BUSINESS RENEWABLES CENTRE AUSTRALIA

# CORPORATE RENEWABLE POWER PURCHASE AGREEMENTS IN AUSTRALIA:

# STATE OF THE MARKET 2021

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**About the Business Renewable Centre Australia**
The Business Renewables Centre Australia (BRC-A) is a not-for-profit initiative that seeks to help accelerate the uptake of Renewable Energy Corporate Power Purchase Agreements (PPA) in Australia through addressing critical knowledge gaps and facilitating industry networking. The BRC-A is a joint collaboration between WWF-Australia, Climate-KIC Australia and the Institute for Sustainable Futures, University of Technology.

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- Trade and Investment Queensland

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The BRC-A would like to extend gratitude to its Market Advisory Panel (MAP), a group of industry experts and experienced corporate buyers of offsite renewable energy, for their continuing input into the development of the BRC-A Resource Library.

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## CORPORATE RENEWABLE POWER PURCHASE AGREEMENTS IN AUSTRALIA:

# STATE OF THE MARKET 2021

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# EXECUTIVE SUMMARY

The emergence and growth of Corporate Renewable Power Purchase Agreements (Corporate PPAs) has been one of the major changes to the market for large-scale renewable energy. Since 2017, we estimate there have been 110 Corporate PPAs negotiated, contracting over 4 GW of renewable energy generation.[1]

The growth in Corporate PPAs has diversified the market for large-scale renewable energy. Not long ago, Utility PPAs with electricity retailers were effectively the only buyer option for off-take agreements – but Corporate PPAs are now playing an important role in energy transition. As retailer agreements with solar and wind farms slow, now their legislated purchase obligations under the Renewable Energy Target have been met, Corporate PPAs and public sector retailers have been the two on-going market segments.

In our State of the Market report, we highlight three key trends or features of the market during 2020-21:

- **The resilience of the Corporate PPA market:** Corporate PPAs had a record year in 2020 amidst the turbulence of Covid and in 2021 has seen strong volumes amidst low wholesale electricity prices. In 2021, 1.3 GW of capacity were signed through Corporate PPAs whereas around 770 MW have been signed in 2021 to date. This is the third-highest figure and may grow significantly in the last quarter. For two-years running Corporate PPAs have been a source of renewable energy demand in challenging conditions.
- **The PPA market is now primarily being driven by buyers with sustainability drivers:** In the early years, corporate PPA market growth was driven by buyers seeking relief from electricity price shocks – but the market is now being driven by buyers with net zero and sustainability targets. For two years running, over 60 per cent of buyers nominate non-price drivers as drivers for interest in PPAs. The growth of organisations signing net zero and sustainability commitments is likely to solidify this trend and is a key factor underpinning the resilience of the Corporate PPA market.
- **The market is shifting away from wholesale to retail PPAs:** where there was a bifurcated market with large buyers signing Wholesale PPAs and mid-sized buyers Retail PPAs, there was a swing amongst large buyers to retail PPAs this year. It is too early to know if this will become a stronger trend but may signal improved pricing and firming services attracting larger buyers.

1. These figures are drawn from BRC-A's PPA database based on publicly available information. Industry participants inform us that there are some PPAs that are not public.

Our annual survey collects information on the key barriers to Corporate PPAs and processes. The major findings were:

- **PPAs remain a challenging undertaking** with most buyers and developers rating the difficulty high or very high - though transaction costs are generally rated moderate to high.
- **The major barriers to PPA execution are internal to buyer organisations:** buyer understanding, complexity and building organisational support for PPAs are the key challenges.
- **PPAs take time:** for over half of buyers it was longer than 18 months which was higher than last year, which may reflect the challenging environment.

For this year and last year's survey, we also collected data on buyer preferences and criteria when evaluating PPA deals from buyers, developers and service providers.

Some of the key findings are:

- **Price and risk are the most important factors for buyers** followed by developer reputation. Developers and buyers appear better aligned than in last year's survey when developers over-stated the importance of price to buyers.
- **Community support and benefits from PPAs and environment and biodiversity are generally more important to buyers than developers recognise.** Whilst less important than price, community and environmental factors are more important for buyers than developers think.
- Across most categories, **service providers were more accurate in their assessments of buyer preferences than developers.**

2021 was a challenging year in the context of low wholesale electricity prices and an industry slowdown, but the industry was positive about Renewable Energy Zones having a positive impact on Corporate PPAs in 2022.

# INTRODUCTION

Under a Corporate Renewable PPA, electricity buyers agree to buy power and/or Large-scale Generation Certificates (LGC) from a renewable energy project (currently solar or wind farms) at a fixed price over medium and long terms.

The key drivers for Corporate PPA buyers are:

- **Sustainability targets** – off-site renewable PPAs are the quickest and often the only way to achieve ambitious targets.
- **Improving budget certainty** in volatile markets.
- The potential for **cost savings**.
- Improving their **brand or social licence** by supporting new renewable energy.

The market for Corporate Renewable PPAs has continued including a wider range of organisations, sizes and sectors. In 2021, PPAs were signed by large resource companies, supermarket chains, regional councils, telecommunications providers, universities and property companies.

## ABOUT THE REPORT

The State of the Market 2021 report provides an overview of the Corporate Renewable Power Purchase Agreements sector and its key trends. The report is prepared by the Business Renewables Centre Australia (BRC-A) with input from the Market Advisory Panel.

The purpose of the report is to provide an overview of PPA market trends. The original data in the report is drawn from two primary sources:

1. The BRC-A maintains a database of Corporate PPAs based on publicly available information and supplemented through industry contacts.
2. An annual survey of corporate Buyers, project Developers and professional Service Providers in the industry and BRC-A membership.

As of late September 2021, BRC-A had 227 members:

| | |
|---|---|
| Buyers | 133 |
| Developers | 44 |
| Service providers | 25 |
| Partners | 25 |
| **Total** | **227** |

BRC-A membership statistics, industry surveys and further information are provided in ‘BRC-A Activities in 2020-21’.

## ABOUT THE BRC-A

The Australian Corporate PPA sector is developing at a rapid rate. For renewable energy developers, the search and transaction costs for finding and negotiating with buyers can be high. For many buyers, energy procurement is often not a core function and understanding and negotiating Corporate PPAs can be complex and time-consuming.

Consequently, the BRC-A was launched in September 2018, to support and facilitate the growth of Corporate PPAs with funding from the Australian Renewable Energy Agency (ARENA) and the NSW and Victorian Governments, and later the Queensland Government.

The BRC-A is a member-based organisation which helps prepare prospective PPA buyers for market-readiness through in-person and online procurement training (bootcamps and webinars) and a suite of educational resources, and facilitates connections between buyers, developers and professional service providers through an online marketplace and profiles platform.

The BRC-A is a collaboration between WWF-Australia (building on the Renewable Energy Buyers Forum), Climate-KIC Australia and the Institute for Sustainable Futures, University of Technology. For more information go to www.businessrenewables.org.au.

**...energy procurement is often not a core function and understanding and negotiating Corporate PPAs can be complex and time-consuming**

# LARGE-SCALE RENEWABLE ENERGY IN AUSTRALIA

The installation of large-scale renewable energy has slowed after the rapid growth to achieve the Renewable Energy Target. In 2020, 22 new solar farm (892 MW) and 10 wind farms were built adding 1097 MW but much of this is from the PPAs signed for the RET. Whilst the installation of new renewable energy has slowed, solar and wind farms continued to set records with the share of generation reaching 30 per cent in September 2021.

## THERE IS A LARGE PIPELINE OF RENEWABLE ENERGY PROJECTS

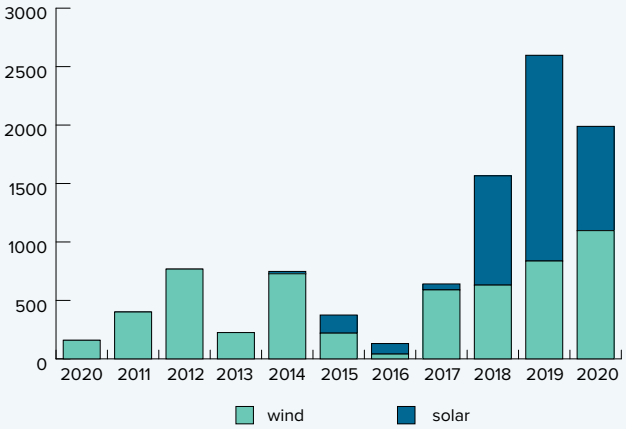
The Australian Energy Market Operator's (AEMO) project pipeline illustrates there is an enormous volume of renewable energy projects under development.

Based on AEMO's generator information, there is around 30 GW of solar, over 40 GW of wind and 20 GW of battery storage projects proposed.

The expressions of interest conducted for the NSW Renewable Energy Zones have highlighted the large volume of projects under development. In June 2020, the NSW Government received 113 registrations of interest for the Central-West Orana REZ, representing 27,000 MW of new energy generation and storage projects. This is 9 times the amount required to deliver the REZ.

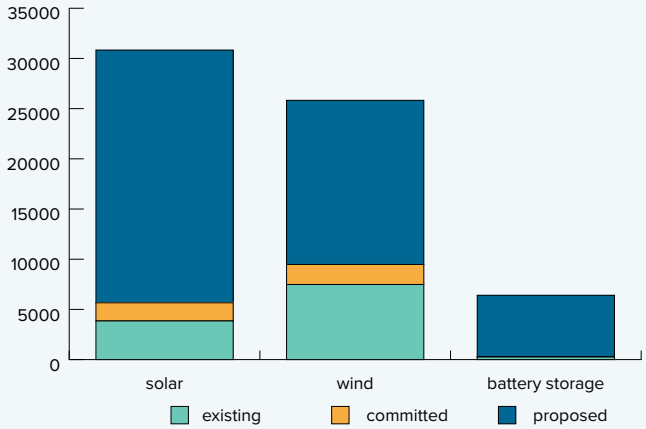
Only a small proportion of projects in the pipeline have secured finance: there is a large number of projects seeking a power purchase agreement and finance to proceed.

**Figure 1: Annual Growth of Large-Scale Renewables (MW)**




Source: *Clean Energy Australia 2021*, Clean Energy Council

**Figure 2: Large-Scale Renewable Energy – Project Pipeline (MW)**




Source: *Generation Information* 2021, AEMO

# WHAT IS A CORPORATE PPA?

A Corporate PPA is an agreement between an entity that owns and operates a wind or solar farm and an organisation that purchases the power and/or environmental attributes generated by the plant.

The typical Corporate PPA was initially a **Wholesale PPA** – a financial Contract-for-Difference entirely separate from a typical retail electricity bill. In a Wholesale arrangement, the off-taker (buyer) pays a fixed price per megawatt-hour (MWh) of electricity to the solar or wind farm (usually with an annual escalation factor); in exchange, they receive the revenue from the electricity sold in the wholesale electricity market and usually the green certificates (LGCs). Typically, these are long-term deals lasting 10 or more years.

However, over the past 18 months, there has been substantial growth in **Retail PPAs** and models for buying renewable energy.

In a Retail PPA, the buyer pays for electricity and/or LGCs from a solar or wind farm through the retailer's contract with the project; that is, the buyer is not a direct party to the PPA between the project and retailer. There is a contracted price for the output from the solar and wind farm and contracted price(s) for the electricity supplied by the retailer when the solar or wind farm is not generating.

There are also hybrid PPAs whereby a retailer **sleeves** the Wholesale PPA inside a retail agreement.

The growth of retail PPAs has brought an influx of smaller, mid-sized buyers drawn into the off-site renewable energy market. Retailers have further responded by providing a growing variety of deal structures, pricing models and term lengths such as:

- **LGC-only PPA:** Initially, LGC-only purchases by government and infrastructure projects for terms of 10-years or longer underpinned new projects. In the past year, as the prices for longer-term LGCs improve relative to electricity and more buyers are seeking to meet emissions reduction targets, LGC-only purchases from operating projects have grown.
- **Long-term (7-10 years) PPAs from a portfolio of operating projects:** PPAs directly linked to or sourced from a group of renewable projects within a retailers portfolio.
- **Short-term PPAs (3-5 years) from operating projects:** there has been strong growth in a secondary market for retailers on-selling capacity from operating projects to renewable energy buyers.

The growth in these new models have spurred debate amongst practitioners as to the definition of a PPA and the impact of these different arrangements. Is a short-term deal a 'PPA' or 'buying renewable energy'? Does the definition of 'environmental additionality' only include deals that are supporting new investment — or also deals that retire LGCs from operating projects to support the price for green certificates that form part of the finances for renewable energy investment. As retailers simplify PPAs and products for smaller buyers the market has also become more diverse and complex to track.

For more information on deal structures, see the BRC-A's guide to Corporate PPA Deal Structures in our Resource Library.

# THE GROWTH OF CORPORATE PPAs IN AUSTRALIA

Corporate renewable PPAs are an important source of investment in the large-scale renewable energy market. There are different ways of measuring the impact of Corporate PPAs and renewable energy procurement:

- Capacity contracted: the volume of capacity contracted by the PPA
- Project capacity enabled: most PPAs only buy some of the capacity of the project but contribute towards the project securing finance for construction. So if, for example, a buyer commits to buy 40MW for a 100MW project, 40MW is allocated to capacity contracted and 100MW to project capacity enabled.
- Renewable energy purchased (Gigawatt-hours): whereas the first two metrics measure the capacity of infrastructure supported, buyers are contracting for a volume of electricity to meet organisational requirements and reduce emissions.

As of the end of October 2021, there have been 110 publicly confirmed RE PPAs which have contracted more than 4 GW of renewable electricity and enabled or supported over 10.5 GW of project capacity.

The total value of large-scale renewable capacity bought through PPAs to date is $4.4B.[2]


Source: *PPA Database 2020-21,* BRC-A. Note 2021 figures include PPAs up to late October.

2. PPA data drawn from BRC-A PPA database; capacity costs from Graham, P., Hayward, J., Foster, J. and Havas, L. 2020, GenCost 2020-21: consultation draft CSIRO, Australia.

After a record year for Corporate PPAs in 2020, deal volumes were slower in 2021 but it was still a very good year. 2021 to date has been the third-best year (around 770 MW) – and with some large deals in the works but not yet completed or announced could still push towards the 1 GW mark by the end of the year.

After a big end to 2020, deal volumes were lower but healthy quarter-by-quarter in 2021 (except Q3).

