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NAB Business renewable survey

January 2019



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NAB BUSINESS RENEWABLE SURVEY

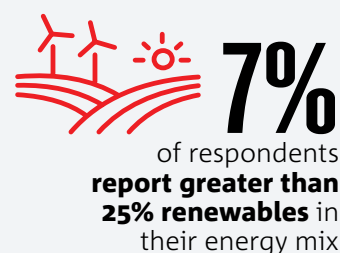
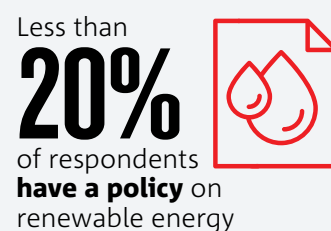
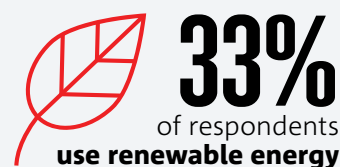
Globally, the penetration of renewable energy in the energy mix is increasing. This has been driven by both supply and demand factors.

On the supply side, renewable energy has become increasingly cost efficient and reliable, enhanced by technological innovation. On the demand side, individuals, businesses and communities are increasingly choosing clean energy given the improving economics and as a way of addressing climate change and assisting in the transition to a low carbon economy.

And what of Australian business? Where do they stand on renewable energy usage? NAB recently extended its Quarterly Business Survey to include a set of questions on the use of renewable energy by business. The survey covers between 850-900 firms across the non-farm business sector ranging from small (35-99 employees), medium (100-199 employees) to large companies (200 plus).

The survey found that only a third of companies confirmed they use renewable energy, and of this group, only 1 in 4 used more than 25% renewable energy in their mix. The survey also found that cost is considered to be both a major driver and barrier to use. Almost 70% of surveyed firms stated that cost savings were one of the main drivers of use, yet 50% stated costs being too high were a barrier to greater use. This could indicate that many respondents perceive renewable energy as being more expensive than non-renewable energy suggesting there is a need for increased awareness of the actual cost of renewable energy vis-à-vis other energy sources. In addition, the social and reputational benefits were also a high driver of use, whilst the uncertainty around government policy was seen as a major barrier.

This paper will explore these insights via business, segment, sector and geography and is the first of what will be an annual survey to gauge how Australian business is choosing its energy future.



State of Australian renewable sector

More than A\$300 billion of investment flows into the renewable energy sector globally every year. In Australia, investment in wind and solar projects has surged in recent years with the renewable energy sector in Australia witnessing record investment levels. The Clean Energy Council estimates there are about 80 projects in construction (or due to start soon) in Australia which will deliver over \$20 billion worth of investment¹. Australia has the opportunity to further boost its renewable energy penetration compared to other developed nations. According to Geoscience Australia, Australia has some of the best wind resources in the world as well as the highest solar radiation per square metre of any continent. By 2020, renewable energy penetration is expected to grow to about 23.5% in Australia, while some individual states have targets of between 40 per cent and 100 per cent by 2025.

The New Energy Outlook 2018 report by Bloomberg New Energy Finance (BNEF) predicts that wind, solar and batteries will continue to get cheaper, surpassing coal as a source of generation in Australia by 2035. Renewable energy such as wind, solar, batteries and hydro storage are expected to reach almost 45 per cent of generation by 2030, 74 per cent of generation by 2035 and 92 per cent by 2050.

Solar panels “behind the meter” are predicted to generate more power than coal by 2035. Wind and solar generation together with battery and pumped hydro storage are expected to comprise 87 per cent of all new capacity additions between now and 2050. This significant transition is supported by continued sharp reductions in the cost of clean energy².

We have already seen new utility-scale solar and wind fall below the cost of new coal generation; that is, renewable energy is now cheaper than new coal. At the same time, we have witnessed rising domestic energy prices and energy policy uncertainty. For businesses, many of whom spend more than 15% of their operating expenditure on energy according to ClimateWorks, the energy choice has significant implications.

