Decommissioning Management Plan

Cattle Creek Wind Farm

PREPARED FOR
RWE Cattle Creek Onshore Wind Pty Ltd

DATE
24 July 2026

REFERENCE
0706881

DOCUMENT DETAILS

DOCUMENT TITLE	Decommissioning Management Plan
DOCUMENT SUBTITLE	Cattle Creek Wind Farm
PROJECT NUMBER	0706881
DATE	24 July 2026
VERSION	07
AUTHOR	Environmental Resources Management Australia Pty Ltd
CLIENT NAME	RWE Cattle Creek Onshore Wind Pty Ltd

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
Version	01	Sophie Allan	Michael Rookwood		28 November 2025	Draft
Version	02	Jessica Kwok	Michael Rookwood	David Dique	19 December 2025	Draft v2
Version	03	Aadya Pandit	Michael Rookwood	David Dique	20 March 2026	Draft v3
Version	04	Louise Waite	Michael Rookwood	David Dique	27 April 2026	Draft v4
Version	05	Louise Waite	Jessica Kwok	Michael Rookwood	26 May 2026	Draft v5
Version	06	Louise Waite	Jessica Kwok	Michael Rookwood	20 July 2026	Draft v6
Version	07	Louise Waite	Michael Rookwood	David Dique	24 July 2026	Final

SIGNATURE PAGE

Decommissioning Management Plan

Cattle Creek Wind Farm

0706881

Michael Rookwood
Consulting Partner

Dr David Dique
Partner in Charge

Environmental Resources Management
Australia Pty Ltd

Level 14
207 Kent Street
Sydney NSW 2000

T +61 2 8584 8888

CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS, TERMS AND ABBREVIATIONS

Term	Description
ABRI	The Association for the Battery Recycling Industry
BESS	Battery Energy Storage System
ERM	Environmental Resources Management Australia Pty Ltd
ha	Hectares
LIB	Lithium-ion Battery
LGA	Local Government Areas
kV	Kilovolt
MCU	Material Change of Use
PO	Performance Outcome
SARA	State Assessment and Referral Agency
SF	State Forrest
State Code 23	State Code 23: Wind farm development (v3.6)
State Code 27	State Code 27: Battery storage facility development (v3.6)
The Proponent	RWE Cattle Creek Onshore Wind Pty Ltd
The Project	Cattle Creek Wind Farm
WTG	Wind turbine generators

DEFINED TERMS

Defined Term	Definition
Decommissioning	Removal, rehabilitation and remediation of the Project in part, after finalisation of construction, then in entirely at the end of operation
Project Area	The wind farm and BESS project area comprising twelve separate lots, and adjacent road reserves with a total area of approximately 20,404.5 ha.
Rehabilitation	The restoration of areas of disturbance due to construction of and operation of the Project. Rehabilitation means the act of undertaking a range of activities that collectively endeavour to return the landscape to an agreed post-development use. This is further described in the Post-Construction Rehabilitation Management Plan prepared for the Project.
Disturbance Footprint	The area of maximum direct disturbance associated with the construction, operation and decommissioning of the Proposed Development in the Project Area, which is approximately 2,221.2 ha.

1. INTRODUCTION

RWE Cattle Creek Onshore Wind Pty Ltd (the Proponent), a wholly owned subsidiary of RWE Renewables Europe & Australia GmBH, proposes to develop, construct and operate the Cattle Creek Wind Farm (the Project) on land located approximately 60 km southwest of Dalby and 110km west of Toowoomba, and within the Toowoomba Regional Council and Western Downs Regional Council Local Government Areas (LGAs) in Queensland. The Project consists of the construction, operation, maintenance, and decommissioning of up to 135 Wind Turbine Generators (WTG), a Battery Energy Storage System (BESS) as well as ancillary infrastructure. The Project will be located on twelve separate lots and adjacent road reserves with a total area of approximately 20,404.5 ha.

The Project is currently subject to the following statutory development assessment processes:

- Assessment as a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*. The Project is being assessed by public environment report (EPBC ref.: 2025/10150); and
- Development Application under the *Planning Act 2016* for a material change of use (MCU) for a wind farm and operational works for native vegetation clearing.

1.1 PURPOSE

The Project is subject to development assessment under State Code 23: Wind farm development (v3.6) (State Code 23) and State Code 27: Battery storage facility development (State Code 27) by the State Assessment and Referral Agency (SARA). This report has been prepared to address Performance Outcomes 24-27 of State Code 23, and Performance Outcomes 31-35 of State Code 27, and to demonstrate the Proponent’s commitment to meeting contemporary decommissioning requirements. This report demonstrates that prior to construction, the following commitments are made in relation to decommissioning of the Project:

- The decommissioning strategies, practices, and processes implemented by the Proponent will not result in adverse impacts on landowners, the community, the environment, or the state; and
- Financial security is in place, resulting in no financial liability risks to landowners and the State Government.

This report acknowledges the state’s expectation that decommissioning will be in accordance with strategies prepared by the Proponent, and all decommissioning activities are to be undertaken at full cost to the Proponent. This report is intended to provide high-level decommissioning outcomes and strategies for the Project based on the design refinement process using our understanding of current technology and preferred approaches to decommissioning, in accordance with the framework outlined in the Decommissioning Security Report Framework for Renewable Energy Projects (Clean Energy Council, Queensland Renewable Energy Council, 2025). Detailed decommissioning plans for both the construction and operational phases of the Project will be prepared prior to the completion of the aforementioned stages.

