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NAB Renewables Survey

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NAB Renewables Survey Introduction

NAB's 2022 Renewables Survey¹ signals a further acceleration of Australia's transition to renewable energy and net zero carbon emissions policies, a trend we expect to see globally into 2030. The survey also highlights that in addition to cost advantages from renewable energy adoption and decarbonisation, there is a growing cohort of Australian enterprises recognising that a sustainability strategy in line with Australia's climate goals is consistent with customer expectations and carries benefits for their brand and reputation.



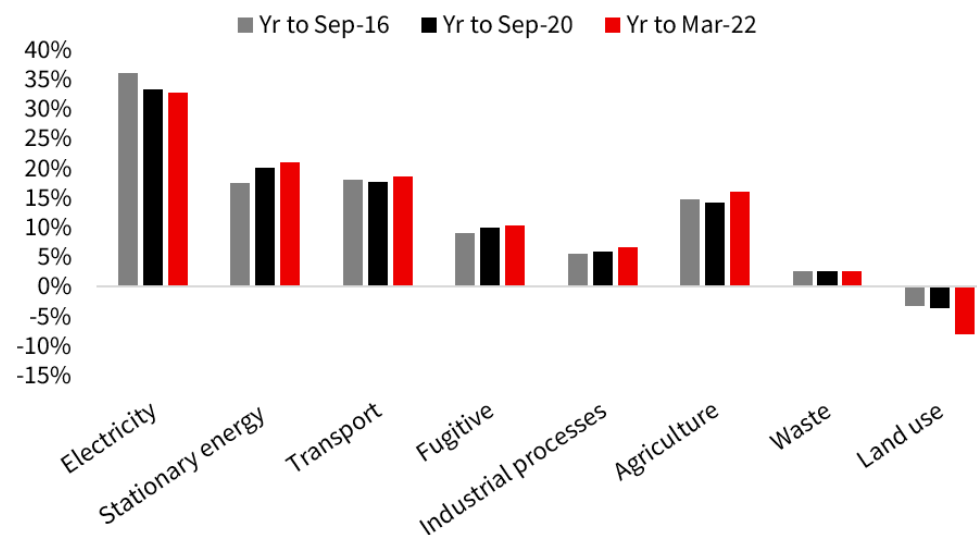
24% of respondents have a policy on renewable energy, up from 18% in 2018.

However, respondents reporting renewable energy usage remains steady at **49%** with only 15% reporting greater than 25% usage.



43% of respondents have in place or plan to develop net zero carbon emissions plans versus 30% in 2021. Only 6.5% have an active policy.

Chart 1: Source of Australia's emissions



Source: Australian National Greenhouse Accounts - Qrtly update on greenhouse gas inventory (March 2022)

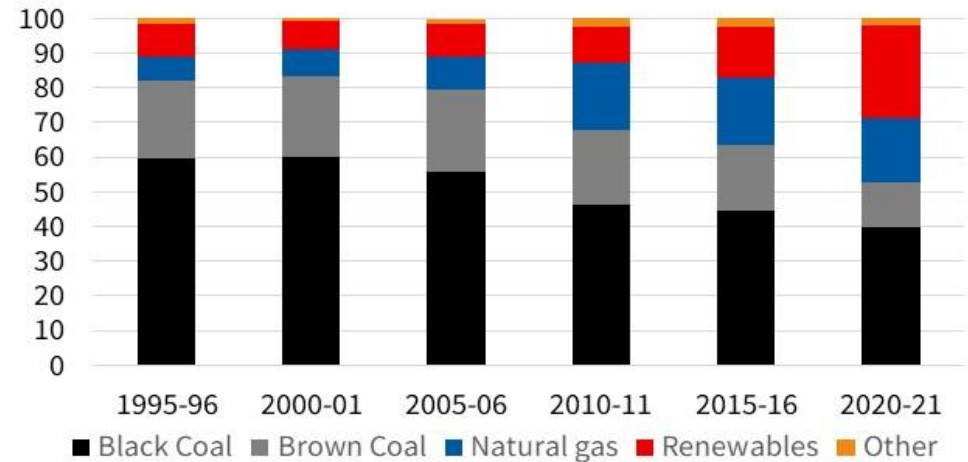
1. The inaugural NAB Renewables survey was conducted in late 2018. In February this year we ran the survey within NAB's regular Quarterly Business Survey. This survey covers 850-900 firms across the non-farm business sector ranging from small (35-99 employees), medium (100-199 employees) to large companies (200 plus employees).

NAB Renewables Survey The role of renewables

- Funding for the green transition continues to increase across the globe with the global energy crisis likely to result in corporates prioritising renewable energy adoption to manage rising costs and elevated volatility of traditional fuels.
- Highlighting the global momentum on climate change this year is the European Union’s Repowering EU policy which was announced in May and the Inflation Reduction Act which was legislated in the United States in August. These policies combined deliver another US\$0.6 trillion in new financing for the green transition.
- Australia has been a key player in the global acceleration of climate change initiatives in 2022. Recently Australia announced it is adding A\$76bn in funding under the Powering Australia policy to support a 43% reduction in emissions by 2030 (against a 2005 baseline).
- The reduction in Australia’s emissions is expected to be driven principally by the continued decarbonisation of the electricity sector, as well as a strengthened safeguard mechanism which was established in 2016 and drives the progressive abatement of emissions from Australia’s largest emitters. These policies, together with the impact of the 2022 global energy crunch, have the potential to see Australia outperform on the latest 2030 climate goals.
- The electricity sector will be a key driver of this outperformance, as high energy prices point to a likely faster than expected closure of black coal generation in Australia.

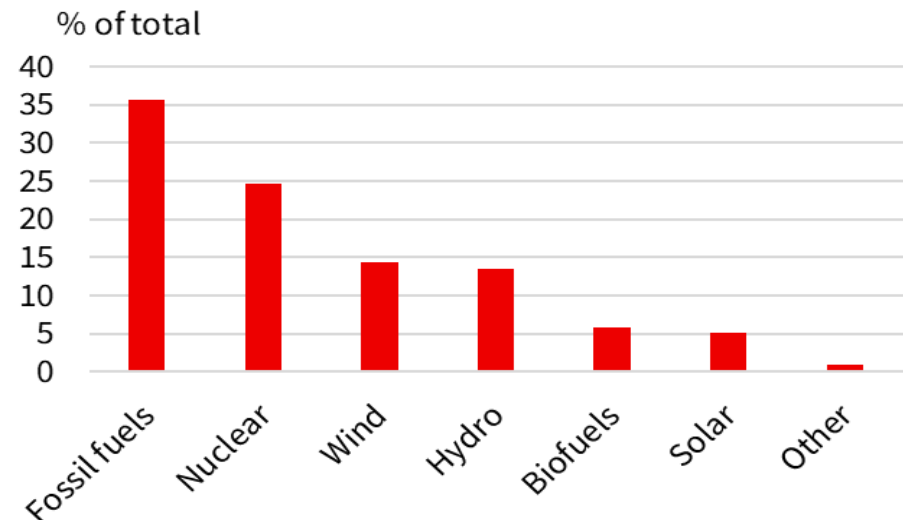
NAB’s 2022 Renewables Survey shows an increase in the number of respondents reporting they have a renewable energy policy, with energy prices a key catalyst for increased renewable energy adoption. We expect the current energy crunch to drive a rapid rise in demand for more renewable energy in Australia, and globally.

Chart 2: Australian electricity generation – fuel mix



source: Department of Climate change, energy the environment and water (2022), Australina Energy Statistics

Chart 3: European production of energy by source in 2020



Source: Eurostat (2020)

Higher energy prices to drive a rapid rise in demand for renewables

1



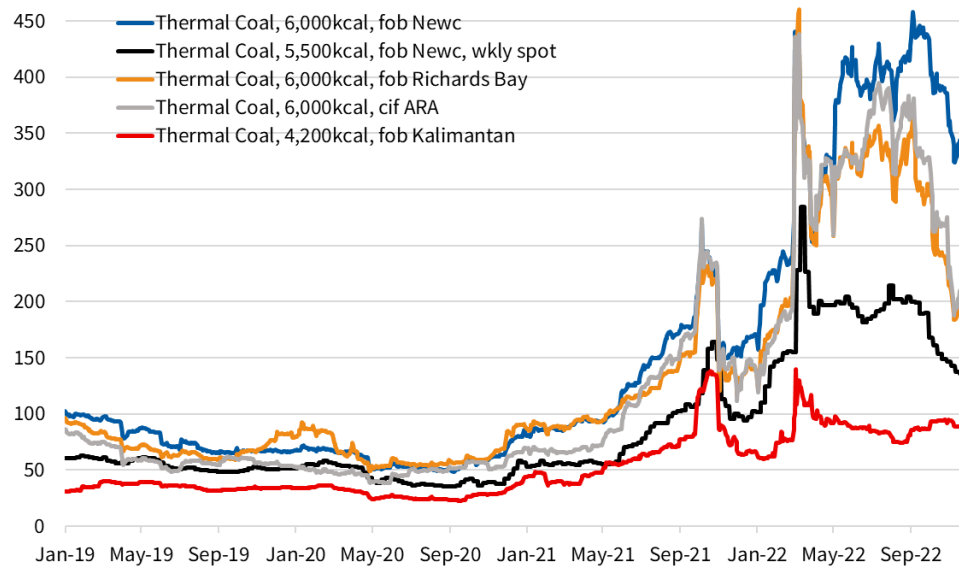
Costs Fossil fuel prices to remain elevated

The rise in coal and gas prices are unlikely to be just a short shock for the market

- While a geopolitical solution to the current sanctions on Russia may normalise energy markets, the likely continued under-investment in traditional carbon intensive fuels (e.g. thermal) as action on climate change accelerates may see prices for these sorts of commodities track above long run averages.
- Further, if a supply response is required to normalise the current high thermal coal and gas prices, then energy markets are likely to remain volatile and elevated until at least 2025/2026.
- The latest Australian Federal Budget highlights a ~56% increase in consumer energy bills in 2023.

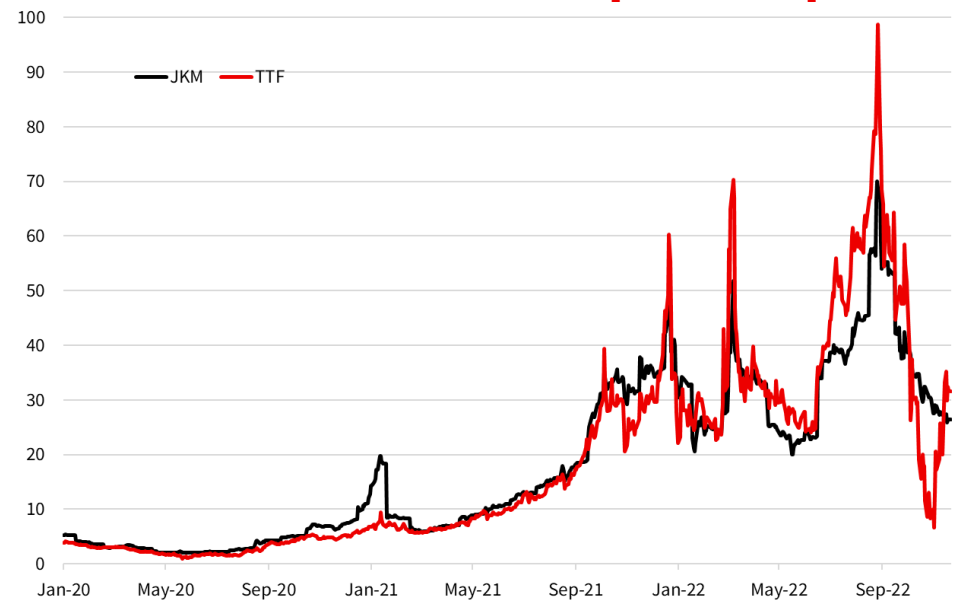
Since the start of 2021, thermal coal and gas prices have increased between 280% and 450% to recent peaks, as highlighted in charts 4 and 5.

Chart 4: Thermal Coal prices, 2019 to 5 Sept 2022 [US\$/t]



Source: Bloomberg, National Australia

Chart 5: JKM vs TTF – 2020 to Current [US\$/Mmbtu]

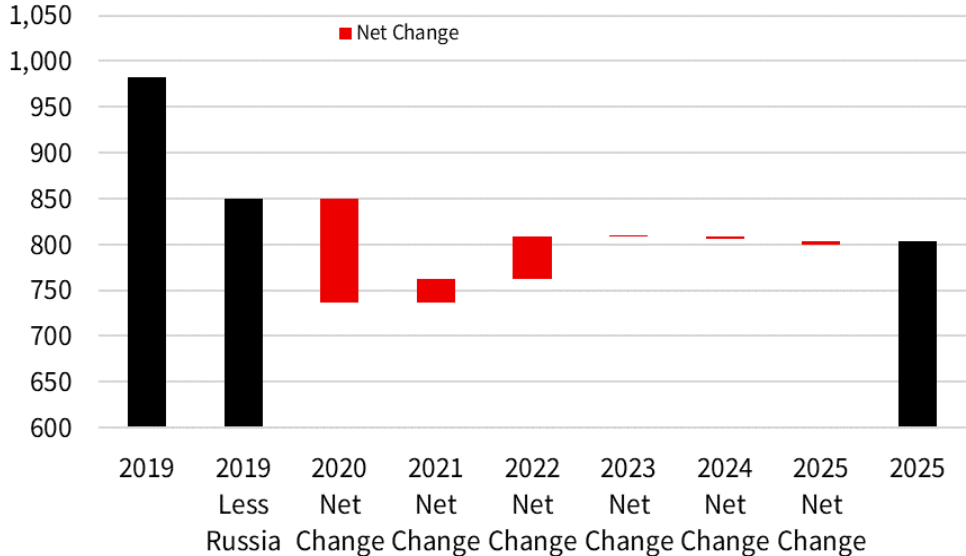


Source: Bloomberg, National Australia Bank

Costs Scarcity of coal & gas supply is expected to 2025

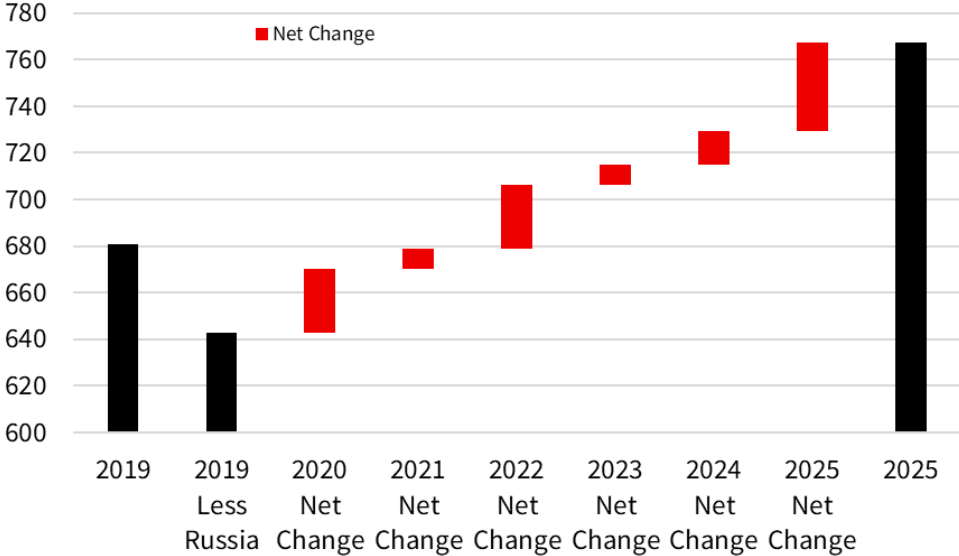
- The following charts outline the movement in market supply capacity for export thermal coal and LNG from 2019 to 2025.
- Importantly, the net addition of nearly 120bcm of new LNG export capacity currently under construction and expected to be delivered 1st LNG by 2026 compares to ~150bcm/annum of Russian gas flows to Europe through 2017 to 2019, will need to be added in order to restore market balance.
- An additional 85bcm of US LNG export facilities are also targeting 1st LNG exports by 2027 but these projects are not in construction at this stage, and accordingly have been excluded from our forward market balance on this basis.