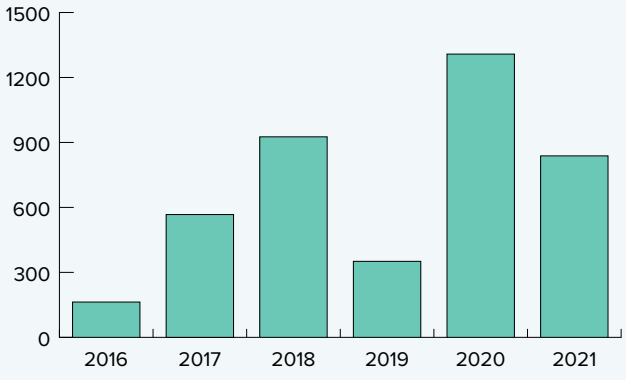
There was a lower number of deals being concluded (18 to date vs 26 in 2020) but some large PPAs inflated the capacity contracted. Two deals in the resource sector accounted for over half the contracted capacity alone.

- BHP (Olympic Dam): 159 MW with Port August Renewable Energy Park (SA)
- Sunmetals: 277 MW with Macintryre Wind Farm (Queensland)

Other notable PPAs during 2021 were:

- Victorian Energy Collaboration: a council buyers group negotiated an 80MW deal with Dundonell Wind Farm
- Woolworths: 65MW (Bango Wind Farm, NSW)
- Telstra: 56MW (Crookwell 3 Wind Farm, NSW)

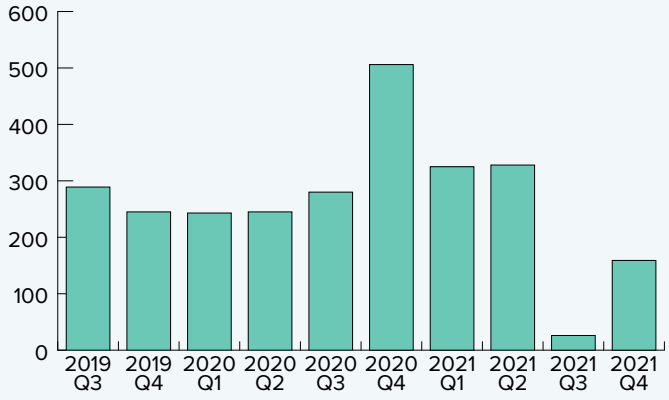
**Figure 3: Annual Corporate PPAs, Volume of Contracts (MW)**




Source: *PPA Database 2020-21,* BRC-A.

Note 2021 figures include PPAs up to late October. Not all PPAs are announced publicly so the figures will under-estimate deal volumes.

**Figure 4: Quarterly Corporate PPAs, Volume of Contracts (MW)**




Source: *PPA Database 2020-21,* BRC-A.

Note 2021 figures include PPAs up to late October.

## THE ROLE OF CORPORATE PPAs

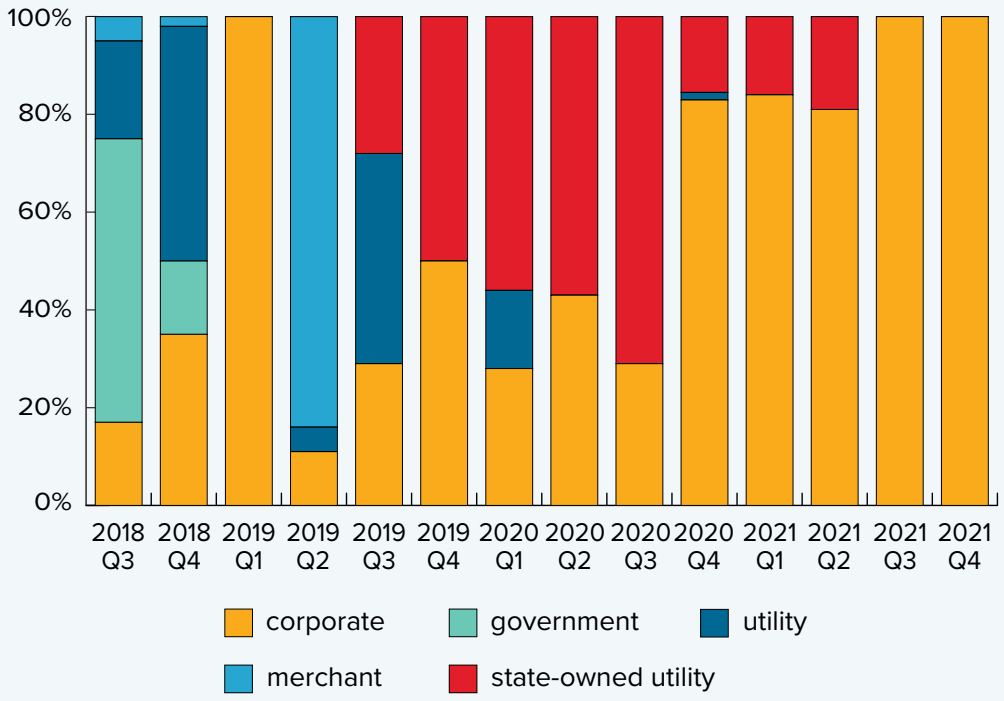
There are four market segments in Australia's large-scale renewable energy sector:

1. **Utility PPAs:** deals between electricity retailers and renewable energy projects
2. **Merchant projects:** solar and wind farms that sell into the wholesale market without a PPA
3. **Government PPAs:** auctions by government for renewable energy using general revenue (i.e. not for their own operations)
4. **Corporate PPAs:** deals with renewable energy projects by public and private sector buyers for their own operations.

In 2020, publicly-owned retailers in Queensland and Snowy Hydro signed major PPAs so they are now separately represented below to differentiate from utility PPAs signed by private sector retailers. Since private retailers secured sufficient capacity to meet commitments under the Renewable Energy Target towards the end of 2019, there have been virtually no utility PPAs signed.

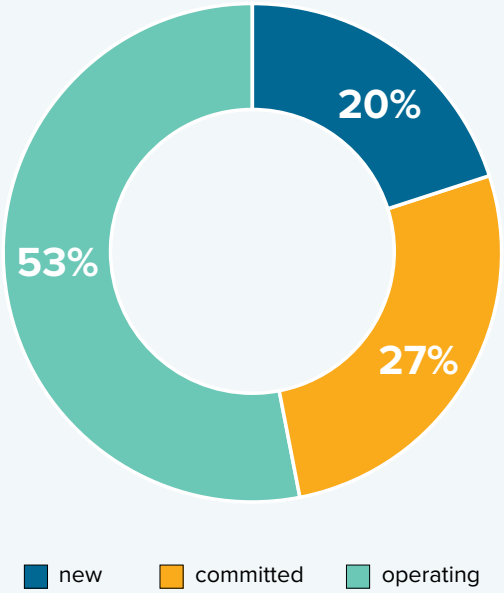
In the early years, Corporate PPAs generally accounted for 30 - 50 per cent of PPA market on average but for the past two years public retailers and corporate buyers have constituted the market for renewable energy.

**Figure 5: PPA Market Segments, 2018-21**



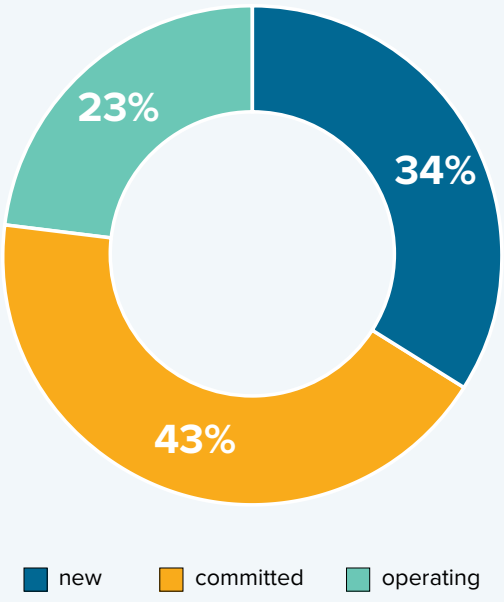

Source: *PPA Database 2020-21*, BRC-A.

**Figure 6: Percentage of total number of Corporate PPAs signed at different project stages**




Source: *PPA Database 2020-21*, BRC-A.
Note 2021 figures include PPAs up to late October.

**Figure 7: How much capacity is contracted by Corporate PPAs with new projects?**




Source: *PPA Database 2020-21*, BRC-A.
Note 2021 figures include PPAs up to late October.

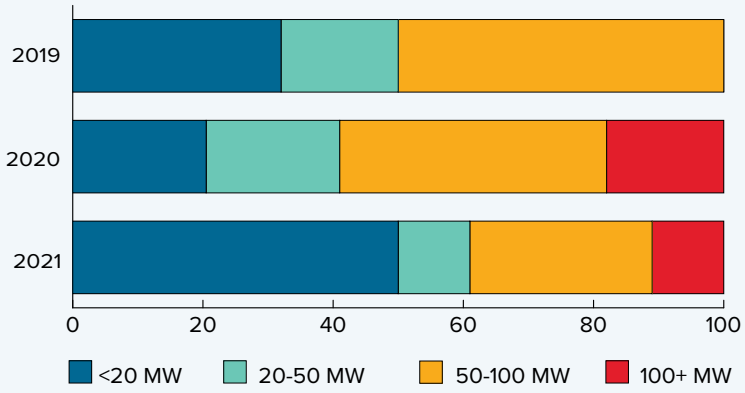
## THE SHARE OF CORPORATE PPAS WITH NEW PROJECTS FELL IN 2021

The growth in PPAs with operational projects observed last year continued in 2021. Most of the deals were with operating projects although only around one-quarter of the capacity contracted was with operating projects – reflecting the smaller-sized deals being signed by retailers with councils, universities and other 'mid-sized buyers'.

Only 15 per cent of PPAs were with new projects (Figure 6) and these accounted for around 30 per cent of the capacity contracted (Figure 7) – the lowest figure recorded by the BRC-A. PPAs with financially committed projects were higher than past years, accounting for almost half of the capacity contracted. This reflects the large resource deals negotiated with projects that had already secured an offtake such as Australia's largest wind farm (Macintrye wind farm, 1026MW) and were therefore an attractive proposition.

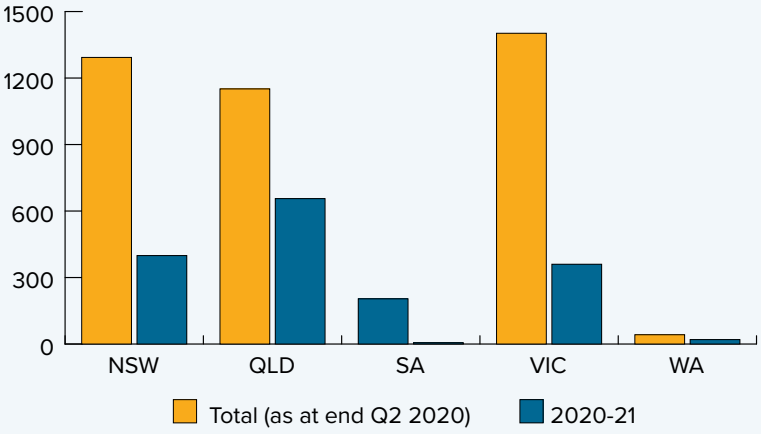
The lower share of PPAs for new projects may in part reflect the point in the cycle of development – an industry slowdown reflecting factors such as the establishment of the REZs (NSW in particular) and low wholesale electricity prices – which could turn next year with scheduled auctions in NSW (REZs) and Victoria (Victorian Renewable Energy Target, VRET). The existence of large committed projects with capacity to contract also may be a one-off. But there are other structural factors such as the growth in the retail PPA and products market for smaller buyers who prefer shorter-terms that can only be secured from operational projects. For some, the growth in operating PPAs is worrying as the prime function is to underpin new investment, for others it is a positive sign of a new market for renewable energy that will ultimately lead to investment in new projects.

**Figure 8: Corporate PPAs, Segments by size (% of deals)**




Source: *PPA Database 2019-21*, BRC-A

**Figure 9: Corporate PPAs by state (MW)**




Source: *PPA Database FY 2020-21*, BRC-A

## HOW BIG ARE THE DEALS?

Since 2019, there was growth in the size of corporate PPAs at both ends of the market. Smaller buyers with lower risk appetites are contracting retail PPAs with operating projects whilst larger buyers are contracting with larger, new projects which offer lower prices. Consequently, there has been growth at both ends of the spectrum - less than 20 MW and greater than 100 MW.

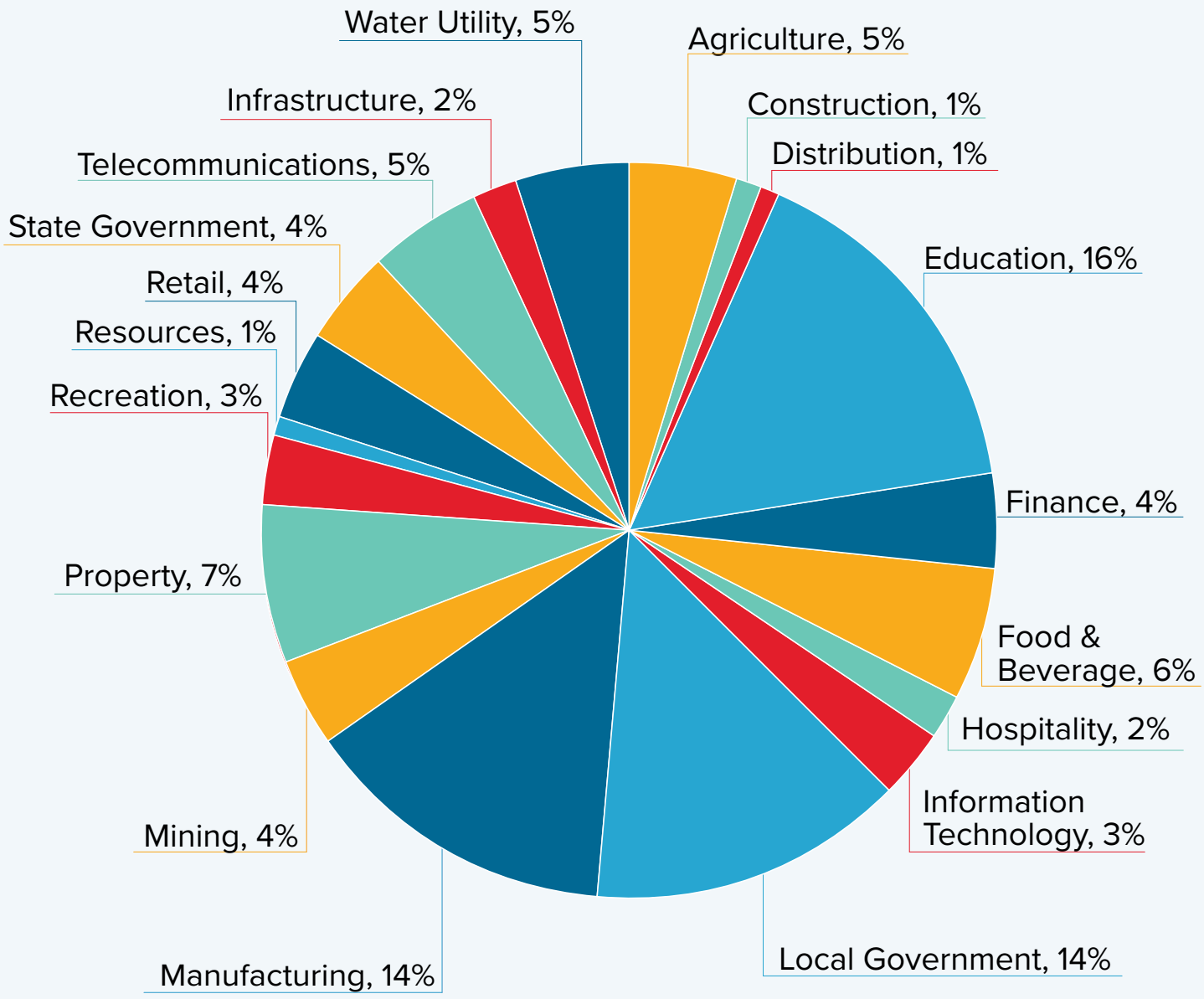
## QUEENSLAND WAS THE LEADING STATE FOR PPAS IN 2020-21

During 2020-21, Corporate PPA uptake accelerated in Queensland, with deals being negotiated in tandem or off the back of PPAs signed by CleanCo in particular. Deal volumes in NSW and Victoria were similar to each other. Activity remains low in other states but there was a PPA signed early in the year in Western Australia by BHP and in September 2021 in South Australia also by BHP – which may be a sign of things to come as resource companies step up activity in renewable PPAs.

