



**BUSINESS  
RENEWABLES  
CENTRE  
AUSTRALIA**

# Best Practice Corporate Renewable Power Purchase Agreements

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## Partners



Institute for  
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The Business Renewables Centre Australia was established in 2018 by partners Climate-KIC Australia, WWF-Australia's Renewable Energy Buyers Forum and UTS Institute for Sustainable Futures to progress renewable energy uptake nationally. Our funding partners are ARENA, NSW, Queensland and Victoria State Governments.

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## About Business Renewables Centre-Australia

**BRC-A, a national not-for-profit initiative, was established to facilitate the growth of corporate renewable energy Power Purchase Agreements (PPAs) with seed funding from the NSW Government, Victorian Government and ARENA.**

As the market for renewable energy PPAs has grown, BRC-A has become the leading source of independent information and advice. BRC-A's core offering includes:

- **A suite of information resources:** primers, guides, templates and other tools adapted from the Rocky Mountain Institute resources for buyers on all stages of the PPA journey such as deal structures, how to maximise social and community benefits and accounting treatments.
- **Capacity building:** an innovative model of buyer and developer 'bootcamps' which include a 'faculty' of experienced buyers who are matched with participants for learning and connections and on-going informal advice and support for members.
- **Knowledge sharing:** the BRC-A runs a very popular webinar series ('Buying Power'), regularly presents at industry conferences and workshops and publishes case studies, articles and an annual State of the PPA Market report.
- **Facilitating industry connections and reducing transaction costs:** BRC-A hosts an online marketplace platform that currently lists 13 GW of projects seeking buyers and a directory with profiles of member developers and service providers.

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**The BRC-A is the leading national organisation for corporate renewable power purchase agreements in Australia. I can testify to the quality of the resources and support they bring.**

Simon Corbell, Chief Adviser, Energy Estate  
ex-Deputy Chief Minister, ACT

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## Best Practice Corporate PPAs to continue decarbonisation of the grid

**Power Purchase Agreements (PPAs) are a powerful tool and can accelerate the decarbonisation of the electricity system by underpinning finance of new solar and wind farms. They can also improve ‘social licence’ for renewable energy in regional communities through better social, employment and environmental practices in solar and wind farm development.**

**As new varieties of PPAs emerge, clarity is needed in the market to continue the positive impact of PPAs. This guide outlines principles and an initial self-scoring system for use by buyers and sellers of PPAs to assess best practice to achieve corporate sustainability objectives.**

Corporate Power Purchase Agreements (PPAs), spurred by the growth in renewable energy commitments and favourable market conditions, have underpinned more than \$5 billion of investment in wind and solar projects in Australia over the past 4 years. The advantages of Corporate PPAs enabling long term investment by financiers of new wind and solar projects and delivering financial and promotional benefits for buyers have seen PPAs become more mainstream. Over 100 deals have been signed across nearly every sector including supermarkets and other retailers, regional councils, universities, manufacturers, agri-businesses, resource companies and infrastructure projects.

As demand has grown for Corporate PPAs, so too has supply with retailers responding with different PPA models. Where early PPAs usually involved a

long-term deal (10-year plus) with a single wind or solar farm, retailer offers now include different term lengths (3 – 10 years), standard retail contracts combined with just the green certificates from specific projects and electricity purchases from a portfolio of renewable energy projects. Such retail electricity offerings are less directly connected to the finance of new solar and wind projects.

This growth in different models is a positive development as it provides greater choice for buyers and has opened up Corporate PPAs to a new tranche of organisations. However, as retailers develop products that look and feel more like traditional energy contracts, the distinction between these products and PPAs is becoming less clear - making it harder to evaluate their impact on decarbonising the grid.

In this rapidly evolving context, some less impactful PPA deals are announced with great fanfare, while other remarkable deals accelerating the path to a decarbonised grid do not achieve the same recognition.

One of the roles of the BRC-A is to provide independent guidance on Corporate PPAs. We think it's time to take stock and open up a discussion about how to define best practice in Corporate PPAs.

