

Concept Waste Management Plan

Burroway Solar Farm

February 2024



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Concept Waste Management Plan

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APPENDICES

Appendix A Solar Recovery Corporation Letter



1 INTRODUCTION

This Concept Waste Management Plan (CWMP) was prepared to provide additional information regarding the intended management of waste associated with the development of the Burroway Solar Farm (The Project).

This CWMP has been prepared with reference to the objectives of the *NSW Waste Avoidance and Resource Recovery Act 2001* (WARR Act), with particular attention towards practices outlined under Section 3(b) of the WARR Act, which outlines that waste management should be undertaken as per the following hierarchy of controls:

- Avoidance and reduction of waste,
- Re-use of waste,
- Recycling, processing or reprocessing waste,
- Recovery of energy,
- Disposal.

The plan also considers the NSW Waste and Sustainable Materials Strategy 2041, which is a strategy for a circular economy, aiming to minimise waste and promote continual reuse of resources and maintain the uses for the BSF infrastructure, thus improving the productivity of the BSF resources.

A Construction Waste Management Plan will be prepared prior to construction commencing, to provide refined estimate quantities of key waste products, such as pallets, cardboard, polystyrene and other notable waste streams.

1.1 PROJECT OVERVIEW

Edify Energy proposes to develop a solar project in the township of Burroway, New South Wales, to be known as the Burroway Solar Farm. The objective of the Project is to generate new and dispatchable carbon-free electricity supply for NSW. Subject to necessary approvals, Edify Energy (Edify) anticipates construction to commence in the 2026/27 financial year.

The Project is located approximately 18 kilometres (km) north of Narromine and 2 km east of Burroway, NSW (Figure 1) at Lot 70 DP 1251856, 1955 Eumungerie Road. The site is approximately 495 hectares (ha) in size, is mostly cleared from its existing agricultural land use (cropping) and is zoned RU1 Primary Production under the Narromine Local Environmental Plan (LEP).

The Project involves the construction of a 100-megawatt (MW) solar photovoltaic (PV) generator with an estimated 100 MW / 400 MWh energy storage capacity. The Project intends to connect into the existing distribution line (Line #94W/1). Key infrastructure components will include:

- Photovoltaic (PV) solar panels;
- Steel mounting frames with piled foundations;
- A single-axis tracking system;
- Direct current (DC) / alternating current (AC) inverter stations;
- Medium voltage (33kV) electrical reticulation network;
- A 33/132kV switchyard, including an internal 33kV switch-room;
- Minor civil works for Eumungerie Road accesses;
- Internal access tracks for operational maintenance and housekeeping, to be largely located in bushfire set-back zones;
- Security perimeter fencing;
- Staff car park and small amenities building; and
- Battery energy storage system facility.