## BUYER SECTORAL COMPOSITION REMAINED DIVERSE

One of the key features of the PPA market continues to be the diversity of sectors. Whilst there are some sectors that are relatively active (e.g. Local Government, manufacturing, councils, universities), the outstanding feature is the broad spread of sectors where Corporate PPAs have been made.

**Figure 10: Number of Corporate PPAs by sector (%)**




Source: *PPA Database FY 2020-21*, BRC-A

# KEY CORPORATE PPA TRENDS

After the tumultuous year of 2020, 2021 was a less volatile version of the same with lockdowns in the largest states and flat wholesale electricity prices. In Australia, there have been major reductions in wholesale electricity prices, especially in the middle of the day amidst the growth of solar power and low grid demand.

There are three key PPA market trends to highlight:

- **The resilience of the Corporate PPA market:** Corporate PPAs had a record year in 2020 amidst the turbulence of Covid and in 2021 has seen strong volumes amidst low wholesale electricity prices.
- **The PPA market is now being driven by buyers with sustainability drivers:** In the early years, corporate PPA market growth was driven by buyers seeking relief from electricity price shocks – but the market is now being driven by buyers with net zero and sustainability targets
- **The market is tipping from Wholesale to Retail PPAs:** in recent years, a two-stream market opened between large buyers signing Wholesale PPAs and mid-sized buyers signing Retail PPAs – but there appears to be a shift towards Retail PPAs now with even larger buyers also increasingly preferring them.

## THE RESILIENCE OF THE CORPORATE PPA MARKET

BRC-A conducts an annual survey of PPA buyers, developers and service providers. In this year and last year's survey, we asked about the impact of Covid-19 on buyer interest in Corporate PPAs. A reduction in demand would be expected due to a range of factors such as lower wholesale prices (reducing the short-term financial incentive and gains), business uncertainty, the need to focus on core business amidst a recession and impacts on the credit ratings of buyer organisations.

However, the picture that emerges from the survey is that the impacts of Covid-19 have been subtler and more modest. Service providers mostly saw no impact amongst buyers or were unsure – very few observed a negative impact. Developers also were mostly likely to say no impact followed by unsure, although one-quarter had observed a negative impact.

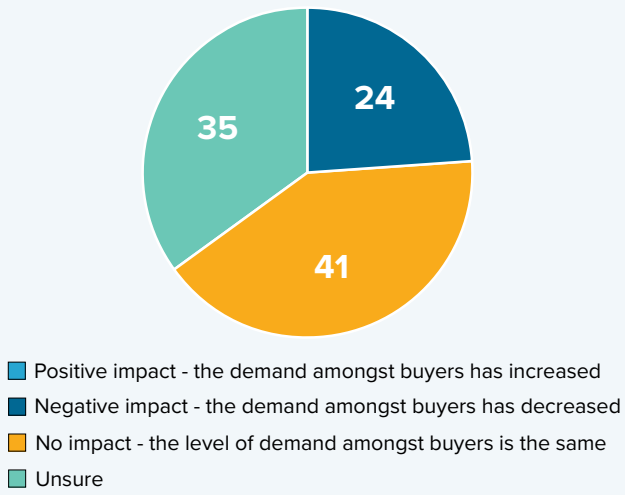
Anecdotally, market participants did report developments in the wholesale electricity market were impacting on buyer demand. Both low wholesale electricity market prices and the effect of very low grid demand and prices in the middle of the day (the 'duck curve') create uncertainty and reduce demand amongst buyers, especially to sign a longer-term PPA.

Amongst survey respondents, there is significant on-going demand for Corporate PPAs. For buyers pursuing a PPA, the range of demand is estimated to be 420 MW and 60 MW interested in a PPA.

The survey does not cover the market (e.g. Sydney Trains announced a large tender in October 2021) but does illustrate the on-going demand.

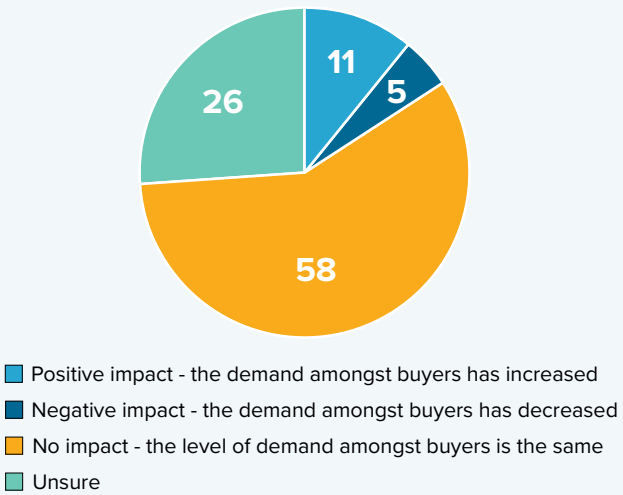
Market participants are also positive about the impact of renewable energy zones on Corporate PPAs.

### Figure 11: COVID-19 Impact on Corporate PPA buyer demand - Developers



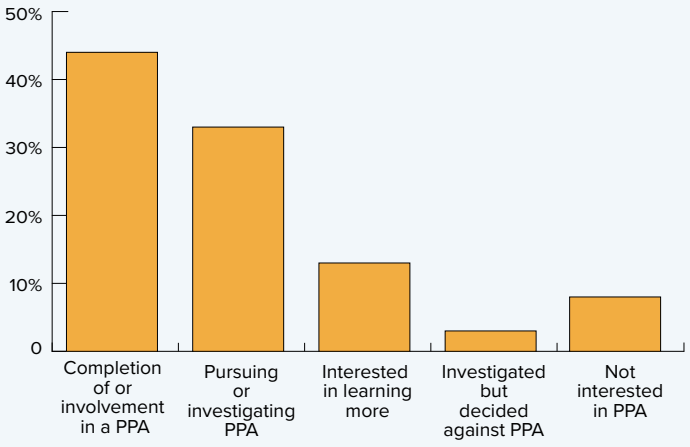

Source: *Industry Survey 2021*, BRC-A.

### Figure 12: COVID-19 Impact on Corporate PPA buyer demand - Service Providers



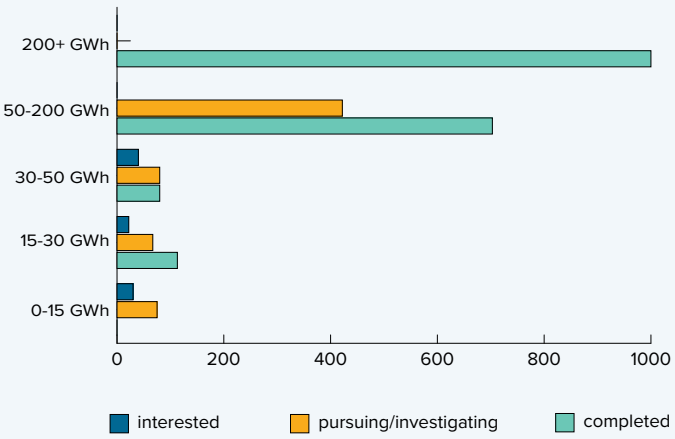

Source: *Industry Survey 2021*, BRC-A.

### Figure 13: PPA Deal Pipeline, Survey Respondents




Source: *Industry Survey 2021*, BRC-A.
Note: the volume for each category is calculated using the mid-point of ranges used in the survey (e.g. for buyers who answered their load is 50-200 GWh, the number of respondents is multiplied by 125 GWh). For respondents with 200+ GWh, the volume is assumed to be 200 GWh and for the 0-15 GWh category the volume is assumed to be 15 GWh. The capacity estimate assumes a 50:50 split between solar and wind with capacity factors of 25% and 35% respectively.

### Figure 14: What Impact will the Renewable Energy Zones have on Corporate Renewable PPAs?

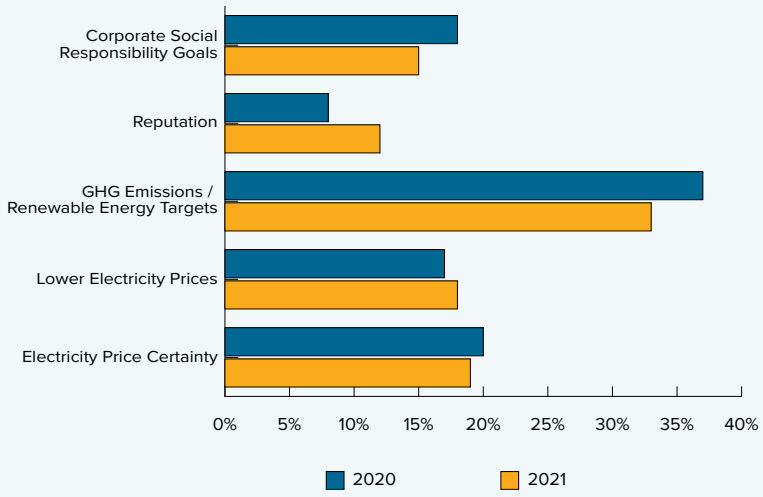



Source: *Industry Survey 2021*, BRC-A.

There have been questions as to whether the REZs might 'crowd out' corporate PPAs (as projects sign up for a strike price with government and/or PPAs with retailers returning to the market). However, around 60% of developers and 70% of service providers expect the REZs to increase corporate PPAs. The design of the NSW Long-Term Electricity Supply Agreement (LTESA) tender criteria in particular will create incentives by favouring bidders with an existing offtake in the bidding process. The most likely outcome appears to be a mixed market in which retailers buy for their own portfolios, broker deals between projects and larger buyers and on-sell to mid-sized buyers. PPAs with larger buyers are likely to also be attractive for developers bidding for LTESAs.

The key feature to emerge is the resilience of the Corporate PPA market. Even amongst the turbulence of Covid, challenging wholesale electricity market conditions and an industry slowdown, Corporate PPAs have remained a significant source of investment for large-scale renewable energy. By the end of the year, 2021 is likely to have been one of the better years for volume of Corporate PPAs.

**Figure 15: What is the driver for your interest in Corporate Renewable PPAs?**



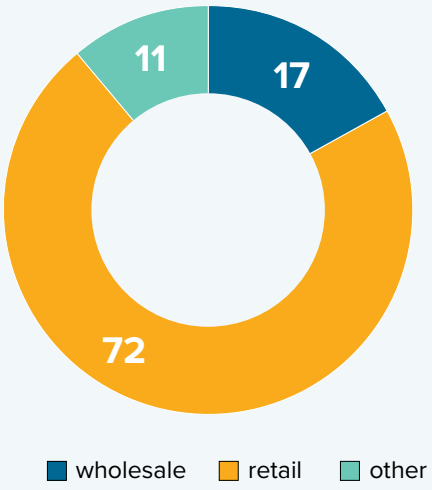

Source: *Industry Survey 2021*, BRC-A.

## SUSTAINABILITY BUYERS ARE NOW DRIVING THE MARKET

One of the key factors underpinning the resilience of the Corporate PPA market is the emergence of sustainability buyers as the key market cohort. Whilst the loss of demand amongst some buyers due to flat wholesale electricity prices has been observed, almost two-thirds of buyers in the BRC-A survey for two years running nominated non-price drivers for their interest in PPAs. Lower electricity prices and price certainty were nominated by just under 20 per cent of buyers.

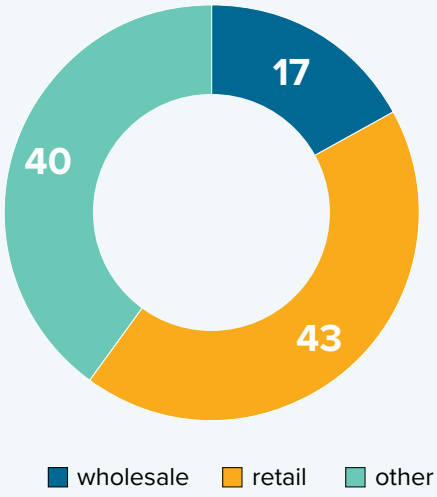
Anecdotally, this matches the views we hear from market participants (and observe in training events) about the growth of organisations exploring PPAs after signing net zero commitments.

**Figure 16: PPA Deal Types, 2020-21 (%)**




Source: *PPA Database 2020-21*, BRC-A.
Note: 'other' includes PPAs for behind-the-meter projects on the site of the buyer, self-owned projects and PPAs signed through third-party platforms

**Figure 17: PPA Deal Types, 2020-21 (MW, %)**




Source: *PPA Database 2020-21*, BRC-A.