This guide is targeted at buyers, sellers, investors and advisors for Corporate PPAs in Australia. Feedback is welcome to develop this guide further in the future

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## The birth of a new era: GreenPower to PPAs

In Australia, up until around 2016, the primary way for an organisation to achieve their renewable energy goals was to purchase renewable energy via the government accredited GreenPower program. GreenPower accredits electricity retailers to purchase and surrender Renewable Energy Certificates (RECs) (see breakout box) when the customer purchases GreenPower. There are more than 20,000 businesses across Australia that purchase GreenPower<sup>1</sup>

However, in the US, around 2010, a number of large corporates like Google and Facebook kicked off a new model of renewable energy procurement. In addition to being motivated by reducing the greenhouse gas emissions associated with their electricity consumption, they had a laser sharp focus on additionality. They wanted to ensure that their activity would create direct investment in new wind and solar generation, and so they chose to contract directly with new solar and wind projects only prior to them being financed.

These new deals with creditworthy counter parties like Google and Facebook became a major new way for wind and solar projects to get financed, reaching over 1GW of combined new projects in 2014. While this has been great for the renewable energy industry and emissions reduction, it has also become an increasingly popular option for corporates in the US, and now globally. Large energy users get to tap into the financial benefits of increasingly cheap wind and solar, as well as meeting their sustainability objectives.

For those early pioneers, the old model had limitations, including:

- **Limited financial benefit** – RECs on their own (as in the case of GreenPower) are a cost, which did not tap into the opportunity for financial benefits from the increasing commercial viability of wind and solar.
- **Weaker market signal** – Wind and solar farms are long term assets requiring 10-15 year loans to compete with existing (coal and gas) generation. A short-term, high REC price does

not provide long term revenue confidence to banks to finance new projects.

- **Less Tangibility** – If RECs are purchased on the open market, the buyer does not have a link to a particular project or wind and solar farm to demonstrate the impact of their investment.
- **Less scalable** – While one organisation may be committed to paying more to be renewable, it is hard to convince all corporates and institutions to do this.

The above is not to say that buying and retiring Large-scale Generation Certificates (LGCs) is not a meaningful initiative – it supports the demand and price for LGCs which contributes to the revenue for renewable energy projects. However, the link is less direct than a Corporate PPA which directly underpins a new renewable energy project.

In truth, RECs are a tool. They can be used in ways that support new investment in renewable energy, such as in the case of our own Large-scale Renewable Energy Target (LRET, see box next page) which has compulsory levels of purchase and retirement. But Greenpower and short-term purchasing of RECs is not a method of directly enabling long term investment in new wind and solar.

### Corporate Renewable Energy Targets & PPAs

Many corporates have publicly made commitments to being powered by 100% renewable energy by a set date, or have already achieved this.

It is important to note, that this is different from a PPA.

Achievement of 100% Renewable Energy by an organisation requires the purchase and retirement of LGCs either directly or via a retailer. LGCs provide an auditable trail and proof that the volume (MWh) of renewable energy has been purchased and that it cannot be attributed to another organisation. As electricity consumption by an organisation changes over time, businesses or their retailers have to actively manage their

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<sup>1</sup> <https://www.greenpower.gov.au/our-impact>

purchase and retirement of LGCs to match supply and demand annually.

In comparison, a Corporate PPA is a one-off transaction, that usually requires a competitive tender process and results in a long term contract.

For example, an organisation can achieve 100% renewables without a PPA, and vice versa.

Many large organisations are using PPAs as a method of cost effectively procuring LGCs to

become 100% renewable immediately or in the future. But PPAs and 100% Renewable Energy targets or policies are not to be conflated as the same action.

This guide is focused on Corporate PPAs as individual deals, not on broader organisation emission reduction strategies or 100% renewable energy power claims.