2. PROJECT AREA

The Project Area is located across both the Toowoomba Regional Council and Western Downs Regional Council LGAs. The closest major town is Dalby, located approximately 60 km north-east of the Project Area, with Queensland's capital, Brisbane, located 220 km east of the Project Area.

The Project Area has been classified as Rural Zone under both the Western Downs Planning Scheme 2017 and Toowoomba Regional Planning Scheme, with the predominant land use being cattle grazing, animal husbandry, and related rural activities. The landscape has been majorly influenced by historical grazing, with large patches of cleared land featuring no remnant vegetation. The surrounding landscape has also been influenced by historical land clearing and cattle grazing, with the exception of surrounding State Forests (SFs).

The Project Area lies adjacent to and within the Locality of five SFs, including:

- The Kumbarilla SF, located on the northern boundary of the Project Area, and covering an area of approximately 86,000 ha;
- The Western Creek SF, located approximately 5 km to the south-east of the Project Area, and covering an area of approximately 100,000 ha;
- Dunmore SF, located approximately 10 km to the east of the Project Area, and covering an area of approximately 20,000 ha;
- Waar Waar SF, located approximately 9 km west of the project Area, and covering an area of approximately 4,000 ha; and
- Boondandilla SF, located approximately 5 km south-west of the Project Area, and covering an area of approximately 57,300 ha.

The Project Area is approximately 20,404.5 ha in size and consists of 12 individual land parcels (lots) spanning five properties and road reserves. The property lots and their respective sizes are outlined below, in Table 2-1.

TABLE 2-1 PROJECT AREA PROPERTY LIST

Property	Lot on Plan	Tenure	Easements	Size (ha)
Property 1	2DY452	Freehold	-	4,698.8
Property 2	27CP882781	Freehold	• GSP112990; and • HSP112991	2,406.6
	2DY831	Freehold		3,013.8
Property 3	1RP174414	Freehold	• JSP109190	2,049.6
	16SP201705	Freehold		1,0019.9
	15SP201705	Freehold		1,032.3
	3RP174414	Freehold		823.6
Property 4	2RP174414	Freehold	-	1,176.7
Property 5	8DY247	Freehold	-	964.9
	9DY247	Freehold	-	965.5
	22DY800	Freehold	-	1,028.3
	21DY218	Freehold	-	1,041.1
Road Reserves	O'Connor Road Unnamed Road Reserves		-	183.4
TOTAL				**20,404.5**

3. REGULATORY REQUIREMENTS

The *Planning Act 2016* (Planning Act) is the statutory framework for plan-making and development assessment in Queensland. SARA is responsible for the delivery of a coordinated, whole-of-government approach to the state's assessment of Development Applications.

3.1 STATE CODE 23: WIND FARM DEVELOPMENT

State Code 23 of the State Development Assessment Provisions applies to an MCU for a new or expanding wind farm. The purpose of this is to:

- Set out the minimum parameters of assessment necessary to demonstrate that a wind farm development can satisfactorily mitigate any unacceptable adverse impacts on individuals, communities and the environment;
- Ensure that the impacts arising from the design, siting (including proximity to sensitive land uses), construction, operation and decommissioning of wind farms do not result in unacceptable adverse impacts on individuals, communities and the environment; and
- Ensure the assessment of wind farm developments is informed by community and local government engagement.

PO 24 – 27 of State Code 23 outline the decommissioning requirements, and has been detailed below in Table 3-1.

TABLE 3-1 STATE CODE 23 PERFORMANCE OUTCOMES RELEVANT TO DECOMMISSIONING

Performance Outcome	Reference
PO24 Relevant components of development, both after completion of construction and at cessation of operation, are decommissioned in a timely and efficient manner.	Section 1.1 and 6.1.2
PO25 Decommissioning ensures that materials removed from site destined for landfill are minimised while opportunities to reuse, recycle and/or repurpose are deployed to the greatest extent feasible.	Section 6.2.1
PO26 Decommissioning at end of operations ensures disturbance footprints are rehabilitated, and waterways and drainage patterns are reinstated.	Section 6.3
PO27 Decommissioning plans are secured by bonds of financial guarantees or other mechanism/s to safeguard compliance.	Section 5

3.2 STATE CODE 27: BATTERY STORAGE FACILITY

State Code 27 of the State Development Assessment Provisions applies to an MCU battery storage facility. The purpose of this code is to ensure that the development of a battery storage facility:

- Avoids and/or appropriately integrates risk mitigation strategies and responsive design measures to address potential fire hazards, and other environmental risks, ensuring long-term safety and resilience for people, surrounding land uses and the environment;

- Minimises the loss or fragmentation of high quality agricultural land;
- Does not result in unacceptable adverse impacts on individuals, communities, the environment, adjacent sensitive land uses and sensitive receptors, landscape values and infrastructure and services; and
- Is decommissioned in a timely and efficient manner that reuses, recycles, and/or repurposes materials to the greatest extent possible and rehabilitates the environment.

PO 31 – 35 of State Code 27 outline the decommissioning requirements, and has been detailed below in Table 3-2.