Chart 6: Thermal Coal Export Supply Capacity Progression - 2019 to 2025 [Mt]



Source: CRU International, National Australia Bank

Chart 7: Global LNG New Capacity - Under Construction - 2022 to 2025 [bcm]



Source: Company websites, Energy Aspects, National Australia Bank

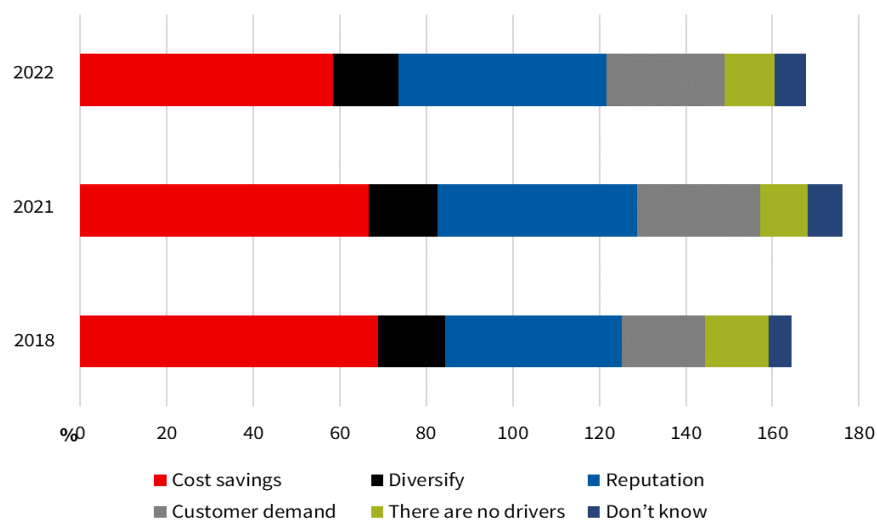
Costs NAB Renewables Survey

High energy prices are expected to drive a rapid rise in demand for renewables

- The latest NAB Renewables survey has re-affirmed that costs and the price of renewable energy are key drivers of increased renewables adoption by Australian corporates. This relationship has been evident in each survey since 2018.
- In the context of the current energy crisis, the impact of higher and more volatile energy prices is expected to be an unacceptable long-term risk for many businesses.

The latest crisis is expected to drive a rise in renewable energy adoption as a priority for Australian corporates.

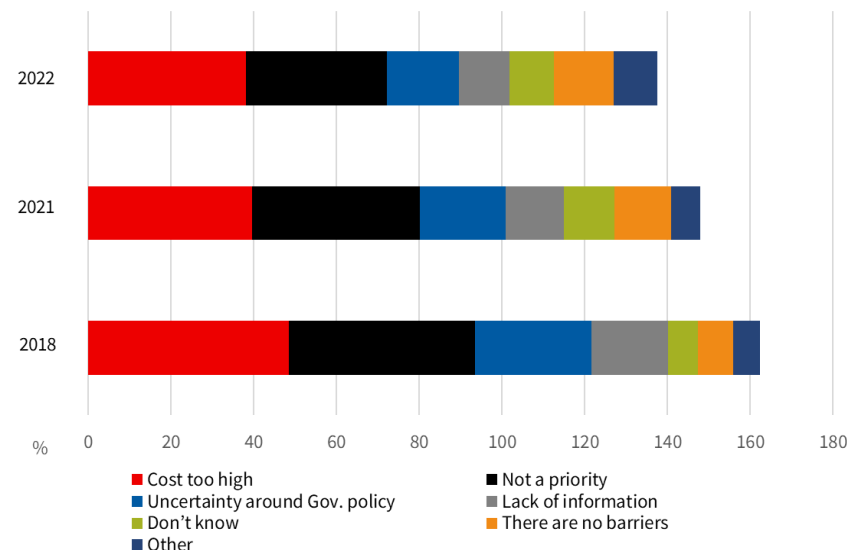
Chart 8: What are the key drivers of using renewable energy?



Source: NAB Renewables Survey

*note respondents can choose more than one option

Chart 9: What are the barriers to your organisation using more renewable energy?

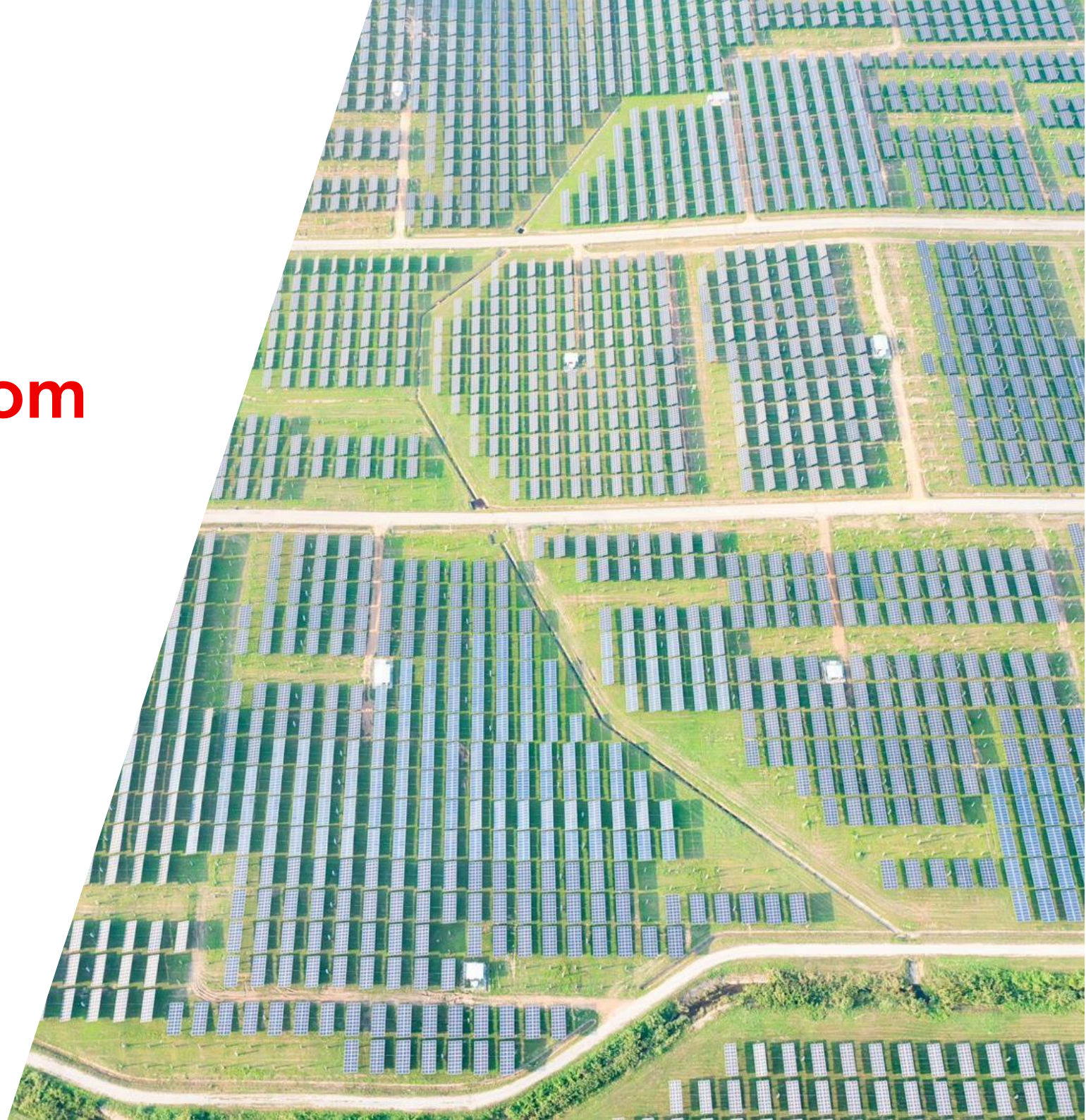


Source: NAB Renewables Survey

* note respondents can choose more than one option

Transition from fossil fuels

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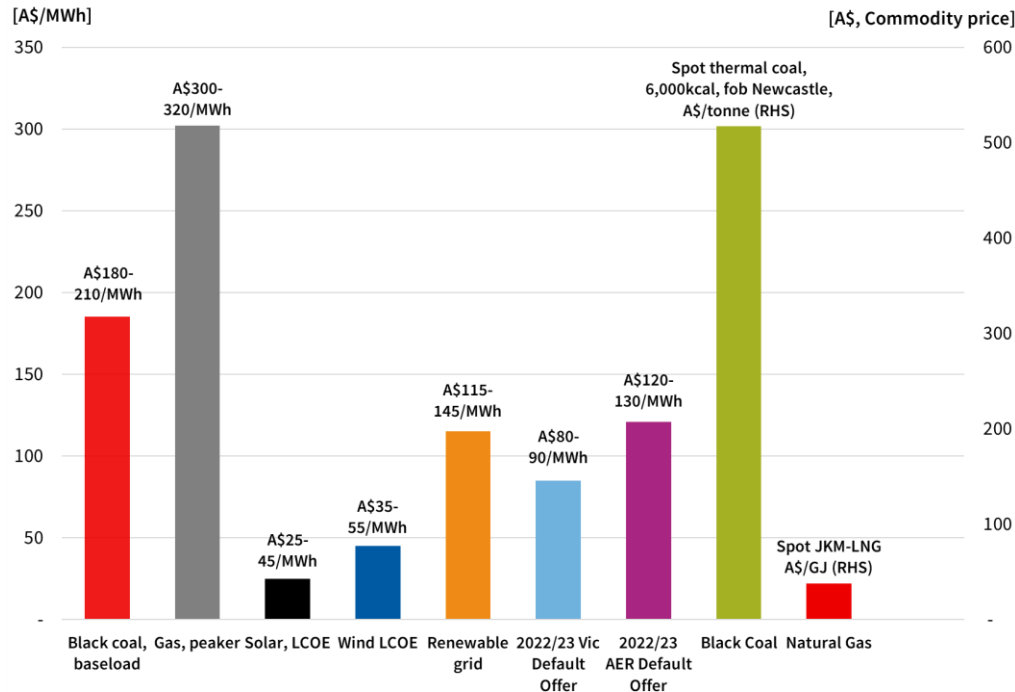


The transition A blended portfolio

2025 is too long to wait for affordable thermal coal

- From an Australian household energy perspective, current spot thermal coal and gas prices require electricity pricing of ~A\$200/MWh and ~A\$310/MWh respectively to completely cover fuel costs.
- Even at current gas prices, electricity from a blended portfolio of renewables and gas is likely to be cheaper than the current cost of black thermal coal generation.
- A normalisation of energy markets in the future would see a similar outcome, especially if a future price on carbon is assumed.

Chart 10: Short-run marginal cost of generation scenario, based on current spot coal, gas and PPA prices, with target fuel mix of renewables to gas at 70:30



Source: Australian Department of Industry, Science, Energy and Resources, Australian Energy Regulator, Australian Clean Energy Regulator, AEMO, Australian Climate Change Authority, Reputex Energy, Company reports, and the National Australia Bank

A more rapid closure of coal generation appears likely

- High black thermal coal prices are a potential catalyst for further closures of black coal generators in Australia. Energy companies are likely to face challenges recovering the full cost of current coal prices from customers. A return on capital will be even less likely given the relatively short asset life remaining on most assets in Australia's National Electricity Market (NEM). As a result, maintenance capital expenditure will likely be deferred, delivering further reliability risks and making earlier closure of these assets more appealing.
- AGL has recently announced it has reduced the operating life of Loy Yang A by ~50% and the plant will now close in 2035. We expect that with Victoria's potential revival of energy generation investment (via the renewed State Electricity Commission, which the current state Labor Government has committed to re-establish if re-elected on 26 November) there is likely further risk to the operating life of existing coal assets.
- Chart 10 sets out the implied electricity prices required to cover the current costs of coal and gas prices. This is compared to a blended price of energy from renewables and gas, including the regulatory allowances for electricity costs in consumers bills over the next 12 months in Australia.
- The price of a renewable portfolio containing gas is cheaper than current spot thermal coal prices for consumers. Transmission and distribution costs can be assumed equal, taking into account proposed investments from the government.

The transition Renewables usage

NAB survey shows a low usage of renewable energy

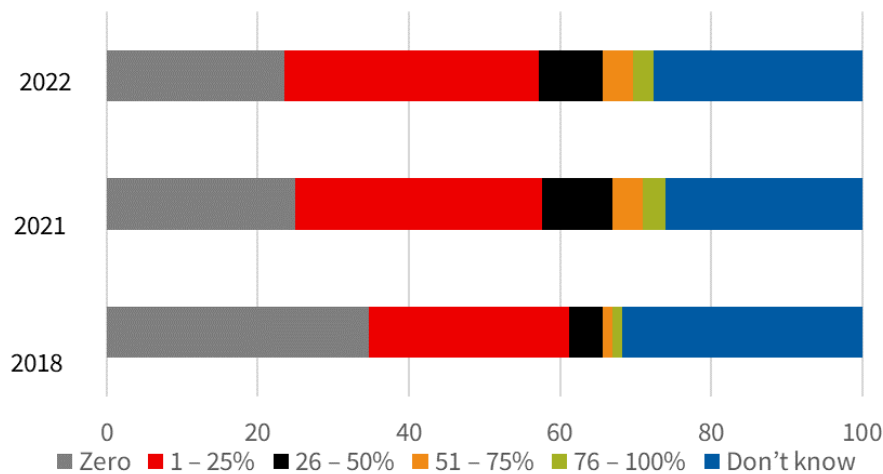
- The NAB survey shows an increasing proportion of Australian survey respondents recognise renewables as contributing less than 25% of total energy demand. This response has shown little variation by location or size of the enterprise of the respondent.
- We believe this survey result is linked to the historical Australian government policy of ~20% renewable energy by 2020.

Government policy may be impacting survey responses

- Australia's latest emissions reduction target of 43% emissions reduction by 2030 (on 2005 levels) is amongst the strongest reduction targets in the world - see chart 12.
- It is likely Australian corporates will adopt a broader sustainability strategy which will result in future NAB surveys reporting an increase in the uptake of renewable energy.