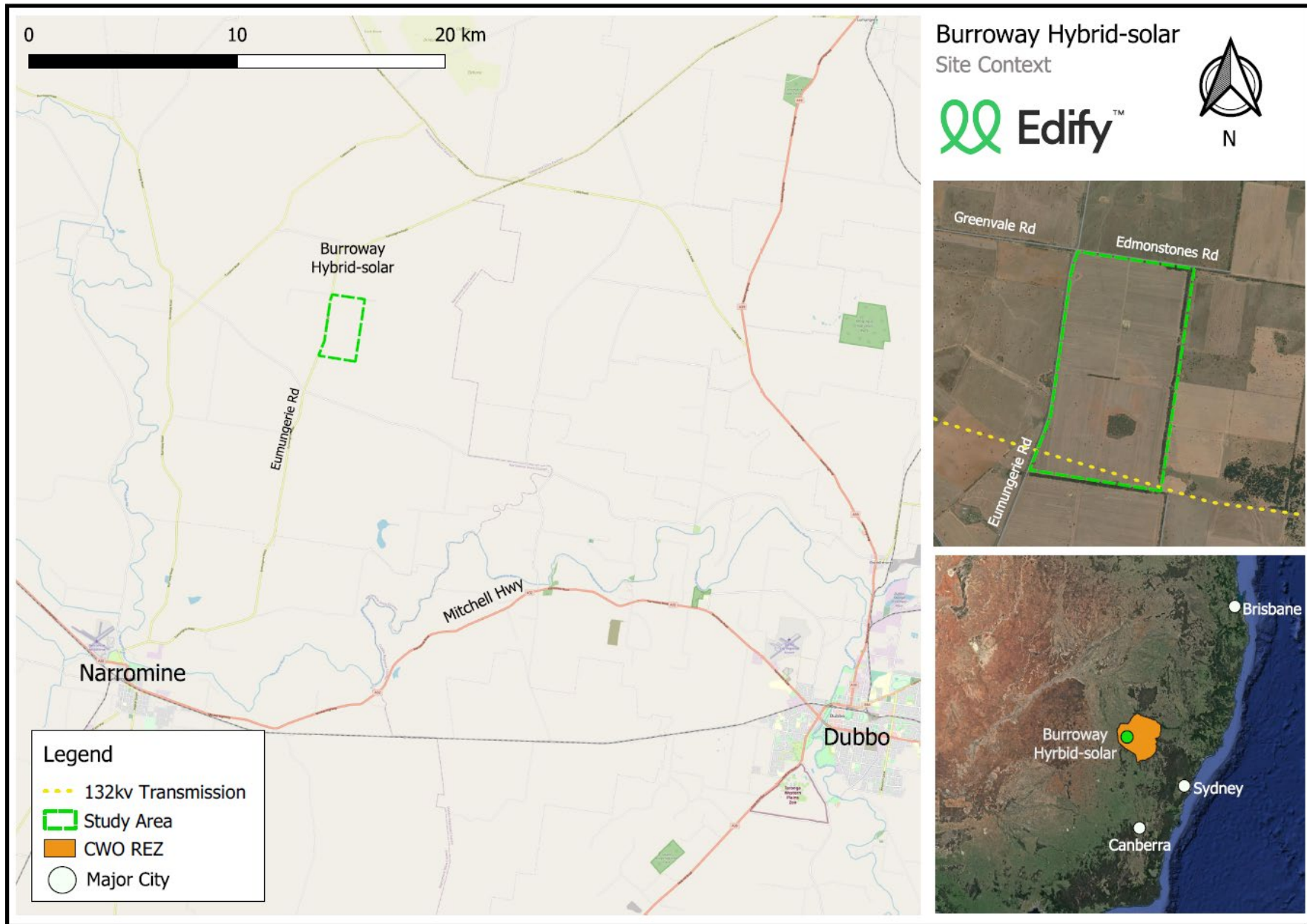


Figure 1: Burroway Solar Farm Project Site and Locality



1.2 PROJECT COMMITMENTS

Edify will preference construction contractors that maintain best practices in environmental management, systems and procedures defined by certification such as but not limited to international standards ISO14001:2015. Contractors are assessed in relation to demonstrated expertise in this development type and therefore circular economy as it relates to construction of a solar farm, as well as for having a sound understanding of compliance with local, regional and state strategies and requirements.

Edify and the eventual construction contractor will ensure that the following requirements are adhered to by all staff (including sub-contractors) in accordance with the Contract:

- Suitably qualified environmental resources will be provided to undertake environmental duties relevant to the Project, including the implementation of the Construction Environment Management Plan (CEMP) and sub-plans as required;
- Mechanisms will be established and implemented to ensure continual review of plans and controls for effectiveness and improvement;
- Compliance with any reasonable direction given by a referral Agency representative to improve or rectify the Project's environmental practices is adhered to; and
- Avoidance of the disposal of solar modules to municipal landfills.

1.3 PLAN OBJECTIVES

This CWMP has been prepared to expand upon the assessment of resource use and waste generation as detailed in the Burroway SF EIS, highlighting the environmental principles to be upheld throughout the project construction, operation and decommissioning. The Plan is designed to achieve the following objectives:

1. Manage resource use and waste in accordance with the waste minimisation hierarchy outlined in the WARR Act,
2. No disposal of solar photovoltaic modules or battery modules to landfill,
3. Assess and classify all waste generated by the development to ensure correct management and disposal in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version),
4. Not receive or dispose of any waste on site,
5. Ensure chemicals, fuels and other construction materials are suitably stored on site so as not to cause potential environmental harm,
6. Manage waste in accordance with any local or regional strategies as they relate to the Project's resource use,
7. Remove all waste from site as soon as practicable and ensure it is sent to an appropriately licensed waste facility for disposal or recycling, and
8. Ensure reporting requirements for resource use and waste generation is completed on site, with routine auditing to ensure the Waste Management Plan controls are being complied with and are effective.



