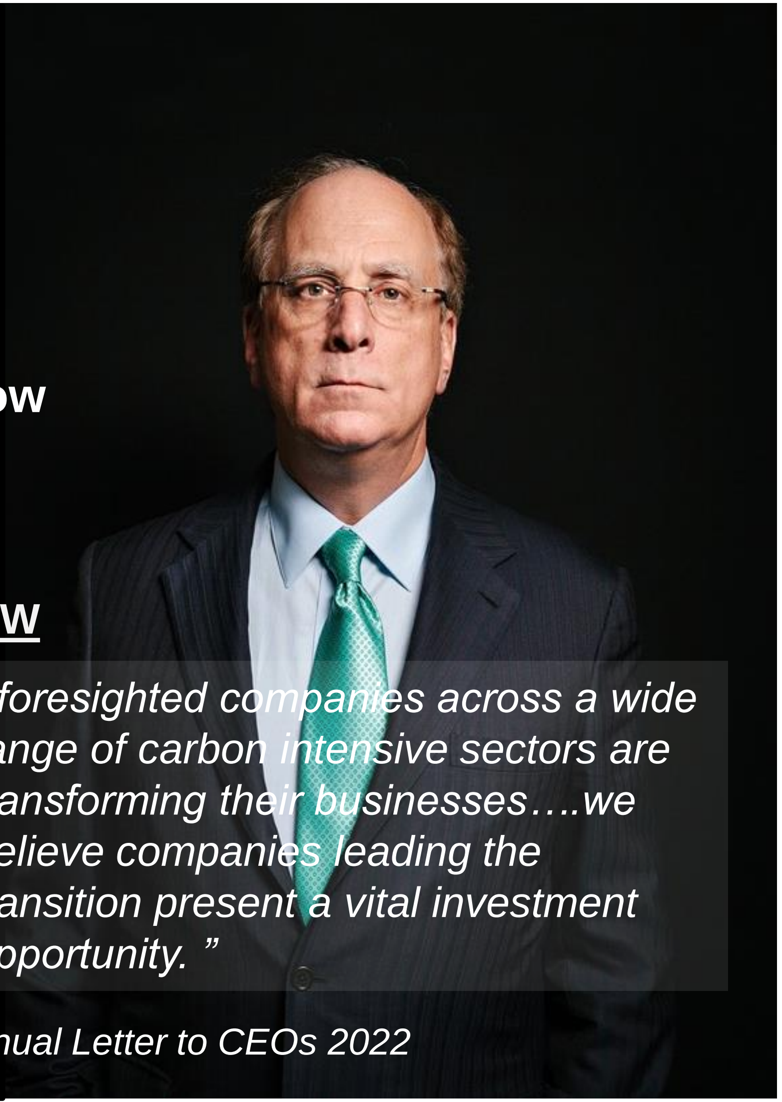
Credible, visible decarbonisation strategy	Santos is a mispriced and undervalued decarbonisation story. Our valuation of $18/share represents almost ~250% upside to current share price.
Carbon negative by 2030	Santos will be materially net negative carbon emissions by 2030[1]. By comparison, global peers have announced reductions of only 30% on average.
~50% upside on base business valuation	Base oil and LNG business valuation alone already offers ~50% upside.
~100% upside based on decarbonisation strategy	International peers that have similar decarbonisation strategies suggest ~100% upside based on similar multiples.
Capital management ~100% of market cap	Scope for capital returns to shareholders of ~100% of current market cap over the next decade.

1. Scope 1+2 emissions. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling.

ESG 2.0 – From Divestment to Transition-Focused

BlackRock.

The $10 trillion world's largest asset manager has changed its tune on how it implements ESG policy.



THEN

"move to divest thermal coal assets and put all fossil fuels under the microscope....
sustainability should be our new standard for investing."

World Economic Forum, Davos 2020

NOW

" foresighted companies across a wide range of carbon intensive sectors are transforming their businesses….we believe companies leading the transition present a vital investment opportunity. "

Annual Letter to CEOs 2022

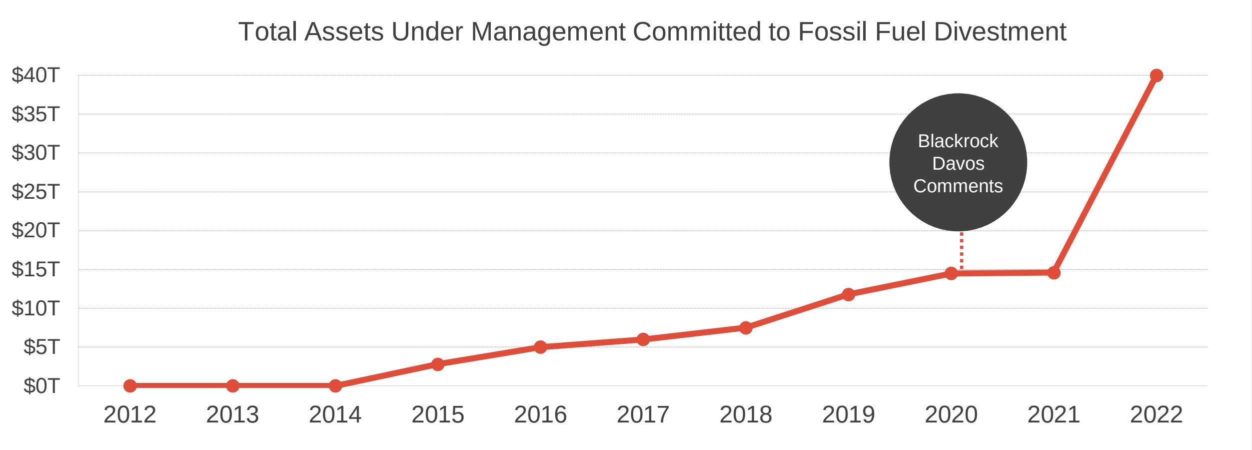
Santos

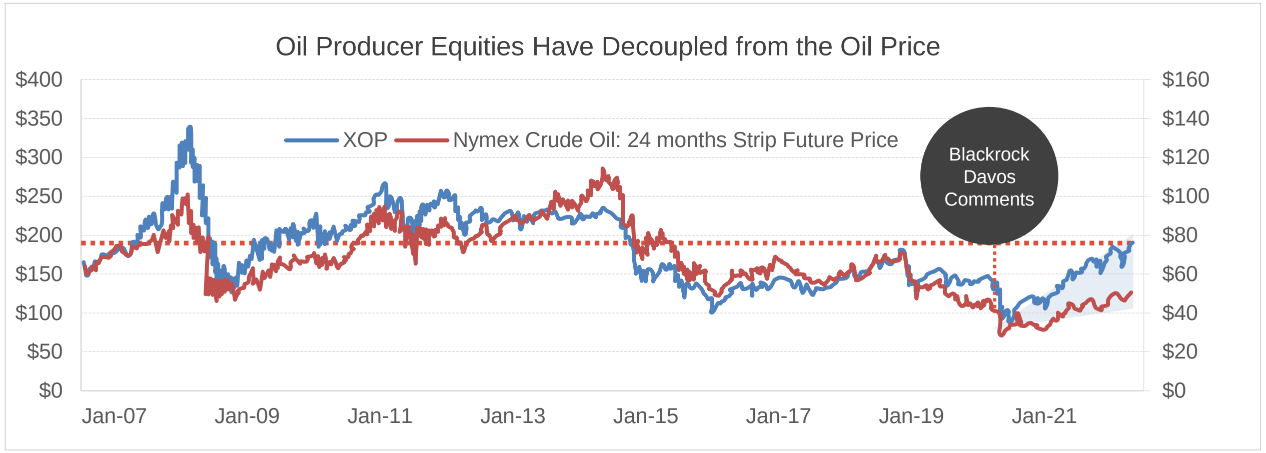
Do you think Larry Fink is referring to a company like Santos?