Whilst cost is a driver for choosing clean energy (and this is reflected in our survey), many are also considering the impact of their carbon choices on the environment. The impact of this choice is important considering electricity generation is responsible for about one-third of total carbon emissions in Australia.

1. Clean Energy Council.

2. Potter, B., 2018, 'BNEF report says renewables can make Australia a cheap energy superpower again', [Australian Financial Review](#).

Survey findings

Just 18% responded that their organisation has a policy on renewable energy.

Renewable policy adoption

Respondents were asked whether their organisation has a renewable energy policy. Just 18% (or close to one in five) responded that their organisation has a policy on renewable energy.

There was only a small margin of difference from small to large firms, with 20% of the largest firms confirming that they have a renewable energy policy compared with 17% of small and medium sized firms.

Across the states it is South Australia which leads the other states with 31% of firms saying they have a renewable energy policy. Victoria is next in line at 21%, Queensland at 18.5% and NSW, Tasmania and WA around 15%.

There was significant variance across sectors with businesses identified as “Wholesale” leading at 28%, followed by Transport (23%), Manufacturing (22%) and Recreation & Personal Services (21%). Mining businesses cited the lowest level of having a renewable energy policy at 5%.

Key drivers to using renewable energy

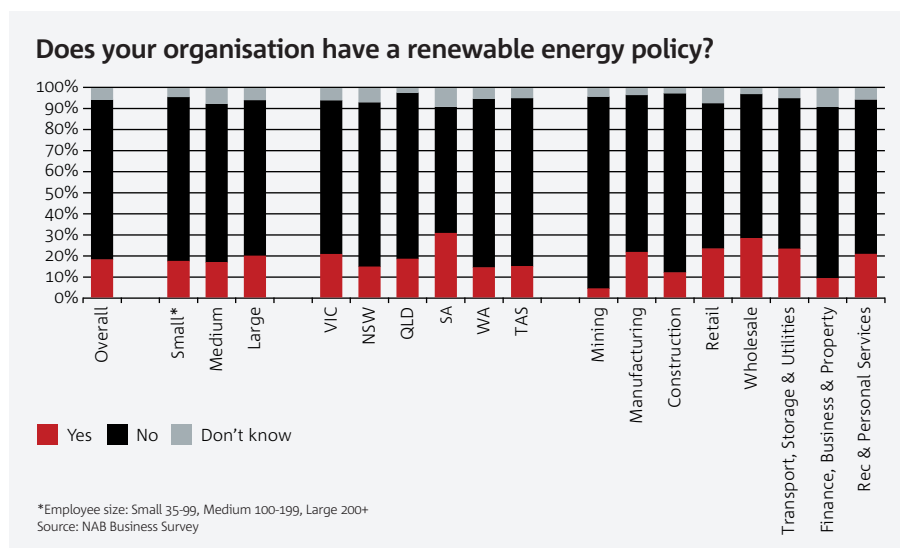
Respondents were asked about the key drivers, if any, for the organisation to use renewable energy and could select more than one answer. Over two thirds of businesses see cost savings as the main driver of renewable energy usage. A large proportion of firms also cited social and reputational benefits as a driver.

Across firm size, there is limited difference in response to “cost savings” as a driver, whereas there is a more notable difference in “social and reputational benefits” with medium and large sized firms citing this driver significantly more than small firms (46% for large and 34% for small).