2 STATE AND FEDERAL CONTEXT

2.1 PHOTOVOLTAIC MODULES AND BATTERIES USAGE

Australia

In Australia, solar power is one of the country's leading renewable energy sources with rooftop solar photovoltaic (PV) installed in more than 3.3 million homes (1).

It is estimated that more than 100,000 tonnes of solar panels will enter Australia's waste stream by 2035. This has the potential to create a hazardous waste management issue, as materials contained within solar panels can leach into soil and groundwater, causing environmental contamination and safety concerns if managed poorly. Keeping these materials out of landfill prevents environmental and human health problems and rescues valuable resources for reuse (2).

New South Wales

It is forecast that NSW will generate 3,000–10,000 tonnes per year of waste solar PV panels and battery storage systems by 2025, rising to 40,000–71,000 tonnes per year by 2035 (Figure 2). In 2025 approximately 88% of PV waste will be from distributed systems. This is because most of the early installations of PV in NSW have been distributed (behind-the-meter residential and commercial / industrial systems), and in 2019 there was twice as much distributed than utility scale PV capacity. However, utility scale capacity is projected to grow and by 2025, the waste from utility scale solar increases so that distributed systems are ~ 60% of waste and utility scale ~ 40%. Utility scale solar farms and distributed systems are projected to reach a similar capacity in future installations. Battery waste is projected to grow at a faster rate than PV waste, with waste volumes 13 times higher in 2035 compared to 2025 (assuming a 10-year lifespan) (3).

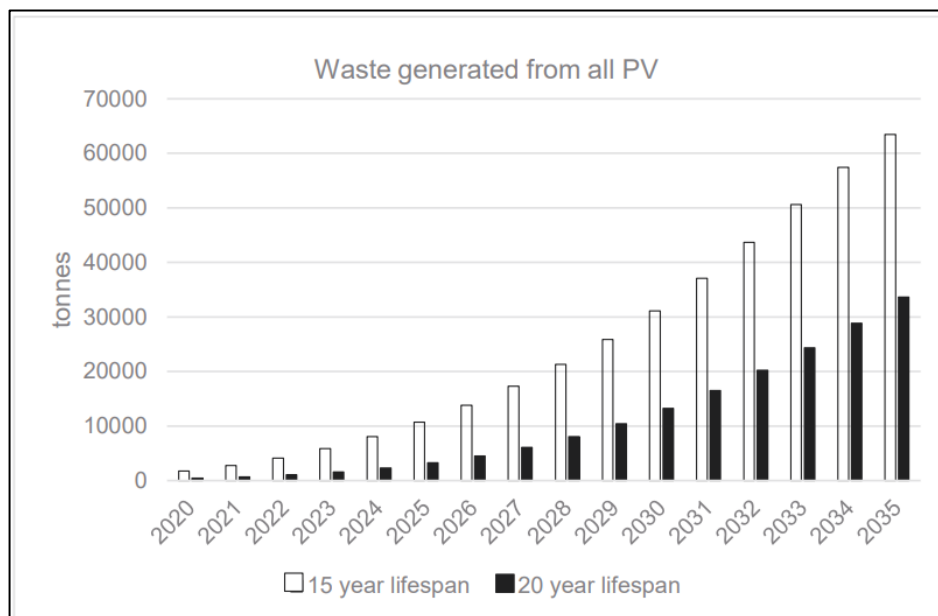


Figure 2: Estimated waste volumes for all End of Life (EOL) PV panels (tonnes)

2.2 STRATEGIES AND LEGISLATION

The management and disposal of PV modules varies between each state and territory. In Australia, only Victoria have officially banned solar panels from ending up in landfill, meaning they need to be taken to e-waste drop off points to be recycled. Under a new proposed recycling expansion program, Queenslanders will soon be banned from dumping solar panels in landfill in the next decade (1).