## THE MARKET IS TIPPING FROM WHOLESALE TO RETAIL PPAS

For the past two years, there has been a two-stream market with a clear bifurcation between large-buyers which prefer wholesale PPAs and mid-sized buyers which prefer retail PPAs. In 2021, however, large buyers also swung to retail PPAs.

The retail PPA market has continued to develop with a range of offerings for buyers with different goals and risk appetites - from LGC-only deals that sit alongside standard retail contracts to fixed-price PPAs through to PPAs with wholesale spot exposure.[3] For mid-sized buyers without the scale of large buyers, these are often considered lower risk and easier than wholesale PPAs. Retail PPAs are now the most common deal type (Figure 16).

However, whereas in past years, wholesale PPAs still constituted the majority of capacity contracted, retail PPAs also were the largest market segment in 2021 (Figure 17). Retail PPAs also constituted the bulk of capacity as larger buyers like Woolworths and BHP also signed retail PPAs. This may represent a significant step in the development of retail PPAs with more attractive pricing and firming for larger buyers.

## THE CHANGING LGC MARKET

One area of the market which observed more complexity, diversity and debate during 2021 was the approach to LGCs. There are a number of dynamics at work:

- The economics of LGCs: the price of LGCs has held up longer than generally expected (still around $35-$40/LGC) and

3. See BRC-A's Renewable Retail PPA Guide for an explanation of the different types of Retail PPAs and how they work.

there are discounts on offer for buyers that strike longer-term deals. The benefits of long-term LGC purchases contrasts with the low prices and uncertainty for electricity. LGCs have also in this environment become a more important component of renewable energy project finances.

- The changing role of LGCs: before the RET was achieved, a party needed to be retiring the LGCs for the purchase to be additional and not squeeze out other renewable energy investment mandated by the RET. This is no longer the case as the RET has been met.
- Changing retailer models: a growing group of retailers offer deals sourcing electricity from a portfolio of projects with LGCs linked to specific asset(s).
- The on-going importance of LGCs for environmental claims: emissions reductions can only be claimed if the LGCs are retired and as noted there are more buyers coming into the market to meet net zero commitments.

Consequently, there has been a growth in LGC-only deals. LGC-only deals have been a preference of property companies for some time, smaller buyers that wish to meet sustainability commitments but also now some larger buyers. Coles, for example, bought LGCs to meet the final 30% of their net zero commitment after signing bundled PPAs for electricity and LGCs for earlier tranches.

There are some other notable market trends and gaps to consider.

There has been a growing debate on approaches to LGCs. For some buyers, retiring LGCs and using the revenue to fund other on-site projects is an attractive proposition. Some question the value of LGC-only purchases in underpinning new investment whilst others defend the role of LGC purchases in price uplift for green certificates and contributing to demand for renewable energy amongst smaller buyers without the purchasing power to underpin new projects. For short-term deals (less than 5-years) from retailer portfolios with LGC's linked to assets, some question whether this is can still be defined as a PPA (without a link to new investment) whilst others see the growth of a market for operating project capacity a positive development that taps into more types of buyers.

Reflecting this debate, BRC-A developed a guide to best practice to help buyers and market participants reflect on the alignment of deals with their values and goals in an increasingly diverse and complex market.

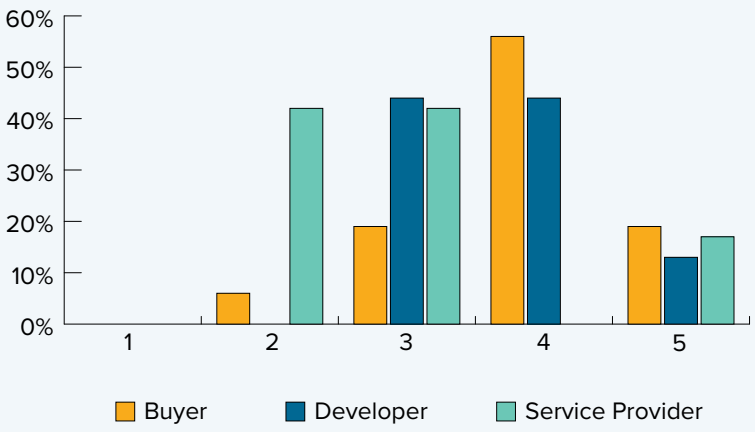
# UNDERSTANDING BUYERS: PREFERENCES AND BARRIERS TO CORPORATE PPAs

The Business Renewables Centre Australia is a 'buyer-facing' organisation that undertakes capacity-building to support buyers make informed decisions about Corporate PPAs. In surveys for the last two years, we asked buyers, developers and service providers about the barriers to and transaction costs of PPAs and preferences and criteria of buyers when making PPAs.

The key findings from the 2021 survey are:

- PPAs remain a challenging undertaking with most buyers and developers rating the difficulty high or very high but transaction costs are rated moderate to high.
- The major barriers to PPA execution are internal to buyer organisations: understanding PPAs and internal processes including business case and building organisational support.
- PPAs still take time: for 60 per cent of buyers the process was longer than 18 months.
- Price and risk are the most important factors for PPA buyers, but community support and benefits are more important than developers think they are and becoming more important to buyers.

**Figure 18: How hard are Corporate PPAs?**



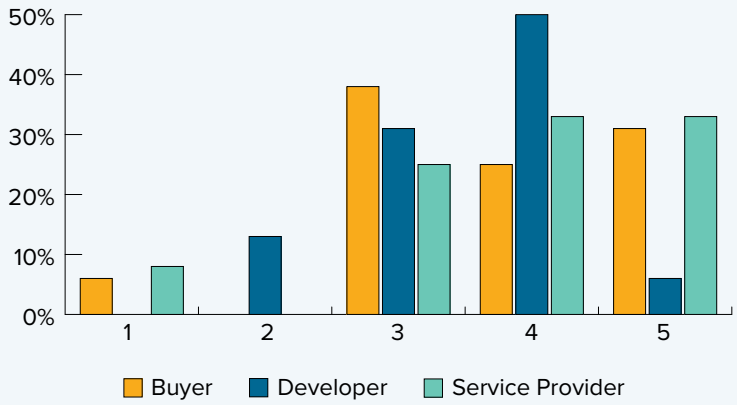

Source: *Industry Survey 2021*, BRC-A

## BARRIERS TO CORPORATE PPAs

When asked to rate the difficulty of negotiating Corporate PPAs, both buyers and developers answer they are hard.

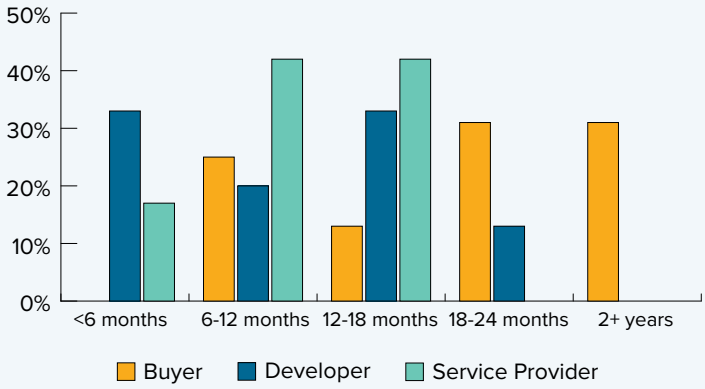
As with last year, around 80 per cent of buyers rate the difficulty at a 4 or 5 – although there are more buyers who rate the difficulty as a 4 and a slight increased in 3 ratings (and the first ever buyer rating it a '2'!).

**Figure 19: How high are the transaction costs for Corporate PPAs?**




Source: *Industry Survey 2021*, BRC-A

**Figure 20: Corporate PPAs, Process Duration**



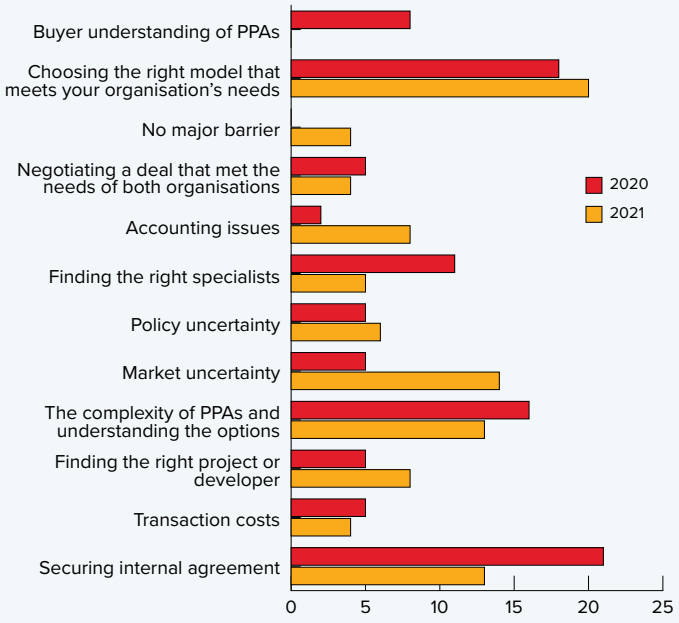

Source: *Industry Survey 2021*, BRC-A

When asked about transaction costs there is greater diversity of answers and the parties rate transaction costs as lower than the negotiation difficulty.

How long do PPAs take? In this year's survey, there was a greater proportion of longer processes. For buyers in last years survey, around one-third took 6-12 months, one-fifth 12-18 months, and almost half of buyers responded that the PPA took longer than 18 months. In this year's survey, 60 per cent took longer than 18 months. It is unclear if this is reflective of longer deal-making through the turbulence of the past year, but certainly there is no evidence of shortening timeframes even with the growth of retail PPAs.

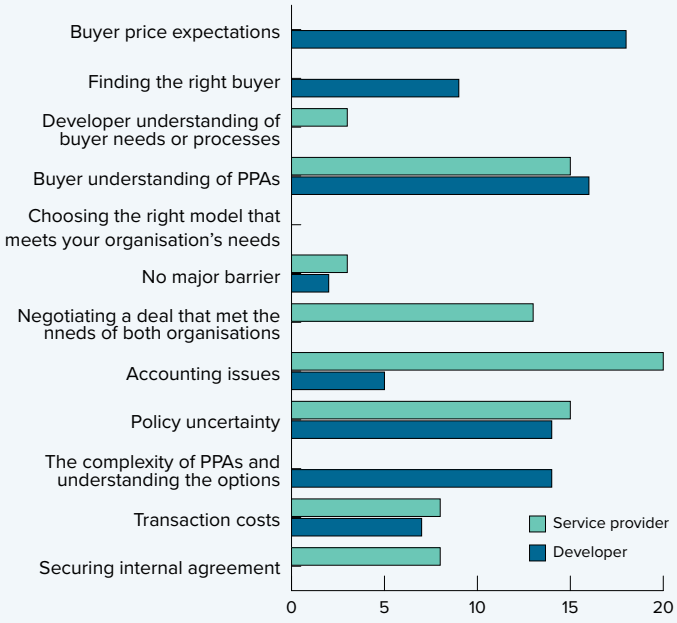
For developer and service providers, their involvement was usually 6-12 months, but a greater proportion of service providers also had 12-18 month processes.

### Figure 21: What is the major barrier to PPA buyer?




Source: *Industry Survey 2021*, BRC-A

### Figure 22: Major barriers in PPA procurement process for Developers and Service Providers



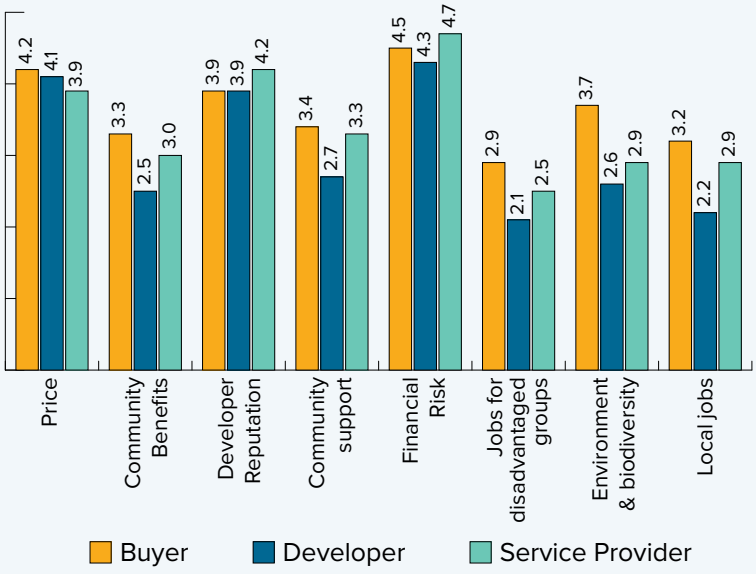

Source: *Industry Survey 2021*, BRC-A

When asked about the single greatest barrier, building internal organisational support, complexity and choosing the right model for the organisation are the major obstacles. Here also there is evidence that PPAs remain challenging.

The responses of developers and service providers likewise rate buyer understanding and complexity as the key barriers. Buyer price expectations rate as an issue amongst developers, whereas service providers rate internal agreement and accounting issues.

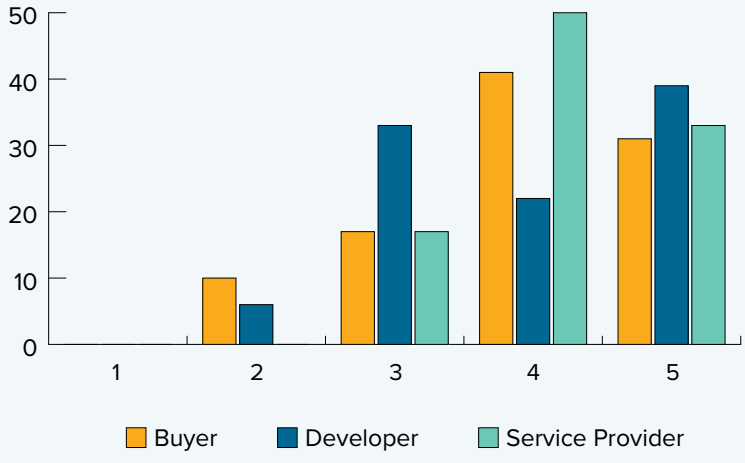
The general picture however is of a myriad of barriers with no dominant issue.

**Figure 23: Key Factors for PPA Buyers, Average Rating**




Source: *Industry Survey 2021*, BRC-A
Note: respondents were asked to rate on a scale of 1-5. Developers and service providers were asked to rate the importance of each factor for buyers – not themselves.