Moving from ‘de-rating’ to ‘re-rating’

Investors who followed BlackRock to divest from the sector will now follow them back in

- BlackRock’s policy announcement at Davos led to other high profile asset managers committing to fossil fuel divestment.
- By the end of 2021, US$39.2 trillion of assets under management committed to some form of fossil fuel divestment, up from <US$10 trillion in 2018[1].
- Over the past two years, oil & gas producers have materially de-rated versus the underlying commodities.
- As large pools of capital become more transition focused, we would expect a flow of funds back into the sector and a reversal of this dislocation.

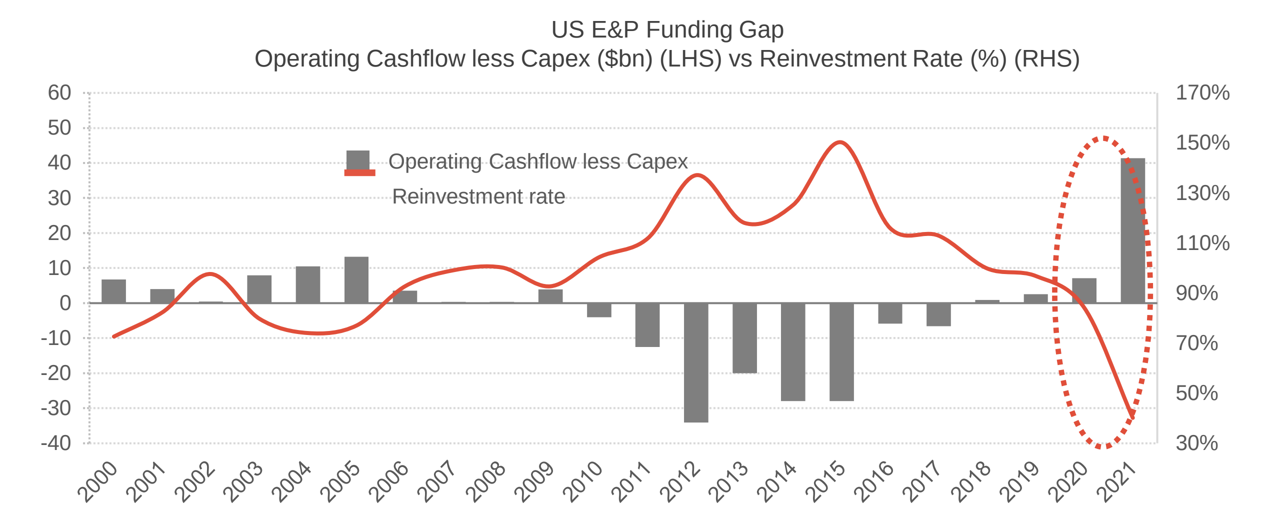


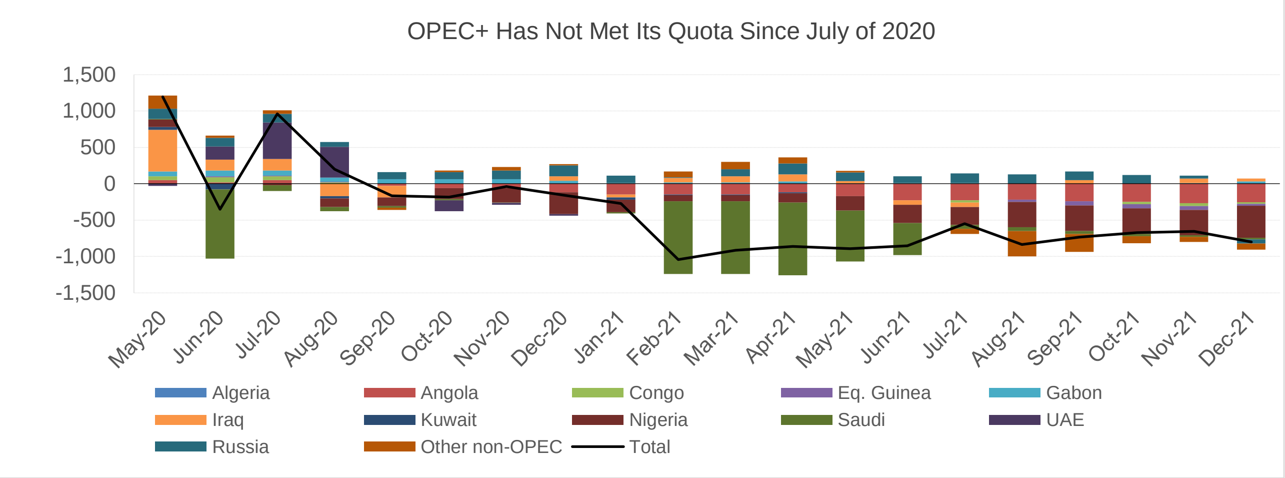


1. Source: Global Divestment Commitments Database
2. Source: Bloomberg

Oil Supply Issues: The Case for $85/bbl Long Term

- U.S. E&P companies, long seen as the marginal producers of oil, have shifted behaviour as a result of ESG 1.0 policies.
- These divestment policies have driven a higher cost of capital, resulting in companies underinvesting in capex. Despite increasing free cash flow, big oil companies remain focused on capital returns (see top chart).
- U.S. E&P share prices have rallied as a result, making management teams reluctant to shift behavior. Despite higher oil prices, there has been a limited supply response.
- Concurrently, OPEC has consistently failed to meet higher quotas, indicating an inability to respond meaningfully to higher oil prices. Higher oil prices in excess of $85/bbl are expected over the long term.