The NSW Government created a \$10 million fund to reduce landfilling of solar panels and battery systems. This investment is intended to future-proof the management of this growing waste stream and help NSW transition to renewable energy sources within a circular economy (4).

Current Federal and State government policies are outlined in Table 1. In alignment with Edify's project stewardship goals, Edify is committed to voluntarily align with the industry benchmark practices. As such, once the BSF solar modules reach EoL, Edify commits to avoiding disposal of any solar modules to landfill.

Table 1: Federal and State Legislation and Policies

Regulator	Legislation and Policies
Federal Government	<p>Australia's Environment Ministers and the Australian Local Government Association endorsed the National Waste Policy in 2018 and resulting National Waste Policy Action Plan 2019. These commit governments to waste targets and support and promote actions moving Australia towards a circular economy, reducing waste and accelerating the efficient recovery and reuse of resources.</p> <p>On 21 October 2022, Environment Ministers agreed to an Annexure updating the Plan's action items, including (5):</p> <ul style="list-style-type: none"> • the Australian Government to identify a preferred product stewardship scheme for photovoltaic systems by 2023 and implementing this scheme by 2025, • all governments committing to develop a common approach to restrict the disposal of priority products and materials in landfill, including e-waste, by 2024. <p>In 2016, PV systems were listed on the annual priority product list in accordance with Section 108A of the <i>Product Stewardship Act 2011</i>. The Australian government released a public consultation paper in June 2023 for feedback, with the intent of developing a regulatory public stewardship scheme for small electrical and electronic equipment and solar photovoltaic systems.</p> <p>Federal Government committed \$15 million through ARENA's to support the '<i>Research and Development Program Round 5: Addressing PV end-of-life issues</i>', of which research teams at six Australian universities were awarded the funding.</p> <p>The Clean Energy Finance Corporation (CEFC) has been allocated \$100m to support <i>Australian Recycling Investment Fund</i>. CEFC will provide \$75 million to reduce the construction and demolition waste for the Brisbane Olympics, through a flagship recycling facility.</p>



Regulator	Legislation and Policies
New South Wales	<p>In 2020, NSW Environmental Protection Agency created a \$10m ‘Circular Solar Trials’ grant funding scheme. Phase 1 of the Circular Solar grants program (trial phase) awarded \$2.1 million in funding for eligible trial projects in 2021. Phase 2 of the Circular Solar grants program awarded \$7.4 million in funding for eligible projects in 2022. Remaining funds under Circular Solar were reserved as a support program for product stewardship and circular economy research.</p> <p>The funding includes support for the first 3 solar panels and battery recycling facilities in NSW, which are being built in Bankstown, Fairfield and Albury. Round two funding recipients included (4):</p> <ul style="list-style-type: none"> • PV industries, who received \$2.3million to scale-up solar panel recycling technology and build a new solar panel and battery recycling facility in the Bankstown area, which will process up to 8,000t per year. • Tes-Amm Australia received \$1.9 million to construct new lithium-ion battery recycling facility in the Fairfield area, processing up to 800t per year of lithium-ion batteries from solar panel systems. • Scipher Technologies received \$1.7 million to construct a solar panel recycling facility in the Albury area, which aims to process up to 2,000 tonnes per year, with recovered materials going back into local markets. • Blue Tribe received \$400,000 to investigate a process to divert serviceable decommissioning solar panels from landfill for reuse in community solar gardens, which has potential to divert 10,000t per year of reusable end-of-life solar panels by 2030. • The University of New South Wales received \$1 million to complete research and development activities for a prototype recycling technology that can recover valuable metals, glass and silicon from solar panels. <p>Local and State government departments were consulted for the discussion paper on regulation for small electrical products and solar photovoltaic system waste, compiled by the Australian government in 2023.</p>
Victoria	<p>In May 2018, the National Working Group formed by the Victorian Government undertook a PV Systems Stewardship Options Assessment for presentation and potential actioning by the Australian Government.</p> <p>In July 2019 a law was passed noting e-waste can be disposed in landfill.</p> <p>Sustainability Victoria and various arms of the Victorian government departments were consulted for the discussion paper on regulation for small electrical products and solar photovoltaic system waste, compiled by the Australian government in 2023.</p>
Queensland	<p>The Queensland Government announced a draft E-product Action Plan for consultation in May 2023, which could result in a banning of solar panels from landfill within 10 years.</p> <p>The Queensland Government has committed to initially investing more than \$250,000 for a ‘pilot of an industry-led Solar Stewardship Scheme’ led by the Smart Energy Council to identify participants and locations to divert End-of-Life (EOL) solar panels for recovery (6).</p> <p>Local and State government departments were consulted for the discussion paper on regulation for small electrical products and solar photovoltaic system waste, compiled by the Australian government in 2023.</p>
South Australia	<p>South Australian Government and the University of South Australia is supporting research into options to improve EOL management of utility systems and infrastructure.</p> <p>The South Australia’s Waste Strategy 2020-2025 notes supporting product stewardship as a priority action (12).</p> <p>Local and State government departments were consulted for the discussion paper on regulation for small electrical products and solar photovoltaic system waste, compiled by the Australian government in 2023.</p>