**Figure 24: How Important is Developer reputation?**




Source: *Industry Survey 2021*, BRC-A

## BUYER PREFERENCES: WHAT MATTERS WHEN BUYERS ARE EVALUATING PPAs?

What are the key factors for buyers when procuring PPAs and evaluating different projects? In this and last year's survey, we asked buyers, developers and service providers about the preferences of buyers to gain insight into their priorities and differences between the parties.

The average ratings of the parties highlight:

- Price (4.2) and risk (4.5) are the most important factors for buyers followed by developer reputation (3.9).
- Community support (3.4), community benefits (3.3) and environment and biodiversity (3.7) are less important than price - but each of non-price factors are rated as more important for buyers than developers consider.
- The assessment of buyer preference by service providers is generally more accurate than developers.

### Developer Reputation

For around three-quarters of buyers, developer reputation is either very important or important (very similar to last year's survey).

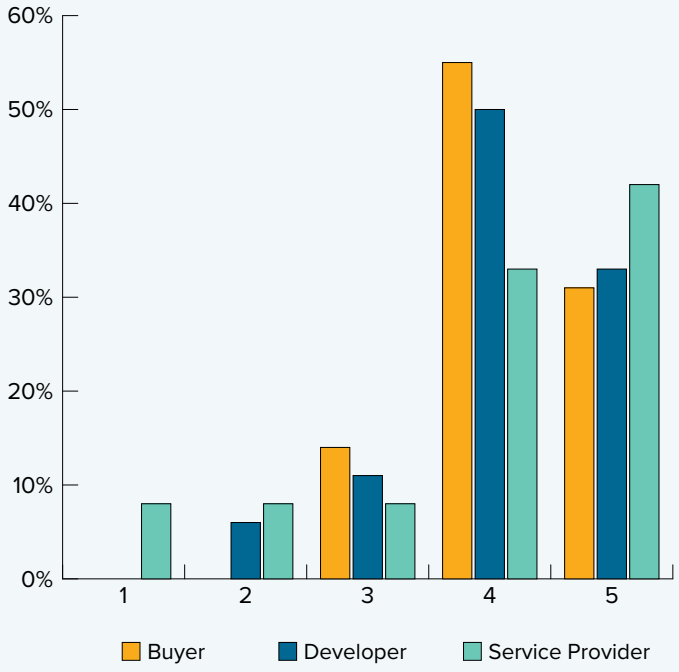
There is stronger alignment between buyers and developers on this factor than last year.

### Price and Risk

All parties rate price as a key factor and as with developer reputation there is a better alignment in response this year. Whereas there was a notable gap between the level of buyers that rated price as '5' and developer expectations, there is closer alignment although more buyers rate it as a '4' relative to developer expectations.

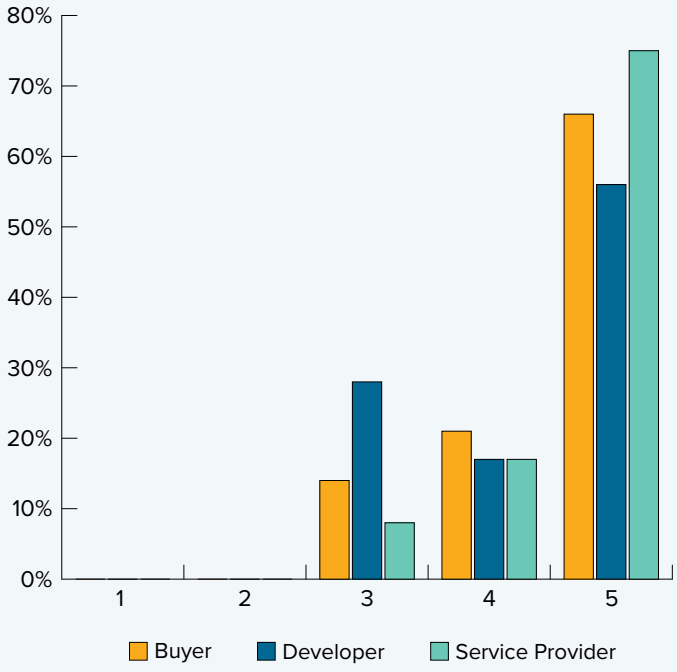
All parties are also quite well-aligned on risk and it is notable that there is a higher proportion of '5' ratings than in last year's survey.

**Figure 25: Importance of price to PPA buyers**



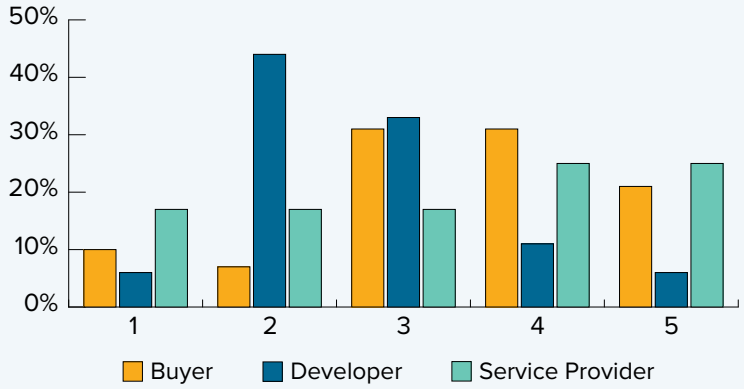

Source: *Industry Survey 2021*, BRC-A

**Figure 26: Importance of financial risks to PPA buyers**



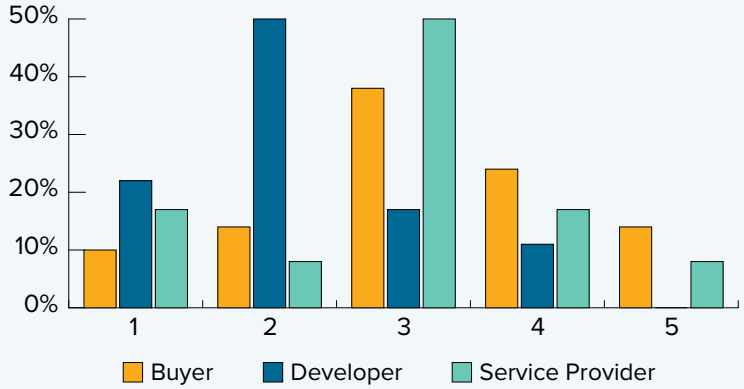

Source: *Industry Survey 2021*, BRC-A

**Figure 27: Importance of local community support to PPA buyers**



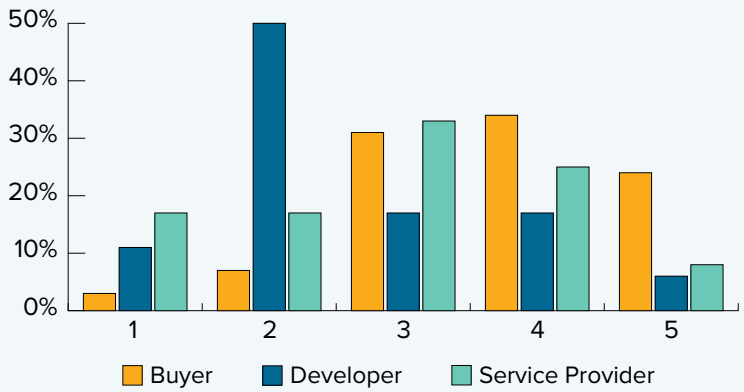

Source: *Industry Surveys 2021*, BRC-A

**Figure 28: Importance of community benefits for PPA buyers**




Source: *Industry Surveys 2021*, BRC-A
Note: Community benefits refer to benefits such as infrastructure funds which are included as part of solar and wind farm developments

**Figure 29: Importance of impacts on local environment and biodiversity for PPA Buyers**




Source: *Industry Surveys 2021*, BRC-A

## Community, Economic and Environmental Benefits

If price, risk and reputation are the most important factors, community benefits, support and environment and bio-diversity are all rated more importantly by buyers than developers expect.

Around one-half of buyers rated community support as a '5' or '4' (Figure 27) and one-third also did so for community benefits (Figure 28).

Greater importance is also being placed on impacts on local environment and biodiversity with almost half of PPA buyers rating it as a '5' or '4'.

# BRC-A ACTIVITIES IN 2020-21

The BRC-A was established to support the development of the Corporate PPA market. Established through a licence agreement with the Rocky Mountain Institute's Business Renewables Centre in the United States, the BRC-A is a member-based organisation that provides buyer education and training, develops informational resources (guides, primers, tools, templates), and connects buyers and developers through an online marketplace platform and networking events. The core function of the BRC-A is to help bring build the capacity of PPA buyers, grow the pipeline of buyers who are better informed and able to negotiate PPAs and reduce the transaction costs of Corporate PPAs.

## BRC-A IMPACT TO DATE

As Corporate PPAs generally take longer than a year and upwards to negotiate, it takes some time for the impact of an initiative focussed on early-stage buyers to demonstrate impact. However, after three years BRC-A can demonstrate clear impact in the market from events, training, guidance materials and PPA deals signed by members.

Since launching in October 2018, some of the impacts of the BRC-A include:

- Buyer Members have signed 31 PPAs constituting >1.1 GW of power contracted and supporting >3.9 GW of projects. 13 of these Members participated in Buyers Bootcamps.
- Six Buyers Bootcamps have been run, training more than 80 organisations in PPA procurement
- More than 460 listeners attended BRC-A webinars in 2021
- The BRC-A online Resource Library has been utilised by over 600 Member users 4,500 times;
- The Project Marketplace has been viewed by Member users 2,800 times.

The BRC-A surveyed its members and the broader industry in 2021 to understand their experiences with Corporate PPAs. There were 92 responses of which more than 70 per cent were BRC-A members.

| Buyers | Developers | Service Providers |
|---|---|---|
| 46 | 23 | 23 |

In this section we profile BRC-A members and other industry constituents and report on activities of the BRC-A in 2020-21.

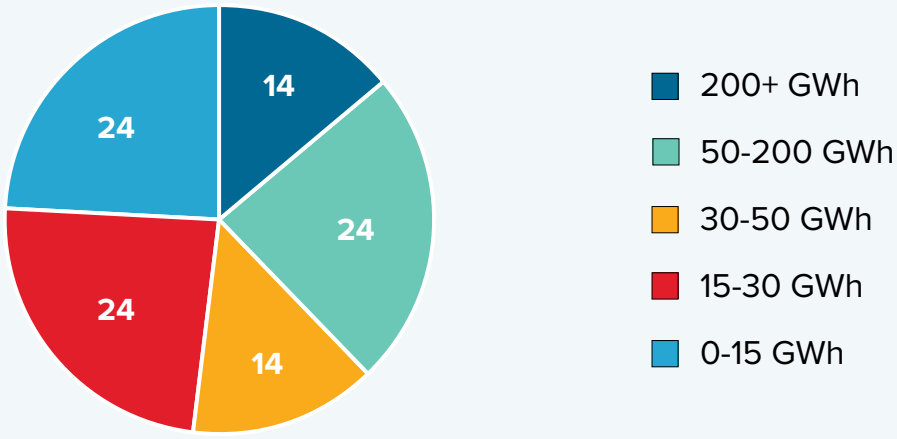
## BRC-A INDUSTRY SURVEY PARTICIPANTS PROFILE

BRC-A membership is comprised of energy Buyers, large-scale renewable energy Project Developers, professional Service Providers that advise on PPA transactions and partners including State Government departments and industry associations.

The survey captured a range of annual electricity loads, with 38% being large or very large consumers, and a growing, now majority, segment of small and mid-sized buyers (<50 GWh p.a.) constituting the remainder. Over this reporting period there has been a rise in the quantity of Buyers that are currently pursuing or investigating a PPA, with this survey capturing 14 Buyers using less than 50 GWh of electricity per annum.

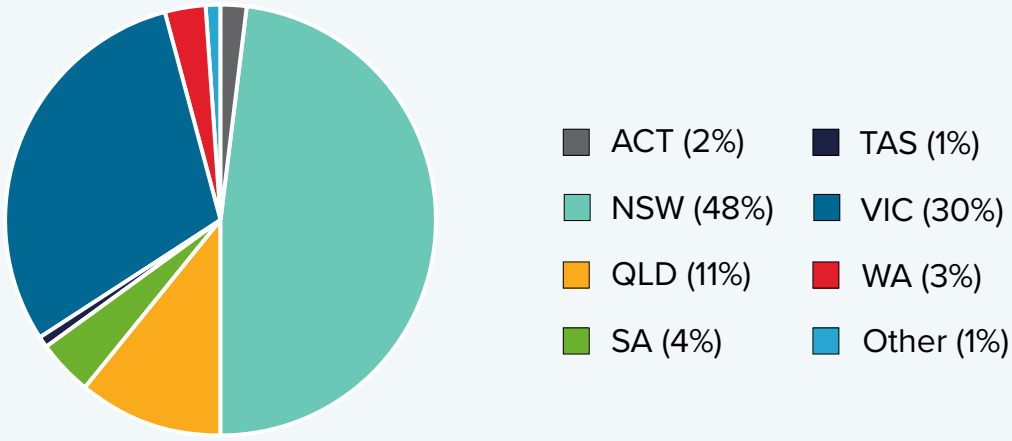
BRC-A Members are drawn primarily from New South Wales and Victoria, with a growing base in Queensland.