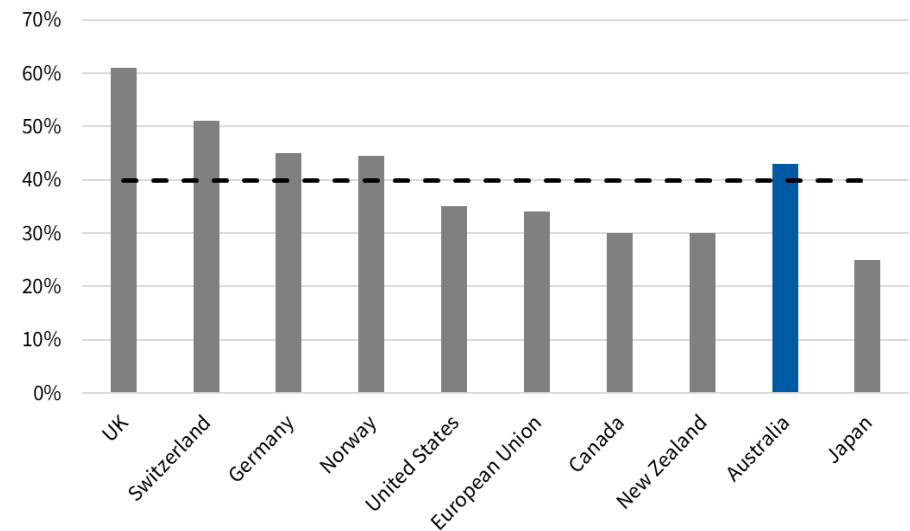
The NAB Renewables Survey highlights a growing proportion of Australian corporates identifying the benefits to their brand from direct action on emissions. Australian corporates also understand and that their customers increasingly have an expectation that they will act to deliver products on a progressively climate neutral basis.

Chart 11: What proportion of energy usage is renewable?



Source: NAB Renewables Survey

Chart 12: Post-2020 National Emission Reduction Targets



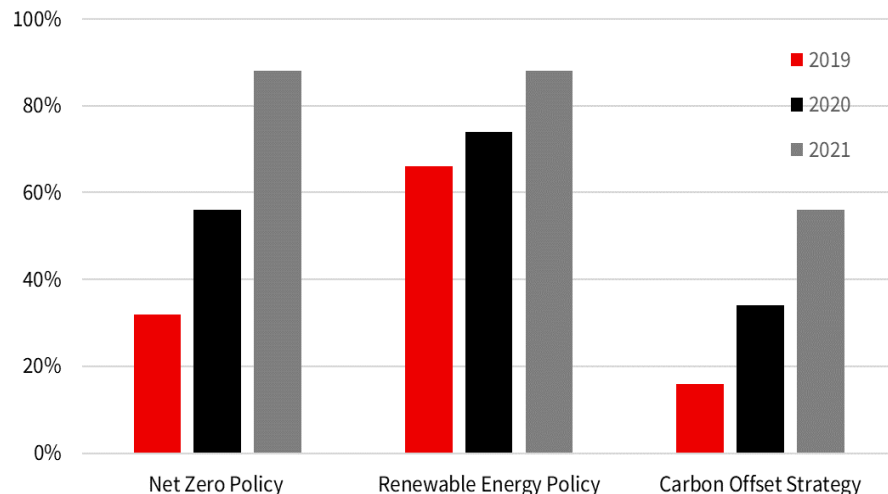
Source: Climate Change Authority, National Australia Bank

The transition Adopting formalised strategies

Australia's largest companies are taking more action

- The acceleration of Australia's emissions target is in line with action already being taken by many of Australia's largest companies. Since 2019, Australia's S&P ASX listed Top 50 companies have increasingly adopted formalised strategies on renewable energy, carbon neutrality and the usage of carbon offsets.
- Approximately 90% of these companies have established renewable energy and net zero targets and nearly 60% plan to use carbon offsets to achieve carbon neutrality. We observe that within this group, renewable energy policy was the initial or lead focus for many of the corporates. Also, as Net Zero targets were increasingly featured in corporate policy, the appeal of carbon offsets also increased.

Chart 13: S&P ASX-listed Top 50 Company progressive carbon policy adoption

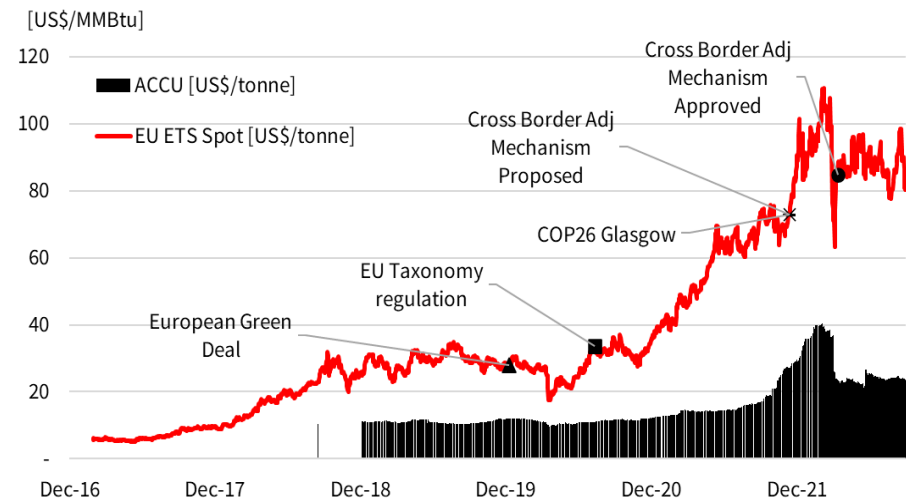


Source: Bloomberg, National Australia Bank

Europe is increasing funding to support a more rapid green transition

- With the onset of the global energy crisis, we have seen increased funding to support a more rapid green transition across the globe.
- The European Union's RePowerEU policy announced in May 2022 added another EUR225bn in financing to the EU's green transition. The United States' Inflation Reduction Act contributes US\$369bn towards energy security and climate change funding. The two policies total US\$0.6trln in funding the net zero carbon emissions transition.
- Europe has also established a carbon price to facilitate its net zero transition. Tightening in global energy markets has driven Europe's ETS pricing above US\$80/tonne CO2 and created a material cost within the energy mix.

Chart 14: European Union carbon policy progression vs EUA & ACCU Pricing



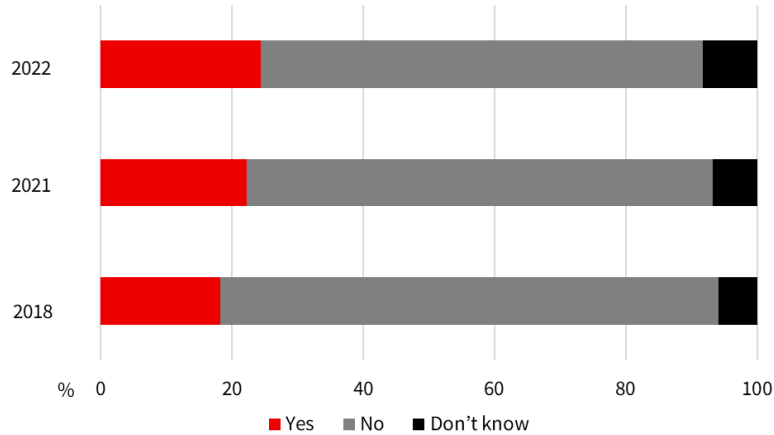
Source: Bloomberg, National Australia Bank

The transition Survey respondents lagging

NAB Survey respondents lag ASX peers.

- For now survey respondents lag their ASX50 peers in terms of adopting a renewables policy but we believe this will change rapidly in the next 3 years.

Chart 15: Do you have a renewable energy policy?

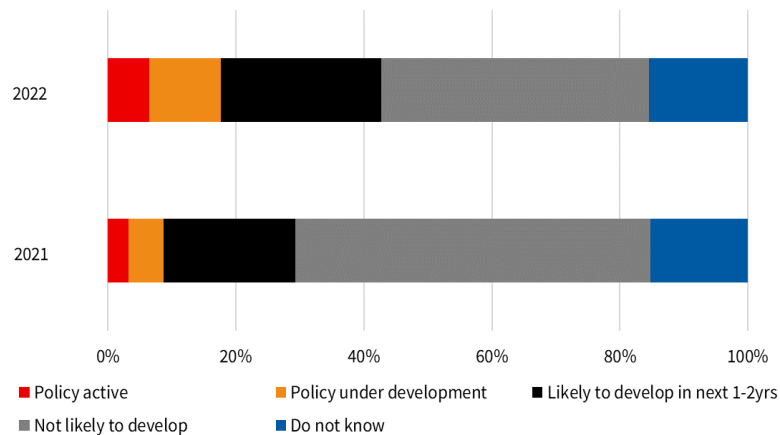


Source: NAB Renewables Survey

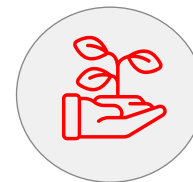


While we have seen an increase in the number of respondents reporting they have a renewable energy policy, the level remains low at **24%**, up from 18% in 2018.

Chart 16: Does your organisation have a net zero policy?



Source: NAB Renewables Survey



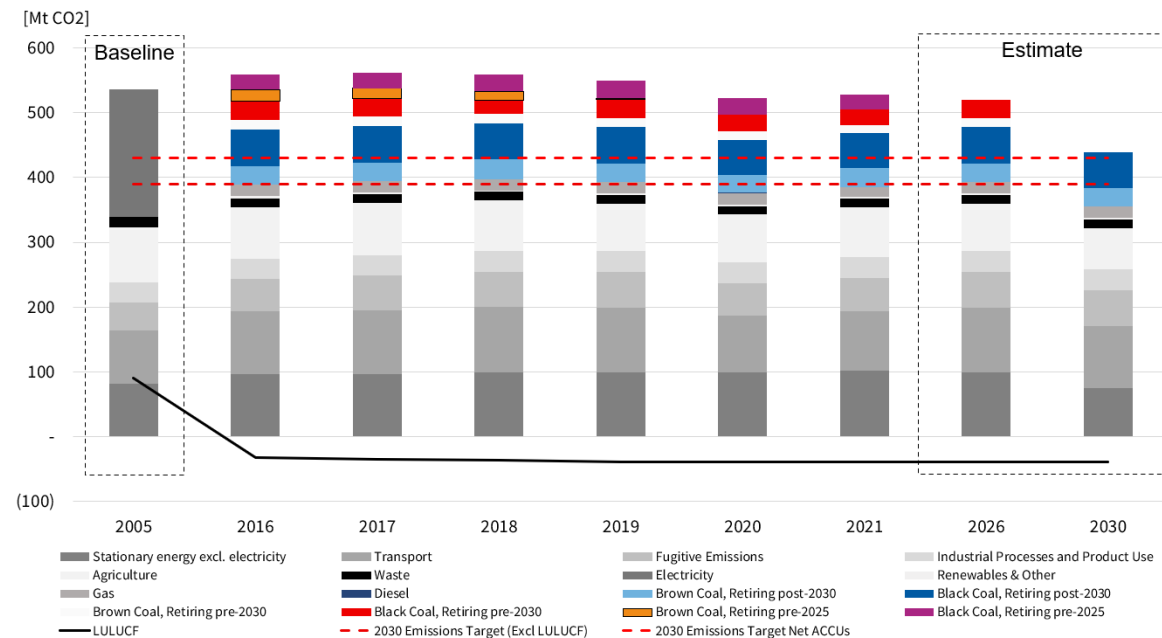
43% of respondents have in place or plan to develop net zero carbon emissions plans versus 30% in 2021. Less than **10%** have an active policy in place.

The transition A reduction in carbon emissions

Rapid closure of black coal generation may position Australia to beat 2030 emission targets

- Australia’s updated 2030 emissions target implies a rapid reduction in carbon emissions. We estimate that the 43% target reduction equates to 140Mt-150Mt of abatement (excluding contributions from Land Use, Land Use Change and Forestry (LULUCF)). For context, 140Mt of CO2 emissions is equivalent to removing more than ten black coal power stations.
- The Australian Labor Government’s initial and early modelling of its Powering Australia plan – undertaken by Reputex Energy, sets out ~140Mt of abatement could be achieved across three key sectors including:
 - 37 Mt from the progressive decarbonisation of the electricity sector;
 - 56 Mt from Industry & Carbon Farming which includes proposed changes to the Safeguard Mechanism;
 - 4Mt from the Transport sector linked to the Federal Government’s Electric Vehicle policies; and
 - A further 40Mt of abatement is expected to be delivered from the use of domestic carbon offsets.
- The revamped safeguard mechanism is still being developed, but the intent is for implementation by July 2023 subject to the passage of legislation through Parliament. Assuming it is delivered, on our simple analysis (outlined in chart 17) this leaves black coal generation and the size of the ACCU market the key swing variables in reaching the 2030 emissions reduction target. In the event of a complete closure of the remaining black coal generation in the NEM, it is likely Australia would beat its 2030 emission reduction target.
- A conclusion of the Independent Review of the ACCU market (due to the Government by the end of December 2022) is a potential catalyst for increased participation in the market.

Chart 17: Australian Emissions Inventory and 43% Emissions Reduction Target by 2030



Source: Australian Department of Industry, Science, Energy and Resources, Australian Energy Regulator, Australian Clean Energy Regulator, AEMO, Australian Climate Change Authority, Reputex Energy, and the National Australia Bank

Carbon offsets

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Carbon offsets To meet carbon neutral goals

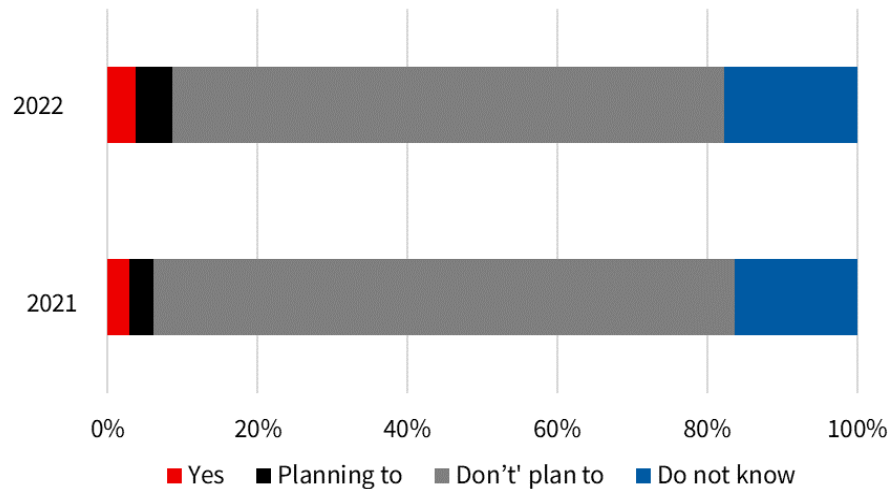
The carbon offset market is critical to meeting and beating our emission reduction goals.

- In our view, the Australian Labor Government’s Powering Australia modelling is only one potential pathway to the 2030 emission reduction targets.
- Formal plans to meet individual carbon neutral targets are likely to become an increasing focus for policy makers and consumers and will have an impact on NAB survey respondents and their Australian peers.
- Australian carbon offsets (ACCUs) are increasingly positioned as a flexible solution for Australian corporates to meet near term emissions targets and resolve any potential shortfalls in Safeguard Mechanism Credits.