### **The Large-Scale Renewable Energy Target (LRET)**

The objective of the LRET was to encourage investment in large-scale renewable power stations to achieve 33,000 gigawatt hours of additional renewable electricity generation by 2020. The mechanism for the LRET is the Renewable Energy Certificate (REC), known as Large Scale Generation Certificates (LGCs) in Australia.

There are two sources of demand for LGCs, a mandatory market and a voluntary one. The mandatory market relates to the amount of LGCs that large electricity purchasers (usually energy retailers) must legally buy and surrender to the Clean Energy Regulator each year. The voluntary market enables organisations to purchase LGCs and as long as they are 'retired' and not on-sold, this investment is considered 'additional' to the investment that is underpinned by the mandatory market. This method of purchasing and retiring LGCs, particularly if from a nominated wind or solar farm, is likely to remain the primary method of proof for purchases of renewable energy, guaranteeing the origin of renewable energy supply and providing an auditable trail of emissions reduction.

The LRET was achieved in 2020. Investment in new wind and solar has continued beyond the LRET, which will create an oversupply of LGCs compared to the mandatory RET of 33,000 gigawatt-hours. The oversupply may be so large that it is unviable that enough electricity customers will take up voluntary surrender of LGCs to balance supply and demand, and maintain price signals for renewables investment based on LGCs.

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## What are the guiding principles for rating PPAs?

Fast forward just five years since PPAs started taking off in Australia and you can now find a range of models on the market – short and long-term, bundled (electricity and LGCs) or LGC-only, directly linked to a project or sourced from a portfolio of projects.

This is a positive development as it creates choice and brings more buyers for renewable energy into the market but it also raises questions. How can organisations gain a clear picture on the real impact of their renewable energy procurement choices, how their actions can affect this and therefore how their decisions align with their sustainability ambitions? And how can the supply side of the industry ensure that quality procurement of renewable energy that delivers on economic, social and environmental objectives is quick and easy for organisations?

Rating and assessing PPAs is tricky and any rating system will be subject to debate. So, it is important to establish some principles based on objectives and outcomes for the rating system.

### **Principle 1: Supporting decarbonisation of the electricity grid.**

The key purpose and benefit of PPAs is their ability to support investment in renewable energy, in particular new projects, and in turn support the transition to a decarbonised electricity grid. As the emissions reduction of wind and solar is set once designed and built, it is the finance and construction of new wind and solar that is the key step to decarbonising the grid.

Before the RET was met it was a binary judgement as to whether offsite renewable purchases were ‘additional’ or not. If LGCs were retired, they were ‘additional’ to the RET and created new demand for renewable energy and if they weren’t retired they could ‘crowd out’ other investment. Now, as the RET has been met, a buyer that does not retire LGCs is not displacing other investment that would have been legally required. There is no legislated minimum or maximum of LGC creation or retirement. LGC retirement adds to the demand and price for green certificates but it is no longer synonymous with ‘additionality’. There is a spectrum of options which add to the demand for renewable energy in different degrees. So, it is not a case of one deal being green and another black,

rather there are different shades of green – but the key principle is the level and directness of support for new investment (even if the LGCs are not retired).

### **Principle 2: PPAs should support further decarbonisation of the electricity grid by enabling other projects.**

Increased storage and matching of generation with demand is required to facilitate higher levels of renewable energy. In its latest quarterly report on the National Electricity Market, the Australian Energy Market Operator estimates on average 350 MW of renewable energy was blocked from connecting to the grid (or ‘curtailed’). PPAs which include storage, some type of firming arrangement (e.g. hydro) or wholesale pricing to encourage demand-management assist in creating space for more renewable energy.

### **Principle 3: Support of environmental and social benefits in order to build ‘social licence’ for renewable energy.**

Some buyers have negotiated PPAs with other environmental, social and economic benefits, such as increased local employment, biodiversity or programs for disadvantaged labour market or community members. Projects with higher social, environmental and economic standards help build community support and ‘social licence’ for future renewable energy projects. PPAs can be an effective vehicle to deliver on Sustainable Development Goals (SDG), such as Sustainable Communities (SDG 11), Decent Work (SDG 8), Reduced Inequality (SDG 10) and Life on Land (SDG 13) as well as Affordable and Clean Energy (SDG 7) and Climate Action (SDG 13).