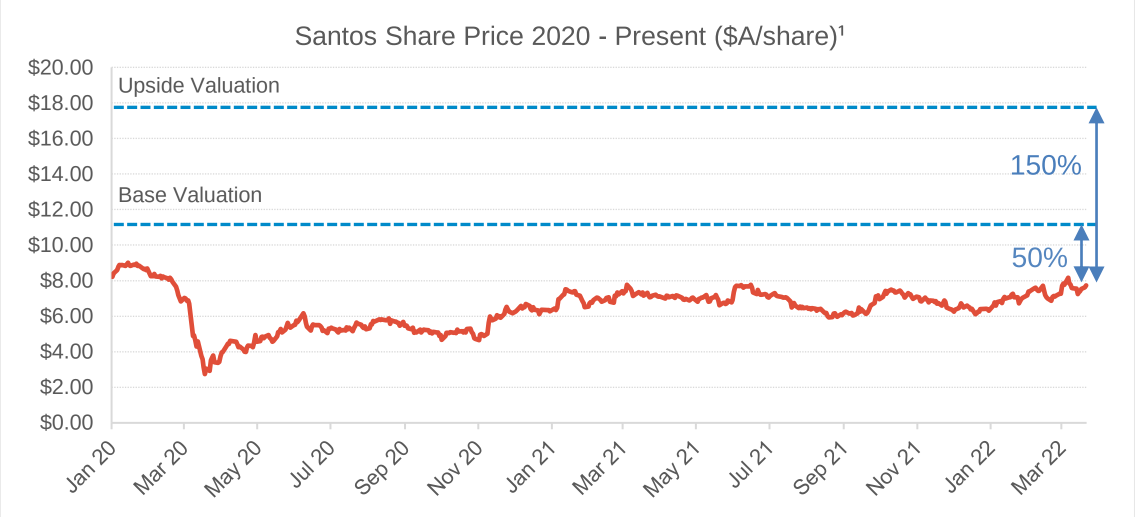


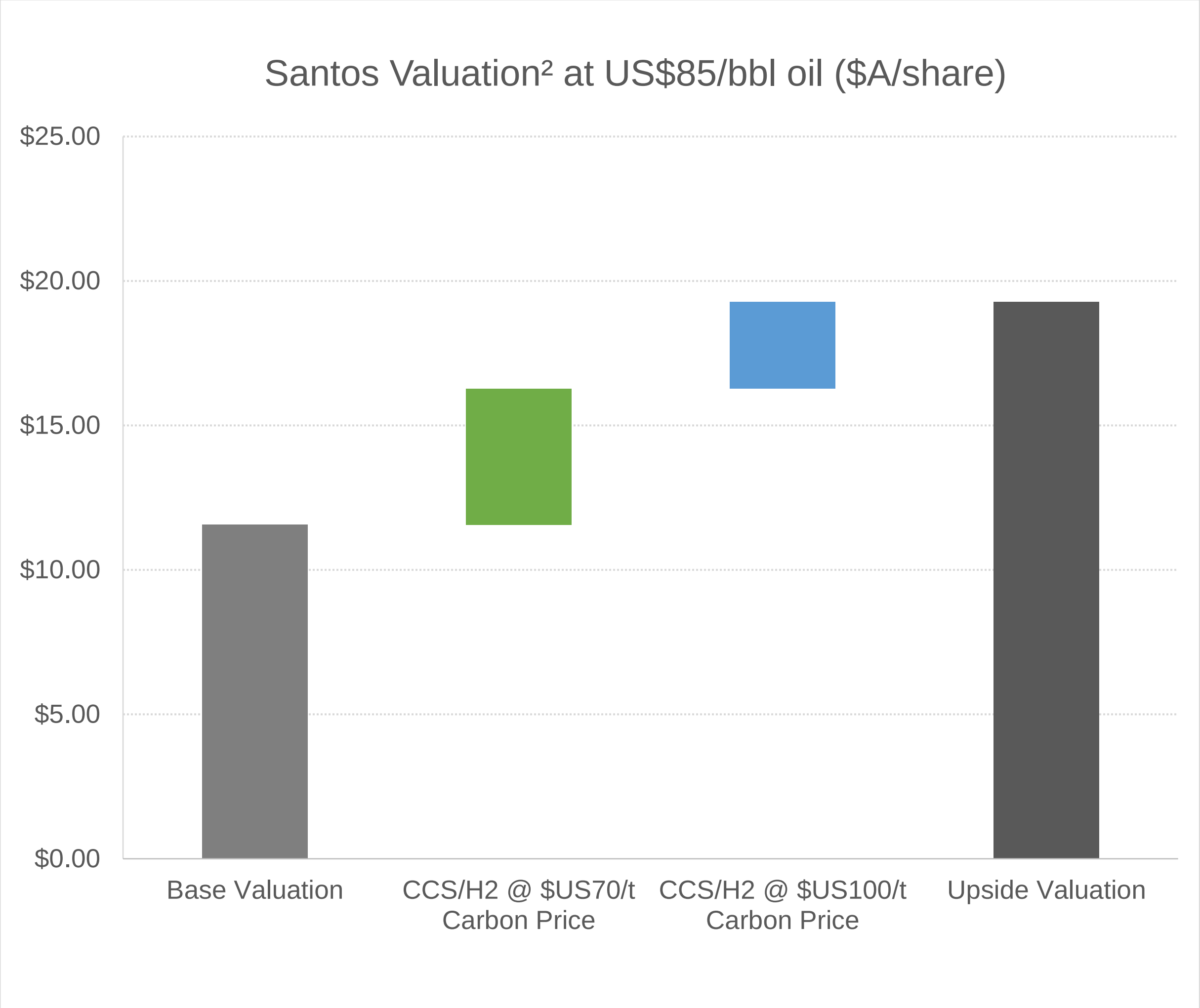


Source: BofA Research

Santos: Valuation Building Blocks to A$18.00/share or ~150% higher

- Santos has been a victim of relentless selling by domestic and offshore institutions implementing ESG 1.0 policies.
- The result is a base business worth $11.50, or ~50% more than the current equity value assuming US$85/bbl oil price.
- The company's decarbonisation strategy adds a further $7.50/share.
- On a base + decarbonisation basis, our valuation is A$18/share or ~150% higher than the current equity value.