2.3 CURRENT MANAGEMENT

Up to 95 per cent of the materials used to make a solar panel can be recycled, with the most valuable parts being the silicon, aluminium frames, and silver. For panels that are recycled, the most common process in Australia results in the panels being put through a standardised shredding machine where they are broken into smaller



pieces. These pieces are then down-cycled into other products such as an additive in the production of construction bricks, concrete or even road base (1).

Inverters can be recycled through Australia's existing e-waste recycling system. In Victoria, they can be taken to e-waste drop off points at council waste and recycling transfer stations. From there, they are sent on to an e-waste recycler for recycling and extraction of valuable materials for reuse (2).

There is more interest in reusing electric vehicle (EV) batteries for Energy Storage System's (ESSs) than reusing ESSs as currently there are limited end of life ESSs being decommissioned given the immaturity of this market. ESSs can accommodate lower battery efficiency levels compared to EV applications, which are often retired when the capacity declines to 70-80% of original capacity. These decommissioned EV batteries can either be reused directly if they meet the minimum performance and safety standards or be refurbished by replacing defective battery cells or components for a new application (7).



3 PROPOSED MANAGEMENT AND RECOVERY

3.1 PHOTOVOLTAIC MODULES

Recycling and recovering EoL modules prevents the addition of e-waste contributing to landfill. The following outlines the potential process for managing EoL solar materials and avoiding disposal to landfill. Figure 3 illustrates two potential recovery pathways for upcycling (high recovery) or downcycling (low recovery) components of the PV module. Both techniques reduce disposal to landfill and will be considered when preparing the EoL strategy for the solar modules due to the environmental and project stewardship benefits derived.

To illustrate the PV EoL process further, Figure 3 also lists the collection, transportation, dismantling, followed by the upcycling and downcycling methods that alleviate the environmental impacts, albeit to differing degrees.

Edify is committed to working with domestic e-waste recycling facilities to consider the most appropriate EoL recovery techniques to achieve sustainable outcomes. Edify continues to refine and consider the EoL strategy across its portfolio, including for the Burroway Solar Farm.