Please see BRC-A’s **Social Licence Guide** for more on project co-benefits and how to assess them by visiting [www.businessrenewables.org.au](http://www.businessrenewables.org.au)

Furthermore, contracting with aligned entities (retailers and/or developers) that have set climate change commitments under the Net Zero Standard (SBTi), Climate Active or similar, as well as companies that have made modern slavery commitments, provides further scope for future-proofing your contracting choices.

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## It's not about Deal Models

An important point to note is that there are a variety of different PPAs and renewable energy procurement models. The deal type does not inherently equate to the impact or role in accelerating to a decarbonised grid.

The table below from a 2018 study from the Low Carbon Living Cooperative Research Centre<sup>2</sup> summarises the various decisions and options that shape the type of PPA deal. Almost any of these options can result in a best practice PPA if combined with the considerations and actions outlined in our Rating Scale 1.0 in the next section.

Decision Type	Options
Economic Structure	Buy (contract) or Own
Project Type	New or Existing
Form of renewable energy procured	Electricity only, LGC only or Bundled
Deal Type	Exclusive or Aggregated (Group)
Counter Party	Retailer or End User
Metering & Settlement	Physical or Virtual
LGC Treatment	Sell, Surrender or Combination

### Contract Term

Longer contracts enable more wind and solar investment by allowing longer term, cheaper debt finance. Contracts under 10 years rarely directly enable the finance of new wind and solar.

It is also intuitive that most of the cost of a wind or solar farm is in construction, and projects have relatively low cost to operate, particularly with no fuel cost (for now!). So, if its generation is divided by its cost, the generation becomes cheaper each year it operates. Longer term contracts therefore enable the buyer to tap into the lower cost of wind and solar, resulting in a financial benefit. This is a fundamental driver for PPAs.

A remaining consideration related to term is that any buyer that enters a PPA may be out of the market for the duration of the PPA, up to 15 years. This means they are unable to invest or contract further with renewables until the end of this contract. It is important therefore that buyers fully understand the impact of different PPAs and that their choice aligns with their objectives. If a PPA is signed that the buyer later regrets, there is little way of fixing this position.

As PPA models proliferate, there is greater potential for buyer confusion. It is therefore crucial that clarity is brought to the market, to avoid willing renewable energy buyers being locked out of a truly impactful market.

### Operating projects

The smallest “large scale” projects that rely on PPA backed project finance are typically 30 MW in size, producing, say, 60 GWh per annum. Such a project would need a PPA of at least 30 GWh to enable finance and progress into construction.

For buyers with loads of 25-50 GWh in a state/region or less, a PPA with a new project is unlikely to be a viable option on their own. The development of retailers signing PPAs with projects to on-sell in smaller tranches on shorter terms does make it more complex to evaluate impact. If a buyer is signing up to a deal with a retailer which is then returning to sign new PPAs, they are contributing to new investment even if the original PPA is with an operating project. Context needs to be considered by buyers interested in decarbonisation signing deals with operating projects.

### LGC retirement and renewable energy claims

The purchase and retirement of LGCs remain essential for organisations seeking to:

- creating auditable proof of purchasing for strengthened public announcements
- guaranteeing origin of renewable energy supply
- manage their Greenhouse Gas emissions accounts;

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<sup>2</sup>[http://www.lowcarbonlivingcrc.com.au/sites/all/files/publications\\_file\\_attachments/rp1032\\_final\\_project\\_report\\_2017\\_0.pdf](http://www.lowcarbonlivingcrc.com.au/sites/all/files/publications_file_attachments/rp1032_final_project_report_2017_0.pdf)

- offset emissions due to electricity use;
- achieve accredited or verifiable emissions reductions;
- meet stakeholder expectations around emissions reductions; and
- make credible and defensible public claims on emissions reductions.