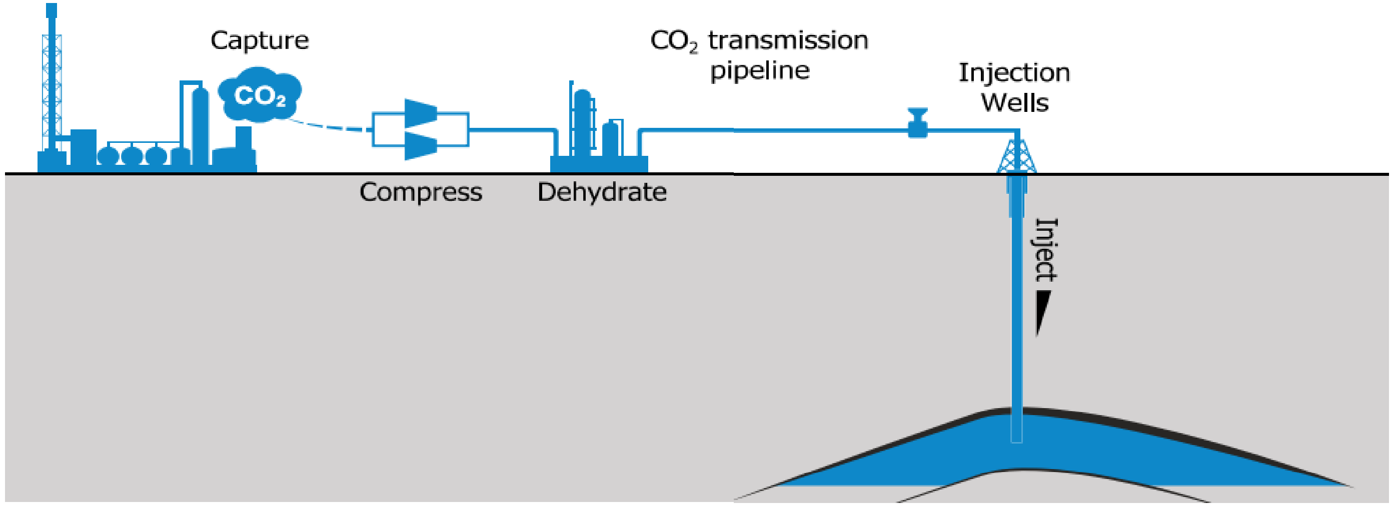




1. Source: Bloomberg
2. Source: Tribeca Investment Research

Santos to be Carbon Negative by 2030

Carbon Capture and Storage (CCS)



+

Blue Hydrogen (H2)

=

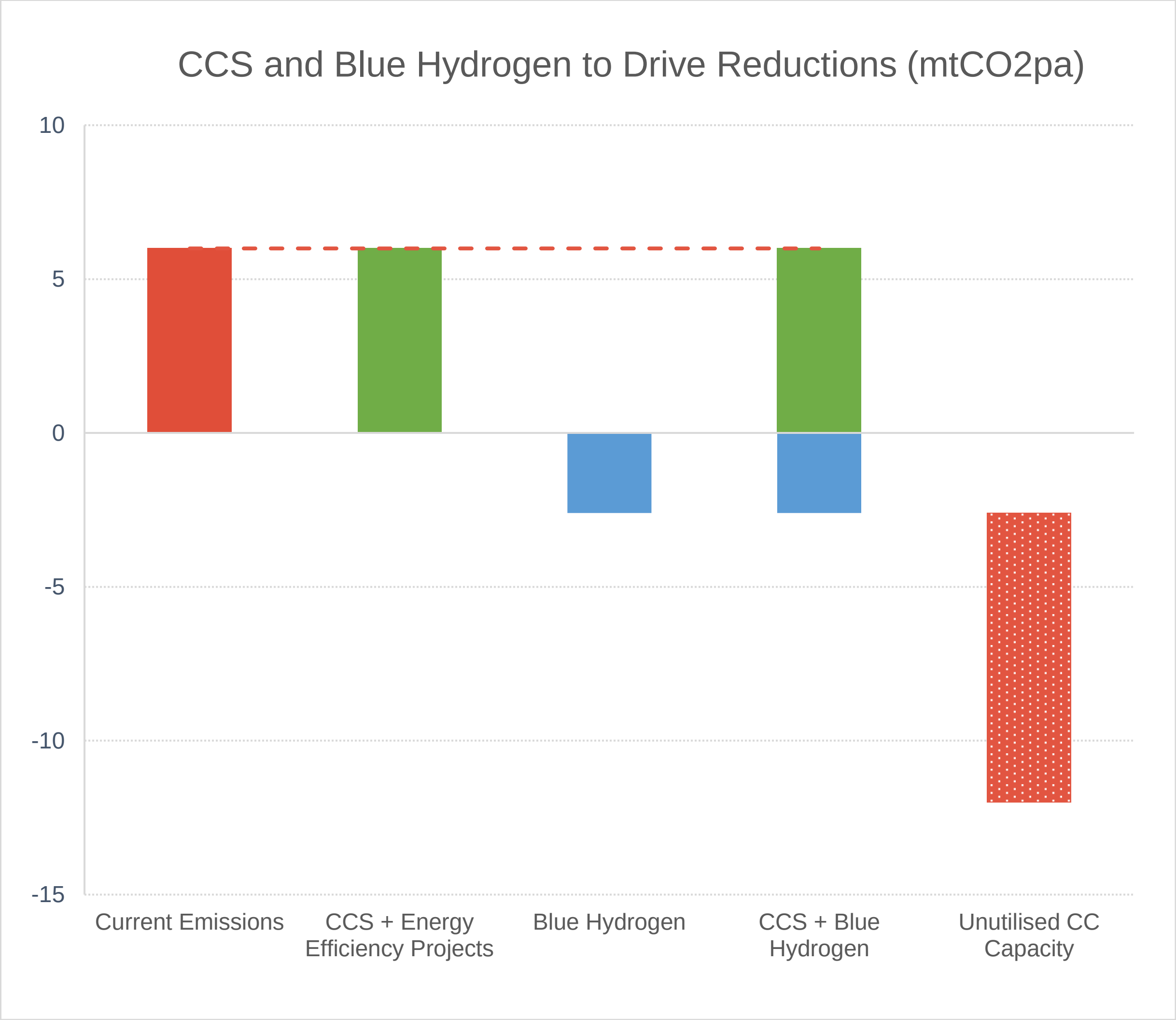
Santos

2030

Net Negative Carbon Emissions

The Building Blocks to Net Negative Emissions

- Santos' current Scope 1+2 emissions are ~6mt CO_2 p.a.
- Carbon capture and storage projects (onshore and offshore) will offset ~5.5mt CO_2 p.a.
- Santos is pursuing a further ~0.6mt CO_2 p.a. of direct emissions reduction on its existing asset base by 2025.
- Blue Hydrogen project expected to provide ~2.5mt CO_2 p.a. of further reductions.
- Still leaves net >10mt CO_2 p.a. of unutilised infrastructure capacity for other sources of CO_2.