TABLE 3-2 STATE CODE 27 PERFORMANCE OUTCOMES RELEVANT TO DECOMMISSIONING

Performance Outcome	Reference
PO31 Relevant components of development, both after completion of construction and at cessation of operations, are decommissioned in a timely and efficient manner.	Section 1.1 and 6.1.2
PO32 Development decommissioning ensures that: • materials removed from site are minimised; • materials that are removed from the site are disposed of at approved disposal facilities capable of receiving • the materials; and • opportunities to reuse, recycle and/or repurpose the materials are deployed to the greatest extent feasible	Section 6.2.2
PO33 Decommissioning at end of operations ensures disturbance footprints are rehabilitated, and waterways and drainage patterns are reinstated.	Section 6.3
PO34 Decommissioning incorporates design features that enable reuse, recycling, and recovery of battery components and associated infrastructure at end-of-life.	Section 6.2
PO35 Decommissioning plans are secured by bonds or financial guarantees or other mechanism/s to safeguard compliance.	Section 5

4. PROJECT INFRASTRUCTURE

The Project will consist of up to 135 WTGs, BESS of up to 450 MW and ancillary infrastructure (supporting infrastructure) consisting of:

- WTG foundations, crane hardstands, crane boom laydown, blade laydown and rotor assembly area;
- Access tracks, including:
  - New and upgraded tracks within the Project Area, generally comprising of a nominal range of 5.5 m – 10 m wide permanent access track, and a maximum 50 - 95 m wide cleared corridor for Oversize Overmass (OSOM) vehicles;
- Low voltage (LV) and medium voltage (MV) underground cabling, as well as MV and high voltage (HV) overhead transmission lines;
- Internal collector substations;
- A switching station adjacent to the existing 330 kV Powerlink transmission line. This has been accounted for within the Disturbance Footprint, thereby allowing the clearing of the site to be assessed as part of the impacts associated with the Proposed Development (noting, however, that the switching station infrastructure will be constructed, owned and operated by Powerlink);
- Permanent meteorological masts;
- Construction compounds and laydown areas;
- Washdown areas;
- Operational and maintenance facilities; and
- A construction workers accommodation facility.

Further, there is the potential for the inclusion of the below infrastructure:

- Concrete batching plants;
- Borrow pits; and
- Communications tower.

The Project will accommodate up to 135 WTGs, with a blade tip of up to 260 m. These WTGs will be of the horizontal axis type, with a rotor consisting of three blades, and a maximum rotor diameter of up to 175 m. The WTG specifications have been summarised below in Table 4-1.

TABLE 4-1 KEY GENERATION AND TURBINE SPECIFICATIONS

Feature	Statistic
Estimated wind farm generation capacity*	Up to 972 MW
Turbine electrical output	Up to 7.2 MW
Number of WTGs	Up to 135 WTGs
Hub height**	Up to 169 m
Tip height**	Up to 260 m

Feature	Statistic
Rotor diameter**	Up to 175 m
Rotor Swept Area (RSA) height**	75 – 260 m
Number of blades	3
Chord width of blade	Up to 4.9 m
Average pitch angle of rotor	5-8°
Max rotation period of WTG	6.5 seconds

* The actual output of the wind farm will depend on the size and type of turbine chosen during the detailed design phase. Regardless of the size of the wind farm generation capacity, the Proposed Development will still need to comply with the State Code 23 and supporting Planning Guidelines, particularly in relation to acoustic amenity and setback criteria.
** The specifications contained within the table are based on current, projected turbine size. Whilst they are an estimated maximum, changes in technology and constructability may result in larger turbines being installed.

4.1 WTG FOUNDATIONS AND HARDSTANDS

Each WTG foundation will consist of a mass concrete footing or rock anchor foundation, where suitable, with foundations varying in size depending on the selected WTG, imposed loadings, ground conditions, construction methodology and the drainage design. The detailed design of the foundations will be undertaken prior to construction of the Project.

The final design will also consider the geotechnical conditions identified through detailed Project Area investigations. The area surrounding the WTGs, once erected, will be finished to a standard allowing for shared agricultural use, which may include mounding. At each WTG site, a hardstand area may be established for the laydown of key WTG equipment, including the crane boom laydown and assembly, nacelle, tower sections, blade, and other WTG components. In time and where suitable, delivery and tower cranes may be utilised, which may result in a smaller hardstand area. The smaller hardstand area is dependent on geotechnical studies and detailed engineering design, including a review of the construction methodology.

4.2 ACCESS

The onsite access track layout will be designed to utilise existing tracks, where possible and consider the topography of the land, reducing the need for vegetation clearing and minimising the amount of land required for access. The Project will require permanent access tracks of 5.5-10 m width carriageway, with the cleared corridor of between 50 - 95 m to accommodate heavy vehicles, cranes, and delivery vehicle requirements during construction or where curves necessitate a wider access track. The cleared access corridor required to facilitate construction will be rehabilitated to the minimum required to support operations, maintenance and decommissioning.

Six locations along Cecil Plains Moonie Road will provide access to the site.

4.3 ELECTRICAL CONNECTIONS AND SUBSTATION

Each WTG will be connected via a MV (33 kV) electrical reticulation network to an on-site substation, whereby an internal overhead transmission line will interconnect the Project to the grid. The electrical cables will be installed in underground trenches at a typical depth of up to 1 m below the ground surface, however, there is potential for it to be deeper in some locations to suit site conditions and design constraints. The cable trenches are expected to follow site access tracks where practicable. Through the detailed design process, cable depths will be further understood for the Project.

The internal collector substations will connect via a new 330kV overhead transmission line to the switching station adjacent to the existing 330 kV Powerlink transmission line. The transmission lines and substations have been accounted for within the Disturbance Footprint, thereby allowing the clearing of the site to be assessed as part of the impacts associated with the Proposed Development (noting, however, that the switching station infrastructure will be constructed, owned and operated by Powerlink).