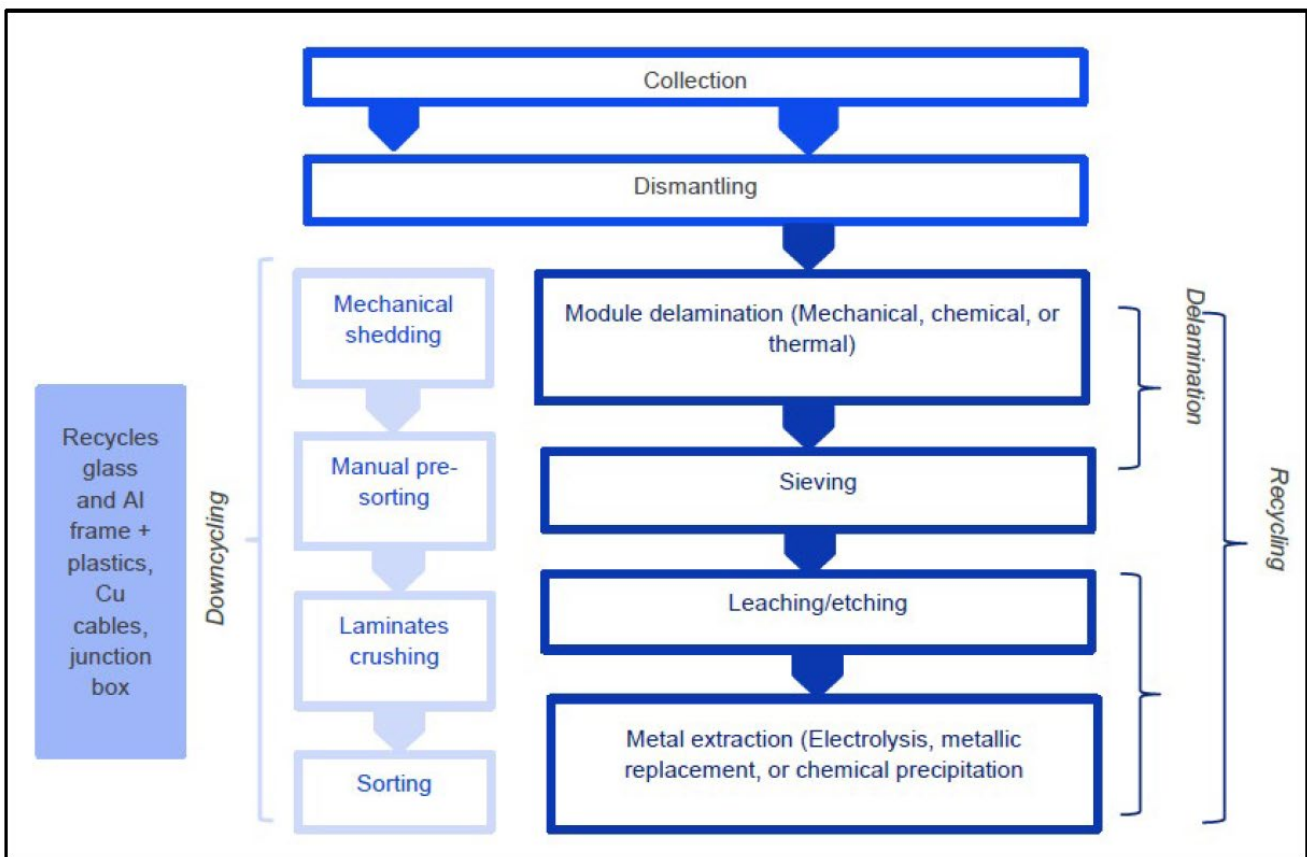


Figure 3: Recycling EoL PV Modules (Source: Florin et al., 2020)

Table 2 provides a breakdown of the typical inputs and outputs from processing 1,000kg of typical EoL solar modules, noting these estimates are provided as indicative and preliminary detail. From this typical sample, it is evident that over 92% of materials (by weight) can be recovered through simple techniques. Whilst it is beyond the scope of this report to explore technical recycling methods, such as incineration or pyrolysis, it is noted that the University of New South Wales, with support from ARENA, have been working on solutions for cost-effective and sustainable solar PV recycling (8).