Santos: a Compelling Decarbonisation Story

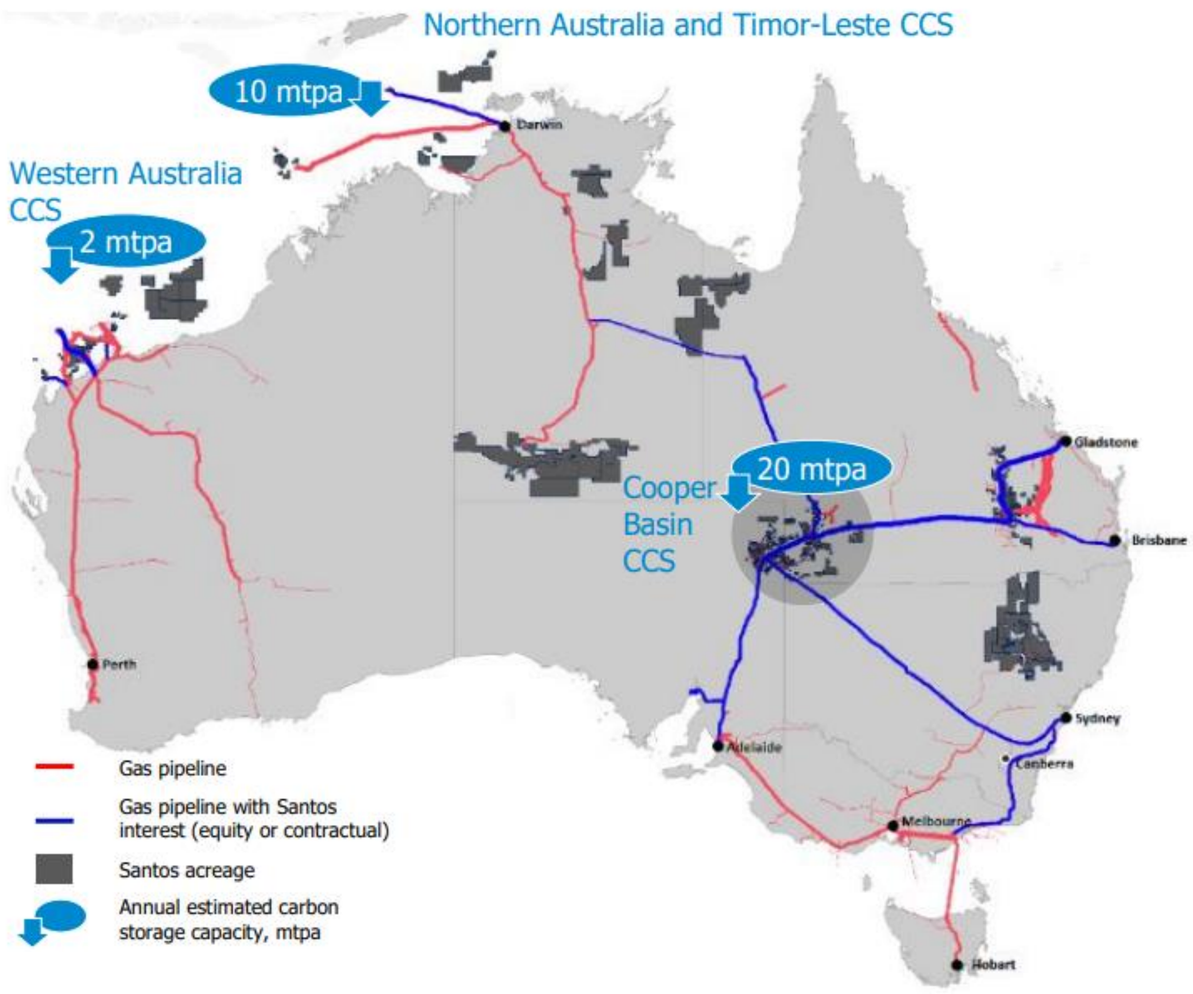
Achievable Outcomes vs Laudable Promises

CCS technology is expected to be ~20% of 2050 decarbonisation targets globally

- Alan Finkel, former Chief Scientist of Australia, stated that CCS “has to work” for the world to reach net zero.
- The International Energy Agency Net Zero 2050 Roadmap assumes 20% of all emissions reductions by 2050 will be from CCS. This will require a ~200x increase from current project capacity.
- CCS suffers a relatively poor reputation in Australia due to the failure of some high-profile projects to meet targeted capacity.
- These failures were largely due to the technical, environmental and geological complexities faced by those projects.
- Santos on the other hand, will reinject gas into depleted reservoirs – a proven approach which represents an entirely different technical risk profile.

Santos: Leveraging Existing Infrastructure

- What sets Santos' strategy apart from its peers is the use of their significant existing infrastructure to become a world leading decarbonisation company.
- Santos' ownership and operatorship of their infrastructure is a major risk-mitigating factor versus other carbon capture projects.
- Santos have guided to potential carbon capture and storage of >5.5 million tonnes per annum by 2027 from their onshore Moomba project and offshore Bayu-Undan project.
- Blue Hydrogen in the Cooper Basin could take emissions to net negative >2.5mt CO2 p.a. by 2030.
- An additional net >10mt CO2 p.a. of unutilised infrastructure capacity for other sources of CO2.



Source: Company Reports. Santos' interest in Cooper Basin CCS projects is 66% and offshore projects 44%.

~100% of Current Share Price Upside Potential From Decarbonisation

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Santos potentially has >A$7.50/share upside from execution of its decarbonisation strategy

- Moomba CCS Phase 1 and Bayu-Undan CCS alone add A$1.65/share under BP's US$100/t carbon price assumption.[1]
- Cost of capital is key with access to green financing set to materially reduce WACC – using 6% WACC vs 8% WACC for fully de-risked blue-sky gives A$2.50/share higher value.
- Under a 6% WACC, at US$100/t, A$4.54/sh of valuation upside would exist from using Moomba CCS' residual capacity (total capacity is 20mtCO2 pa) above Phase 1 and a 365ktpa Blue Hydrogen project. Challenge is to get more carbon to Moomba, but Santos investing in exciting direct air capture technology, along with possibility of bringing more industry to the Cooper Basin as CCS proves itself as the price of carbon drives it

Santos CCS/Hydrogen asset valuations at 6% WACC (A$/sh)

Carbon price assumption	Moomba CCS Phase 1	Bayu-Undan CCS	Moomba CCS from Blue Hydrogen	Blue Hydrogen	Moomba CCS upside on residual capacity	Total valuation
US$40/t	0.15	0.06	0.27	0.29	1.38	2.15
US$50/t	0.22	0.23	0.36	0.29	1.91	3.01
US$60/t	0.28	0.41	0.44	0.29	2.44	3.86
US$70/t	0.35	0.58	0.52	0.29	2.96	4.70
US$80/t	0.41	0.76	0.61	0.29	3.49	5.55
US$90/t	0.47	0.93	0.69	0.29	4.02	6.41
US$100/t	0.54	1.11	0.77	0.29	4.54	7.25

Santos CCS/Hydrogen asset valuations at 8% WACC (A$/sh)

Carbon price assumption	Moomba CCS Phase 1	Bayu-Undan CCS	Moomba CCS from Blue Hydrogen	Blue Hydrogen	Moomba CCS upside on residual capacity	Total valuation
US$40/t	0.10	-0.01	0.18	0.10	0.91	1.29
US$50/t	0.15	0.11	0.24	0.10	1.26	1.85
US$60/t	0.19	0.22	0.30	0.10	1.62	2.43
US$70/t	0.24	0.34	0.35	0.10	1.98	3.01
US$80/t	0.28	0.46	0.41	0.10	2.34	3.59
US$90/t	0.33	0.57	0.47	0.10	2.70	4.17
US$100/t	0.37	0.69	0.52	0.10	3.05	4.74