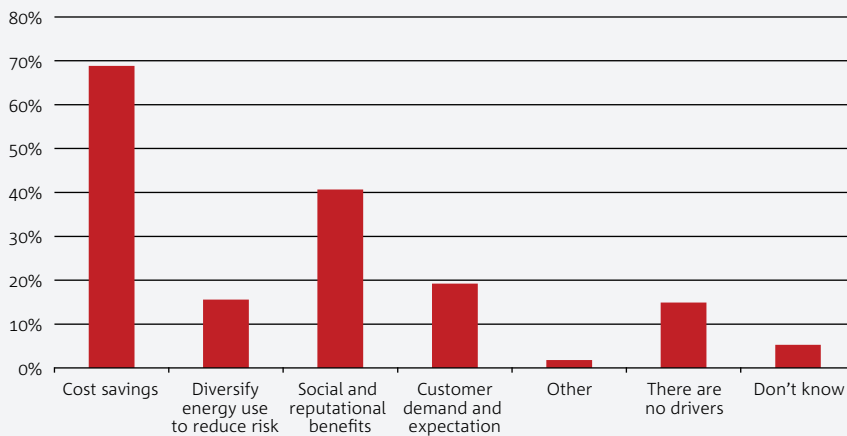
By state, it is Tasmania with the highest recognition of cost savings as a driver (85%), followed by Queensland and South Australia (at 73-74%). The state with the highest citing of social and reputational benefits as a driver for use is South Australia (48%) followed by Victoria (44%).

Within the sectors, manufacturing (81%) and recreational & personal services (76%) ranked cost savings as a key driver more often than other industries. Transport (47%) and recreational and personal services (46%) lead in terms of highlighting social and reputational benefits. Notably, only 40% of mining industry respondents reported cost savings as a driver, ranking social and reputational as a more significant driver to use renewable energy.

Refer to Appendix for full detail.



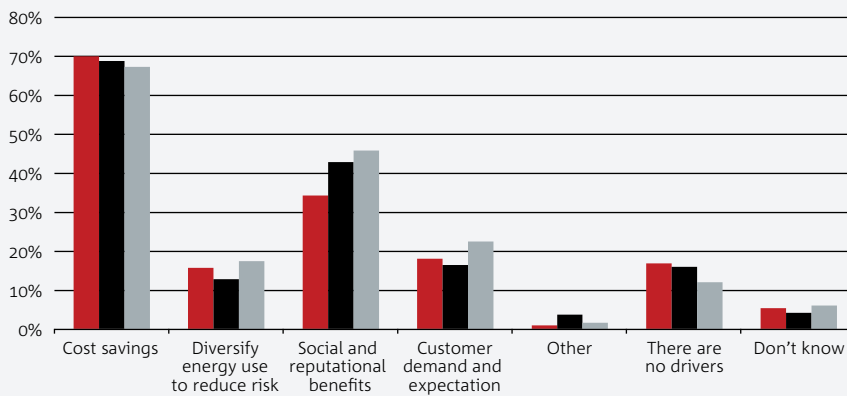
Key drivers of renewable energy use overall



Source: NAB Business Survey

Over two thirds of business see cost savings as a main driver to renewable energy use.

Key drivers of renewable energy use by firm size



■ Small: 35-99 employees ■ Medium: 100-199 employees ■ Large: 200+ employees

Source: NAB Business Survey

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Barriers to using renewable energy

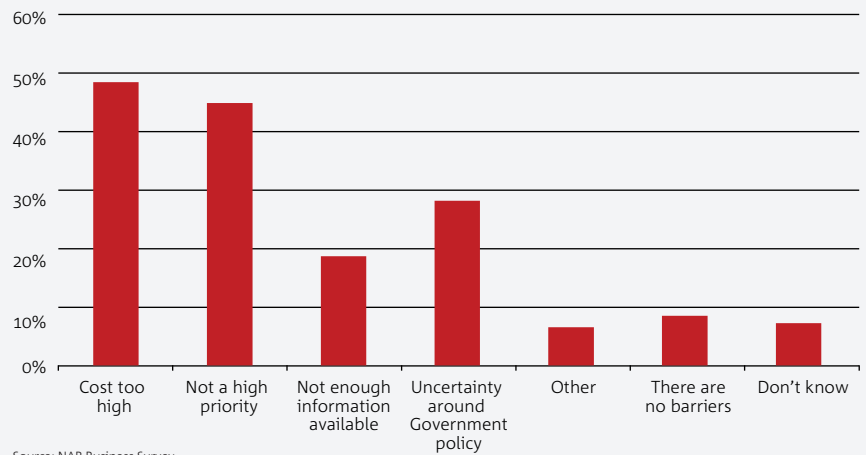
Respondents were asked to select key barriers to their organisation using more renewable energy and could select more than one. Whilst renewable energy costs being too high is the main barrier to increased usage (48%), close behind is that increasing renewable energy usage is not considered to be a high priority (45%). Uncertainty over Government policy (28%) is also seen as a reasonably significant barrier.