4.4 BATTERY ENERGY STORAGE SYSTEMS

The Proposed Development includes a BESS of up to 450 MW. The proposed battery storage technology will comprise of lithium-ion phosphate cells. Accepted industry practice will be observed for handling the respective battery components during installation, maintenance, replacement and recycling.

4.5 METEOROLOGICAL MASTS

Permanent meteorological masts are proposed to be installed in order to monitor wind conditions during the operational phase of the Project. The height of the proposed meteorological masts is approximately 160 m, with a disturbance footprint that includes the meteorological mast base footing, power connection and guy anchor footings.

4.6 CENTRAL OPERATIONAL AND MAINTENANCE FACILITIES

The Proposed Development includes operations and maintenance facilities. The operational infrastructure for the Proposed Development will include management offices, parking areas, workshops, storage, equipment laydown, and warehousing facilities. Water, sewage and electricity services will be provided on site.

4.6.1 CONSTRUCTION WORKFORCE ACCOMMODATION

A temporary construction workers accommodation facility will be provided within the Project Area.

During operation, maintenance crews will look to be accommodated in short-term accommodation in Dalby, Cecil Plains or Millmerran, or other nearby towns.

4.7 TEMPORARY INFRASTRUCTURE

The Disturbance Footprint includes up to 15 construction laydown areas. Temporary construction laydown areas are proposed for the storage of WTG and BESS components and construction items upon delivery, material stockpiling, and temporary site amenities.

Additionally, the following temporary infrastructure is proposed for the construction phase of the Project may include:

- Concrete batching plants;
- Fencing; and
- A construction site compound.

5. DECOMMISSIONING FINANCIAL SECURITY FRAMEWORK

5.1 FINANCIAL SECURITY APPROACH

The Project adopts a lifecycle based financial security framework to ensure sufficient funds are available to complete decommissioning and rehabilitation if required, at any stage of the Project. The approach recognises the changing risk profile of the Project across its lifecycle and aligns with the Clean Energy Council (CEC) and Queensland Renewables Energy Council (QREC) phased contribution model (Clean Energy Council, Queensland Renewable Energy Council, 2025).

Financial security is proposed to be adopted based stages of the Project as shown in Table 5-1 below.

TABLE 5-1 TYPES OF DECOMMISSIONING SECURITY

Project Phase	Timing	Type of Decommissioning Security	
Construction	During Construction	• Parent company guarantee • Manufacturer Warranties and Defect Coverage	
Operations	Year 1-5	Manufacturer Warranties and Defect Coverage	
	Year 5-15	Manufacturer Warranties and Defect Coverage	
	Year 10-15	Decommissioning bond for the benefit of the landowner	20% cost of decommissioning
	Year 20		50% cost of decommissioning
	Year 25		75% cost of decommissioning
	Year 30+		100% cost of decommissioning
Project Life	At all times	• Project Insurance (liability, unforeseen events) • Determined based on Net Asset Value Test	

5.1.1 BONDS AND GUARANTEES

Financial security for the Project is provided through legally enforceable financial bond instruments. During the construction period (approximately 3 years) financial security will be provided in the form of a parent company guarantee. The parent company guarantee constitutes a dedicated financial security arrangement that is separate from the Proponent’s general assets and is specifically assigned to meet decommissioning and rehabilitation obligations.

As outlined in 5.2, during the initial operation period (years 1-10), the adequacy of the Proponent's financial capacity relative to the estimated decommissioning liability will be monitored. If the Proponent's net asset value falls below ten times the estimated decommissioning cost, an additional dedicated financial bond will be provided to affected landowners in accordance with the relevant agreements.

Subject to the relevant landholder agreements, from approximately Years 10-15 of operations, dedicated decommissioning security instruments will be progressively established and secured on the applicable land titles. These security arrangements will increase incrementally over the life of the Project and will be fully funded by year 30, as shown in Table 5-1.

Accordingly, the Project incorporates multiple layers of financial assurance that collectively ensure sufficient funds are available to undertake decommissioning and rehabilitation at the end of the Project's operational life.

5.1.2 WARRANTIES AND INSURANCES

In addition to the dedicated decommissioning and rehabilitation financial security arrangements described in, Section 5.1, the following insurances and warranties will be maintained for the Project. These measures provide an additional layer of financial assurance and risk management during the construction and operational phases of the Project and operate independently of the dedicated decommissioning security arrangements.:

1. Insurance for the wind farm and BESS as an operating asset with exclusions cascaded to supply and installation contractors;
2. Wind Turbine and BESS Manufacturer's and installation contractor warranty; and
3. Battery Manufacturer's defects and Serial Defects Coverage as per below:

For serial defects, where a common root-cause defect affects a material portion of the installed system population (e.g. more than 15% of battery modules within a specified period), the manufacturer is required to:

- Conduct a root-cause analysis;
- Develop and implement a corrective action plan;
- Repair or replace all affected components;

4. Undertake fleet-wide remedial actions where required; and

- Minimise disruption to ongoing system operations during remediation activities.

5. Wind Turbine Manufacturer's general defects and serial defects as per below:

- A defects liability period for the Turbine Works:
  - Commencing on the date of Batch Completion for a Batch;
  - Ending 24 months after the date of Facility Completion; and

6. An extended defects liability period for any rectification works performed during the initial defects liability period. In such circumstances, the defects liability period for the defective part will be extended by 24 months from the date of completion of those rectification works, subject to a maximum period of 48 months from the Facility Completion Date.