- A conclusion of the Independent Review of the ACCU market led by Professor Ian Chubb is a potential catalyst for increased participation in the market. The review is scheduled to conclude at the end of December 2022

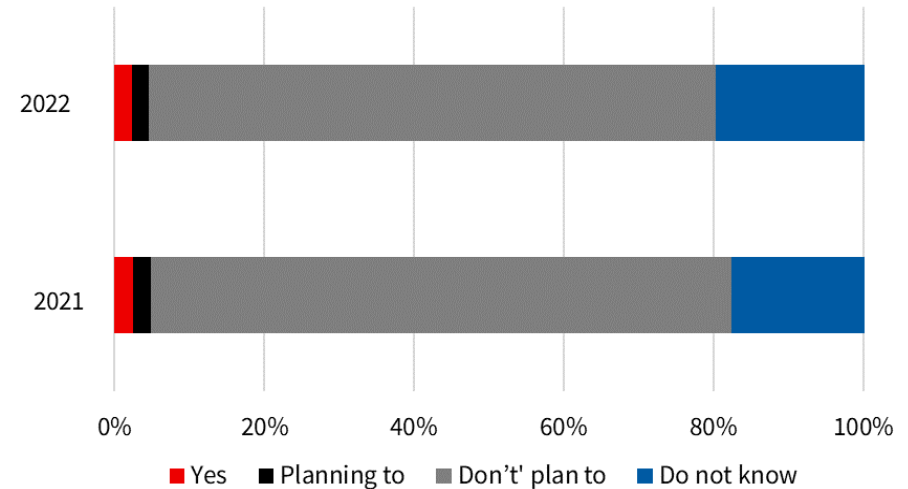
The NAB Renewables Survey highlights that a limited number of respondents are looking to participate in Australia’s carbon markets. The expectation is that, in line with the ASX50 companies, NAB survey respondents will increasingly leverage the carbon offset market in Australia to meet their carbon neutral needs.

Chart 18: Does your organisation buy carbon credits?



Source: NAB Renewables Survey

Chart 19: Does your company Sell carbon credits?



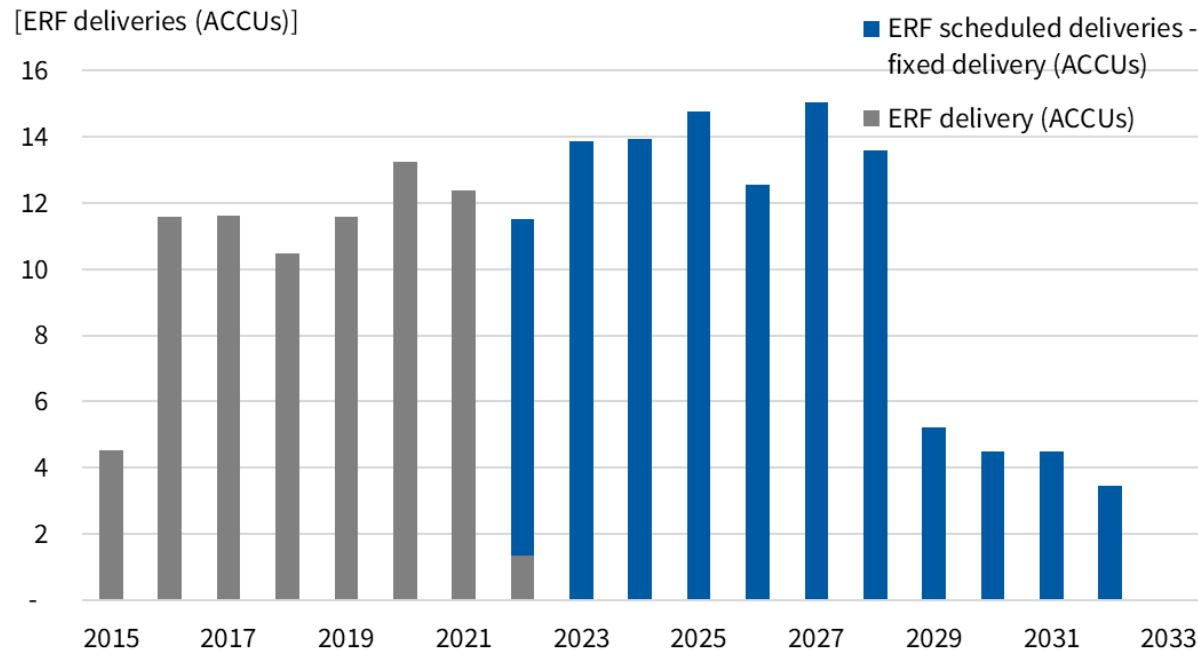
Source: NAB Renewables Survey

Carbon offsets Increased investment

Increased investment is required to support the Australian offset market

- The Powering Australia modelling undertaken by Reputex Energy highlights the potential for the ACCU market to account for as much as 40Mt of abatement by 2030. The rising demand for ACCUs is expected to be driven by the growing number of Australian corporates setting carbon emission reduction targets by 2025 and 2030. Safeguard Mechanism covered entities are also expected to be net buyers of ACCUs in order to meet their emission goals.
- While the Australian Government’s Emission Reduction Fund is expected to cease buying ACCUs, making room for increased demand, overall we expect market conditions to tighten.
- Chart 20 highlights the development of the ACCU market under the ERF and its relative scale to the potential 40Mt size considered for 2030.

Chart 20: Australian government ACCU delivery from current portfolio, 2015 to 2033



Source: Australian Clean Energy Regulator, National Australia Bank

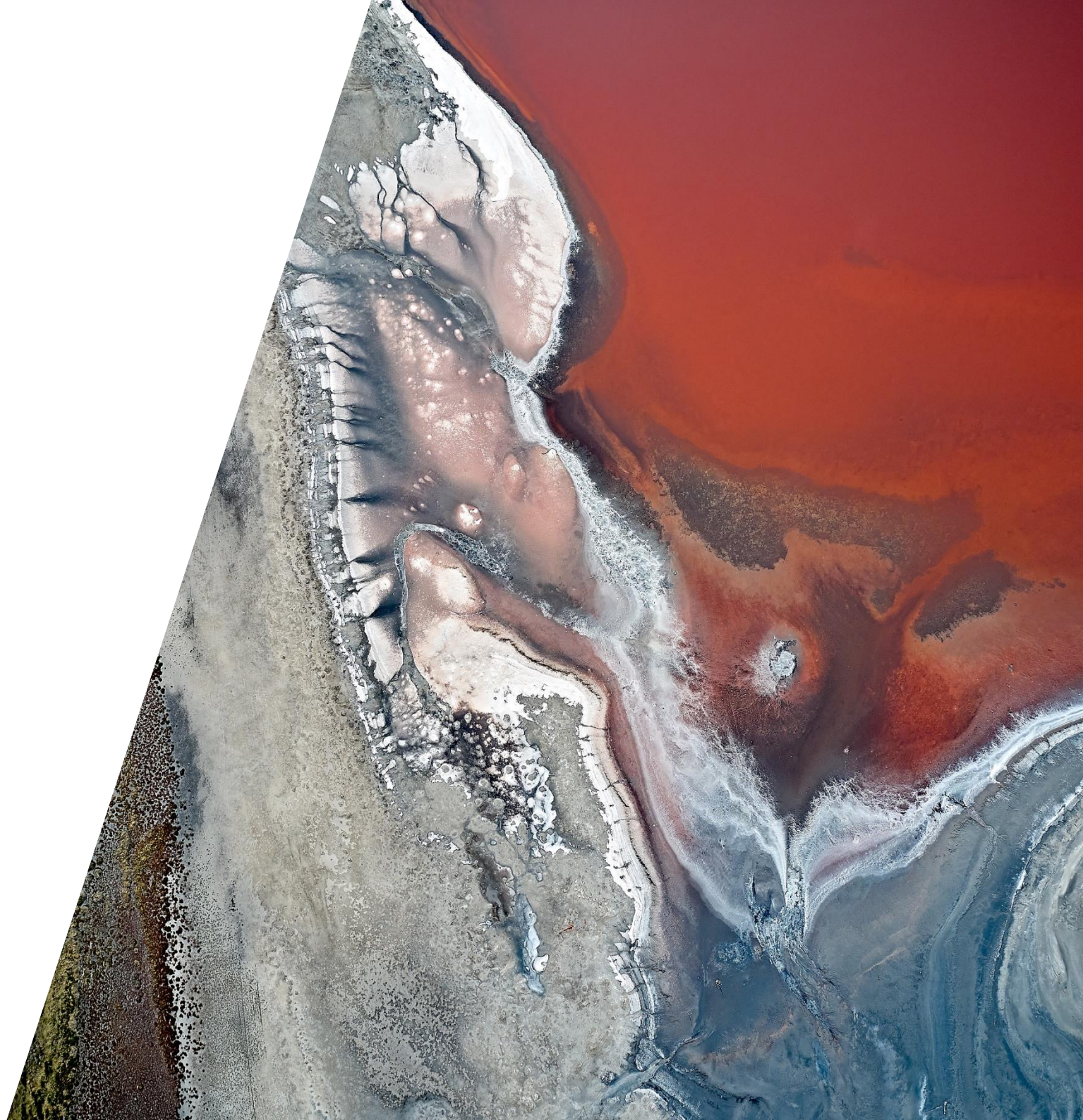
NAB Renewables Survey - in detail

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Overview

4.1



Survey Findings Overall Data

Renewable energy and Net Zero policies

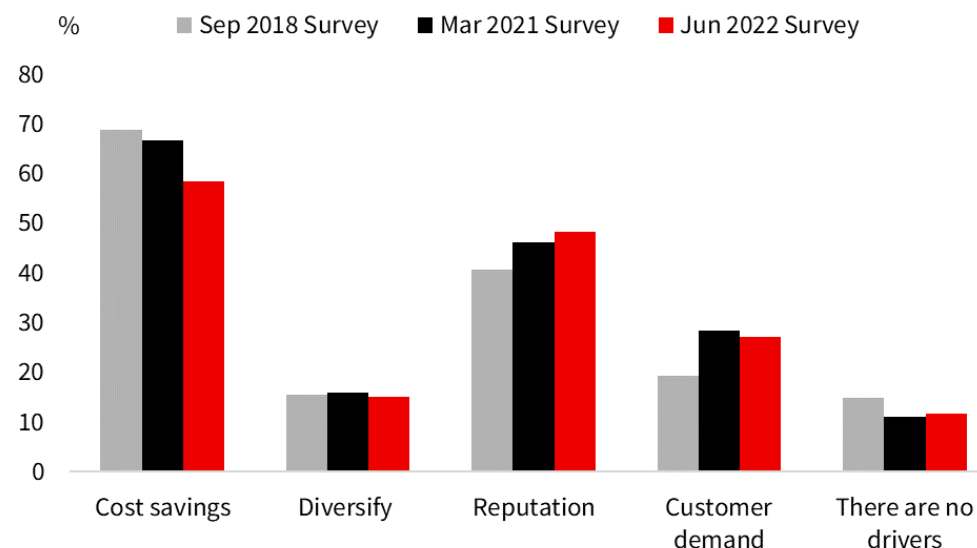
- The NAB Renewables Survey shows that there has been a rising number of respondents adopting a ‘renewable energy policy’ over the past four years, with **24%** of respondents confirming a policy is in place in 2022, up from **18%** in 2018. While it is encouraging to see an increasing uptake, this survey group is materially underperforming compared to Australia’s larger businesses. For example, close to 90% of the S&P ASX 50 constituents have established both a renewable energy policy and a commitment to Net Zero by 2050 (or earlier).
- In our view, the S&P ASX50 group is setting the trend that will be adopted more broadly by the Australian business community.

Drivers of renewable energy usage

- Renewable energy prices have fallen considerably over the past decade. Solar and wind PPA’s offer businesses and consumers material savings on energy bills.
- Despite the lower costs on offer, **70%** of survey respondents report that their businesses do not have a renewables policy and **57%** of respondents estimate their renewable energy usage is below **25%** of consumption.
- This reported renewable energy usage is similar to Australia’s commitment under the Kyoto Protocol of 20% renewable energy usage by 2020.
- These adoption rates are likely to accelerate to 2030 in line with Australia’s updated emission targets.
- In Australia’s Nationally Determined Commitment (NDC), communicated under Article 4 of the Paris Agreement to the United Nations, the Australian Federal Government on 16 June 2022 committed Australia to reduce national emissions by 43% by 2030 (excluding International offsets).

While cost savings remain a Top 3 driver for renewable adoption, we note that the survey group also increasingly nominates (i) Brand gains from the associated social and reputational benefits and (ii) Customer expectations as key drivers of renewable adoption and climate action.

Chart 21: What are the key drivers for using renewable energy?



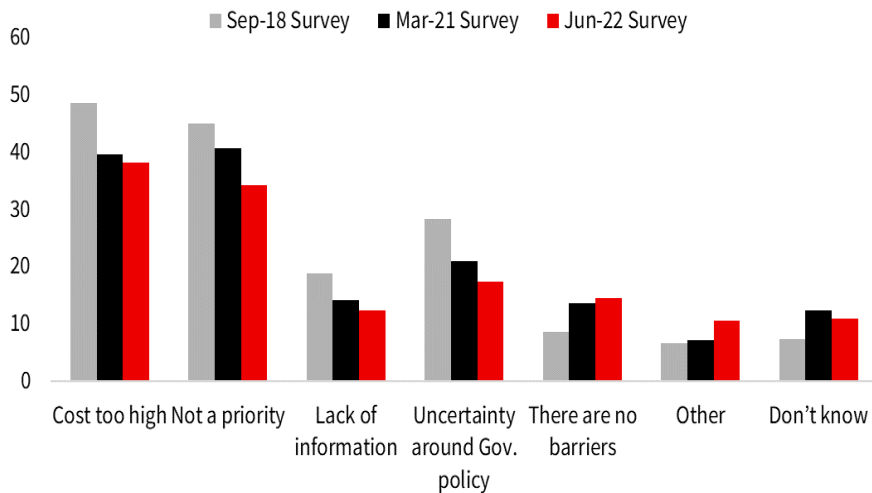
Source: NAB Renewables Survey

Survey Findings Overall Data

- Costs remain a key driver of organisations adopting renewable energy. This issue is addressed in the previous slide.
- “Not a priority”, Lack of information” and “Uncertainty around government policy” are the next three key issues for Australian business considering adopting increased renewable energy.
- In this context we expected the government’s Climate Active Initiative will play an increasingly important role in supporting businesses reach carbon neutrality.

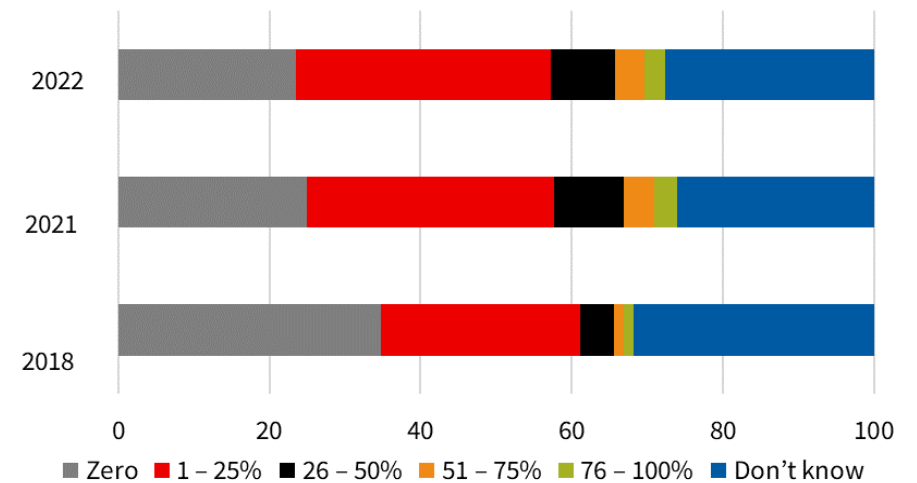
Information gaps and government policy risk are seen as barriers to renewable energy adoption.