For buyers signing a PPA with a new project, selling the LGCs to make the business case stack up should be considered a viable option. For most buyers, LGC retirement immediately or in the near future should still be considered an essential part of best practice.



## Corporate PPAs: Best Practice for Small, Medium and Large Buyers

So what does best practice for Corporate PPAs look like? Well, that depends in part on the size and purchasing power of the organisation.

Wholesale PPAs negotiated directly with new, large scale solar or wind farms are large complex undertakings requiring a focused internal team and resources to develop, negotiate, execute and manage a long-term contract.

Additionally, smaller organisations do not have the scale to be able to purchase enough electricity and LGCs to meaningfully help finance new large-scale projects (or for some organisations, demand is spread across several states with insufficient volumes in any one state).

Size also matters when considering the project's social and environmental co-benefits. A large buyer underwriting a new project is in a genuine position to negotiate commitments to local jobs, infrastructure and biodiversity associated with the project (which mostly don't cost much in the scheme of these projects).

Smaller buyers procuring from an operating project will have a more limited capacity to negotiate co-benefits, but it is becoming more common to develop projects with co-benefits to improve social licence and meet the ESG preferences of energy buyers – so asking for this can be a worthwhile exercise as part of your tender process.

Where possible, larger and smaller buyers alike who have set - or are planning to set - sustainability goals and commitments should future-proof their decisions by contracting with aligned retailers with climate change commitments under a recognised initiative, such as the Net Zero Standard (Science-Based Targets Initiative), the RE100, Climate Active.

In this section, we outline a spectrum of choices for both small to medium and large/very large buyers and what 'best' and 'better' practice looks like. The key options are summarised in the table below.

Annual Electricity Consumption	Buyer Type	Key Best Practice Features
Less than 25,000 MWh p.a.	Small	Retail PPA from a portfolio of assets. LGC retirement Project co-benefits identified in tender evaluation criteria
Between 25,000 & 50,000 MWh p.a.	Medium	Retail PPA – project-linked with a retailer for one or more projects LGC retirement (project-linked LGCs) Project co-benefits identified as preferred in tender evaluation criteria
Between 50,000 & 100,000 MWh p.a.	Large	PPA with one or more new projects Longer-term agreement Project co-benefits in tender evaluation criteria
Over 100,000 MWh p.a.	Very Large	Targeting best practice Multiple, long-term PPAs over time Project co-benefits identified in tender evaluation criteria

Note: On-site demand management and storage to create more room is able to be implemented by all of these categories of buyers.