1. On 15th June 2020 BP changed their long run price assumption for carbon to US$100/tCO2 (real 2020) from 2030

'Foresighted' Companies are Leading the Transition

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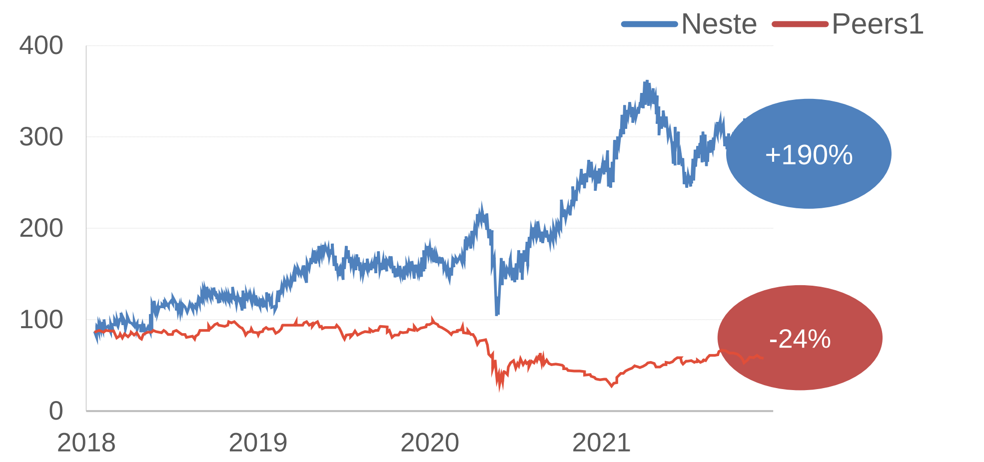
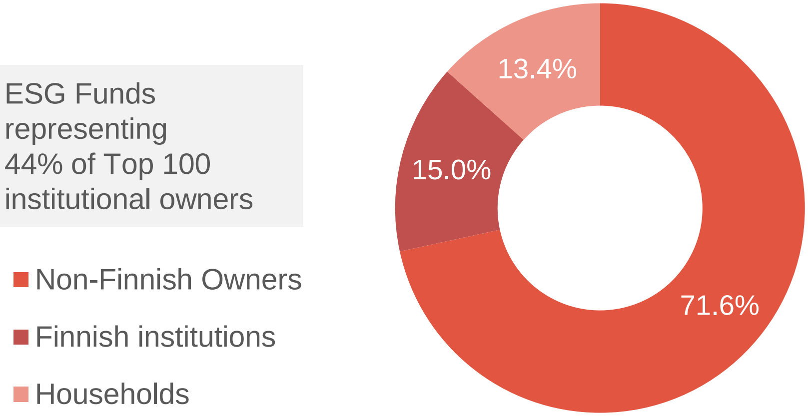
- Perhaps best example of traditional hydrocarbon stock achieving re-rating from transition to renewables is Neste.
- From being loss making in 2012/13, Renewables now accounts for ~80% of operating profit.
- Stock outperformed peers by >200% from 2018-late 2021, with ~44% institutional ownership is ESG funds.
- Trades on a 50-80% EV/EBITDA premium to 'Old Energy' downstream peers.



Distribution of free-float on 31 August 2021
Excluding State of Finland and Climate Fund with 44.2% of Neste shares

ESG Funds representing 44% of Top 100 institutional owners



Source: Neste

Santos Already Lagging Global Peers Due to Lack of Capital Management

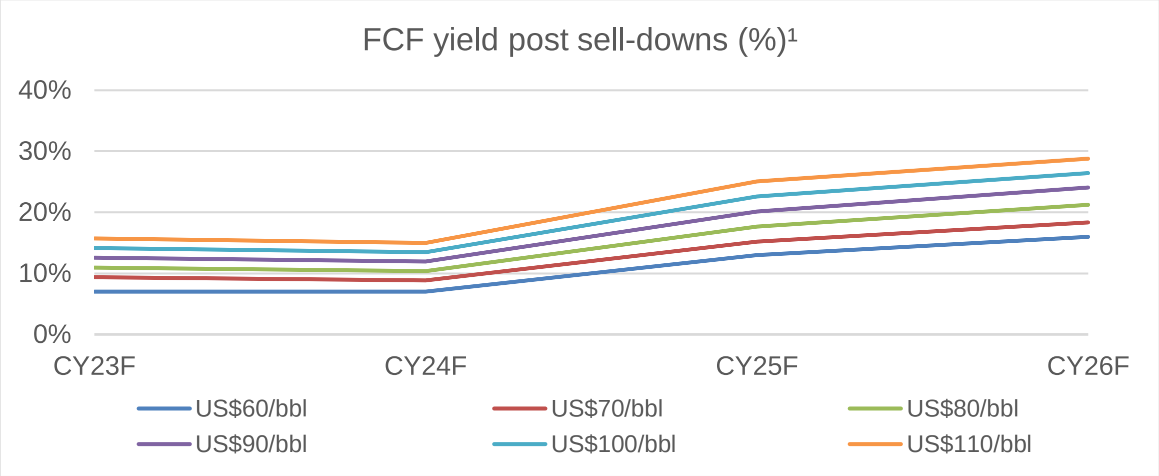
- Santos share price is flat in US$ terms over the past 12 months despite oil being up ~US$50/bbl, spot LNG rising >US$25/mmbtu and having bought Oil Search for no premium to fair value.
- Santos has underperformed US peers by 100%+ since the start of 2021.
- Lack of capital management appears largest reason, with the likes of Conoco having returned >10% of their starting market cap since the beginning of 2021.
- Extremely strong correlation between excess capital returns and share price performance.
- Post asset sales (PNG LNG, Dorado and Alaska), Santos could be net cash and still generating >US$2bn pa of FCF to fund buybacks.