**Figure 30: Buyer respondent annual electricity loads (%)**



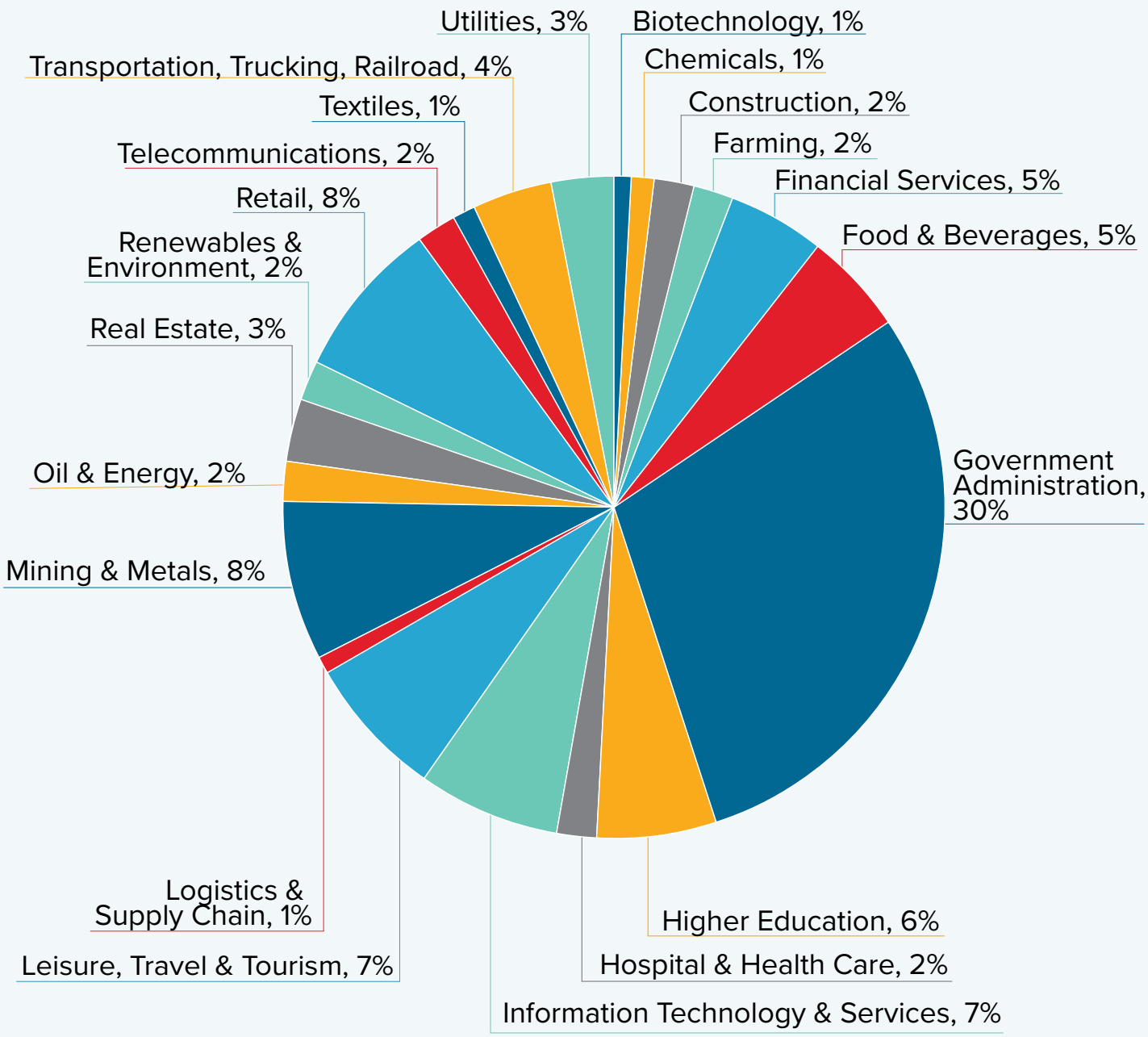

Source: *Industry Survey 2021*, BRC-A

**Figure 31: BRC-A membership proportion by region**



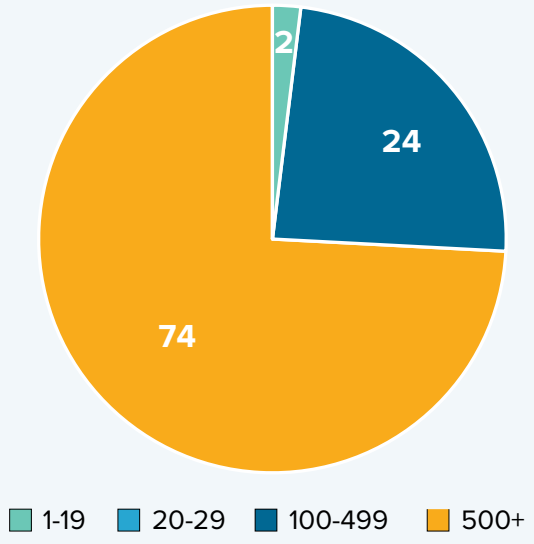

Source: *BRC-A Membership 2021*, BRC-A

**Figure 32: Economic sector distribution of Buyer members**



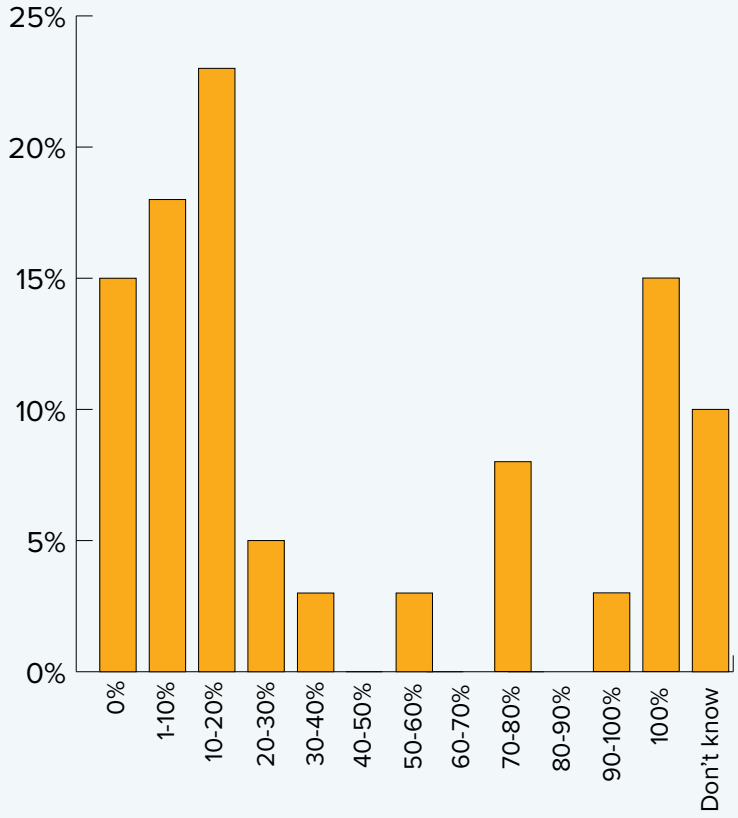

Source: *BRC-A Membership 2021*, BRC-A

**Figure 33: Buyer respondent employee count (%)**




Source: *Industry Survey 2021*, BRC-A

**Figure 34: Buyer respondents' current level of renewable energy**




Source: *Industry Survey 2021*, BRC-A

## Buyers

BRC-A Buyer members are drawn from a diverse range of economic sectors, with strong representation among public sector organisations (local and state governments, higher education) and private enterprises spanning mining, metals and resources, information technology and services, leisure, travel & tourism, retail and more.

The distribution among economic sectors of Buyers that answered the industry survey was largely representative of BRC-A Buyer membership

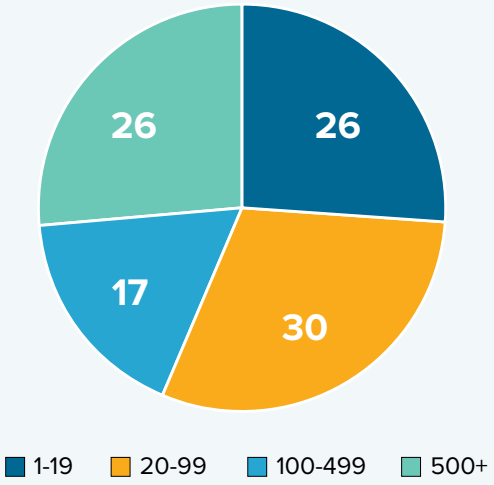
Almost three-quarters of Buyer respondents are from businesses employing over 500 people, with small and medium enterprises constituting the remaining quarter.

Organisations responding to the survey tended to be at one end of the spectrum or the other in relation to their current purchase of renewable energy. Almost one-fifth of members currently do not purchase renewable energy. Just under 60 per cent source less than 20 per cent of their electricity from renewable sources. Whereas, 15 per cent are entirely powered by renewable energy. There are very few organisations that are in-between. Consequently, most are either at an early stage when it comes to renewable energy or they have negotiated a PPA which covers all of their electricity consumption.

### Developers

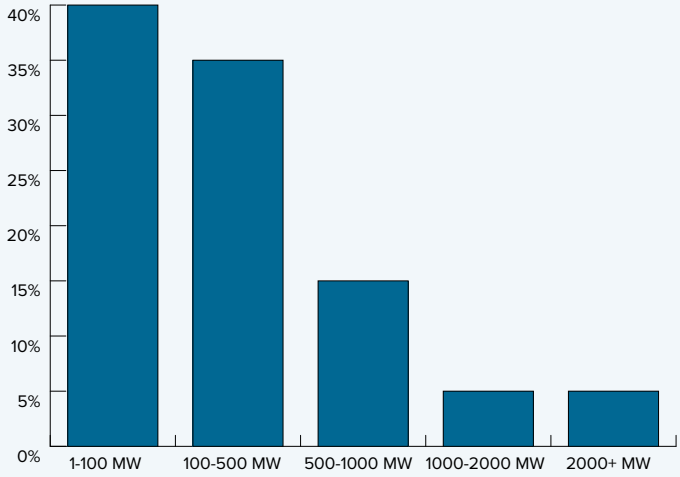
Most of the Developers surveyed have small to medium numbers of employees; just over half have between 1 and 100 employees and a further quarter have 500+ employees. Most have small project pipelines (<500MW) although there is a spread across different sizes. among our Developer members and the broader industry. Comparing pipeline to the current operating portfolios of these respondents indicates that they are generally growing proportionally to their current size (most Developers have at least as much planned as they currently operate).

**Figure 35: Developer respondent employee number (%)**




Source: *Industry Survey 2021*, BRC-A

**Figure 36: Developer respondent pipeline**




Source: *Industry Survey 2021*, BRC-A

## BRC-A EVENTS

The BRC-A hosts and participates in a range of events to build capacity and facilitate knowledge-sharing in the PPA ecosystem.

### Buyers' Bootcamps

Buyers' Bootcamps are based on the peer-learning model developed by the US BRC. Staff from approximately 15 prospective buyers learn directly from experienced buyers on all aspects of procurement, including selecting an appropriate deal structure, building internal support, how to conduct an RFP and evaluate bids, accounting treatment and the best time to engage the right type of consultants.

Given the online restrictions of 2021 events, BRC-A successfully ran 2 sold-out Virtual Buyers Bootcamps in late May and late-July, attended by a wide variety of corporates and councils from all around the country, and through Bootcamps has trained more than 800 organisations in PPA procurement  to date.

### Developer Bootcamps

The BRC-A delivered a Developers bootcamp in late 2020. Our next event will be in 2022.

### Industry Events

The BRC-A also participates in industry events to build awareness and understanding of Corporate PPAs through presentations on market trends, deal structures, case studies and by participants themselves. Since the launch in November-December 2018, BRC-A has participated regularly in All Energy, the Australian Clean Energy Summit and a range of other industry events (including Energy Users Association and Smart Energy Council events, various industry summits, Renewable Cities, Sustainability Victoria etc.). The BRC-A participated in industry events with high energy use members including the Green Building Council of Australia, Healthy Futures, Australian Food & Grocery Council, Cities Power Partnership and Climate Council as well as various State Government workshops.

### Webinars

Educational webinars for BRC-A members are hosted as a quick, easily accessible way for members to get information on PPAs. A developer webinar for buyers to hear their perspectives was held as was a webinar on the Cities Power Partnership for councils.

In addition to contributing to the CEC's Large-scale Solar Forum 2020 Webinar Series and others hosted by the Smart Energy Council and Australian Industry Group, in 2021 the BRC-A held its second year of Buying Power webinar series, which saw the following topics covered (which amassed nearly 700 attendees in total):

- Buying Power 2021 Webinar 1: Government Leadership and the Queensland Renewable Energy Strategy: Race to the Top
- Buying Power 2021 Webinar 2: From Cost to Opportunity
- Buying Power 2021 Webinar 3: Large-scale generation certificates (LGCs) – crucial to credibility or holding back action?
- Buying Power 2021 Webinar 4: Managing PPA risk in volatile market conditions

## BRC-A MARKETPLACE PLATFORM

The BRC-A website hosts an online marketplace platform where developers can list projects seeking an off-taker. Project listings include a range of information on the project status (e.g. seeking planning approval), terms (e.g. minimum term and purchase volume), technology and state. The marketplace is designed to assist buyers understand the market and help connect buyers and sellers.

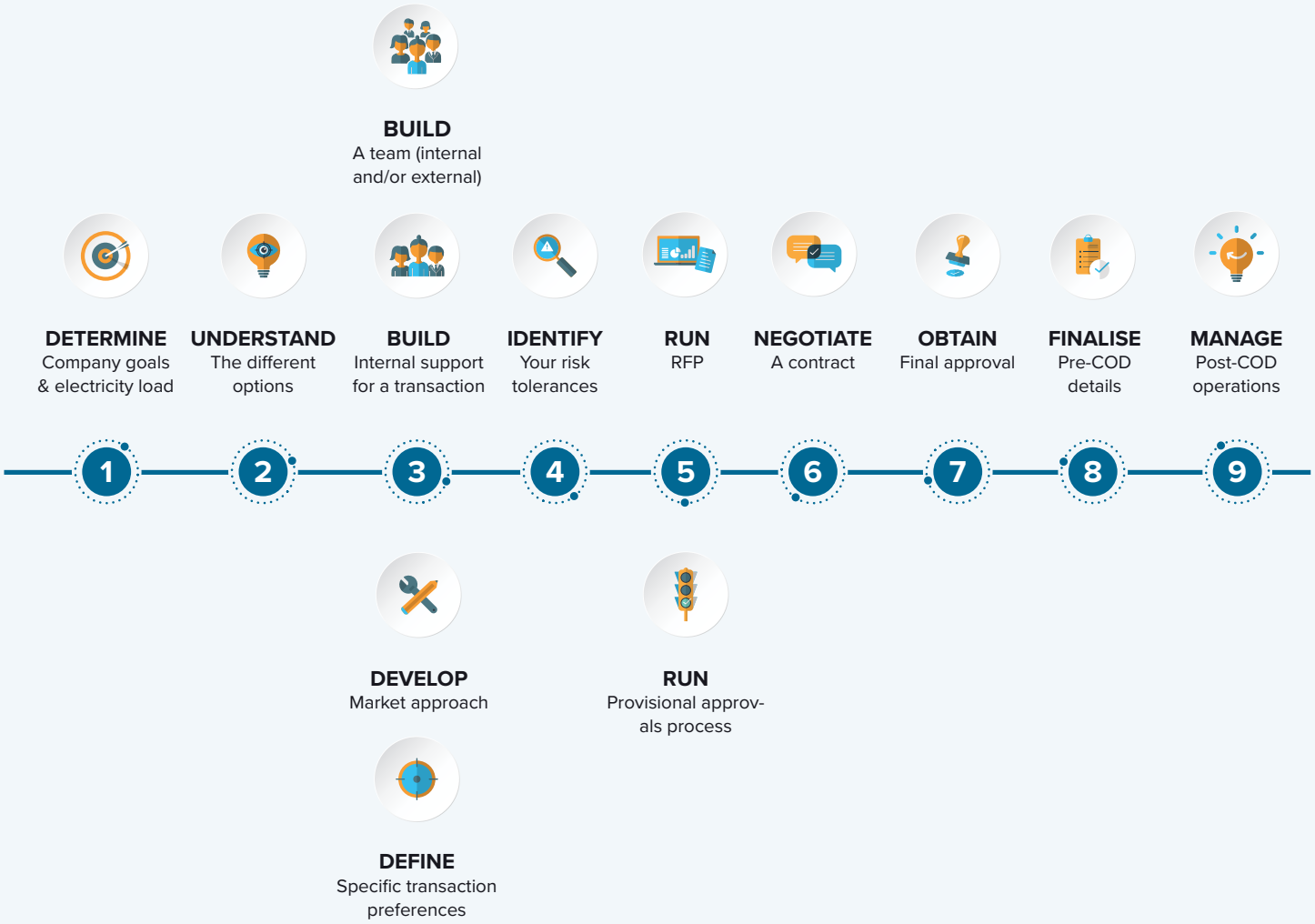
As at late-October 2021, the Marketplace Platform contained:

- 80 renewable energy projects
- 13 GW of total capacity

## BRC-A RESOURCES

The BRC-A has developed and adapted a range of primers, guides, tools and templates from the US for the Australian market. The centrepiece for BRC-A resources is the Buyer's Roadmap, which includes a step-by-step guide to Corporate PPA procurement with supporting resources for each step of the process.