Chart 22: What are the barriers to your organisation using more renewable energy?



Source: NAB Renewables Survey

Chart 23: What proportion of your energy usage is renewable?



Source: NAB Renewables Survey

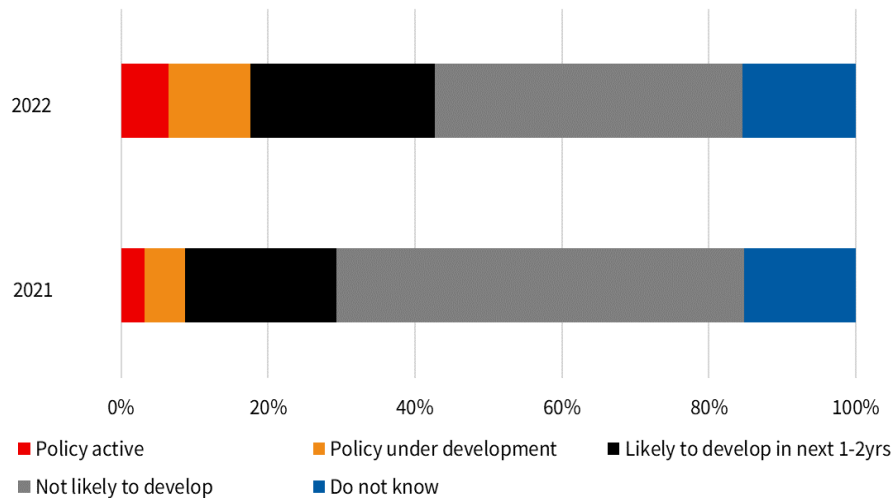
Survey Findings Overall Data

Net Zero policy

- Only a small fraction of NAB Renewables Survey respondents indicated their company has a 'Net Zero' policy in place. However, the number of respondents with a Net Zero policy has grown materially since the last survey at the start of 2021. Many companies have signalled that a plan is either currently in development or likely to be developed.
- Importantly, there has been a 30% reduction in the number of firms indicating they have no intention to establish a 'Net Zero' policy.

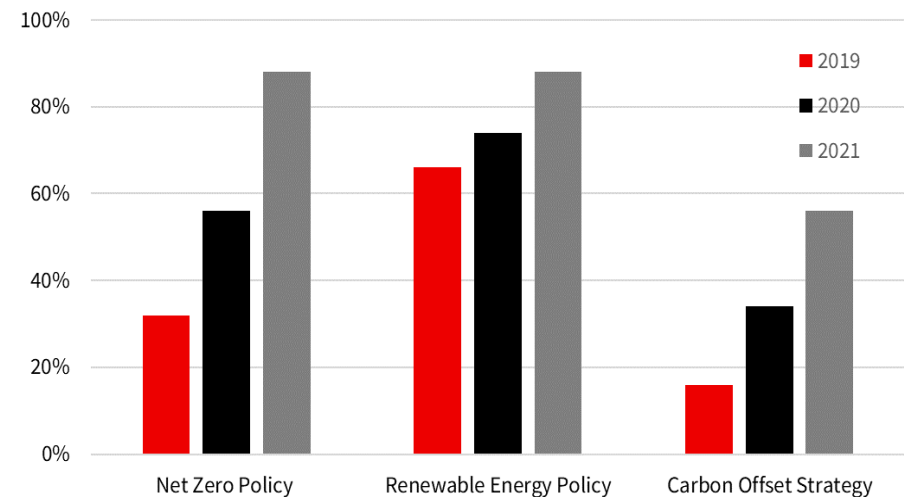
- We expect there will be a material correlation in company plans to adopt a net zero plan with renewable energy commitments.
- We recommend the S&P ASX50 company group as benchmark guide. This is due to our review of 2021 Sustainability Reports whereby 88% of S&P ASX50 companies either have or are planning a Net Zero Policy.

Chart 24: Does your organisation have a net zero policy



Source: NAB Renewables Survey

Chart 25: S&P ASX-listed Top 50 Company progressive carbon policy adoption



Source: Bloomberg, National Australia Bank

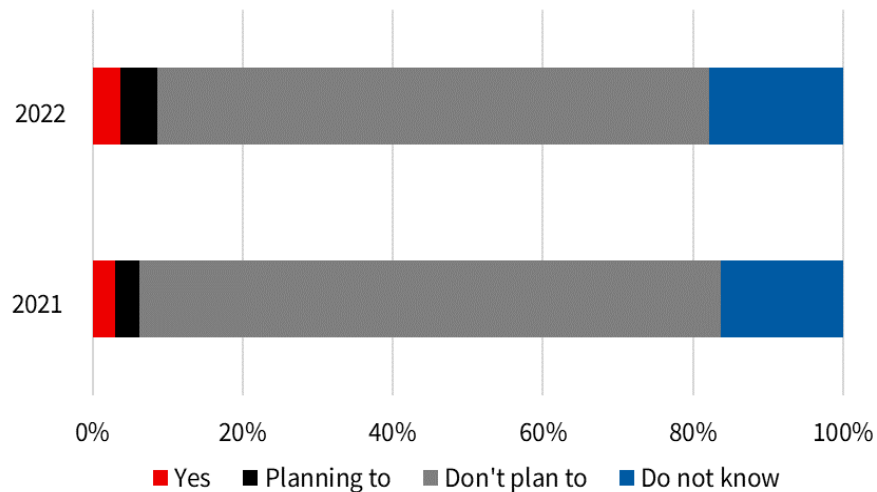
Survey Findings Overall Data

Carbon offsets

- The NAB Renewables Survey has consistently highlighted that a large majority of respondents have no plan or are unaware of plans to utilise carbon offsets to achieve carbon neutrality.
- Climate Active is a partnership between the Australian Government and the Australian business community to drive voluntary climate action. Various companies in the S&P ASX50 Group highlight carbon neutrality and compliance with the Australian Government's Climate Active program.

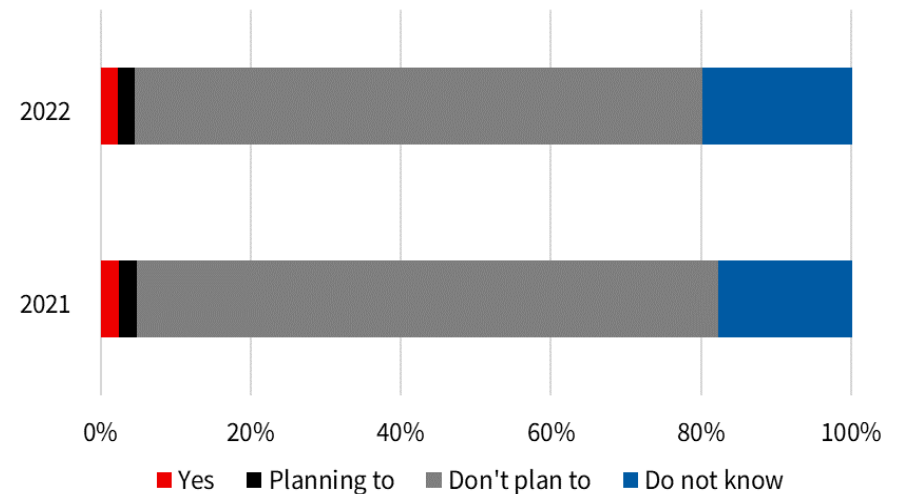
- Carbon offsets will be a relatively cost-effective tool for Australian businesses to manage their carbon footprint. More than 54% of the S&P ASX50 companies indicate carbon offsets as part of their strategy in managing their net zero emission profiles by 2050 and 2030.

Chart 26: Does your organisation Buy carbon credits?



Source: NAB Renewables Survey

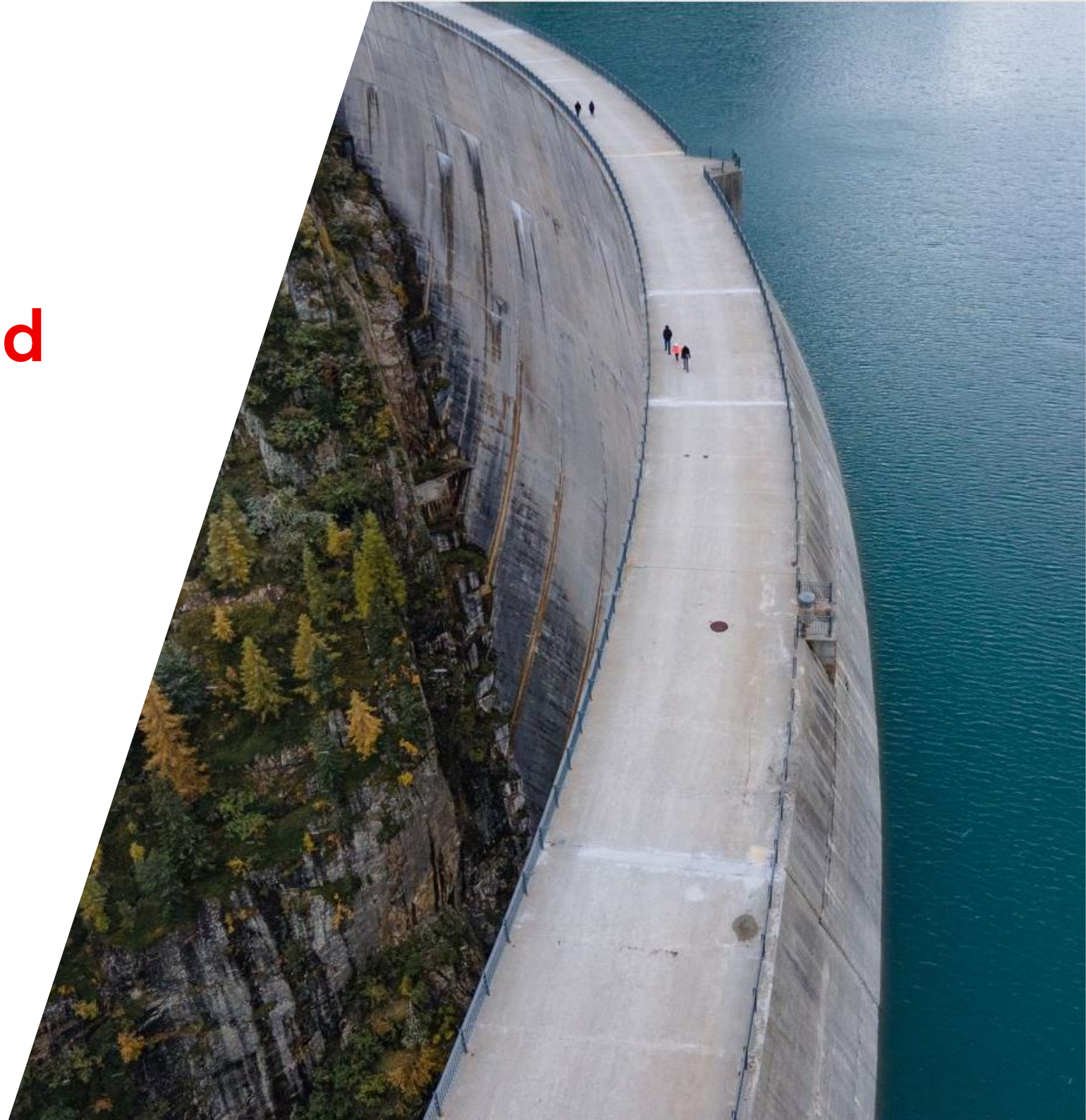
Chart 27: Does your organisation Sell carbon credits?



Source: NAB Renewables Survey

**Results varied
by size of
Enterprise**

4.2

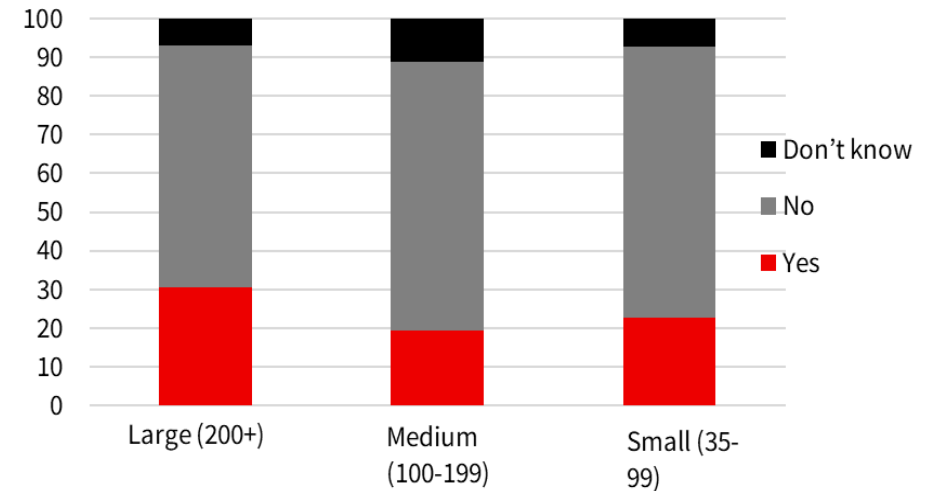


Survey Findings By employee size

Firm size not a great differentiator in terms of renewable energy policy adoption

- The NAB Renewables Survey can be broken down into employee size where a large firm has 200 plus employees, a medium has 100-199 employees and a small firm has 35-99 employees.
- The 2022 survey illustrates that the size of the enterprise is not a great differentiator on the adoption of a renewable energy policy.
- Similarly, larger companies only performed slightly better on development of Net Zero Carbon policy implementation.
- However, over the history of the survey the greatest increase in firms adopting a renewable energy policy was found in the large firms at 31% in 2022 versus 19% in 2018.

Chart 29: Do you have a renewable energy policy?



Source: NAB Renewables Survey

Chart 28: Do you have a net zero policy?