By state, Victoria and Tasmania lead in terms of seeing costs as being too high. Tasmania, SA and Victoria lead in terms of citing uncertainty over government policy as a key barrier.

Within the sectors, manufacturing (65%) and wholesale businesses (58%) see costs being too high as the key barrier with significantly less respondents in the mining industry citing costs being too high as a barrier to increased use (39%). The manufacturing, construction, retail and transport industries all see uncertainty over government policy as an issue with more than 30% calling this out as a key barrier to increased usage.

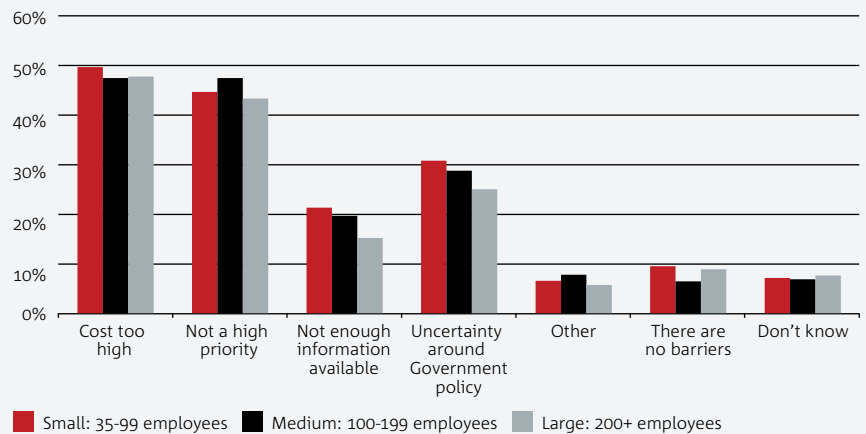
Refer to Appendix for full detail.

Key barriers to renewable energy use overall



Source: NAB Business Survey

Key barriers to renewable energy use by firm size



Source: NAB Business Survey

Proportion of renewable energy use

Respondents were asked what proportion of their energy use is renewable today. Around a third of firms surveyed said they use renewable energy, however usage in the cohort was fairly low with nearly three quarters saying renewable energy makes up less than 25% of overall energy usage. It is noted that one third of all respondents did not know what proportion of energy use was renewable.

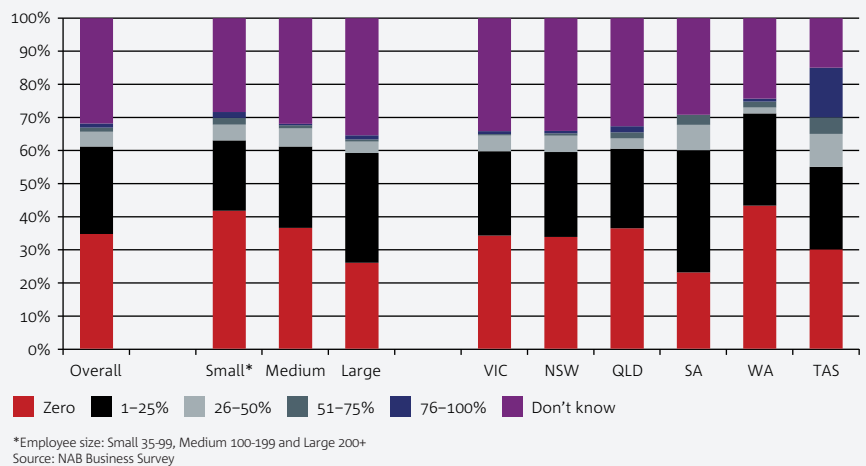
Across the businesses, it is the large firms which lead in terms of overall renewable energy usage. There is a low take up of renewable energy accounting for more than 25% of overall usage but at the margin, smaller firms are in the lead.