## Best Practice Scorecard for Small and Medium Buyers

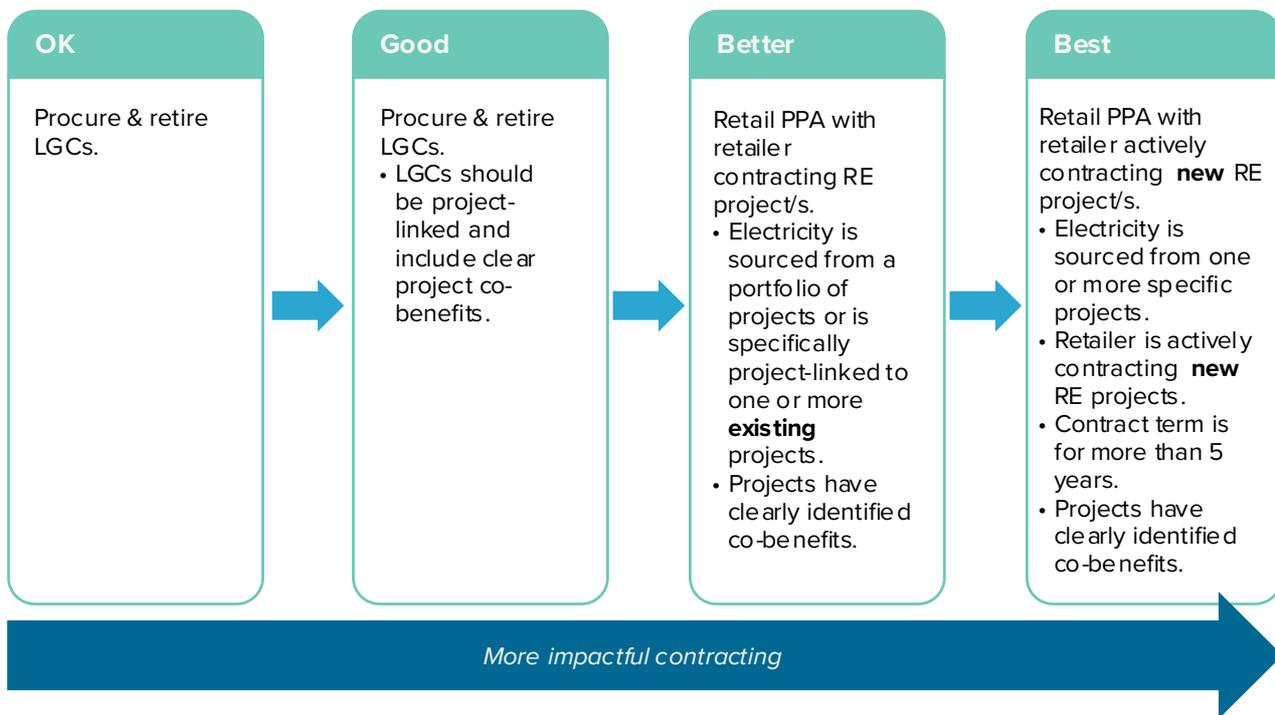
In this section, we outline what best practice looks like for small & medium buyers. There are a range of choices that small and medium buyers make that can increase the impact of their purchasing

power. We have developed a scorecard for these energy buyers to self-assess renewable energy procurement options.

Criteria	Weighting	Key Features
<b>Support decarbonisation of the grid</b>	70% (or up to 70 points)	<p>A growing number of retailers are signing deals with new projects and then selling the output once they are operating to smaller buyers. Some are also making commitments for emissions reductions. Do some research and ask questions about the retailer's business model and climate change stance:</p> <ul style="list-style-type: none"> <li>• <b>Choice of retailer:</b> Is the PPA with a retailer that is actively developing, financing or contracting with new RE projects? (30 points)*</li> <li>• <b>LGC retirement:</b> Are the LGCs project-linked and will you retire them? (20 points).</li> <li>• <b>PPA term:</b> Is the PPA for a longer-terms (5-years)? (10 points)</li> <li>• <b>Counterparty climate change and modern slavery commitments:</b> Has the retailer and/or project developer set a Net Zero or climate change commitment, such as the Science-based Targets initiative, Climate Active, RE100 or equivalent; and/or adopted a modern slavery statement? (10 points)</li> </ul> <p>* Generally, it won't be possible – but a PPA with a new project is 70 points</p>
<b>Support further grid decarbonisation beyond PPA</b>	10% (or up to 10 points)	<p>There are other actions you can take to support further grid decarbonisation:</p> <ul style="list-style-type: none"> <li>• <b>Load-generation matching:</b> Ask retailers about the match between your electricity consumption (or 'load') and the generation output of the project(s). Is there a high correlation?</li> <li>• <b>Demand management:</b> PPAs should be implemented as part of a wider, on-going energy management strategy which includes energy efficiency and demand management to increase the match between consumption and generation. Are you implementing on-site efficiency and demand management? See BRC-A's <i>Guide to Demand Management and PPAs</i> at our website.</li> <li>• <b>On-site generation and storage:</b> Can also be cost-effective ways of reducing electricity bills and improving the match between generation and consumption. Have you investigated onsite generation and storage?</li> </ul>
<b>Social Licence &amp; Other Benefits</b>	20% (or up to 20 points)	<p><b>Project co-benefits.</b></p> <ul style="list-style-type: none"> <li>• Does your Retail PPA tender incorporate environmental, social and economic co-benefits, such as increased local employment, biodiversity or programs for disadvantaged community members? (15 points)</li> <li>• Is the PPA with a operating project that has demonstrated commitment to good community benefits and engagement? (5 points)</li> </ul>

The following graphic provides examples of increasingly more impactful contracting arrangements for small to medium energy buyers.