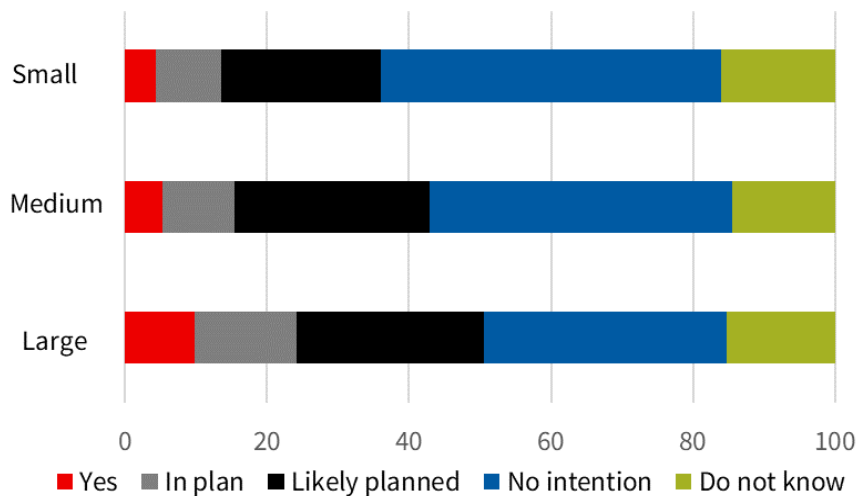
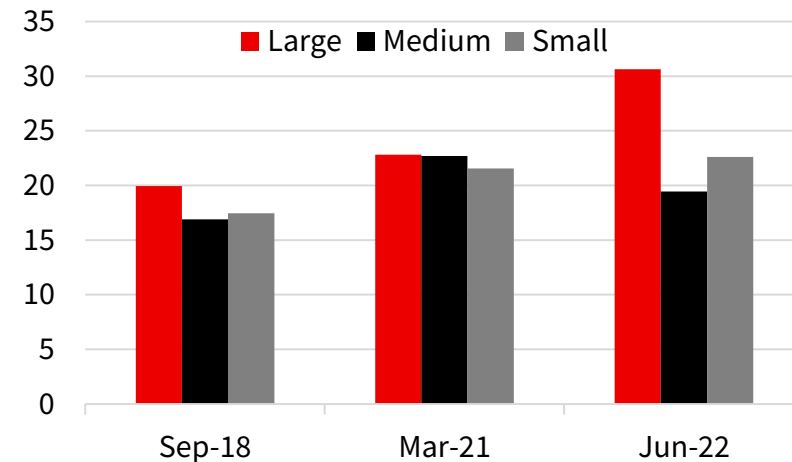


Chart 30: The shift to a renewables policy by business size ('Yes' we have a policy)



Source: NAB Renewables Survey

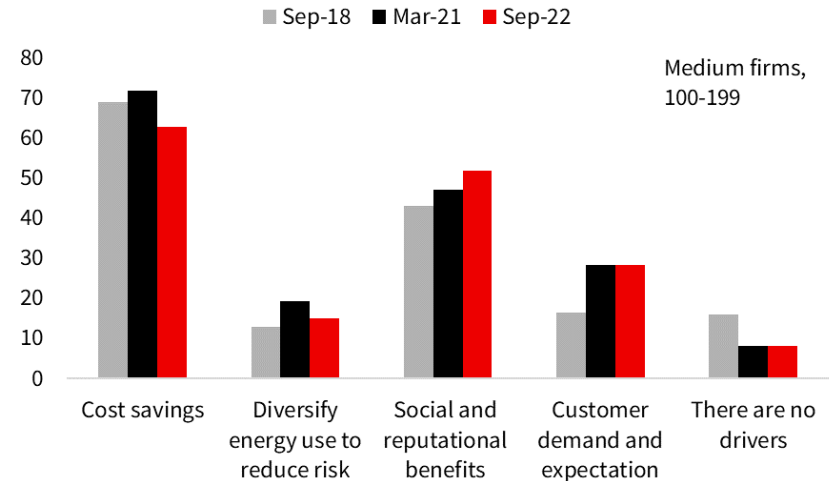
Source: NAB Renewables Survey

Survey Findings By employee size

Benefits to branding a driver of renewable energy adoption

- The larger enterprise group in the NAB Renewables Survey reports increasing recognition of the branding benefit from renewable energy adoption. It can be noted customer expectation of renewable energy use is not materially differentiated by the size of the business.

Chart 32: Drivers of renewable energy use – Medium firms



Source: NAB Renewables Survey

Chart 31: Driver of renewable energy use – Small firms

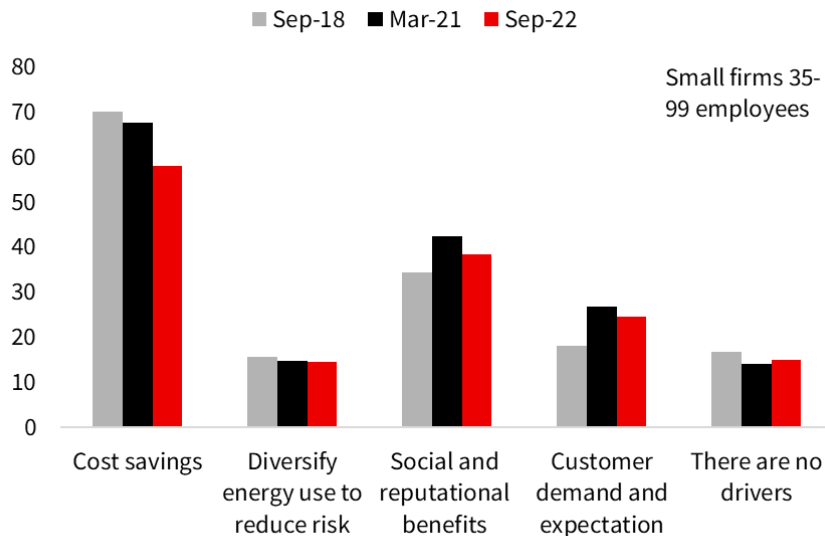
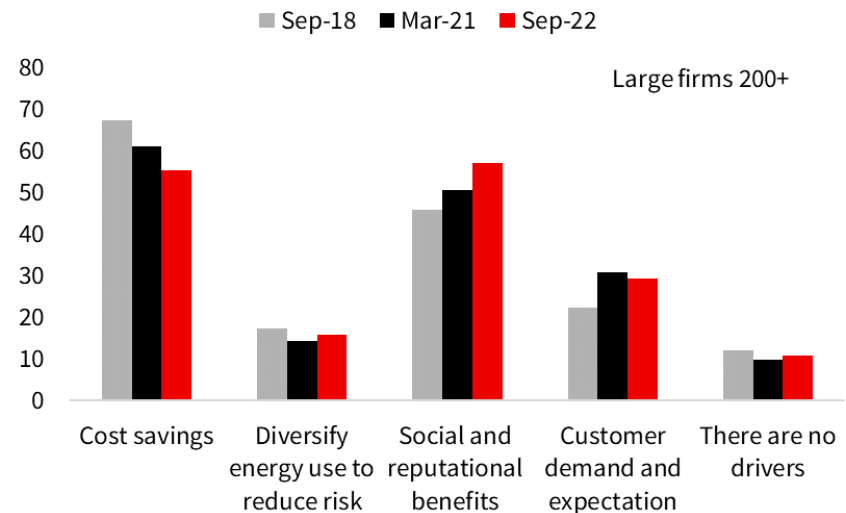


Chart 33: Driver of renewable energy use – Large firms



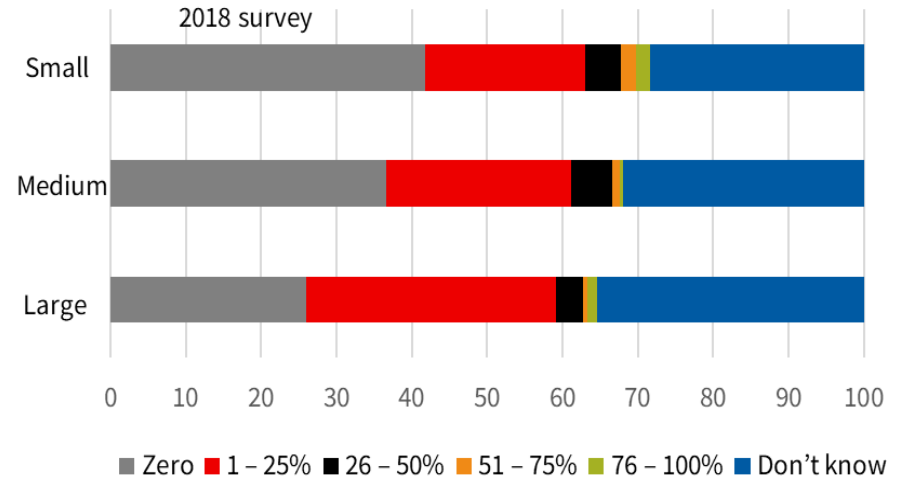
Source: NAB Renewables Survey

Survey Findings By employee size

Proportion of renewable energy usage is low across company size

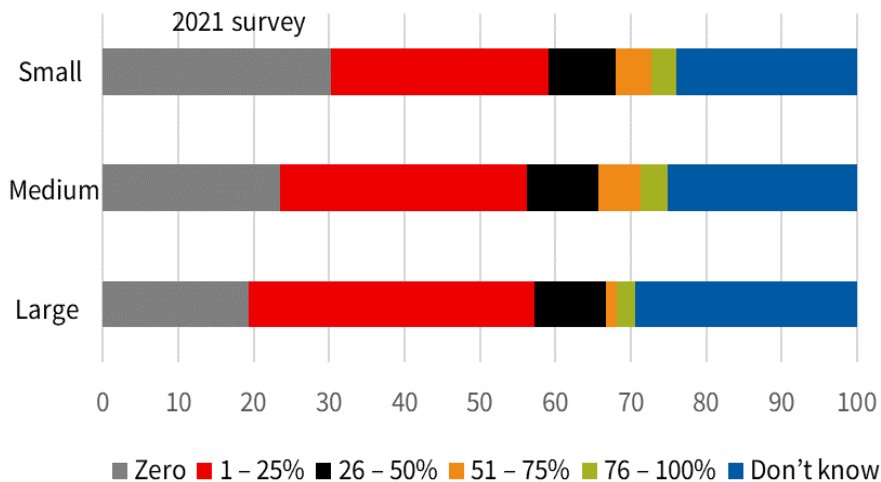
- Most respondents continue to see renewable energy meeting 1-25% of their current needs. This response appears low, but is potentially an alignment of previous National Renewable Energy goals (linked to the Kyoto Protocol which targeted ~20% renewable energy by 2020).

Chart 35: Proportion of energy usage which is renewable- 2018 survey



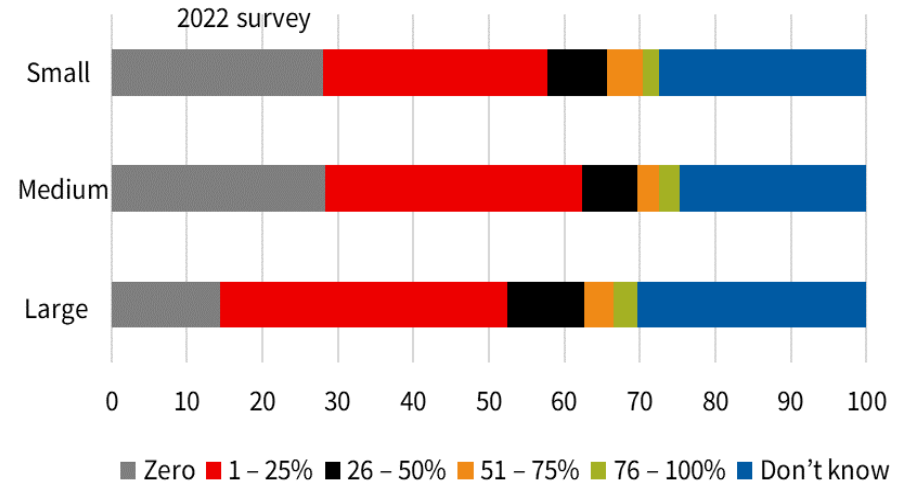
Source: NAB Renewables Survey

Chart 34: Proportion of energy usage which is renewable- 2021 survey



Source: NAB Renewables Survey

Chart 36: Proportion of energy usage which is renewable- 2022 survey



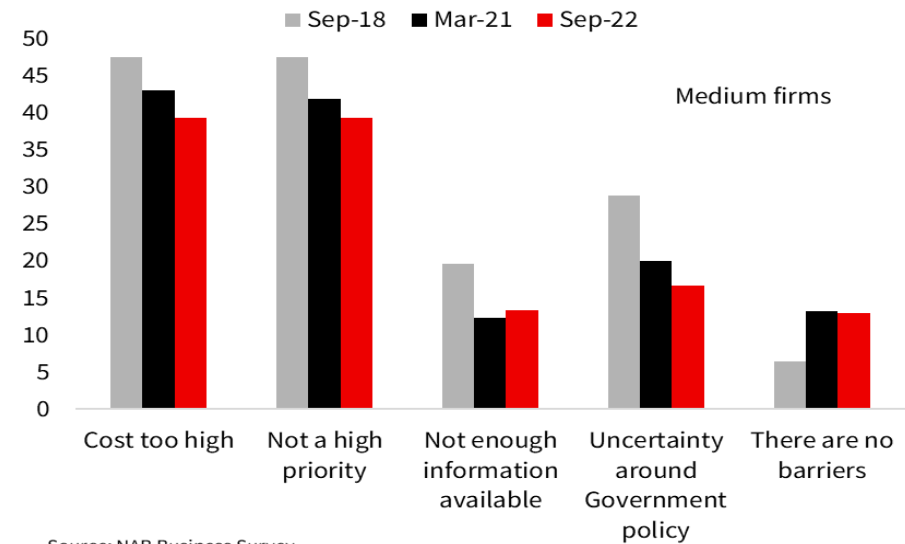
Source: NAB Renewables Survey

Survey Findings By employee size

Barriers to renewable energy use

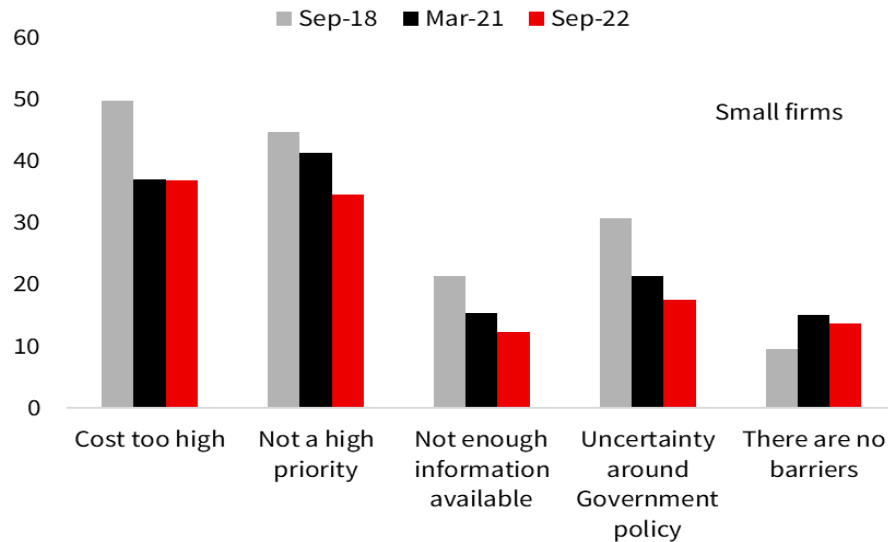
- Pricing of renewable energy continues to be identified as a barrier to usage but has declined as an issue evident by the current survey vs the 2018 survey.
- The NAB Renewables Survey does not report a significantly differentiated response based on size of organisation for the barriers to renewable energy adoption.