By state, Tasmania and South Australia report the highest proportion of renewable use, with around 50% of firms in these states using at least some renewable energy.

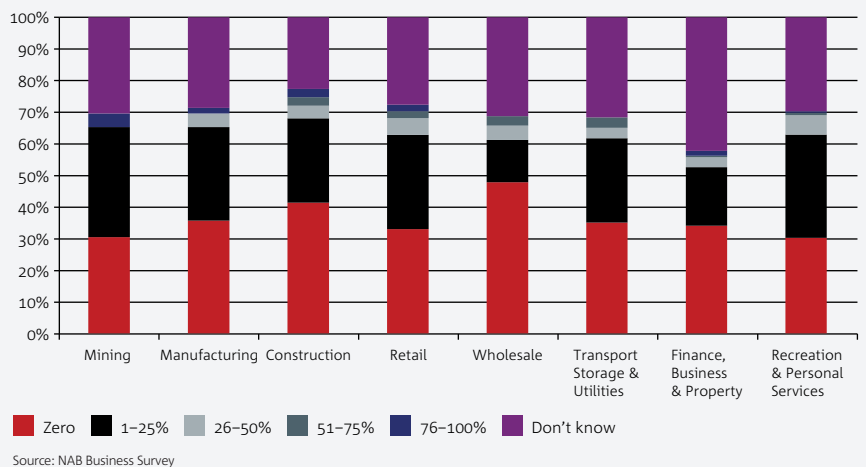
Around 1 in 3 firms across the remaining states report using some degree of renewable energy.

By sector, the recreational & personal services, retail and mining industries report higher usage of renewable energy. The wholesale and finance, business and property businesses have the lowest usage.

Proportion of renewable energy use by size and state



Proportion of renewable energy use by sector



“Renewable energy is an important part of Australia’s future energy mix, and our customers are telling us they want to participate in the transition to a low carbon economy.”

Andrew Smith, Global Head of Energy, NAB.

The rise of the Power Purchasing Agreement – empowered Choice for business and communities

Recently there has been an increasing level of interest from corporate entities looking to enter Power Purchasing Agreements (PPAs) directly with renewable energy generators. The main drivers are twofold:

- to hedge against rising energy prices and to more actively manage price risk providing certainty of energy costs; and
- to clearly demonstrate an organisation’s commitment to sustainability including new renewable investment.

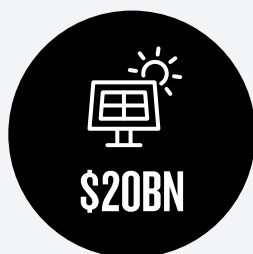
The declining cost of renewables over the past 5 years together with increasing wholesale electricity prices has resulted in corporate PPAs becoming a viable consideration for an increasing number of corporates.

This shift is part of a global trend. Bloomberg New Energy Finance (BNEF) reports that corporations purchased 7.2 GW of clean energy globally from January to July 2018, which is more than the whole of 2017. Whilst BNEF acknowledge that sustainability plans are a key driver of this growth, they also cite the cost driver, stating activity of this level would not have occurred without the opportunity for long term savings, quoting photovoltaic module cost reductions of 84% globally since 2010 and wind turbine costs down 32% over the same period. Together with efficiency improvements, renewables have become cost competitive with wholesale power prices and non-renewable sources of electricity³.

A company doesn’t have to go it alone to enter into a PPA. In fact, by grouping together, organisations can not only secure their own clean energy, they can also enable new renewable projects to get off the ground. An example is the [Crowlands Wind Farm](#), where a group of Melbourne organisations including councils and universities combined their purchasing power to support the construction of a new renewable energy wind farm. The consortium will purchase 88 gigawatt hours of power a year, approximately one-third of Crowlands’ output and enough to power 17,000 homes.

3. [Bloomberg NEF](#), 2018, ‘Corporations already purchased record clean energy volumes in 2018, and it’s not an anomaly’.

