Decommissioning Security Framework for Renewable Energy Projects

CLEAN ENERGY COUNCIL

QREC
Queensland Renewable Energy Council

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Decommissioning Security Framework

Purpose

The purpose of this framework is to establish a nationally consistent, risk-aligned, and investment-sensitive assurance mechanism for renewable energy projects (specifically Wind, Solar and Large-Scale Battery Projects). While transitional provisions exist, this framework is a proactive measure to provide communities, landholders and governments with assurance that, in the unlikely event that a renewable energy project is unable to meet its end-of-life decommissioning obligations, protection is provided against stranded liabilities. The framework balances the protection against such liabilities with a fiscally responsible approach that supports continued investment in clean energy infrastructure without contributing to upwards pressure on electricity prices.

By embedding transparency, proportionality and national consistency, the framework reinforces the clean industry's role as a credible and accountable partner in the energy transition that will support regional communities for decades to come.

This framework has been jointly facilitated by the Clean Energy Council (CEC) and the Queensland Renewable Energy Council (QREC), in close consultation with industry members and other stakeholders, whose constructive collaboration, expert input, and shared commitment have enabled the development of a robust, nationally consistent, and investment-sensitive decommissioning financial assurance framework. Developed collaboratively, the framework balances fiscal responsibility with practical implementation while acknowledging the maturity and comparatively low-risk profile of the renewable energy sector.

Core principles

As part of any discussion around decommissioning of renewable energy development, renewables developers agree the following principles of a decommissioning framework apply.

1. Risk-based

Renewable energy projects must acknowledge their end-of-life responsibilities and proactively plan for decommissioning. Unlike extractive resources industries the actual risk of project abandonment is low. There have been no instances of abandoned utility assets in Australia. This is due to robust capital structures, lender oversight and step-in rights, and the residual value of assets such as turbines, cables, copper, steel, and batteries, which can be recycled or resold.

In addition, revenue certainty is generally assured through long-term Power Purchase Agreements (PPAs), cost certainty is supported by operations and maintenance contracts that are often locked in for 20 years or more at the final investment decision stage, and the industry's front-loaded cost structures mean that once constructed, assets have very low ongoing operating costs. Taken together, these factors materially eliminate the risk that asset owners or financiers would cease operations and abandon assets within their operational lifespans.

For this reason, security requirements should reflect actual risk rather than worst-case assumptions, with financial security obligations escalating gradually only as the real risk of non-decommissioning increases—primarily in later operational years. A risk-based approach avoids tying up large sums of capital unnecessarily during low-risk project phases, while ensuring sufficient protection is in place if obligations are not met toward end-of-life.

2. Proportional

Decommissioning obligations should be proportional to project size, risk profile, and stage of life. A uniform "one-size-fits-all" approach would fail to recognise the diversity of renewable energy projects, i.e. what is suitable for a small 20MW solar farm in remote Queensland, will not be suitable for a 400MW wind project in complex terrain.

Security arrangements should therefore be scaled to reflect project complexity and decommissioning cost, and timed so that requirements are not all front-loaded. Proportionality preserves investment appetite and ensures project financing remains feasible, while still protecting communities and landholders against abandonment.

3. Flexible

Project developers must be able to choose from a suite of acceptable financial instruments, provided that these meet regulatory standards and include safeguards against default. Acceptable instruments may include bank guarantees, escrow accounts, surety bonds, and emerging insurance products.

Flexibility is key: mandating a single instrument such as upfront cash would unnecessarily constrain developers and create investment barriers complicating Final Investment Decisions (FID) and may place upward pressure on electricity prices where Power Purchase Agreements (PPAs) are in place. This flexibility ensures enforceability while encouraging market responsiveness and innovation in financial assurance products.

4. Calculated on a net cost basis

Decommissioning costs must be calculated on a net-cost basis, deducting residual and salvage values, and applying consistent and transparent methodologies. Components such as turbines, BESS units, cabling, and steel retain significant salvage value. These must be recognised, alongside inflation adjustments and standard financial discounting.

An independent, third-party tool should be utilised to calculate costs every five years, using transparent methodologies and accounting for resale and recycling value.

This approach ensures that financial assurance reflects real liabilities, avoids overcapitalisation, and strengthens public confidence that security is fairly calculated.