**Figure 37: BRC-A Buyer's Roadmap**




Source: *BRC-A Member Portal 2020-21*, BRC-A

### Resource Library

The BRC has a licence from the Rocky Mountain Institute to adapt its primers, guides and tools to the Australian market. The BRC-A has to date adapted the following resources to the Australian market for its members:

- Accounting Primer
- Chief Financial Officer (CFO) Pitch Deck
- Deal Structure Primer
- Deal Team Guide
- Energy Management Principles Primer
- Renewable Retail PPAs Guide
- Request for Proposals (RFP) Template
- Social Licence Primer
- Term Sheet Template
- Economic Analysis Primer
- Consultants and Renewable Energy PPA Guide
- Internal Support Guide
- Risk Allocation Guide

The following BRC US resources are currently available to BRC-A members without adaptation:

- Aggregation Primer
- Finance Primer

The BRC-A is working on a best practice guide to Corporate PPAs with industry input. See here for the draft discussion paper.

### Market Advisory Panel

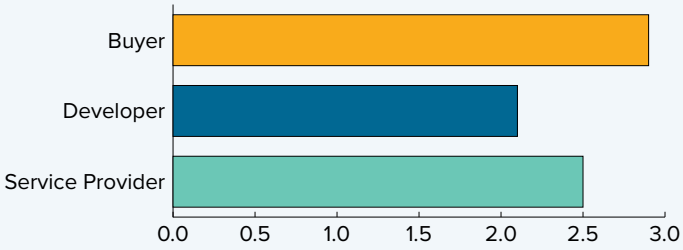
The BRC-A's Market Advisory Panel (MAP) is a group of professionals from leading industry organisations (including government, finance, consulting, academia) that collaborate with the BRC-A on industry-relevant matters, including but not limited to the development of BRC-A resources. The 2021 membership of the MAP is:

- Aylin Cunsolo (Chair), Baker Mckenzie
- Emma Peacock (Deputy Chair), Investment NSW
- Andrew Wilson, KMPG
- Anita Stadler, Energetics
- Ben Waters, Presync
- Dan Brown, Ashurst
- Daniel Barber, DNA Energy
- David Stavridis, X-ELIO
- Francesco Presacco, Tango Energy
- John Anstey, Arcoona Consulting
- Jomo Owusu, EY
- Kirk Lawrence, Schnieder Electric
- Liz Fletcher, Engevity
- Matt Baumgurtel, Hamilton Locke
- Nathan Epp, Engie Australia
- Nicholas Barda, DELWP
- Phil Bayley, DELWP
- Rebecca Tilbrook, Hydro
- Sigmund Malter, ZM Consulting
- Simon Currie, Energy Estate
- Stacey Vacher, Edge Utilities
- Tiburce Blanchey, Adour

The BRC-A would like to express its gratitude for the ongoing contributions made by members of its MAP.

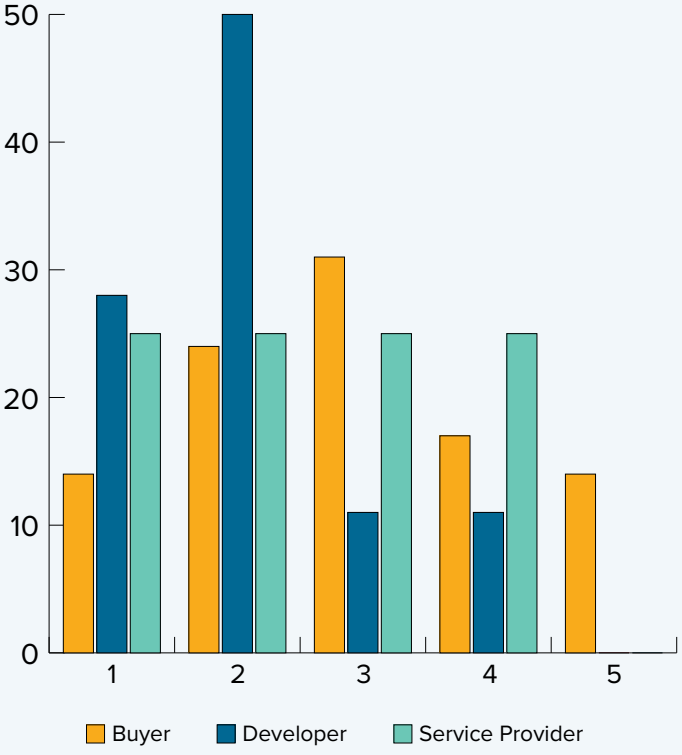
# APPENDIX A: COMMUNITY BENEFITS

**Figure 38: Average rating out of 5 on Importance of jobs and other benefits for disadvantaged groups**



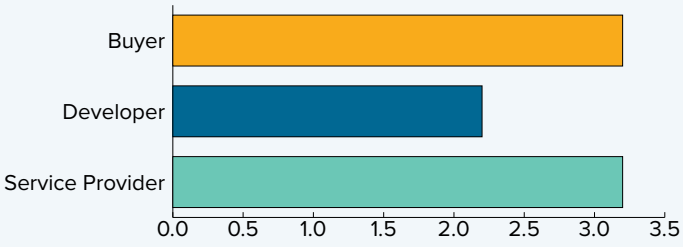

Source: *Industry Survey 2021*, BRC-A

**Figure 39: Importance of jobs and other benefits for disadvantaged groups, rating out of 5**



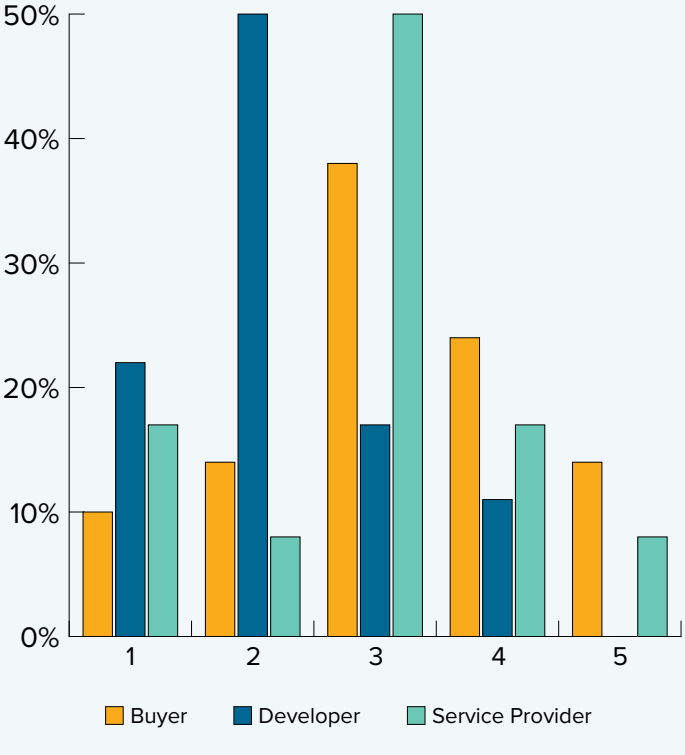

Source: *Industry Survey 2021*, BRC-A

**Figure 40: Average rating out of 5 on importance of local employment and industry**




Source: *Industry Survey 2021*, BRC-A

**Figure 41: Importance of local employment and industry, rating out of 5**




Source: *Industry Survey 2021*, BRC-A

# APPENDIX B: INDUSTRY SURVEY QUESTIONS

## ENERGY BUYERS

**Which of the following sectors best describes the primary activities of your organisation?**

- Education and Training
- Public Administration and Safety
- Construction
- Manufacturing
- Retail, Hiring, Property Operators and Real Estate Services
- Accommodation and Food Services
- Electricity, Gas, Water and Waste Services
- Financial and Insurance Services
- Retail Trade
- Mining
- Arts and Recreation Services
- Health Care and Social Assistance
- Professional, Scientific and Technical Services
- Transport, Postal and Warehousing
- Administrative and Support Services
- Agriculture, Fishing, Forestry
- Information Media and Telecommunications
- Wholesale Trade
- Other

**How many persons does your organisation employ?**

- 500+
- 100-499
- 1-19
- 20-99

**What is the size of your annual electricity load?**

- 0-15 GWh
- 15-30 GWh
- 30-50 GWh
- 50-200 GWh
- 200+ GWh

**What proportion of your electricity load is currently sourced from renewable energy?**

- 0%
- 1-10%
- 10-20%
- 20-30%
- 30-40%
- 40-50%
- 50-60%
- 60-70%
- 70-80%
- 80-90%
- 90-99%
- 100%
- Don't know

### *Experience with Corporate Renewable Power Purchase Agreements (PPA)*

**Which of the following best describes the level of experience of your organisation with a renewable energy PPA:**

- Our organisation has completed a PPA
- Our organisation is currently pursuing or investigating whether to pursue a PPA
- Our organisation is interested in learning more about PPAs but has not taken any major steps
- We looked at PPAs but have decided they are not a good option for our organisation
- We don't know much about PPAs and are not interested

**Why is your organisation disinterested in PPAs?**

- Insufficient cost savings
- Long terms unsuitable for our organisation
- Too risky
- Too complex
- Other

### If your organisation has completed a PPA

**How long did the process take from start to finish?**

- 6-12 months
- 18-24 months
- 12-18 months
- 2+ years
- < 6 months

**On a scale of 1-5, how challenging was it to develop a PPA?**

- 1
- 2
- 3
- 4
- 5

**At what stage of the process would independent assistance have been most helpful?**

- Business case and internal stakeholder support
- Investigating/assessing options
- Procurement process
- Negotiation

**What were the major barriers you experienced?**

- The complexity of PPAs and understanding the options
- Market uncertainty
- Securing internal agreement
- Negotiating a deal that met the needs of your organisation and the developer
- Finding the right specialists
- Accounting issues
- Finding the right project or developer
- Transaction costs
- Policy uncertainty
- COVID-19 impacts
- Licensing issues
- No major barrier
- Other

**On a scale of 1-5, how would you rate the scale of transaction costs of a PPA?**

- 1
- 2
- 3
- 4
- 5

**What type of PPA did you choose?**

- Wholesale (direct agreement with RE project separate from retail contract)
- Retail (PPA integrated into retail contract)
- Sleeved (PPA negotiated with project and then integrated into retail contract)
- Other

**Why did you choose this type of PPA?**

- Most familiar
- Less complexity
- Risk management
- Financial/price
- Transaction costs
- Legal or accounting issues
- Impact/sustainability/PR
- Other

**When evaluating Corporate PPAs, how important was *PPA price*?
(5 = extremely important, 1 = not important at all)?**

- 1
- 2
- 3
- 4
- 5

**How important were *community benefits (benefit fund, infrastructure etc.)*?**

- 1
- 2
- 3
- 4
- 5

***The* *developer's reputation*?**

- 1
- 2
- 3
- 4
- 5

***Local community support (i.e. social licence)*?**

- 1
- 2
- 3
- 4
- 5

***Financial risks*?**

- 1
- 2
- 3
- 4
- 5

***Jobs and other benefits for disadvantaged groups*?**

- 1
- 2
- 3
- 4
- 5

***Impacts on local environment and biodiversity*?**

- 1
- 2
- 3
- 4
- 5

***Local employment and industry*?**

- 1
- 2
- 3
- 4
- 5

**Were there any other important criteria when evaluating Corporate PPAs? Please list.**

**In retrospect, what is the one change you would recommend to make it easier to do PPAs?**

**If your organisation is currently pursuing or investigating whether to pursue a PPA**

**What is the main driver for your organisation?**

- Electricity price certainty
- Lower electricity prices
- Greenhouse emissions or renewable energy targets
- Brand leadership
- Corporate Social Responsibility goals
- Other

**What has been the impact of Covid-19 on your organisation's interest in a PPA?**

- No impact – we are still considering or pursuing a renewable PPA
- No impact – we were not considering or pursuing a renewable PPA
- Positive impact – our interest in a renewable PPA has increased
- Negative impact – our interest in a renewable PPA has decreased
- Unsure

**Why has your interest in a PPA increased?**

- Greater price certainty/less exposure to electricity price changes
- Climate or renewable energy targetss
- Cost savings
- Corporate sustainability goals
- Brand and social reputation
- Other

**Why has your interest in a PPA decreased?**

- Less scope for cost savings
- Focussing on core business/less time and resources
- Other

**How advanced are you in the process of pursuing a PPA?**

- We are in negotiations with project developers
- We have issued or are about to issue a Request for Proposal
- We are currently assessing the business case for an PPA
- We are investigating the feasibility of an PPA

**What are the primary areas on which you're seeking information and/or support for PPAs?**

- Understanding the electricity market
- Options assessment
- Economic or financial aspects
- Legal and/or accounting issues
- Electricity markets pricing
- Strategies for securing internal support
- Template documents (e.g. RFPs, term sheets)
- Strategies for aggregated deals

**What are the major barriers you have encountered to date?**

- Choosing the right model that meets your organisation's needs
- Internal agreement or commitment
- Understanding of electricity markets and pricing
- Transaction costs
- Legal or accounting standards
- Finding the right project or developer
- Finding the right specialists to support you
- Market uncertainty
- Policy uncertainty
- COVID-19 impacts
- None
- Other