- A defects liability period for Serial Defects (defined below):
  - Commencing on the date of Batch Completion for a Batch; and
  - Ending 60 months after the date of Facility Completion.

Where:

- A Serial Defect means the same defects in the same area or part of the Main Component which:
  - Arises from the same root cause; and
  - Is present at least 25% of the total population of a Main Component for the Wind Farm

7. The Main Components means the WTGs, including but not limited to, the blades, gearbox, tower, generating unit, blade bearing, main bearing, nacelle, pitch drive/gear and WTG switchgear (if part of WTG).

5.2 SECURITY CALCULATION METHODOLOGY

During the Operational Phase, financial security for decommissioning is assessed using a Net Asset Value ("NAV") Test. This test provides an appropriate and proportionate mechanism for demonstrating the Proponent's financial capacity to meet decommissioning obligations. The NAV Test ensures that sufficient financial resources are available to fund decommissioning activities while recognising circumstances where the Proponent's financial position provides a substantial margin above the estimated decommissioning liability. Where this threshold is not maintained, additional financial security arrangements are triggered to ensure decommissioning obligations remain fully secured.

The test works as follows:

1. An independent expert estimates the cost of decommissioning the Project;
2. The value of the Project is compared to estimate the decommissioning costs, based on the Proponent's most recent audited financial statements;
3. During the first 15 years of the lease, additional financial security in the form of a bond is required where the Proponent's net asset value falls below 10 times the independently assessed decommissioning cost, plus a 10% contingency allowance.

The threshold has been intentionally set at a conservative level to provide a substantial margin between the estimated decommissioning liability and the financial capacity available to meet that liability. The requirement for the Proponent's net asset value to exceed the independently assessed decommissioning cost by more than ten-fold, in addition to a contingency allowance, provides a significant buffer against changes in market conditions, asset values or operating performance. Should this threshold no longer be met, the requirement to provide additional financial security is automatically triggered, ensuring that decommissioning obligations remain appropriately secured throughout the operational life of the Project.

On this basis, the NAV Test provides an appropriate and risk-based mechanism for demonstrating the Proponent's ongoing capacity to meet its decommissioning obligations throughout the operational life of the Project. The NAV Test includes a clear and enforceable trigger for the provision of additional financial security where the Proponent's financial capacity falls below the prescribed threshold while providing the landholder with ongoing visibility and enabling verification that the NAV Test continues to be satisfied through audited financial statements and enabling verification that the NAV Test continues to be satisfied. This approach is consistent with the phased financial security model adopted by the Clean Energy Council and Queensland Renewables Energy Council (Clean Energy Council, Queensland Renewable Energy Council, 2025), which recognises that financial security assurance mechanisms should be commensurate with the level of risk and the demonstrated financial capacity of the project at different stages of its lifecycle.

5.3 REVIEW AND UPDATES OF FINANCIAL SECURITY

Financial security arrangements are subject to ongoing review to ensure they remain sufficient and appropriate over the life of the Project. This includes periodic reassessment of decommissioning costs and adjustment of security instruments where required.

Decommissioning cost estimates are reviewed at least every five years, and financial security is adjusted accordingly to reflect changes in project conditions and decommissioning assumptions. Where updated assessments identify an increase in the estimated decommissioning liability, the level of financial security will be adjusted accordingly to maintain adequate coverage. This process ensures that financial security arrangements remain current, enforceable and commensurate with the Project's estimated decommissioning obligations throughout all stages of the Project lifecycle, with no lapse in coverage.

6. DECOMMISSIONING PROCESS

A review of the decommissioning process considerations has been discussed in the below sections.

6.1 END OF LIFE DECOMMISSIONING

6.1.1 END-OF-LIFE OPTIONS

The Clean Energy Council outlines that when a wind farm and associated infrastructure reaches end-of-life, the Proponent is responsible for decommissioning (Clean Energy Council, 2025). The decision rests on several factors, including the safety of the asset, condition of the asset, and the cost of energy. Further, the Proponent will need to consider the regulatory conditions and landowner agreements. End-of-life options include:

- Continue the use of the Project Area as a wind farm using the existing WTGs (subject to condition of equipment);
- Replace the WTGs with technology current at that time and continue the use of the Project Area as a wind farm for a further term; or
- Decommission the Project and remove the WTGs and ancillary infrastructure in accordance with a Decommissioning Plan.

Regardless of the decision, the Project will eventually need to be decommissioned, and consideration will need to be given to the waste generated by the different WTG components.

6.1.2 DECOMMISSIONING PROCESS

When the decision is made to decommission the Project, this will include:

- All above ground infrastructure not required for the ongoing agricultural use of the land, including the WTGs, BESS, substations, and operation and maintenance facilities, will be removed and the land rehabilitated;
- Any access tracks and hardstands not wanted or required by the landowner will be removed and the Project Area will be rehabilitated and returned to agricultural use;
- Below ground infrastructure, including cabling and the WTG foundations, will be left in situ to avoid further disturbance and minimise clearing of revegetated areas. Rehabilitated areas will be adequately graded to reflect the slope of the surrounding area and to mitigate the risk of soil erosion;
- All materials removed from the Project Area will be sorted and packaged for reuse and/or recycled where possible in accordance with the waste hierarchy; and
- Remediate land to pre-development landform and/or as agreed with the landholder having regard for proposed land use following cessation of the use.

An End of Operation Decommissioning Plan will be prepared for the Project six months prior to the cessation of operation.