5. Transparent & accountable

Transparency underpins the credibility of this framework. Developers must submit Decommissioning Security Reports to the relevant approval authority at key milestones (prior to construction, at completion of construction, and at project end-of-life) and then periodically throughout the asset's life, at a minimum, at five (5) year intervals, to ensure they reflect any changes that may impact the accuracy of the plan. These reports must disclose the financial security mechanism, methodology for calculating amounts, and custodian arrangements.

While commercially sensitive information should remain protected, transparency is essential for regulators, landholders, and communities to have confidence in industry's accountability – it ensures trust in the renewable energy sector, while protecting competitive intellectual property.

6. Nationally consistent

The renewable industry operates across jurisdictions, and inconsistent state-based approaches create regulatory inefficiency and investment uncertainty. This framework provides a nationally harmonised approach to decommissioning financial assurance, guided by peak bodies, the industry and in partnership with state and local governments.

National consistency fosters investment certainty, lowers compliance costs, and demonstrates the industry's maturity and long-term accountability.

Policy mechanism overview

The framework adopts a two-stage approach:

Stage 1: Pre-approval commitment

At development approval stage, the proponent must provide to the relevant approval body:

- A signed Decommissioning Commitment Statement affirming responsibility for decommissioning and the instrument used; and
- An indicative Financial Security Plan, which may be appended to landholder agreements and include high-level cost estimates and security mechanism, calculation methodology, and custodian arrangements.

Stage 2: Phased financial contributions

A phased financial contribution model is the most practical approach as it balances the need for long-term assurance with the financial realities of project development and operation. Rather than requiring large upfront securities that can tie up capital and discourage investment while a project is under finance, a staged mechanism allows contributions to be made progressively over the life of the asset, aligned with revenue generation and asset maturity. This ensures that adequate funds are available, in the unlikely case of default, when decommissioning obligations fall due, while also supporting project viability and enabling reinvestment in innovation and jobs during operational years. This model provides transparency and predictability for regulators, landholders, and communities, while reducing financial strain on project proponents, operators and investors.

Key Features:

- **Contributions**: Increase progressively, aligned to construction, commissioning, mid-life, and late-life stages.
- **Independent calculation**: occurs at least every five (5) years, or upon significant project changes such as repowering or expansion. This ensures stated values reflect current or emerging market costs.
- **Accepted instruments**: Cash in escrow, bank guarantees, surety bonds, or other approved vehicles.
- **Residual value consideration**: Decommissioning costs must have an established way to deduct estimated salvage, resale, and recycling value of components.

Phased contributions balance long-term assurance with the financial realities of project development, ensuring adequate funds are available for decommissioning while avoiding capital being locked-up unnecessarily.

Fund holding & governance

- **Custodianship:** Financial security must be held by independent, credible entities such as state Treasury or accredited trustees, not directly by landholders.
- **Verification:** Completion of decommissioning will be verified by regulators and landholders, to ensure completion to the agreed state, and compliance with approval conditions.
- **Dispute resolution:** If landholders or communities are unsatisfied, escalation processes should be established to bring evidence-based concerns to the regulator for review.

- **Release of funds:** Cash would be released at agreed milestones only upon verified completion of works; other instruments follow commercial arrangements.

Independent governance ensures accountability, prevents conflicts of interest, and gives landholders confidence in the enforceability of obligations.

Reporting and transparency

- **Decommissioning security reports:** Required to be submitted to the approving authority pre-construction and every five years thereafter. Must specify security mechanism, calculation methodology, and custodian arrangements.
- **Compliance framework:** To be developed for frequency, scope, and verification, balancing self-assessment and independent review.
- **Final detailed decommissioning plan:** Required prior to cessation of operations if project is not proposed to be extended or repowered, confirming implementation of the financial security in full.
- **Industry decommissioning risk assessment:** Commissioned independently to distinguish real from perceived risks and to inform public confidence.

Clear, periodic reporting demonstrates compliance, assures stakeholders, and reinforces industry accountability.

Transitional provisions

For existing projects or developments already approved:

- Existing arrangements (e.g. escrow or landholder-held bonds) may be recognised if independently verified and consistent with principles.
- Flexibility exists for projects at advanced development stages.

Transitional provisions avoid retrospective disadvantage while progressively harmonising the industry under consistent national standards.