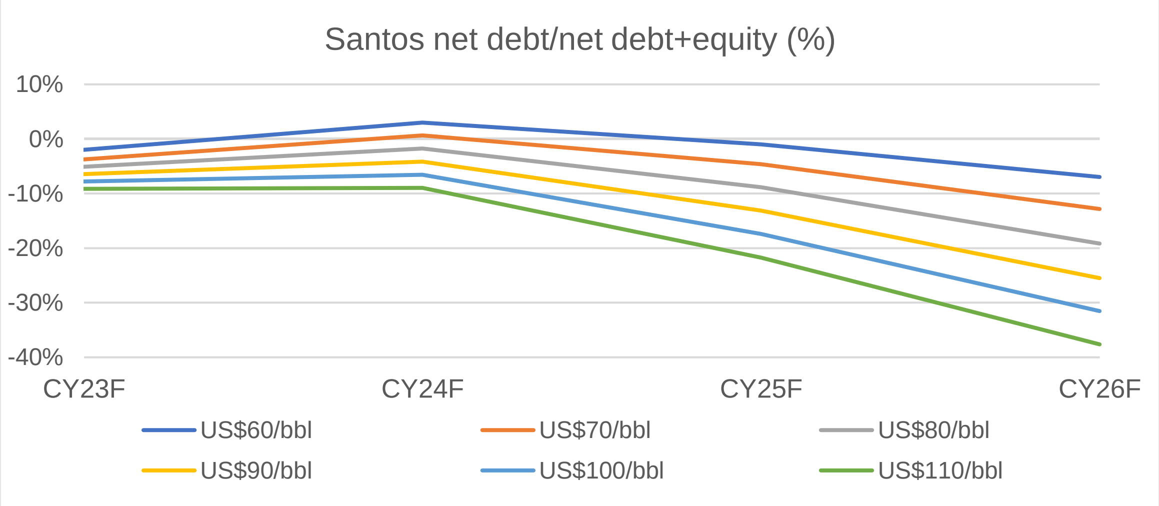
	Exxon	Chevron	Conoco	BP	Shell	Santos	Woodside
Start 2021 market cap (US$bn)	174.3	162.6	42.7	70.7	136.6	10.1	16.9
consensus 2022 dividend yield	4.40%	4.20%	2.40%	4.20%	3.80%	3.30%	7.60%
2021 announced returns in excess of dividends (US$bn)	10	5	4.5	1.4	7	0	0
excess returns as % of start 2021 market cap	6%	3%	11%	2%	5%	0%	0%
share price performance since 1st Jan 2021 (US$)	106%	102%	146%	35%	45%	15%	33%
gearing - 31st December 2021	21%	16%	25%	30%	23%	25%	22%*

Sell-downs[1] Would See Santos Go Net Cash

~US$9bn of balance sheet headroom through CY25 for capital management at US$100/bbl

- Gearing already below target at <25% today, with US$1.5bn pa of FCF being generated post-growth capex at US$85/bbl oil in 2022.
- Sell-downs, particularly in PNG, transform the balance sheet. Selling 12.5% of PNG LNG would see Santos net cash by end-2022.
- Post sell-downs, all growth projects can be funded out of FCF at ~US$60/bbl in CY23-24.
- In a US$100/bbl world Santos would have ~US$9bn of headroom to bring gearing back to the 25% target in CY25.
- This would allow the company to buy back >50% of its current market cap in the coming 4 years.
- Headroom would still be >US$4bn to CY25 at US$60/bbl oil given starting point of net cash post sell-downs.





1. Sell-downs assume 12.5% of PNG LNG sold at consensus valuation, 36% of Alaska sold at 50% discount to Oil Search book value and 30% of Dorado sold at consensus NPV

Huge Upside From Re-rating to Peer Group

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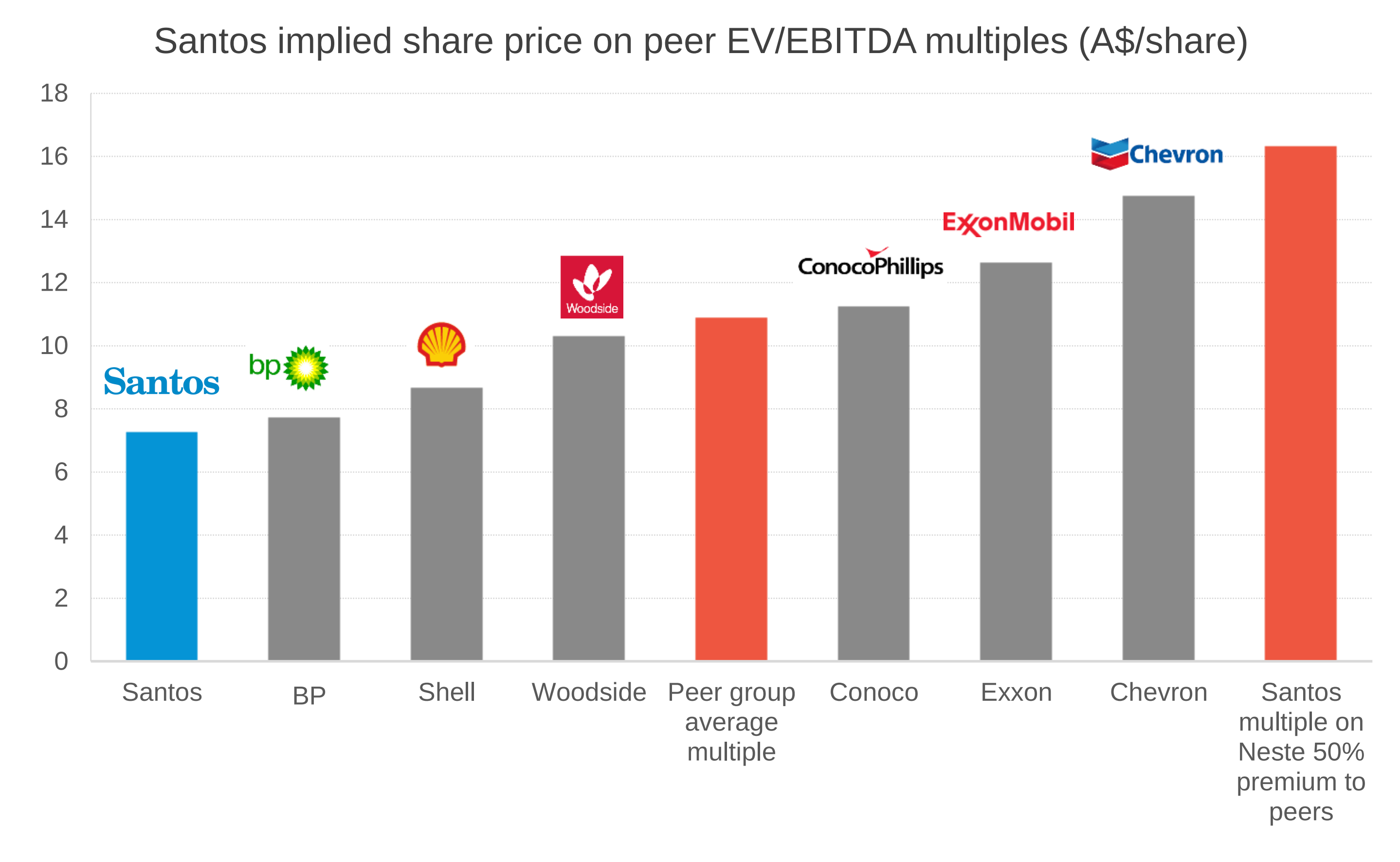
More still to commanding a justified premium for stronger ESG credentials

- Santos trading at 50% EV/EBITDA discount to global peer group.
- Entirely unjustified given higher than peer production/FCF growth profile.
- Only peer with sanctioned new energy project of scale.
- Multiple CCS/H2 projects far more advanced than peer group.
- Prospect of Neste-style re-rating from ESG attractions/ownership.
- On a 50% EV/EBITDA multiple premium to peers (Neste), Santos would be trading at A$16.30/share.