\$55BN ENVIRONMENTAL FINANCING COMMITMENT BY 2025



To support green infrastructure, capital markets and asset finance



In new mortgage lending flow for 6 Star residential housing in Australia (new dwellings and significant renovations)

NAB's sustainability commitments and its role in the renewable energy industry

NAB believes it has a role to play in helping Australian business transition to a renewable energy future. In part, it does this through supporting the renewable industry. Since 2003, NAB has arranged almost \$32 billion of clean energy finance and is the No.1 arranger in the Australian market⁴.

This is part of NAB's broader commitment of \$55 billion in environmental financing to help address climate change and support the orderly transition to a low carbon economy. This includes \$20 billion to support green infrastructure, capital markets and asset finance and \$35 billion of lending to support the development of six-star residential mortgages.

To find out more about renewable energy or the survey, contact:

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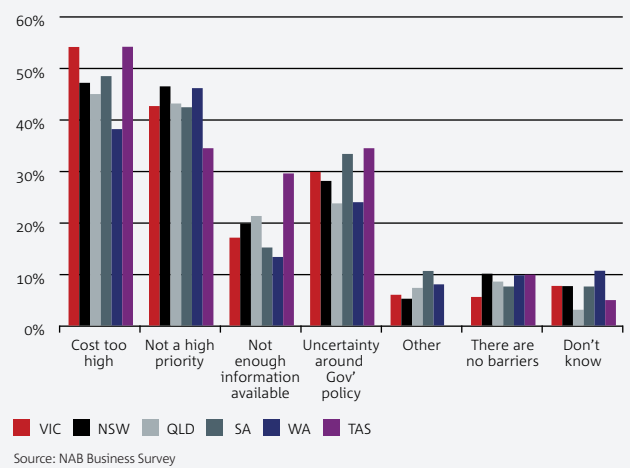
4. As at August 2018.

Appendix

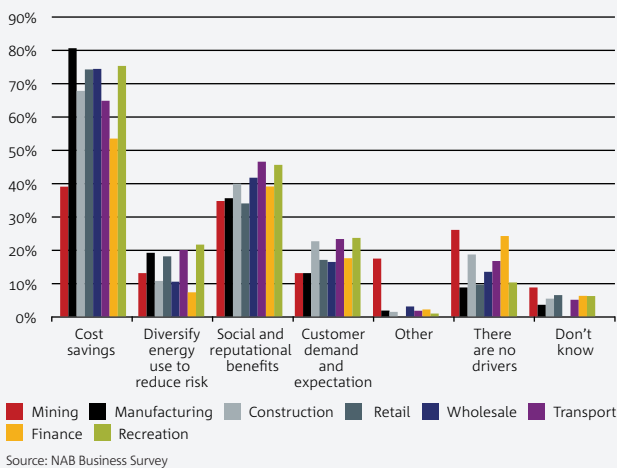
Key drivers of renewable energy use by state



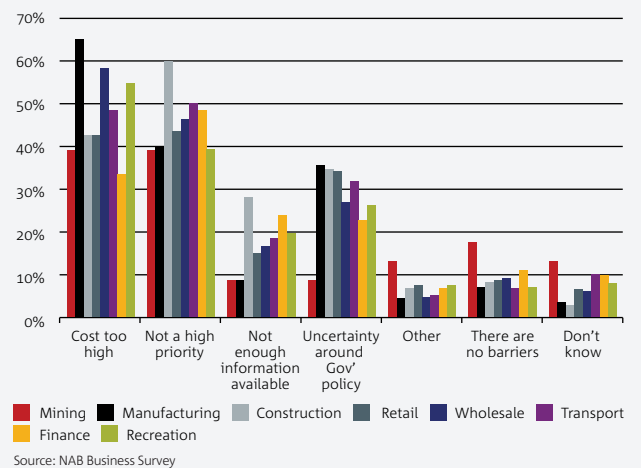
Key barriers of renewable energy use by state



Key drivers of renewable energy use by sector



Key barriers of renewable energy use by sector



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