### Small to medium energy buyers



Note: For energy buyers at the larger end of the small to medium energy user scale (e.g. 40,000 – 50,000 MWh pa), opportunities to seek project-linked Retail PPAs with retailers for new RE projects may be sought where desired as part of your tender process.

## Best Practice Scorecard for Large and Very Large Buyers

For larger buyers, we have developed a scoring system to provide guidance to all stakeholders involved in renewable energy procurement, assist them in evaluating impact and make better PPAs.

The intention of the system is not to provide a rating system.

Stakeholders have raised the legitimate concern that a rating system could discourage buyers who due to various circumstances are unable to achieve a 'gold standard' PPA.

Criteria	Weighting	Sub-Criteria & Scoring Guide
<b>Support decarbonisation of the grid</b>	80% (or up to 80 points)	<p>To what extent is your PPA supporting new renewable electricity generation?</p> <ul style="list-style-type: none"> <li>Is the PPA with a project pre-finance with a term 7 years or greater, enabling finance and construction? (50 points)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Is the PPA with a commissioned or operating project with a project developer, investor, owner or retailer that is active in developing, financing or contracting with new projects? (40 points)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Is the PPA with an existing solar or wind farm or portfolio of assets via a retailer with a term 7 years or greater? (35 points)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Is the PPA with an existing solar or wind farm or portfolio of assets via a retailer with a term 5 – 7 Years? (30 points)</li> </ul> <p>Has your organisation publicly committed to 100% renewables with retirement of LGCs? (10 points)</p> <p>Was it a partial PPA which enabled finance and construction of a project of a larger capacity than the organisational demand or viable deal size for this PPA? (10 Points)</p> <p>Counterparty climate change and modern slavery commitments: Has the retailer and/or project developer set a Net Zero or climate change commitment, such as the Science-based Targets initiative, Climate Active, RE100 or equivalent; and/or adopted a modern slavery statement? (10 points)</p>
<b>Support further grid decarbonisation beyond PPA</b>	15% (or up to 15 points)	<p>Does the PPA include elements that support broader decarbonisation of the grid by increasing the match between site consumption and project generation, such as:</p> <ul style="list-style-type: none"> <li>Storage</li> <li>Demand management</li> <li>Offsite firming (e.g. pumped hydro, grid or community-scale batteries)</li> </ul>
<b>Social Licence &amp; Other Benefits</b>	10% (or up to 10 points)	<p>Does the PPA include commitments to additional environmental, social and economic benefits, such as increased local employment, biodiversity or programs for disadvantaged community members? (10 points)</p>

## Conclusion

Clarity is needed in the evolving Australian Corporate PPA market to help organisations set the scale of their ambition, to encourage organisations to aim for high quality Corporate PPAs that achieve deep impact and to reward those going above and beyond by ensuring that their PPA creates additional renewables and a positive societal and environmental impact.

The purpose of this guide is to:

- Provide more clarity to buyers and providers of PPAs of what best practice is and what is possible.
- Enable the acknowledgement and reward of organisations that have sought to maximise their impact with their PPAs, as they have sought to achieve best practice.
- Encourage buyers to target additional benefits in their PPA procurements.

BRC-A is continually updating its advice to buyers in its Bootcamps, resources and events. As the range and types of buyers in the market for renewable energy changes, we have placed renewed importance on striking a realistic balance between effort and impact. We encourage higher effort and higher impact for organisations of greater scale, ambition and capability. We also support buyers who do not meet this criteria to procure good renewable deals that are less complex but with commensurate impact. In the end, any renewable energy procurement is positive.

The BRC-A will continue to develop and update this guide over time and would appreciate any feedback. Please get in touch at [www.businessrenewables.org.au](http://www.businessrenewables.org.au).