**When evaluating Corporate PPAs, how important do you expect *PPA Price* will be? (5 = extremely important, 1 = not important at all)?**

- 1
- 2
- 3
- 4
- 5

**How important do you expect *community benefits (benefit fund, infrastructure etc.)* will be?**

- 1
- 2
- 3
- 4
- 5

***The developer's reputation*?**

- 1
- 2
- 3
- 4
- 5

***Local community support (i.e. social licence)*?**

- 1
- 2
- 3
- 4
- 5

***Financial risks*?**

- 1
- 2
- 3
- 4
- 5

***Jobs and other benefits for disadvantaged groups*?**

- 1
- 2
- 3
- 4
- 5

***Impacts on local environment and biodiversity*?**

- 1
- 2
- 3
- 4
- 5

***Local employment and industry*?**

- 1
- 2
- 3
- 4
- 5

**Are there any other criteria you expect will be important when evaluating Corporate PPAs? Please list.**

**If your organisation is interested in learning more about an PPA**

**What is the main driver(s) for your organisation?**

- Electricity price certainty
- Lower electricity prices
- Greenhouse emissions or renewable energy targets
- Brand leadership
- Corporate Social Responsibility goals
- Other

**What are the primary areas on which you seeking information and/or support for PPAs?**

- Costs and benefits of PPAs
- Options and deal structures
- Economic or financial aspect
- Legal and accounting issues
- Electricity markets
- Strategies for securing internal support
- Template documents (e.g. RFPs, term sheets)
- Strategies for aggregated deals
- Other

**Is your organisation a BRC-A Member?**

- Yes
- No
- I don't know

**What was your primary reason for joining?**

- Education and training
- Networking and industry connections
- Access to the marketplace platform
- Making connections with buyers
- Making connections with developers
- Events

## DEVELOPERS

**How many persons does your organisation employ?**

- 1-19
- 20-99
- 100-499
- 500+

**What is the size of your current (operating) portfolio in Australia?**

- 0-100 MW
- 100-500 MW
- 500-1000 MW
- 1000-2000 MW
- 2000+

**What is the size of your future project pipeline in Australia?**

- 0-100 MW
- 100-500 MW
- 500-1000 MW
- 1000+ MW

**In which states do you have operating projects?**

- NSW
- VIC
- QLD
- SA
- TAS

### Experience with corporate PPAs

**Which of the following best describes the level of experience of your organisation with a corporate renewable energy PPA:**

- Our organisation has completed a Corporate Renewable PPA in the past 2 years
- Our organisation is considering or pursuing a Corporate Renewable PPA
- Our organisation is not interested in pursuing a Corporate Renewable PPA

### If your organisation has completed a Corporate Renewable PPA

**How long did the process take from start to finish?**

- < 6 months
- 6-12 months
- 12-18 months
- 18-24 months
- 2+ years

**On a scale of 1-5, how challenging was it to develop a PPA?**

- 1
- 2
- 3
- 4
- 5

**At what stage of the PPA process could independent assistance be most helpful?**

- Helping buyers assess options
- EOIs
- RFPs
- Negotiation
- Other

**What were the major barriers you experienced?**

- Transaction costs
- The complexity of the process
- Buyer understanding of PPAs
- Buyer legal or accounting issues
- Buyer price expectations
- Finding the right buyer
- Negotiating a deal that met the needs of your organisation and the buyer
- Market or policy uncertainty
- COVID-19 impacts
- No major barrier
- Other

**On a scale of 1-5, how would you rate the scale of transaction costs of a corporate PPA?**

- 1
- 2
- 3
- 4
- 5

**In your experience, when Buyers are evaluating Corporate PPAs, how important is *PPA price*?**

- 1
- 2
- 3
- 4
- 5

**In your experience, how important are *community benefits (benefit fund, infrastructure etc.)*?**

- 1
- 2
- 3
- 4
- 5

***Developer reputation*?**

- 1
- 2
- 3
- 4
- 5

***Local community support (i.e. social licence)*?**

- 1
- 2
- 3
- 4
- 5

***Financial risks*?**

- 1
- 2
- 3
- 4
- 5

***Jobs and other benefits for disadvantaged groups*?**

- 1
- 2
- 3
- 4
- 5

***Impacts on local environment and biodiversity*?**

- 1
- 2
- 3
- 4
- 5

***Local employment and industry*?**

- 1
- 2
- 3
- 4
- 5

**Were there any other important criteria for Buyers when evaluating Corporate PPAs? Please list.**

**In retrospect, what is the one change you would recommend to make it easier to do PPAs?**

**If your organisation is currently pursuing or investigating whether to pursue a corporate PPA**

**How advanced are you in the process of pursuing a PPA?**

- We are in negotiations with project buyers
- We have responded or are about to respond to a Request for Proposal
- We are currently searching for RE PPA off-takers
- We are investigating the feasibility of a RE PPA

**What are the major barriers you have encountered to date?**

- Buyer understanding (e.g. electricity markets and pricing)
- Finding a buyer
- Buyer price expectations
- Other buyer expectations or requirements (e.g. RFP)
- Negotiating a deal that meets the needs of your organisation and the buyer
- Market and policy uncertainty
- Transaction costs
- COVID-19 impacts
- None
- Other

**What kind of independent assistance would be most helpful in supporting your PPA processes or the market at large?**

- Educating buyers
- Connections with buyers
- Template documents (e.g. RFPs, term sheets)
- Strategies for aggregated deals
- Lower transaction costs
- Other

**In your experience, when Buyers are evaluating Corporate PPAs, how important is *PPA price*?**

- 1
- 2
- 3
- 4
- 5

**In your experience, how important are *community benefits (benefit fund, infrastructure etc.)*?**

- 1
- 2
- 3
- 4
- 5

***Developer reputation*?**

- 1
- 2
- 3
- 4
- 5

***Local community support (i.e. social licence)*?**

- 1
- 2
- 3
- 4
- 5

***Financial risks*?**

- 1
- 2
- 3
- 4
- 5

***Jobs and other benefits for disadvantaged groups*?**

- 1
- 2
- 3
- 4
- 5

***Impacts on local environment and biodiversity*?**

- 1
- 2
- 3
- 4
- 5

***Local employment and industry*?**
- 1
- 2
- 3
- 4
- 5

**Are there any other important criteria for Buyers when evaluating Corporate PPAs? Please list.**

**What is the minimum contract *length (years)* you're seeking in a PPA?**

**What is the minimum *off-take agreement scale (GWh)* you're seeking in a PPA?**

**Why are you not interested in Corporate Renewable PPAs?**
- The transaction costs are too high
- There are insufficient buyers at the right scale for our project
- There is not interest from buyers at the moment
- Other

**What has been the impact of Covid-19 on level of buyer interest in a Corporate Renewable PPA?**
- No impact – the level of demand amongst buyers is the same
- Positive impact – the level of demand amongst buyers has increased
- Negative impact – the level of demand amongst buyers has decreased
- Unsure

**Why in your assessment has the interest in PPAs amongst buyers increased?**
- Buyers are seeking greater price certainty
- There are more buyers with climate or renewable energy targets
- There are more buyers with Corporate sustainability goals
- Other

**Why in your assessment has the interest in PPAs amongst buyers decreased?**
1. Less scope for cost savings
2. Focussing on core business/less time and resources
3. Other

**Is your organisation a BRC-A Member?**
- Yes
- No
- I don't know

**What was your primary reason for joining?**
1. Education and training
2. Networking and industry connections
3. Access to the marketplace platform
4. Making connections with buyers
5. Events

## SERVICE PROVIDERS

**How many persons does your organisation employ?**

- 1-19
- 20-99
- 100-499
- 500+

**What type of services do you provide?**

- Accounting
- Financial
- Legal
- Corporate Strategy/marketing
- Energy advice
- Sustainability advice
- Other

**Which of the following best describes the level of experience of your organisation with a corporate renewable energy PPA:**

- Our organisation has provided services for a PPA
- Our organisation has not yet provided services for a PPA

### If your organisation has been involved in a PPA

**How long did the process take from start to finish?**

- < 6 months
- 6-12 months
- 12-18 months
- 18-24 months
- 2+ years

**On a scale of 1-5, how challenging was it to develop a PPA?**

- 1
- 2
- 3
- 4
- 5

**What are the major barriers experienced in PPA transactions?**

- Transaction costs
- The complexity of the process
- Buyer understanding of PPAs
- Buyer legal or accounting issues
- Buyers securing internal agreement
- Developer understanding of buyer needs or processes
- Negotiating a deal that met the needs of both organisation
- Market uncertainty
- Policy uncertainty
- COVID-19 impacts
- No major barrier
- Other

**On a scale of 1-5, how would you rate the scale of transaction costs of an PPA?**

- 1
- 2
- 3
- 4
- 5

**In your experience, when Buyers are evaluating Corporate PPAs, how important is *PPA price*? (5 = extremely important, 1 = not important at all)**

- 1
- 2
- 3
- 4
- 5

**When Buyers are evaluating Corporate PPAs, how important are *community benefits (benefit fund, infrastructure etc.)*?**

- 1
- 2
- 3
- 4
- 5

***The developer's reputation*?**

- 1
- 2
- 3
- 4
- 5

***Local community support (i.e. social licence)*?**

- 1
- 2
- 3
- 4
- 5

***Financial risks*?**

- 1
- 2
- 3
- 4
- 5

***Jobs and other benefits for disadvantaged groups*?**

- 1
- 2
- 3
- 4
- 5

***Impacts on local environment and biodiversity*?**

- 1
- 2
- 3
- 4
- 5

***Local employment and industry*?**

- 1
- 2
- 3
- 4
- 5

**Were there any other important criteria when evaluating Corporate PPAs? Please list.**

**In retrospect, what is the one change you would recommend to make it easier to do PPAs?**

**What has been the impact of Covid-19 on level of buyer interest in a PPAs?**

- No impact – the level of demand amongst buyers is the same
- Positive impact – the level of demand amongst buyers has increased
- Negative impact – the level of demand amongst buyers has decreased
- Unsure

**Why in your assessment has the interest in PPAs amongst buyers increased?**

- Buyers are seeking greater price certainty
- There are more buyers with climate or renewable energy targets
- There are more buyers with Corporate sustainability goals

**Why in your assessment has the interest in PPAs amongst buyers decreased?**

- Less scope for cost savings
- Focussing on core business/less time and resources
- Other

**What are the primary areas on which BRC-A should provide information?**

- Options assessment
- Economic or financial aspects
- Legal and/or accounting issues
- Deal structuring
- Electricity markets and pricing
- Template documents (e.g. RFPs, term sheets)
- Strategies for aggregated deals
- Other

**Is your organisation a BRC-A Member?**

- Yes
- No
- I don’t know

**What was your primary reason for joining?**

- Education and training
- Networking and industry connections
- Access to the marketplace platform
- Making connections with buyers
- Making connections with developers
- Events
- Other

**At what stage of the PPA process could independent assistance be most helpful?**

- When buyers are seeking to understand the electricity market and how PPAs work
- When buyers are assessing options
- When developers are seeking connections/advice
- EOIs
- RFPs
- Negotiation
- Other

# APPENDIX C: PPAs ANNOUNCED IN 2020-21

| Buyer | Project | Size (MW) |
|---|---|---|
| **MREP 2** | Yaloak South Wind Farm (VIC) | 28.7 |
| **BHP** | Western Downs Solar Farm (QLD)<br>MacIntyre Wind Farm (QLD) | 460<br>1026 |
| **Griffith University**<br>**Central Queensland University**<br>**QUT** | Columboola Solar Farm (QLD) | 162 |
| **CSIRO** | Numurkah Solar Farm (VIC)<br>Nevertire Solar Farm (NSW) | 128<br>132 |
| **Coles 2** | Western Downs Solar Farm (QLD) | 460 |
| **Tweed Shire Council** | Sapphire Wind Farm (NSW)<br>Bomen Solar Farm (NSW) | 270<br>120 |
| **Salesforce** | Blue Grass Solar Farm (QLD) | 200 |
| **Amazon 3** | Hawkesdale Wind Farm (VIC) | 96.6 |
| **Newcrest** | Rye Park Wind Farm (NSW) | 400 |
| **BHP 2** | Merridin Solar Farm (WA) | 100 |
| **Flinders University** | Willogoleche Wind Farm (SA) | 119 |
| **Northern Beaches Council** | Bodangora Wind Farm (NSW) | 113.2 |
| **BP** | West Wyalong Solar Farm (NSW) | 107 |
| **Sun Metals 2** | MacIntyre Wind Farm (QLD) | 1026 |
| **Coles 3** | Willogoleche Wind farm (SA)<br>Canunda Wind Farm (SA) | 119<br>46 |
| **Eurobodalla Shire Council** | Parkes Solar Farm (NSW)<br>Griffith Solar Farm (NSW) | 66<br>36 |
| **Canva** | Parkes Solar Farm (NSW)<br>Griffith Solar Farm (NSW)<br>Hills of Gold Wind Farm (NSW) | 66<br>36<br>420 |
| **AMP Capital** | Trundle Solar Farm (NSW)<br>Peak Hill Solar Farm (NSW) | 6.4<br>6.4 |
| **Victorian Energy Collaboration** | Dundonnell Wind Farm (VIC)<br>Murra Warra II Wind Farm (VIC) | 226<br>209 |

| Buyer | Project | Size (MW) |
|---|---|---|
| **Woolworths Group** | Bango Wind Farm (NSW) | 244 |
| **Telstra 4** | Crookwell 3 (NSW) | 58 |
| **Victoria University** | Cherry Tree Wind Farm (VIC) | 57.6 |
| **ISPT** | Bodangora Wind Farm (NSW) | 113.2 |
| **Dexus 2** | Western Downs Solar Farm (QLD)<br>Kaban Green Power Hub (QLD) | 460<br>157 |
| **Dexus 3** | Cherry Tree Wind Farm (VIC) | 57.6 |
| **BHP 3** | Port August Renewable Energy Park (SA) | 320 |
| **Coles 4** | Mt Gellibrand Wind Farm (VIC)<br>Silverleaf Solar Farm (NSW)<br>Canunda Wind Farm (SA)<br>Willogoleche Wind Farm (SA)<br>Warhook Solar Farm (QLD)<br>Gregory Solar Farm (QLD) | 132<br>120<br>46<br>119<br>200<br>215 |

**Table 1: PPAs in 2020-21 Financial Year**

# WHO IS BRC-A?

A not-for-profit initiative of Climate-KIC Australia, WWF-Australia's and the Institute for Sustainable Futures (UTS).

BRC-A is supported by funding from: