Renewable PPAs that are good for nature, people and your business

This guide is for corporate energy buyers and sellers seeking to understand how well renewable electricity projects perform against environmental and social criteria.

Buyers need to manage their brand exposure to the social and environmental impacts of projects which underpin their renewable power purchase agreements (PPAs), by proactively identifying risks and opportunities.

Sellers need to futureproof their projects by taking positive steps during the planning, construction, operational and decommissioning stages to enhance the project's environmental, social and economic legacy.

Environmental and social performance on renewables projects matters

The world needs to accelerate the transition away from thermal generation sources if we are to drive down greenhouse emissions and thereby avoid climate chaos, halt environmental and biodiversity destruction, and limit socio-economic decline. In Australia, pace is also required to reduce the risk of energy system instability due to our aging generation fleet.

However, while urgent, the transition must be managed responsibly.

Renewable energy assets need to recognise the potential positive and negative impacts on the environment, climate and community in Australia, as well as those associated with their supply chains.

Like other industries, renewable energy projects must earn a social licence to operate.

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Over the next 10 years the energy transition should see a sixfold increase (at least) in the footprint of renewable energy generation assets in the National Electricity Market (NEM)[1]. The buildout could create both benefits and challenges for local economies, biodiversity and ecosystems, and the visual amenity of much-loved Australian landscapes.

Communities are key stakeholders in every renewable project, especially as the impacts are amplified by the need for thousands of kilometres of new transmission lines.

Australia needs the transition to clean energy to succeed. On one hand, we must move quickly to build the renewable energy at the scale required to meet our climate targets. On the other, Australia has also committed to global goals to halt and reverse biodiversity loss by 2030 and contribute to a full recovery of nature by 2050[2].

The energy transition provides both opportunities and challenges in addressing the nature and climate crises.

When properly managed, environmental and social impacts can deliver mutually beneficial outcomes for investors and communities alike and help the energy industry contribute to a 'nature positive' future (see Box 1).

Box 1: 'Nature positive' renewables?

The United Nations Global Biodiversity Framework to which Australia, the G7, and other business advocacy groups are signatories, places nature at the forefront of the sustainability agenda. It commits signatories to halting and reversing nature loss by 2030 measured against a 2020 baseline. This includes increasing the health, abundance, diversity and resilience of species, populations and ecosystems so that nature is visibly and measurably on the path to recovery. Under this framework, nature must recover by 2050 so that thriving ecosystems and nature-based solutions support future generations. Put simply, nature positive is about 'halt the decline, protect what is left, and restore the rest'. This approach requires going beyond what is needed for obtaining environmental approvals and encompasses a broad suite of mitigation and compensation activities.

The energy industry has a major role to play. Working through a series of steps, a project's life cycle can limit negative impacts on nature and ideally create net positive environmental outcomes. This approach encourages projects to consider (1) avoiding impact through strategic siting of projects, (2) further minimising impacts through project design and operations, (3) compensating for unavoidable impacts through offsets; and finally (4) enhancing environmental outcomes. The last point encourages projects to work collaboratively to open up new opportunities for contributing to landscape-scale environmental priorities such as large-scale habitat corridor restoration or watershed protection.

'Nature positive' can drive real change but must be backed by tangible and credible actions. Today, nature positive is a broader goal to which projects and industries can contribute. Measuring nature positive outcomes is a fast-moving space but currently there are no verifiable frameworks for a project to be positioned as 'nature positive'.

Nonetheless, actions can be taken that demonstrate how a project can contribute to nature positive outcomes.

Large energy users investing in renewable energy recognise this opportunity.

To date they have been a driving force behind much of the direct and indirect (via retailers) of the renewable contracting market in the NEM, ERM Energetics is forecasting the corporate market to continue to gain momentum, with demand for renewable Power Purchase Agreements (PPAs) by large electricity users expected to increase nearly threefold by 2030 from the current volume of 24TWh, based on publicly announced scope 2 emissions reduction targets.

[1] As estimated by ERM Energetics under the Integrated System Plan's Step Change Scenario using the average hectares per MW of existing wind and solar; and extrapolating new build hectarage based on a sample of new projects under construction or committed.

[2] A New Global Biodiversity Framework: Kunming-Montreal Global Biodiversity Framework - DCCEEW

For leading corporations, universities and government bodies, PPAs are an opportunity to reduce their electricity price risk, but also enhance their reputation as leaders in climate change action, supporters of social justice, natural capital and biodiversity conservation.

In fact, with the growth in sustainability linked debt finance, PPAs are increasingly an extension of organisations' actions to meet targets necessary to unlock lower financing cost. Beyond emissions reduction, these targets typically include employment of First Nations people, improved gender equality and increasingly biodiversity (see Box 2).[3]

Executed well, and with the right partners, these strategies deliver significant brand value and unlock competitive advantages at a time of increased pressure from shareholders and external stakeholders for organisations to demonstrate climate leadership, and heightened scrutiny of 'greenwashing' claims.

Box 2: Sustainability-linked finance

Cairns Airport is the habitat for several endangered birds and plants. Conserving these species became a key objective of North Queensland Airports' (NQA) sustainability linked loan, alongside First Nations' people employment, gender equality and emissions reduction.

These values underpinned NQA's selection of retailer (and project) to supply it with renewable electricity.

[3] See shaded box: Sustainable finance puts biodiversity in focus (commbank.com.au)

About this guide

This guide aims to increase the focus on the *environmental, climate* and *community* goals (referred to as '*ecco*' goals) of renewable electricity projects.

The guidance also provides insights on how the *organisational* standing of developers, suppliers and owners is assessed against criteria intended to ensure a buyer's reputational risks are minimised from a sustainability and ethics perspective. These aspects are typically assigned a weighting of more than 20% by buyers, and in some cases, specific elements may be threshold requirements.

If these are not met, they can lead to the immediate disqualification of offers.

Who will benefit from using this guide?

This guide will support both energy buyers and sellers. Specifically, it is designed to support the planning for a Request for Proposal (RFP), development of a response to RFP schedules and the design of evaluation criteria by aiding:

- Buyers to articulate their sustainability and social licence priorities clearly - and consistently applying this value screen throughout the assessment process.
- Sellers to self-assess how their *projects* measure up against the *'ecco'* goals as articulated by the buyer. By pro-actively addressing the typical requirements throughout the project life cycle, sellers can enhance their score during procurement processes.

Box 3: Electricity retailers are both buyers and sellers

Given the surge in demand for retailer (intermediated) PPAs in recent years, retailers are playing a key role in supporting the energy transition. However, many retailers are asset-light and therefore contract their own wholesale PPAs. As a result, they often operate both as buyers and sellers. They on-sell a significant portion of their renewable hedges (owned or contracted) to large energy users who would otherwise be:

- Sub-scale from a renewable project financing perspective; or
- Too risk averse to contract directly with a renewable energy asset (i.e. unwilling to accept spot exposure in the NEM).

Electricity retailers must therefore buy 'responsibly' to meet customer requirements. The retailer's project origination team, however, doesn't typically face the end-customer. Consequently, sustainability and other customer requirements are not often addressed in retailers' PPAs with projects, and they therefore don't pass through the required benefits and terms.

Unlock the value of social licence and environmental goals

Energy buyers consider renewable electricity contracting to be a long-term partnership. Their brand's sustainability credentials are linked not only to the seller, but to the specific project underpinning the PPA and its key contractors and suppliers. The sustainability component of a PPA RFP is equally focused on aspects that enhance a buyer's reputation, while preventing reputational damage through negligence or the reckless actions of the seller.

All developments have some impacts. It may not be possible to avoid them all. However, there are steps that can avoid, mitigate, compensate and enhance the outcomes. Furthermore, the *ecco* goals (listed below) apply equally to each stage of the project lifecycle. Below is an illustrative list of actions that could enhance *ecco* goals.

Box 4: Credible action by renewable energy projects (examples)	Environment	Climate	Community	Organisation
1. Co-funded community programs between the owner and offtaker (e.g. Spark Renewables and Westpac), which could cover one or more of the '*ecco*' goal areas.[4]	●	●	●	
2. First Nations' led planning, design and implementation of land management programs (e.g. Caring for Country) even if Aboriginal Land/Native Title rights on the site have been extinguished.	●		●	
3. Selecting native screening vegetation to preserve the visual amenity of the landscape whilst increasing the habitat for native fauna.	●	●	●	
4. Providing *additional* fire trails and water tanks for fire management purposes.	●	●	●	
5. Micro-siting of infrastructure to avoid/minimise impacts on sensitive habitats (beyond compliance with planning requirements).	●			
6. Technical training and employment programs for women and First Nations people.			●	●
7. Robust OH&S training programs and accident-free work environment.				●
8. Sourcing strategies preferencing local, and/or First Nations and female suppliers, whilst rigorously applying market leading modern slavery sourcing policies at corporate and project level.			●	●
9. Clear commitment to a circular economy with a credible strategy for end-of-life, renewable-power plant/recycle materials.	●	●		●

The challenge to energy buyers

To date, most buyers have been passive participants in the sustainability narrative of the renewable energy projects underpinning their PPAs. This exposes buyers to significant reputational risk, especially during the post-planning approval stage. Some buyers are criticised for showing limited interest in the project and community beyond the 'ribbon cutting' stage. As a result, many sellers pay scant attention to non-price RFP returnable schedules, believing that PPA evaluation is 'all about price' and that there is no long-term strategic partnership with the project. This situation is likely to continue if buyers do not take charge of their brand risk exposure and commit to co-invest with projects that share their strategic values. Addressing this challenge requires financial and human resource commitment from both the buyer and the seller, including increased information flow to:

- Celebrate success stories from a co-created community engagement strategy
- Enable energy buyers to manage and avoid any potentially negative public relations events associated with the project or seller/supplier.

[4] This could include funding community solar and battery programs, informative sessions for the local community about the importance of the clean energy transition and the impact of climate change, youth development program, funding wildlife corridors on existing or new access roads, etc. Noting that the value of these fund contributions is typically benchmarked per jurisdiction on a $/MWh basis between bidders.

Environment and biodiversity: Case studies of a net-gain approach

Protecting environmental values for the long-term: Neoen and BHP

In South Australia, French developer Neoen has gifted the state government a 1000-hectare parcel of land near its Goyder Renewables Zone project.

BHP entered into a PPA with Neoen for 700 MW of baseload power from the Goyder project, which combines wind, solar and battery technologies, and will ultimately produce more than 8 million MWh renewable energy each year.

Goyder is home to World's End Gorge, a rare and permanent water way that splices the red plains of Australia's driest state.

In what is believed to be a first-of-a-kind for the renewables sector, the land will be reserved as a national park. This once privately-owned farmland will now be protected and made accessible for public enjoyment.

To learn more, visit: Goyder Renewables Zone - Renewable Energy for South Australia (goyderenergy.com.au)

Restoring native ecology and improving solar performance: SA Water

SA Water, South Australia's largest water and sewerage utility, has partnered with Succession Ecology to revegetate five of its regional water pump stations and co-located solar arrays.

Previously, the lands supporting these facilities served as cropping and grazing paddocks had limited perennial vegetation cover and were prone to weed invasion and dust problems in summer.

In this project, hardy native saltbush and low-growing grasses, which are naturally adapted to variable rainfall, were planted below the ground-mounted solar panels, not only regenerating the native biodiversity and landscape by attracting insects and birdlife, but it also minimising dust particles that can inhibit solar panel performance.

Visit: SA Water's native seed propagation grows local jobs

Setting the bar with multi-use solar farms: Lighsource bp and UNE

At Lightsource bp's Wellington Solar Farm, a development with 600MW installed capacity located in the Central West Orana region of New South Wales, the company has partnered with University of New England and EMM to conduct research into onsite native fauna and vegetation.

The results to date are positive, showing that native grassland condition can be maintained and even improved on an operational solar farm.

Further, the company is prioritising shared land use of solar farms, either through cultivating grasses and pollinator friendly flowers to restore insect and wildlife habitat, soil restoration activities (including carbon capture), and/or grazing livestock around the solar panels (agrivoltaics).

To learn more, visit: Lightsource bp on track to develop 600MW solar hub in NSW, Australia

Climate and renewables: Case studies of embracing life-cycle emissions and circularity in the clean energy transition

Linear supply chains continue to dominate clean energy and storage technologies. Adopting circular economy principles for clean energy projects can reduce supply chains emissions, material inputs and waste, as well as create new regional jobs at every stage of the project lifecycle, from raw material management and design to production, reuse, and recycling. Re-designing supply chains are complex and if not done well, can be disruptive, increase cost and delay the transformation at a time when we need to accelerate investment. Scale is critical to the cost-effective transformation of supply chains and governments are often the catalyst, driving industry collaboration and investment in shared infrastructure.

As the renewables sector scales up and earlier developments are retiring, what happens at the end of life for the projects is under increasing scrutiny. While repowering – the process of replacing hardware either due to end of life or because technology improvements have enhanced performance significantly – is a fairly common practice, recycling is less so. In efforts to reduce landfill, recycling and circular economy principles have become front of mind for the sector.

International leadership on wind turbine circularity

ACCIONA Energía has partnered with RenerCycle to build a wind recycling plant in Navarra, Spain. Once operational in 2025, the plant will be able to process up to 6,000 tons of material per year, working from the dismantling of the blades through to the manufacturing of new ones.
To learn more: ACCIONA to build pioneering wind blade recycling plant in Navarra

Vestas has partnered with Aarhus University, Danish Technological Institute, and Olin the partners of the CETEC project, to form a coalition of industry and academia dedicated to finding circular solutions for wind turbine blades. What they have produced is a novel chemical process, which breaks down epoxy resin (the most common adhesive in turbine technology) into reusable A-grade materials.
To learn more: Vestas unveils circularity solution to end landfill for turbine blades

Opting for a manufacturing solution, Siemens Gamesa has developed RecycleableBlade - the first wind turbine blade that is recyclable. These blades are made using a new resin that dissolves upon immersion in an acidic solution, making all components available for reuse.
To learn more, visit: RecyclableBlade

Australia's wind sector is in the early stages of adopting circularity principles, however there are green shoots of innovation in the solar energy sector.

Emerging leadership from the Australian solar sector

Two Australian companies addressing end of life solutions for solar PV are PV Solutions and Elecsome.

PV Solutions recycle solar panels from domestic, business and utility scale installations. Panels are disassembled with components being sent off for use in local manufacturing. Visit: pvindustries.com.au

Elecsome, has developed upcycling solutions for end-of-life solar panels. Solar panels are refurbished, recycled or upcycled into innovate products used in manufacturing, such as *solarcrete*, 'an upcycled pre-mix concrete product from end-of-life solar panels'. Visit: elecsome.com

Community benefits: Case studies of unlocking social licence to operate, collaborate and deliver meaningful change

Social licence – the acceptance of a project by a local community – is fundamental to a project's success (or for the transition to renewables more broadly across society). It is the willingness of a community to accept change when they can see the benefits outweighing the impacts. An essential part of building social licence is genuine community engagement that starts early, and is predicated on trust built from meaningful conversations.

There are a lot of principles and guides defining what social licence means. For communities hosting renewable energy projects, it's fundamentally about building and supporting more socially and economically resilient regional communities through investment and placemaking.

Community engagement to investment: Grong Grong Solar Farm and IAG

Grong Grong Solar Farm is a 1.5 MW solar farm in the NSW Riverina.

Grong Grong is Australia's first crowdsourced equity funded solar farm, with over 650 investors. It also hosts the innovative Haystacks Solar Garden - a cooperatively owned model of solar access, allowing renters and those locked out of rooftop solar to buy a 'plot' in the solar farm.

Community engagement started early, and the local community widely supported the project, as it gave access to solar for those locked out of the market. Local Riverina contractors have also been given preference across the project cycle.

Through a partnership with Energy Locals, solar 'gardeners' receive ongoing credit on their electricity bill, even when they move house. A philanthropic donation enabled Haystacks to offer 10 subsidised plots to Riverina locals.

IAG signed a PPA with Grong Grong Solar Farm; proving that small energy buyers can have impact.

To learn more, visit: Renters go bush to buy a slice of sunshine

Bringing jobs, changing lives, local economy and community: Beon

Beon Energy Solutions has delivered more than 2 GW of renewable energy to Australia's energy system. Beon has demonstrated an unwavering commitment to providing local communities with opportunities to participate in the clean energy workforce boom; proving that equity, diversity and inclusion can be at the heart of project delivery.

At Avonlie Solar Farm, a 245 MW project in the Riverina NSW, Beon engaged early with the community, identifying local employment challenges via a free 'ID Day' attended by 100 locals. Beon signed 30 First Nations local employees and supported them with training.

At Karadoc Solar Farm, a 112.5MW project near Mildura, Beon employed 212 people – the majority of whom were local, and included 90 long-term unemployed, 14 from culturally and linguistically diverse backgrounds, 4 with a disability and 38 were First Nations Australians. On this project, Beon partnered with SuniTAFE to develop a course for employees new to solar farm jobs.

Westpac and Carlton United Brewery (via Flow Power) signed PPAs supporting Beon projects.

To learn more, visit: beon-es.com.au

Solar-grazing: Agriculture and solar farming, New England, ACEN Renewables

New England Solar Farm is a 400MW solar farm that will soon grow by another 320MW plus 200MW battery. This NSW region provides an important agricultural resource, and land for animal grazing is essential to the regional and state economy.

Recognising the need for both resources, ACEN Renewables has worked to co-locate sheep grazing and solar panels at this 1,200-ha site, which supports some 6,000 sheep. The shady panels create a micro-climate that prolongs morning dew, helping the grass to grow and providing shade for the grazing sheep.

Visit: acenrenewables.com.au

Affordable electricity for the whole town: Hay Shire Council NSW and Engie

Hay Shire Council is working with its community to gain support for the energy transition in the South West Renewable Energy Zone in NSW.

Eight renewable energy developments are proposed for the Hay Shire, including a hybrid wind, solar and battery storage development by French developer, Engie.

Despite its large size, local community opposition to the project has been minimal. The Council worked with Engie and the community to identify meaningful outcomes for the community, including cheaper electricity. A $1,000 rebate per annum for 30 years has been negotiated for anyone in the town of Hay and living within 20 kms of the project.

Read more: Renewable wind and solar farms on the Hay Plain in NSW to boost economy, build sustainable farms

Community fund governance: Dulacca Wind Farm, Octopus Investments

Dulacca Wind Farm is a 43-turbine project owned by Octopus Investments and located near in the Western Downs region of Queensland. The project will deliver a community fund valued up to $1.25m to fund community groups, projects and organisations via annual funding grant rounds.

Importantly, community representatives will be on the funding the panel, meaning that the community has a say in funding allocation. To learn more, visit: dulaccawindfarm.com.au

Community benefits: First Nations partnerships and heritage protection

Did you know that in Canada, nearly 20 percent of all First Nations peoples have either equity and/or direct ownership of a renewable energy project?

In Australia, First Nations communities are key stakeholders in the energy transition, yet ownership/equity lags behind Canada. Importantly, supporting First Nations values is linked to each of the 'ecco' goals. For 'environment', cultural heritage is connected to the environmental considerations of projects. On 'climate', caring for Country and First Nations land use practices, when supported through shared land use, can have restorative climate benefits. 'Community' goals include supporting self-determination and the economic development of First Nations communities through employment, land use payments, and partnerships. For 'organisational' goals, companies and businesses can be assessed on their Reconciliation Action Plans (RAPs).

First Nations peoples are inherent holders of rights and Free, Prior and Informed Consent (FPIC)[5] should be given in any negotiation.

The First Nations Clean Energy Network, Australia's leading body supporting and advocating for First Nations in the energy transition, has devised ten best practice principles for the sector[6]:

1. Engage respectfully.
2. Prioritise clear, accessible and accurate information.
3. Ensure cultural heritage is preserved and protected.
4. Protect Country and environment.
5. Be a good neighbour.
6. Ensure economic benefits are shared.
7. Provide social benefits for community.
8. Embed land stewardship.
9. Ensure cultural competency.
10. Implement, monitor and report back.

For more case studies, see The First Nations Clean Energy Network's project tracker.

Supporting First Nations' values and future: ACEN Renewables

In Western Australia, ACEN has partnered with the Yindjibarndi nation in the Pilbara region of Western Australia to develop, own, and operate up to 3GW of renewable energy on Yindjibarndi country. Yindjibarndi people will hold 25-50% project equity.

In NSW, whilst surveying the land that would become New England Solar Farm, ACEN and Anaiwan archaeologists discovered Ooralla - a significant site of Anaiwan cultural heritage.

Ooralla is a rocky outcrop on the New England tablelands that was once an important meeting spot marked with ancient grinding groves. It is now preserved, with access granted for cultural practices.

ACEN recently won an award for First Nations engagement from the Clean Energy Council.

To learn more, visit: acenrenewables.com.au

[5] Free, Prior and Informed Consent (FPIC). UNHR.

[6] Leading Practice Principles: First Nations and Renewable Energy Projects. Clean Energy Council and KPMG.

Do the work upfront

This guide seeks to help save energy buyers, generators and sellers effort and cost in the PPA process. This includes learning from case studies where projects were derailed.

In addition to the case studies presented in this guide, there are recent and well-publicised examples of corporate PPA deals which have experienced extensive and costly delays, or collapsed because generators did not value the environmental and social aspects of the projects – ultimately leaving energy buyers exposed to reputational risks.

Both energy buyers and sellers need to pay attention to project risks to avoid reputational damage. Some important lessons we have observed are:

- It's not all about price. Factor-in the 'ecco' goals and assign value to the environmental, climate, community and organisational aspects of renewable energy projects as part of your project site selection and the non-price criteria within the tender or RFP process. Failure to do so may result in the project size being scaled-back, which will harm economies of scale and commercial viability.
- Conduct project and partner due diligence.
- Seek evidence of community engagement. It should be appropriate - early, genuine and inclusive.
- The financial consequence of brand damage is significant.
- Project delays cost money and may ultimately result in projects losing an offtake. Set realistic project planning approval milestones.

Self-assessment checklist guidelines

Below are considerations for energy buyers in the development of a robust sustainability requirements framework to guide the tender process:

- Assess your organisation's sustainability priorities.
- Screen parameters to decide your minimum requirements versus preferences.
- Review the assessment standards to determine the relevance to your organisation.
- Assign weightings to parameters to ensure alignment of the assessment's outcomes with your strategic priorities.

Although each buyer has unique requirements, the table on the following pages provides energy sellers with a generic framework and insights into the standards typically applied - allowing you to assess how well your project rates against an objective set of sustainability criteria.
Sellers must be able to present credible evidence to support their claims during the procurement processes. However, buyers must recognise than many renewable project owners are resources constraints. So, think carefully what your priorities are and when information is required (e.g. RFP, best and final round or preferred bidder stage).

HOW TO USE THE SELF-ASSESSMENT CHECKLIST:

Energy buyers: Adapt the criteria and standards provided to meet your specific requirements. Assign a weighting per criterion that reflects your priorities. Then assess prospective energy sellers against the criteria by multiplying the rating assigned (0 to 5 points) with the weight out of 100, to derive the weighted score in percentage terms.

Energy sellers: Use the criteria in the following table to assess the relative maturity of your project, and your organisation, against best practice.

Aiming for best practice - a self-assessment checklist

AREA	PARAMETER	STANDARDS APPLIED TO A PROJECT AND ITS OWNERS, TYPICALLY USING A 0 TO 5 POINT SCALE			SCORING		
		POOR (0)	MARKET STANDARD AND COMMONLY REQUIRED BY BUYERS (3)	BEST IN MARKET (5)	RATING	WEIGHT	WEIGHTED SCORE
Environment (Natural resources, ecosystems and heritage assets)	1. **Site selection, design and operation**	Development in area with high conservation value; and Minimum planning requirements are met, but the project may lead to a "permanent loss" with mitigation, compensation and offsetting options deemed inadequate; and / or Project or project owner has been fined for breaching planning provisions for the project.	Development in an area which has (or is risking) an adverse impact on the environment, but where actions could readily be taken to materially reduce the impact. Actions include planning (e.g. micro siting) or offsetting and ongoing monitoring to deliver an outcome that meet or exceed planning requirements.	Developed on a site with low conservation values. Awarded planning approval with no significant action required to reduce or offset environmental impacts; and Use of market leading technology to monitor and work on further reducing the project's impacts during the construction and operational stages.			
	2. **Environmental leadership**	Limited evidence of mitigation and enhancement beyond complying with minimum planning requirements.	Significant steps taken to ensure the development leads to a "net gain" for the environment within the project footprint boundaries.[7] This would go beyond what is required for gaining approvals through offsetting of direct impacts.	Active steps taken beyond own project to also collaborate with other developers/partners at a regional level to drive landscape-scale "net gains" (e.g. protecting, enhancing and restoring large-scale water and habitat corridors).			
Climate (beyond emissions reduction at project level)	3. **Unlocking additional investment**	Project >15 years old in the last year of the PPA or no specified project underpinning a retailer intermediated PPA with renewable certificates sourced from the market / unspecified sources.	Project committed or operational already, but will be less than <15 years old in the last year of the PPA; or Project will be >15 years old in the last year of the PPA, but owners have already committed to repower the plant before the end of the PPA.	New project yet to reach financial close, with the offtake of sufficient scale to enable an investment decision to be made.			
	4. **Circularity and lifecycle emissions**	No consideration to supplier/embodied emissions, nor a commitment to repair/reuse/recycling at end of life. Consequently, equipment used on a linear path from 'cradle to grave' and destined for landfill at end of life.	End of life decommissioning plan covers some components of the plant and GHG intensity of major equipment/contractors/inputs[8] considered during procurement;	Project adopted strong circularity principles during each stage of the project lifecycle, including a commitment to prolonging the use of equipment through practices like reusing, refurbishing, and repairing for a second life, with recycling as a final measure; and Conducted life-cycle assessment of embodied emissions and actively work with suppliers to decarbonise the value chain. [9]			

[7] Net gains are specific to the environmental impacts of a development (See Box 1). This may include rehabilitation of ecosystems (e.g. wetlands, or regeneration of native habitats on degraded land).

[8] E.g. Low carbon concrete is readily available

[9] E.g. Low carbon or Aluminium Stewardship certified aluminium, as well as ResponsibleCertified Steel expected to become the next frontier in reducing the carbon footprint of renewable energy projects.

AREA	PARAMETER	STANDARDS APPLIED TO A PROJECT AND ITS OWNERS, TYPICALLY USING A 0 TO 5 POINT SCALE			SCORING		
		POOR (0)	MARKET STANDARD AND COMMONLY REQUIRED BY BUYERS (3)	BEST IN MARKET (5)	RATING	WEIGHT	WEIGHTED SCORE
Community	**5. Engagement**	No or limited community engagement beyond ad-hoc information sessions and a static website with basic information.	Robust strategy to maintain a community engagement model throughout the life of the project. Pro-active two-way communication (see IAP2 consult and involve stages[10]).	Commitment to collaborate and empower (see IAP2) the community throughout the project development lifecycle (e.g. best practice may include community shareholding or cash payments beyond the impacted landowners).			
	6. Support / opposition	Vocal opposition and / or ongoing legal action by a well organised, credible local community groups opposing the project	Good support from the local community, but some opposition from national or regional anti-renewables lobby groups.	No opposition to the project from members of the local community adjacent to the land on which the projects are located; and Limited opposition form the wider local community.			
	7. Community fund[11]	No community fund; or Community fund below industry norms on a $/MWh basis.	Community fund contribution broadly on par with industry norms on a $/MWh basis.	Community fund contribution above industry norms on a $/MWh basis, with community members active in decision-making process over project life.			
	8. Partnerships employment and sourcing from target groups (from target groups e.g. First Nations, female, youth, local SMEs)	None or unknown portion of contracting / procurement spend with businesses owned by targeted groups; and No employment or apprenticeship statistics on targeted groups.	Targets[12] established and represent: • [X%] of employees during the construction and operation stage • [X%] of contracting / procurement spend • [X]% of 'learning workers'/apprenticeships	Partnerships with targeted groups to design, develop and deliver projects including regional 'offsite' projects; and Partners have equity share / co-ownership options or at a minimum has a key role in decision making of employment, training and sourcing.			
Organisation	**9. Alignment of sustainability values**	Supplier owns thermal generation assets but has no clear decarbonisation or environment strategy and / or targets.	Supplier owns thermal generation assets but has a clear decarbonisation and / or environment strategy which includes a net zero and / or nature positive target.	Supplier does not own any thermal generation assets; and have an ambitious net zero target; and Supplier has or is in process of incorporating nature positive principles into business strategies.			
	10. Employment record (incl OH&S)	History of major accidents with management found liable; and Recent or ongoing industrial action associated with worker pay and / or safety; or Fair Work Ombudsman finding against the developer or its main suppliers / contractors.	Evidence of robust OH&S practices, with no incident in the past year resulting in >5-workday-equivalent lost on site; or May have experienced some industrial action in the past but resolved without prolonged disruption to project development / construction / operation.	Evidence of robust OH&S practices and no OH&S incidents in the past year which resulted in more than one workday equivalent lost on site; and No evidence of unfair work practices; nor known current or past workplace conflicts.			
	11. Modern slavery	No policy and monitoring process to identify and eliminate modern slavery in the supply chain of key contractors and suppliers.	Internal Modern Slavery policy; and Actively implements a Supplier Code of Conduct at both group and individual project level.	Modern Slavery Policy complies with the Modern Slavery Act 2018 (Cth); and Continuing to build an understanding of modern slavery risks.			

[10] IAP2's Public Participation Spectrum, available on IAP2 IAP2 Public Participation Spectrum - IAP2 Australasia

[11] The most recent guideline had been issued by the NSW Government at the end of 2023, proposing a rate for benefit sharing of (1) $850 per MW per annum for solar, and (2) $1,050 per MW per annum for wind paid over the life of the development and indexed to the Consumer Price Index. However, guidelines are updated from time to time and varies by state and within states.

[12] We advise to benchmark amongst respondents if no minimum requirements are specified by the buyer.

References and resources

Area	Link
Circularity	Going circular in clean energy, Office of Energy and Climate Change, March 2023 PV panel re-use around the world: State-of-the-art. Overview Report, November 2023
Community engagement and benefits sharing (General)	Community Engagement Review - DCCEEW Draft energy policy framework | Planning Portal - Department of Planning and Environment (nsw.gov.au) BRC-A, Social Licence Primer for PPA Buyers
First Nations engagement	Community_Energy_Planning_Toolkit_A4-web.pdf (nationbuilder.com) Leading-Practice-Principles-First-Nations-and-Renewable-Energy-Projects.pdf (cleanenergycouncil.org.au)
Modern Slavery	Addressing-Modern-Slavery-in-the-Clean-Energy-Sector.pdf (cleanenergycouncil.org.au) Discussion Paper: A Code of Practice on Managing Modern Slavery Risks in Renewable Energy Value-Chains (nsw.gov.au)
Nature capital / environment	The Mitigation Hierarchy - Nature Positive Better Practice Renewables and Biodiversity: Opportunities for Collaboration Guide - RE-Alliance Climate-related financial disclosure: exposure draft legislation | Treasury.gov.au WWF report on nature positive infrastructure
Power Purchase Agreements	BRC-A, Best Practice Corporate PPA Guide

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