6.2 REUSE AND RECYCLING

6.2.1 WIND TURBINE COMPONENTS

When a wind farm is decommissioned, the components will need to be managed. Currently, approximately 85% - 100% of the materials used in wind farms, such as steel, copper and concrete can be recycled, surpassing the National Waste Policy Action Plan's average resource recovery rate of 80% across all industries by 2030 (Clean Energy Council, 2025).

A key opportunity for the industry to further reduce waste is through innovation in the recycling of WTG blades. The blades are typically constructed from composite materials such as fibreglass or carbon fibre, chosen for their strength and durability, but are currently challenging to recycle. While recycling pathways for composites remain limited, turbine manufacturers are actively developing new blade designs and materials that can be fully recycled as part of their commitment to achieving zero waste turbines by 2040 (Clean Energy Council, 2025).

With existing technology, mechanical grinding is the most common method for recycling WTG blades, where the composite material is shredded into a power matrix. This approach is relatively low cost and less energy intensive than alternative technologies such as thermal or chemical breakdown processes (Clean Energy Council, 2025).

Waste generated from decommissioning the construction and operational phases of the Project will primarily consist of the following waste streams:

- Construction and demolition waste – inert waste, such as bricks, pavers, ceramics, concrete, glass, steel, or general waste that does not biodegrade or decompose. This waste may be suitable for recycling, resource recovery, or reprocessing;
- Regulated waste – waste that contains hazardous characteristics and is classified as regulated waste under the *Environmental Protection Act 1994*. Regulated waste includes electrical waste (e-waste) and biosecurity waste; and
- General waste – waste that does not fit into the above categories, including organic and putrescible wastes.

Management of the wind farm components will follow a well-established waste hierarchy, prioritising avoidance, reuse, recycling and recovery before disposal (Clean Energy Council, 2025), as outlined below and in Figure 6-1.

- Avoidance – waste minimisation and reduction;
- Resource recovery:
  - Re-use (where the product maintains its original function);
  - Recycle (requires energy and resources to convert the product into a different function) and energy recovery (treatment processes used to generate a usable form of energy from waste materials); and
- Disposal – management of all disposal options in the most environmentally responsible way.

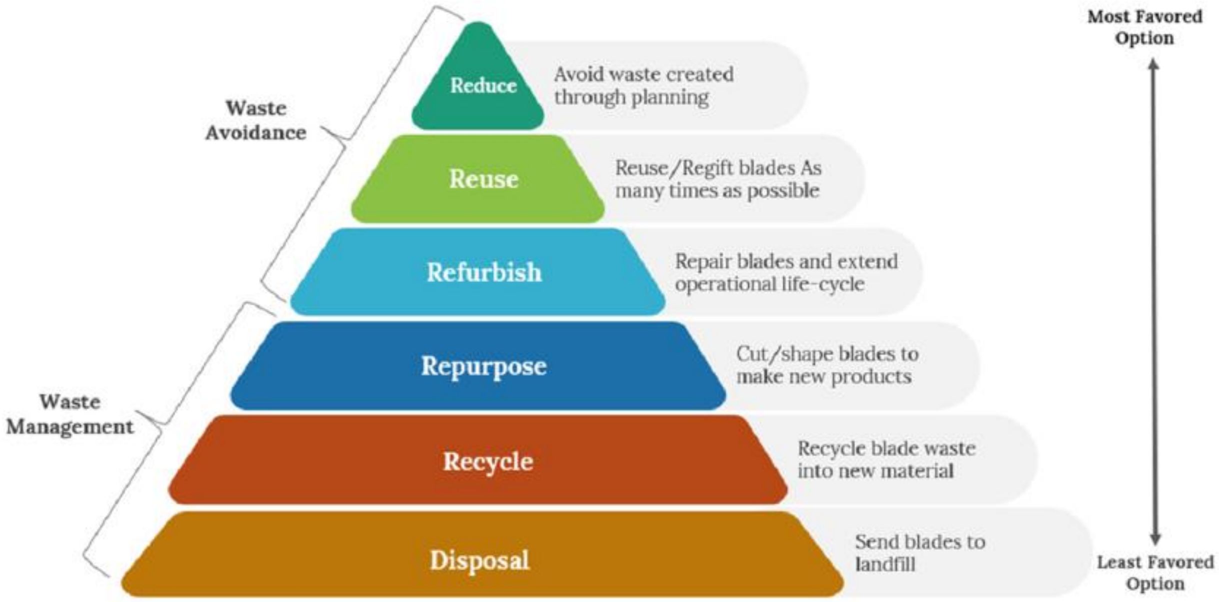

FIGURE 6-1 WTG BLADE END-OF-LIFE WASTE HIERARCHY (VISHNU, ET AL., 2024)

6.2.2 BATTERY COMPONENTS

As part of decommissioning the Project, opportunities to reuse, recycle and repurpose of battery components will be deployed to the greatest extent feasible. Lithium-ion batteries (LIB) are the predominant commercial form of rechargeable batteries, widely used in electric vehicles (EVs) and BESS due to their high energy density, long cycle life and suitability for large-scale storage. They contain valuable materials, such as lithium, cobalt, nickel, and aluminium (Ecobatt, 2024) that can almost entirely be recovered and reused through established recycling processes. Current industry guidance indicates that up to95% LIB materials are recyclable (Clean Energy Council, 2025). A typical LIB structure and composition are shown in Figure 6-2.

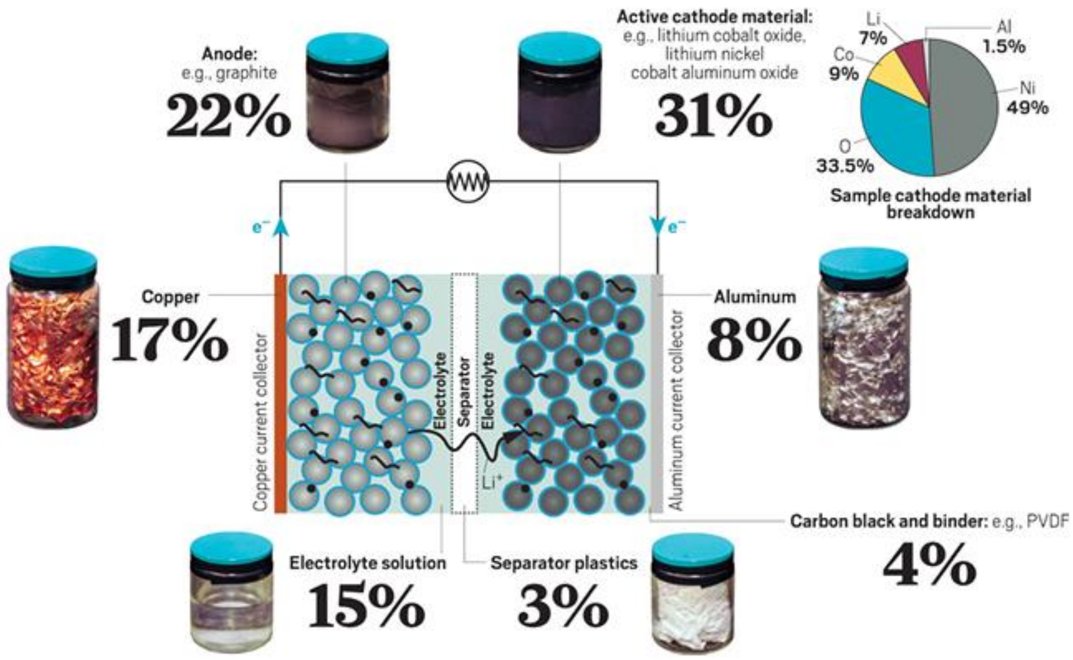

FIGURE 6-2 MATERIAL COMPOSITION OF A TYPICAL LITHIUM-ION BATTERY (CSIRO, 2021)

Recycling of battery components will involve collecting the end-of-life batteries, extracting their critical minerals and repurposing them for new battery production (Clean Energy Council, 2025). It is expected that the current state of the LIB recycling practices and regulatory frameworks are evolving. With ongoing government investment, advancing in recycling technologies and increasing circular-economy expectations, it is reasonable to expect that by the time the Project reaches decommissioning, other commercial interests may have entered the market, significantly expanded recycling infrastructure and improved end-of-life processing capability, enabling more cost-effective and sustainable outcomes for the reuse, recovery and recycling of BESS components.

The Project is committed to end-of-life decommissioning that minimises battery component waste and will remain consistent with the emerging recycling and reuse technologies and capabilities.

6.2.3 COMMITMENTS

6.2.3.1 END OF CONSTRUCTION DECOMMISSIONING MANAGEMENT PLAN

An End of Construction Decommissioning Management Plan will be prepared prior to construction finalisation for the Project. This will include outlining the removal of above-ground non-operational equipment, including materials storage and handling facilities, construction offices, and concrete batching plants.

6.2.3.2 END OF OPERATION DECOMMISSIONING MANAGEMENT PLAN

An End of Operation Decommissioning Management Plan will be prepared prior to the cessation of the Project operations. This will encompass a Battery Recycling Strategy as per the State Code 27 planning guideline, including but not limited to:

- Details of a qualified professional to assist with the deinstallation of batteries;
- Any risks associated with the deinstallation of batteries, in particular management steps necessary to contain harmful and dangerous battery materials and any direction provided from the supplier regarding an 'end-of-life' plan;
- Whether the battery system contains recycled content and if it is recyclable; and
- Itemised breakdown of materials to be reused, recycled and/or recovered. Additionally, this should detail what happens to other system components associated with the decommissioned Battery Storage Facility.

6.3 REHABILITATION

Rehabilitation of the disturbance footprint will be undertaken for the Project post-construction, as well at the end-of life decommissioning phase. In both cases, the intention is to progressively stabilise areas of disturbance, making them resilient to erosion and weed infestation, and to re-establish appropriate vegetation cover. Rehabilitation of on-ground vegetation will be managed through adaptive management to ensure rehabilitation acceptance criteria are met. Rehabilitation activities are anticipated to involve:

- Mulching of cleared vegetation to be used in rehabilitation areas;
- Topsoil stockpiling for use in rehabilitation areas;
- Natural regeneration of groundcover;

- Tube-stock containing native species in rehabilitation areas; and
- Hydro-seeding and direct seeding of native species.

Progressive rehabilitation of waterways and drainage patterns are outlined in the Stormwater Management Plan.

6.4 CONTAMINATION AND REMEDIATION

Contamination and remediation will be avoided through the implementation of a Construction Environmental Management Plan and an Operation Environmental Management Plan. These plans will include details on the procedures and protocols to respond to unexpected environmental incidents, while maintaining compliance with regulatory requirements.

6.5 ROLES AND RESPONSIBILITIES

The Proponent will be fully responsible for the decommissioning and rehabilitation of the Project. This is supported by the provisions in the agreements executed with landowners.