Chart 38: Medium sized firms



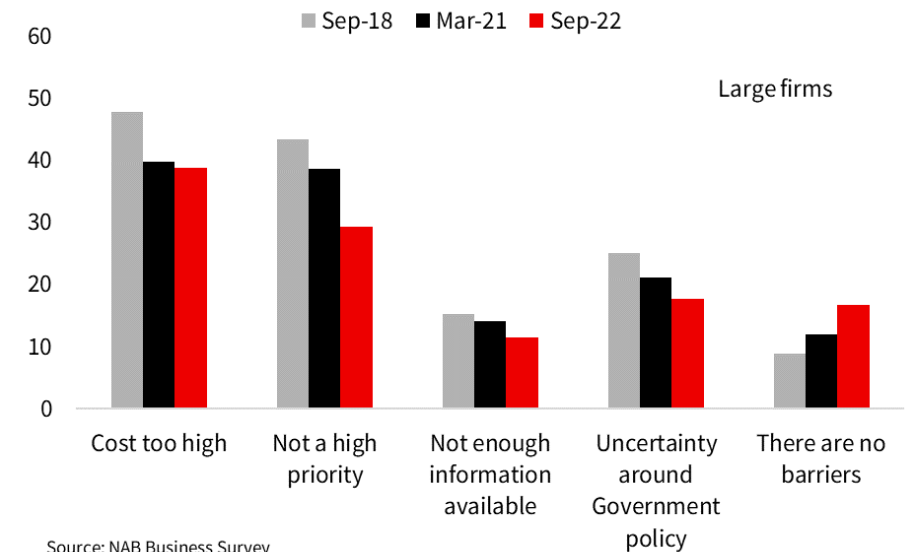
Source: NAB Business Survey

Chart 37: Small firms



Source: NAB Business Survey

Chart 39: Large firms



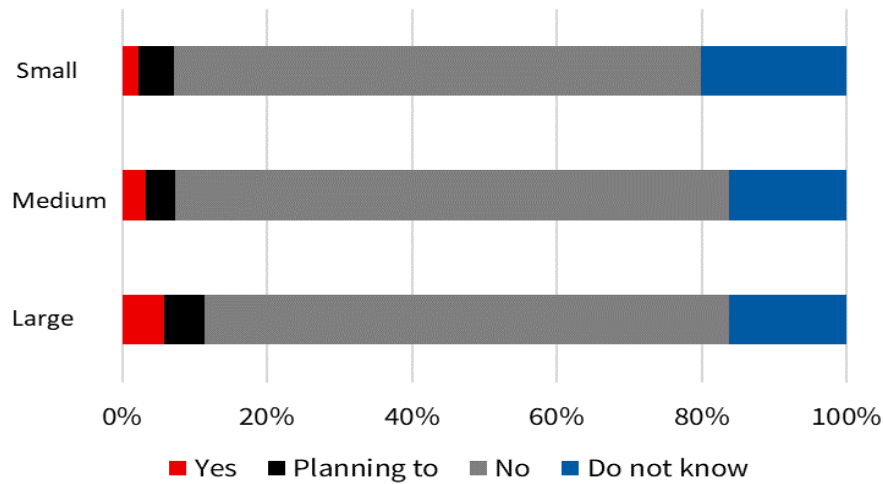
Source: NAB Business Survey

Survey Findings By employee size

Carbon credits

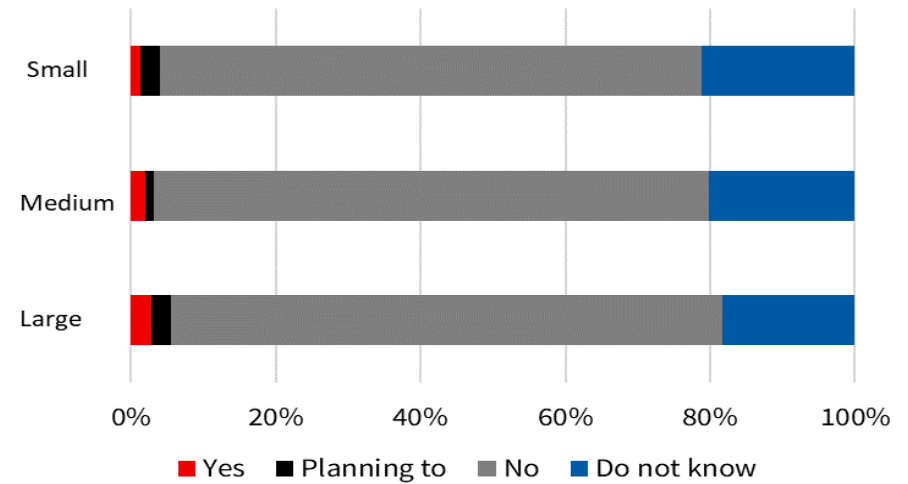
- Most NAB Renewables Survey respondents show little interest in participating in carbon markets from either buying or selling carbon credits. This response was fairly consistent across all sizes of enterprise.
- The expectation is that, in line with the ASX50 companies, NAB survey respondents will increasingly leverage the carbon offset market in Australia to meet their carbon neutral needs.

Chart 40: Buy carbon credits



Source: NAB Renewables Survey

Chart 41: Sell carbon credit



Source: NAB Renewables Survey

Results by Industry

4.3



Chart Key for Industries

MIN - Mining

MFG - Manufacturing

CON - Construction

RET - Retail

WHL - Wholesale

TS - Transport

FBP - Finance, Business and Property

REC - Recreation and Personal Services, Accommodation,
Cafes, Restaurants

COM - Telecommunication



Survey Findings By Industry

Mining, manufacturing and Banking leading in terms of Net Zero policy adoption

- The 2022 NAB Renewables survey indicates that 20-30% of businesses have a renewable energy policy, with Retail and Manufacturing the best performers on this metric.
- In terms of Net Zero policy, Mining and Banking lead in terms of having an active Net Zero policy while Transport, Recreation and Communications lag. The survey responses show that the leading sectors are Mining, Manufacturing, Transport, Communication and Banking. These sectors either have an active policy or plan to have one.

Chart 42: Does your organisation have a Net Zero policy? – 2022 survey

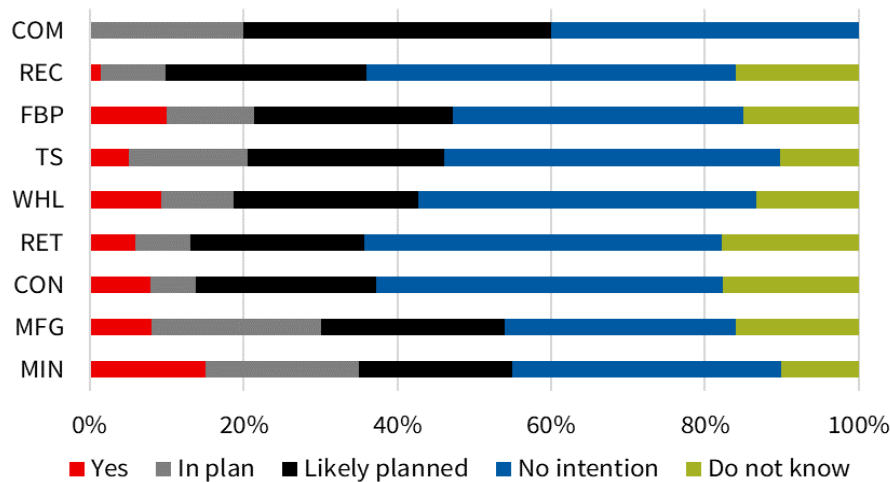
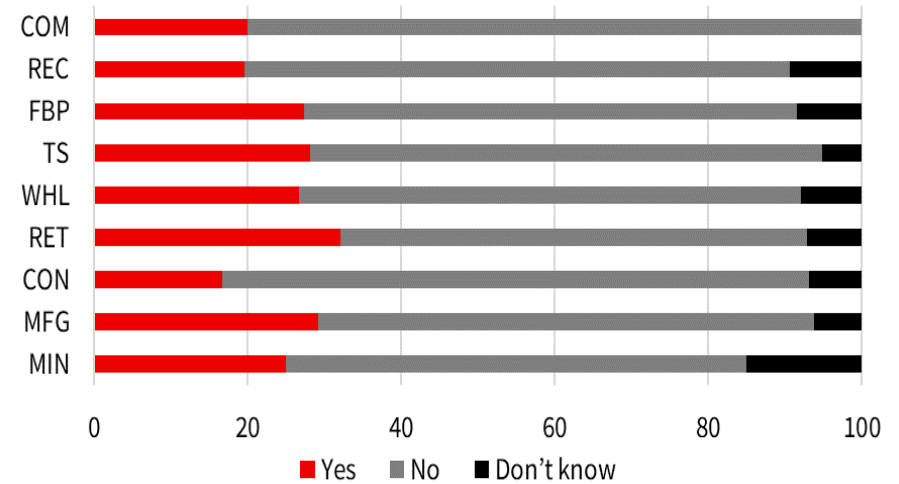
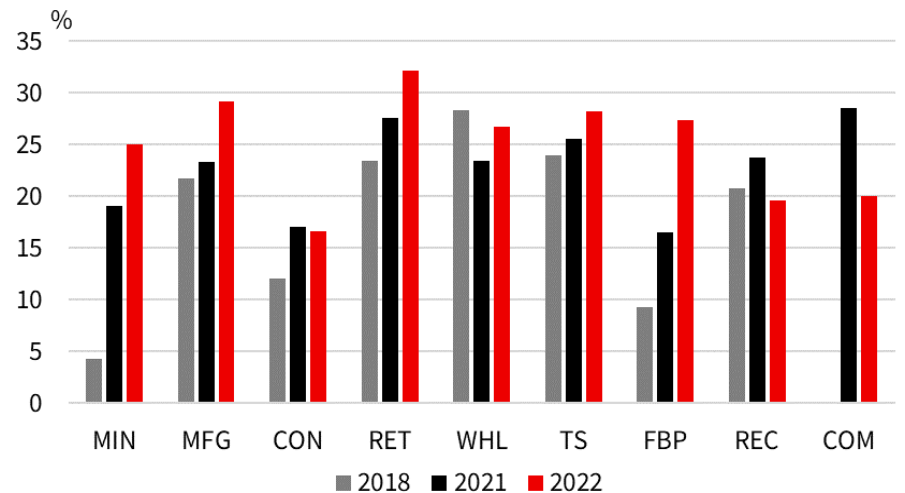


Chart 43: Do you have a renewable energy policy? – 2022 survey



Source: NAB Renewables Survey

Chart 44: The 'yes' response to whether a business has a Renewable policy



Source: NAB Renewables Survey

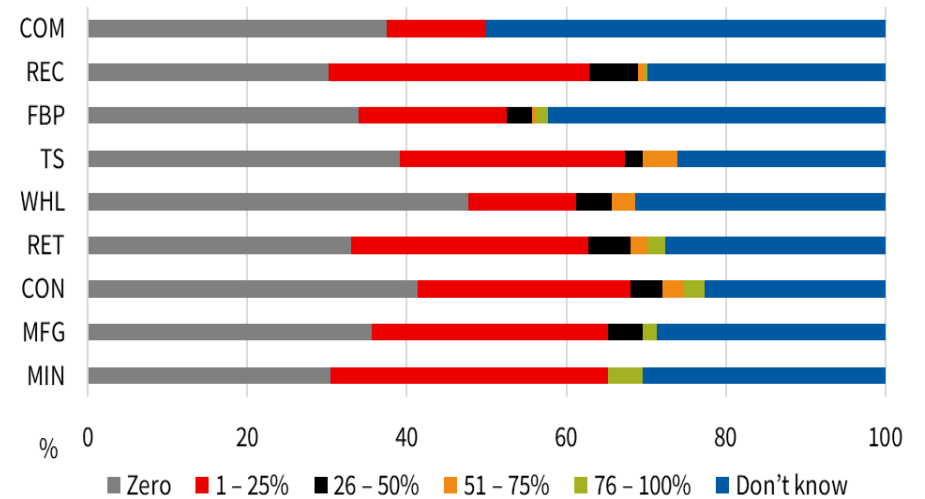
Source: NAB Renewables Survey

Survey Findings By Industry

Renewables usage

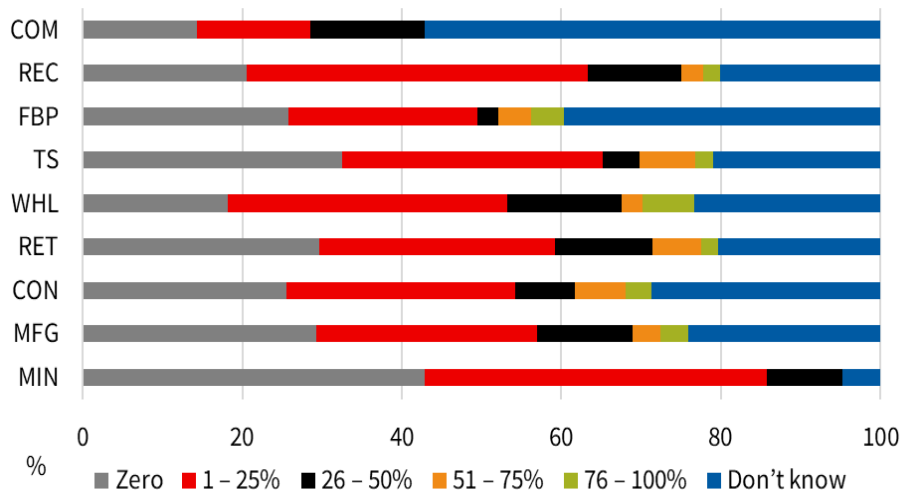
- Most NAB Renewables Survey Respondents indicate an expectation that renewable energy accounts for 0-25% of their energy consumption however the Utilities sector expects closer to 30% of energy to be sourced from renewables.

Chart 46: Proportion of renewable energy usage - 2018 survey



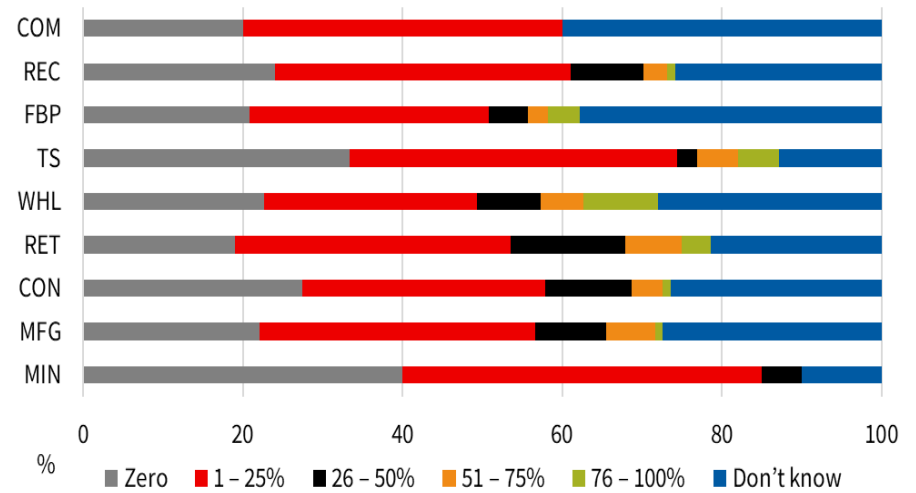
Source: NAB Renewables Survey

Chart 45: Proportion of renewable energy usage - 2021 survey



Source: NAB Renewables Survey

Chart 47: Proportion of renewable energy usage - 2022 survey



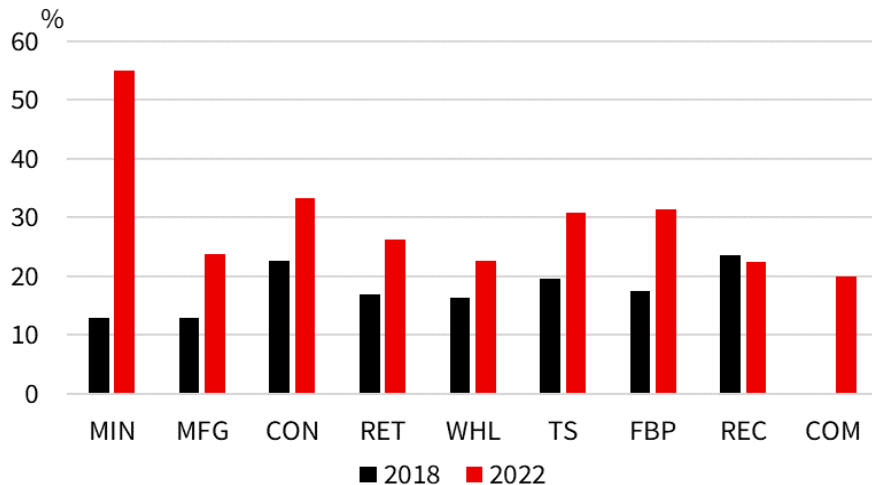
Source: NAB Renewables Survey

Survey Findings By Industry

Cost savings is a key driver of renewable energy use

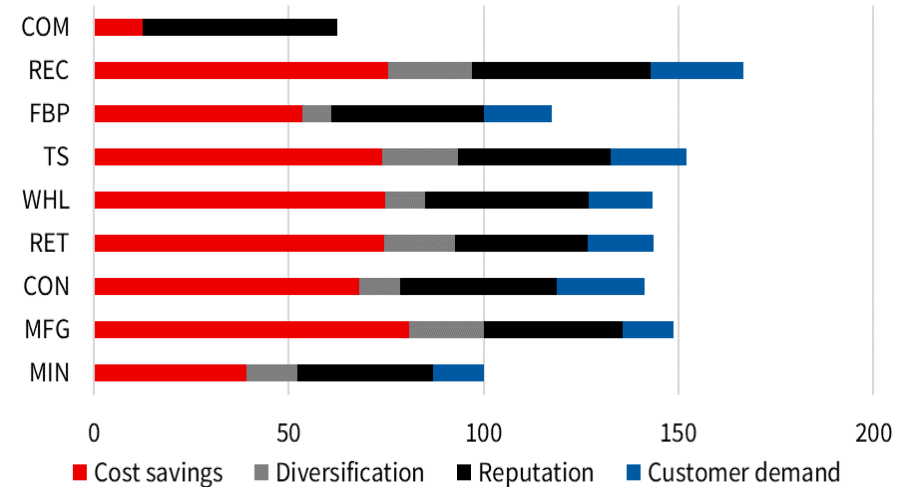
- NAB Renewables Survey highlights cost savings as a potential driver of renewable energy adoption across all sectors. However, the Mining & Utilities sectors identify brand benefits and customer expectations as almost equally important to renewable energy adoption.
- The biggest shift across survey responses between the 2018 and 2022 surveys is the recognition of brand benefits and customer expectations.

Chart 48: Respondents citing customer expectations as a driver of renewable energy usage



Source: NAB Renewables Survey

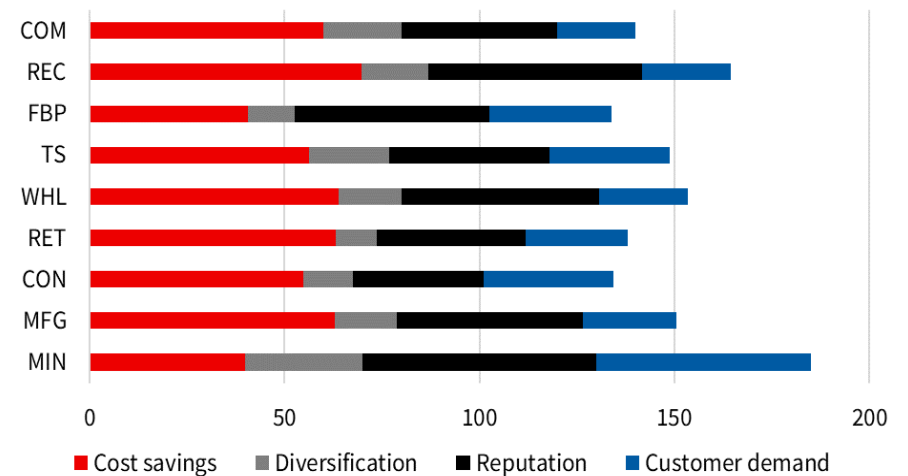
Chart 49: Drivers of renewable energy usage – 2018 survey



Source: NAB Renewables Survey

*note respondents can choose more than one

Chart 50: Drivers of renewable energy usage – 2022 survey



Source: NAB Renewables Survey

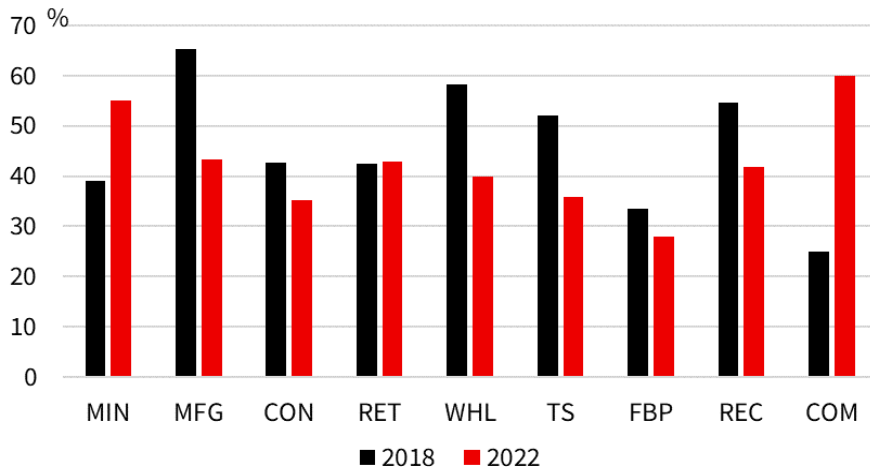
*note respondents can choose more than one

Survey Findings By Industry

Renewables pricing is a barrier to usage

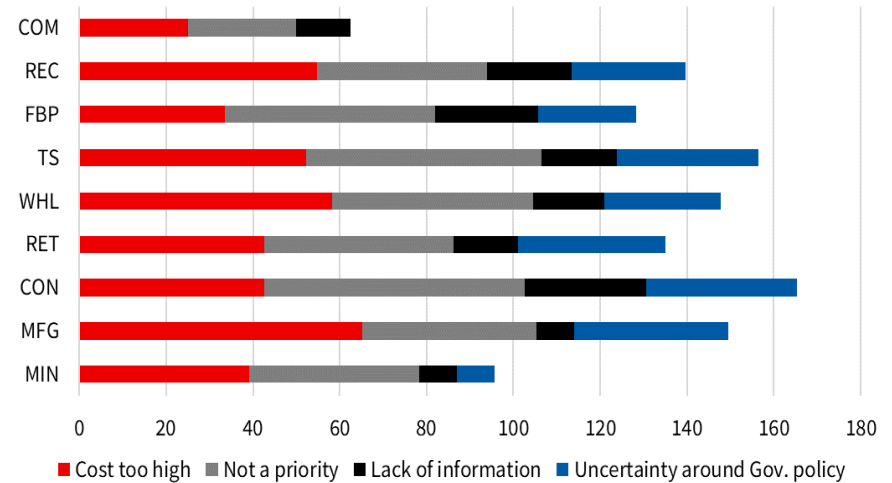
- Renewables pricing is an increasing barrier to renewable energy usage across several sectors including Mining, Retail, Construction and Telecommunications sectors.
- The three key barriers to increased renewable energy penetration remains consistent across all sectors for the past three survey years (i) pricing, (ii) low priority, and (iii) regulatory risk or policy certainty. However those citing pricing as an issue has declined for all sectors excluding Mining and Communications.

Chart 51: The pricing of renewables remains a barrier but it is declining as a concern for most industries - respondents citing pricing as a barrier to usage



Source: NAB Renewables Survey

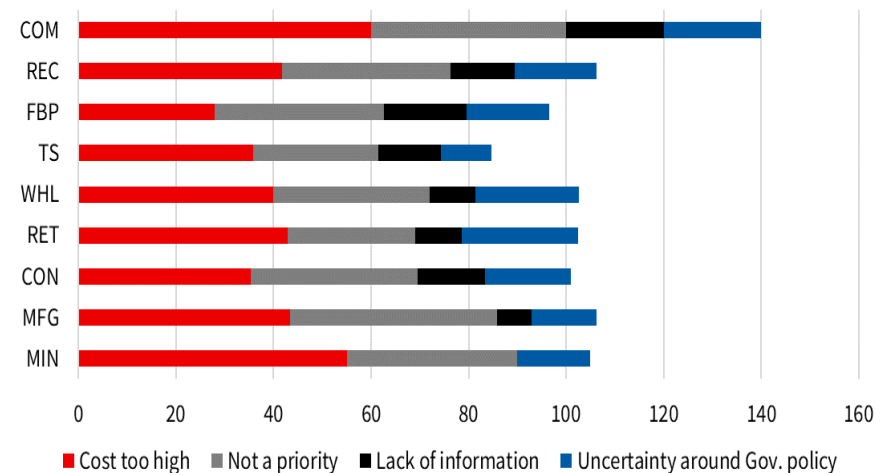
Chart 52: Barriers to renewable energy usage - 2018 survey



*note respondents can choose more than one

Source: NAB Renewables Survey

Chart 53: Barriers to renewable energy usage - 2022 survey



*note respondents can choose more than one

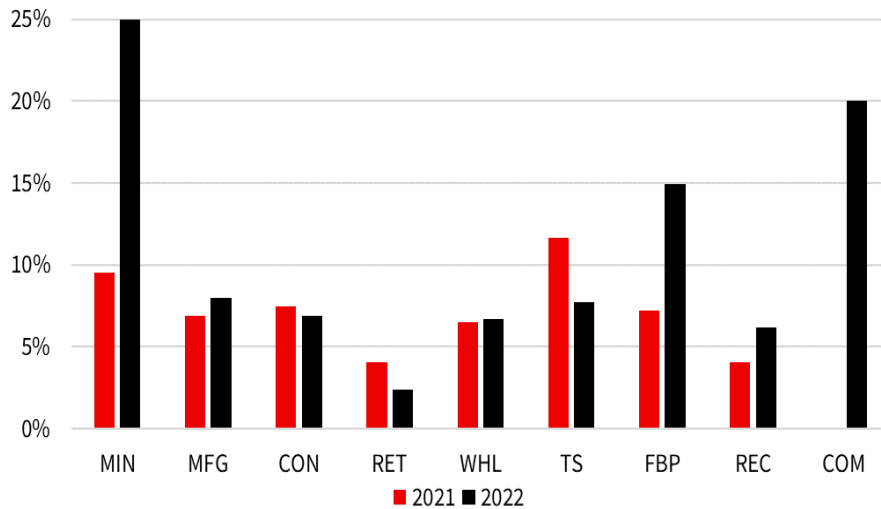
Source: NAB Renewables Survey

Survey Findings By Industry

Buying & Selling Carbon Credits

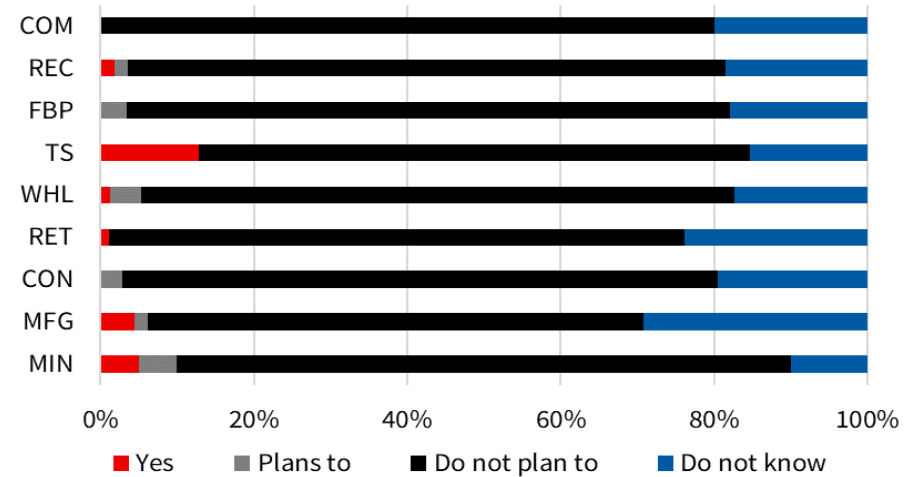
- Mining, Banking, Transport, Telco and Utility companies are the most open to participating in carbon markets, however most NAB Renewables Survey respondents indicate they do not plan to use carbon offsets.
- While the proportion of organisations saying they are buying carbon credits or plan to is still small, there has been a big uplift in those respondents saying yes in the 2022 survey versus the 2021 for Mining, Banking and Communication. A similar response was observed with respect to Selling carbon credits.
- NAB expects an increasing number of organisations to engage in trading of carbon credits to support near and medium term carbon commitments, triggered by an increasing sophistication of Australian corporates approach to Climate Action and Sustainability broadly.

Chart 54: Yes, my organisation is buying or plans to buy carbon credits



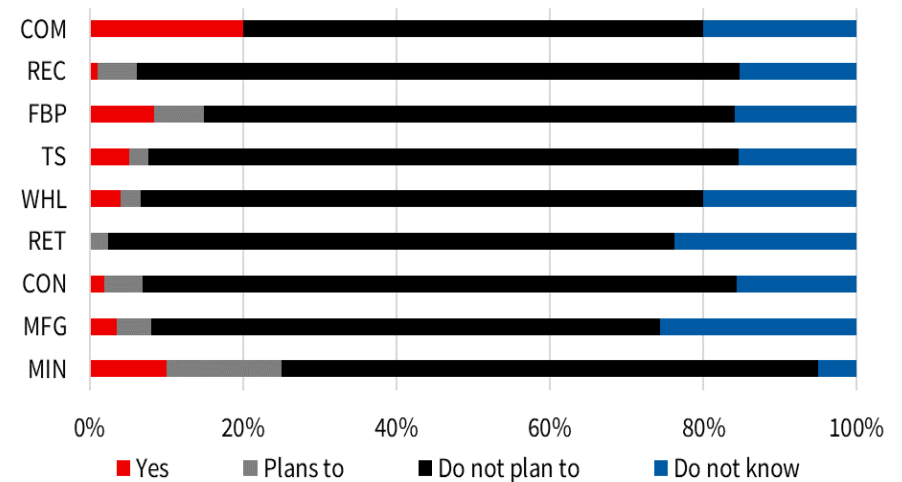
Source: NAB Renewables Survey

Chart 55: Does your organisation sell carbon credits? – 2022 survey



Source: NAB renewables Survey

Chart 56: Does your organisation buy carbon credits? – 2022 survey



Source: NAB Renewables Survey



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