Source: Tribeca Investment Partners

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Appendix

Moomba CCS Pioneering The Way

- Phase 1 of Moomba CCS, a 1.7mt CO_2 p.a. US$165m capex project (Santos net ~66%), took FID in late 2021.
- Technical risks extremely low at Moomba CCS with gas having been reinjected safely into the depleted reservoirs for many decades.
- Project breakeven on an NPV10 at a US$24/mt$CO_2$ carbon price.
- Capacity of 20mt CO_2 p.a. for 50 years leaves huge upside to expand further.
- A 365ktpa Blue Hydrogen project would provide a further >2mt CO_2 p.a. to store.
- Huge upside in residual capacity of ~16mt CO_2 p.a. (net ~10.5mt CO_2 p.a. to Santos) – transportation costs currently the impediment, but strong potential from direct air capture technology (which Santos is investing in alongside CSIRO) and bringing other carbon intensive industries to the Cooper Basin.
- Even with a US$60/t carbon price, at 6% WACC this residual capacity could be worth ~A$2/share to Santos.

Moomba CCS Phase 1 Valuation sensitivity to carbon price and WACC (A$/sh)

Carbon price assumption	WACC 5%	6%	7%	8%	9%	10%
US$40/t	0.19	0.15	0.12	0.10	0.08	0.07
US$50/t	0.27	0.22	0.18	0.15	0.12	0.10
US$60/t	0.35	0.28	0.23	0.19	0.16	0.14
US$70/t	0.43	0.35	0.29	0.24	0.20	0.17
US$80/t	0.51	0.41	0.34	0.28	0.24	0.21
US$90/t	0.58	0.47	0.39	0.33	0.28	0.24
US$100/t	0.66	0.54	0.45	0.37	0.32	0.27

Moomba CCS Blue Hydrogen Valuation sensitivity to carbon price and WACC (A$/sh)

Carbon price assumption	WACC 5%	6%	7%	8%	9%	10%
US$40/t	0.34	0.27	0.22	0.18	0.15	0.13
US$50/t	0.45	0.36	0.29	0.24	0.20	0.17
US$60/t	0.55	0.44	0.36	0.30	0.25	0.21
US$70/t	0.65	0.52	0.43	0.35	0.29	0.25
US$80/t	0.76	0.61	0.50	0.41	0.34	0.29
US$90/t	0.86	0.69	0.56	0.47	0.39	0.33
US$100/t	0.96	0.77	0.63	0.52	0.44	0.37

Moomba CCS residual capacity Valuation sensitivity to carbon price and WACC (A$/sh)

Carbon price assumption	WACC 5%	6%	7%	8%	9%	10%
US$40/t	1.74	1.38	1.11	0.91	0.75	0.62
US$50/t	2.40	1.91	1.54	1.26	1.05	0.88
US$60/t	3.05	2.44	1.97	1.62	1.35	1.13
US$70/t	4.10	2.96	2.41	1.98	1.65	1.39
US$80/t	4.75	3.49	2.84	2.34	1.95	1.64
US$90/t	5.01	4.02	3.27	2.70	2.25	1.90
US$100/t	5.67	4.54	3.70	3.05	2.55	2.16

Source: Tribeca Investment Partners

Bayu-Undan CCS – a Near-term Game Changer

- Bayu-Undan CCS has capacity of 10mt CO_2 p.a. (Santos net 4.34mt CO_2 p.a.), which would make it the largest operating CCS project in the world.
- Sits in Timorese waters, greatly increasing probability of opening it up to international carbon markets.
- Will process ~2mt CO_2 p.a. of Barossa CO_2, with huge scope to handle CO_2 for others in region, e.g. Ichthys brings 4-6mt CO_2 p.a. onshore to Darwin currently.
- Darwin LNG can also receive infrastructure fee for processing CO_2 and sending it to Bayu-Undan.
- Provides further blue-sky potential for Blue Hydrogen from Beetaloo Basin and other sources.
- Breakeven of ~US$45/t CO_2 on NPV10. Cost of capital is key, with asset worth >A$1.10/share on BP's US$100/t carbon price and a 6% WACC.

Bayu-Undan CCS Valuation sensitivity to carbon price and WACC (A$/sh)

Carbon price assumption	WACC 5%	6%	7%	8%	9%	10%
US$40/t	0.11	0.06	0.02	-0.01	-0.03	-0.04
US$50/t	0.33	0.23	0.16	0.11	0.07	0.04
US$60/t	0.55	0.41	0.30	0.22	0.17	0.12
US$70/t	0.77	0.58	0.44	0.34	0.26	0.20
US$80/t	0.99	0.76	0.59	0.46	0.36	0.28
US$90/t	1.21	0.93	0.73	0.57	0.46	0.37
US$100/t	1.43	1.11	0.87	0.69	0.55	0.45

Source: Tribeca Investment Partners

Blue Hydrogen – Quality Gas Resource and CCS Ownership is Key

- High quality gas resource, located near CCS project, makes Cooper Basin ideal for Blue Hydrogen.
- Blue Hydrogen is 50-66.6% cheaper than Green Hydrogen according to IRENA.
- Can capture 90-95% of Scope 1+2 emissions with CCS, producing zero Scope 3 emissions.
- Still unclear how commercial scale hydrogen will be priced. Given cost advantages, if priced more towards marginal cost of Green Hydrogen the economics could be exceptional.
- Provides further revenue opportunities for CCS.
- 365ktpa project in Cooper Basin could be breakeven at ~A$2/kg (NPV10). Requires ~80TJ/d of gas, up front capex of ~US$1.5bn.
- Cost of capital arbitrage through green financing is key – at 6% WACC worth A$0.29/share at A$2/kg. If can get pricing power, worth >A$2/share at the breakeven price of Green Hydrogen (~A$4.25/kg).

Cooper Basin Blue Hydrogen Valuation sensitivity to hydrogen price and WACC (A$/sh)

		WACC					
		5%	**6%**	**7%**	**8%**	**9%**	**10%**
Hydrogen price assumption	A$2/kg	0.44	0.29	0.18	0.10	0.05	0.00
	A$2.50/kg	0.92	0.68	0.50	0.37	0.27	0.19
	A$3/kg	1.41	1.07	0.82	0.63	0.49	0.38
	A$3.50/kg	1.89	1.46	1.14	0.89	0.71	0.56
	A$4/kg	2.37	1.85	1.45	1.16	0.93	0.75
	A$4.50/kg	2.86	2.23	1.77	1.42	1.15	0.94
	A$5/kg	3.34	2.62	2.09	1.68	1.37	1.13

Source: Tribeca Investment Partners

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