It is noted that while the Proponent is responsible for all decommissioning activities, the End of Construction Decommissioning Plan and End of Life Decommissioning Plans will outline the specific roles and responsibilities required to achieve the decommissioning objectives.

7. CONCLUSION

This Decommissioning Management Plan demonstrates that the Cattle Creek Wind Farm can be decommissioned in a timely, safe and efficient manner in accordance with the requirements of State Code 23 and State Code 27.

The Project incorporates a clear framework for the removal of infrastructure, rehabilitation of disturbed areas, management of end-of-life materials, and restoration of land for ongoing agricultural use or other agreed land uses. Consistent with the waste hierarchy, opportunities to reuse, recycle and repurpose wind farm and battery components will be maximised to minimise waste and landfill disposal.

The Project also incorporates a lifecycle-based financial security framework that ensures decommissioning and rehabilitation obligations remain fully funded by the Proponent throughout the life of the Project, with no financial liability to landowners or the State.

Detailed End of Construction and End of Operation Decommissioning Plans will be prepared at the relevant stages of the Project lifecycle to reflect final design, regulatory requirements and industry best practice. Accordingly, the Project is capable of achieving sustainable decommissioning outcomes while protecting environmental values, supporting landholder interests and maintaining appropriate financial assurance.

8. REFERENCES

ABRI. (2026, January). *Battery material recovery industry profile.* Retrieved from https://static1.squarespace.com/static/6548618de92db95798675b91/t/69b2546ebcf74c5ca1845c70/1773294702516/ABRI+Battery+Materials+Recovery+Industry+Profile.pdf

ABRI. (n.d.). *Association for the Battery Recycling Industry*. Retrieved from https://www.batteryrecycling.org.au/

Australian Government. (2024, May). *National Battery Strategy.* Retrieved from Department of Industry, Science and Resources: https://www.industry.gov.au/publications/national-battery-strategy

Clean Energy Council. (2025, August). *Recycling the future: sustainable solutions for renewable energy technologies*. Retrieved from https://cleanenergycouncil.org.au/for-consumers/fact-sheets/recycling-get-the-facts/recyling-wind-turbines-solar-panels-batteries

Clean Energy Council. (2025). *Recylcing the future: sustainable solutions for renewable energy technologies.*

Clean Energy Council, Queensland Renewable Energy Council. (2025). *Decommissioning Security Framework for Renewable Energy Projects.*

CSIRO. (2021). *Australian Landscape for Lithium Ion Battery Recycling and Reuse in 2020 - Current Status, Gap Analysis and Industry Perspectives.* CSIRO and FBI CRC. doi:https://doi.org/10.25919/91ap-m622

CSIRO. (2022). *Lithium-ion battery recycling*. Retrieved from https://www.csiro.au/en/research/technology-space/energy/decarbonising-industry-transport/energy-in-the-circular-economy/battery-recycling

Ecobatt. (2024, August). *Use of Lithium-ion batteries booming.* Retrieved from https://www.ecobatt.com.au/use-of-lithium-ion-batteries-booming/

Envirostream. (2024). Retrieved from https://liviumcorp.com/battery-recycling/

Government of Western Australia. (2024, November). Retrieved from E-waste recycling receives more than $5 million funding boost: https://www.wa.gov.au/government/media-statements/Cook%20Labor%20Government/E-waste-recycling-receives-more-than-$5-million-funding-boost-20241101

McKell Institute. (2022, April). *Capitalising on the lithium-ion waste resource challenge in South Australia.* Retrieved from https://mckellinstitute.org.au/wp-content/uploads/2022/05/McKell-LIB-Recycling-in-South-Australia-.pdf

Queensland Renewable Energy Council. (2024, November). Retrieved from https://qrec.org.au/wp-content/uploads/2024/11/BESS-Factsheet-Nov-2024.pdf

Sustainability Victoria. (2023, December). *E-waste Infrastructure Grants – Funded projects*. Retrieved from https://www.sustainability.vic.gov.au/grants-funding-and-investment/funded-grants/e-waste-infrastructure-grants

Victoria Government. (2025, September). *Media Release.* Retrieved from FIRST OF A KIND BATTERY RECYCLING IN VICTORIA: https://www.premier.vic.gov.au/sites/default/files/2025-09/250903-First-Of-A-Kind-Battery-Recycling-In-Victoria.pdf

Vishnu, P., Meldrum, J., Kahandawa, R., Domingo, N., Shahzad, W., & Shen, X. (2024). losing the Loop: A Comprehensive Review of Circular Repurposing Options for Decommissioned Wind Turbine Blade Materials. *Future Cities and Environment*. doi:https://doi.org/10.5334/fce.266

Wast Management Review. (2025, July 15). *EcoBatt commissions Australia's first dedicated lithium battery discharge plant*. Retrieved from https://wastemanagementreview.com.au/ecobatts-charge-to-circularity/

ERM HAS OVER 140 OFFICES ACROSS THE FOLLOWING COUNTRIES AND TERRITORIES WORLDWIDE

Argentina
Australia
Belgium
Brazil
Canada
China
Colombia
Denmark
France
Germany
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Kazakhstan
Kenya
Malaysia
Mexico
Mozambique
The Netherlands
Peru
Poland
Portugal
Romania
Singapore
South Africa
South Korea
Spain
Switzerland
Taiwan
Thailand
UAE
UK
US
Vietnam

ERM's Brisbane Office

Level 9, 260 Queen Street
Brisbane QLD 4000

T +61 7 3839 8393

www.erm.com