Table 2: Inputs and Outputs for Solar Module Processing

Component	Quantity	Unit	Percentage (%)	Note
<u>Input</u>				



Component	Quantity	Unit	Percentage (%)	Note
PV modules	1000	Kg	70	Glass
			18	PV Frame (aluminium)
			5.1	Polymer-based adhesive (EVA) encapsulation layer
			3.65	Solar cell, containing silicon metal
			1.5	Back-sheet layer (based on Polyvinyl Fluoride)
			1	Cables (containing copper and polymers)
			0.64	Conductor (containing aluminium, copper)
			0.053	Silver
			0.053	Other metals (tin, lead)
Electricity	113.55	kWh		Required in various treatment processes: disassembly, glass separation, module cutting, sieving, leaching, electrolysis
Diesel fuel	1.14	L		Forklift work
Water	309.71	kg		Water consumption for acid leaching, electrolysis and neutralisation process
Ca(OH) ²	36.5	Kg		Neutralisation of solution
<u>Output, recovered materials (circa 92%)</u>				
Aluminium scrap	273.8	Kg	18.65	Recovered for reuse
Glass scrap	686	kg	68.6	
Copper scrap	4.38	Kg	0.4	
Silicon metal (Metallurgical Grade)	34.68	Kg	3.468	
Silver	0.5	Kg	0.05	
<u>Output, waste to landfill</u>				
Fly ash	2	Kg		Disposal in hazardous waste landfill
Liquid waste	306.13	Kg		Disposal in landfill

Table 3 summarises the material recovery yield that comprises the major components of the PV module by weight. The PV module also contains a relatively small proportion of notable precious metals that can be preserved and recycled.



Table 3: Recovery Yield Summar for Solar Module Components

Component	Recovery Yield	Comment
Al frame	100%	Easily achievable
Glass	100%	See reference (9)
Cu	99%	
Si	95%	
Ag	94%	

3.2 CONSTRUCTION WASTES

The typical construction materials required to build a solar farm and battery energy storage system include solar panels, mounting structures, electrical wiring, inverters, transformers, concrete foundations, underground cables, battery racks, battery management systems, control systems, and support equipment such as monitoring systems and meteorological stations.

Expected waste generated during the construction can include the following:

- **Excavation wastes:** these are expected to be minimal, as only minor earthworks would be required to undertake cable trenching. Topsoils and subsoils would be re-used to the maximum extent possible.
- **Metal off-cuts and cabling:** any excess building wastes.

Packaging materials: During construction, solar farms often require large quantities of packaging material and therefore generate cardboard waste and pallets, due to the packaging and transport of solar panels and associated equipment. With regard to the cardboard waste, it is assumed that BSF requires 240,000 PV modules (assuming 500W modules). Typically, modules are delivered to site as 35 modules per pallet, with cardboard boxes required to provide additional protection and support. This equates to approximately 6,858 pallets and cardboard boxes. To estimate the quantity of cardboard waste generated from the delivery of PV modules, it is assumed that 6,858 cardboard boxes will generate approximately 808 cubic meters of cardboard waste. This cardboard waste is to be recycled as outlined in Section 4.

In contrast, delivering the battery energy storage system to site does not typically generate waste, as these systems are pre-fabricated and populated with battery modules prior to arrival. In addition to pallets and cardboard waste, other waste materials commonly generated during the construction of a solar farm include plastic packaging, metal scraps, wooden debris, concrete remnants, and excess wiring and cables. These details will be quantified in a Detailed Waste Management Plan prior to construction commencing.

- **Wastes from construction equipment maintenance:** various heavy vehicles and construction equipment would be utilised for the duration of the construction phase. Liquid hazardous wastes from cleaning, repairing and maintenance of this equipment may be generated however these activities are expected to be undertaken off-site where possible.
- **Non-hazardous liquid waste:** generated through the use of workers' facilities such as toilets (e.g. waste water).
- **Hazardous waste:** such as hydrocarbons (waste oil, oily water, grease, batteries, paints, resins etc).
- **General refuse wastes:** this encompasses office wastes, scrap materials and biodegradable wastes.

Estimates of bulk material generated during the construction are listed in Table 4 below, however it is important to highlight these estimates have been considered prior to detailed design and must therefore be updated accordingly prior to construction commencing. To address the current uncertainties that endure throughout the early planning phase, Edify commits to providing a Construction Waste Management Plan for approval prior to construction commencing, to refine the estimate quantities of key waste products such as pallets, polystyrene and other notable waste streams. The plan is to be reviewed and accepted by the Narromine Shire Council prior to construction commencing.



Table 4: Estimates of Resource Use on Project

Resource	Approximate Quantity
Gravel for access tracks	8,500 m ³
Sand (trenches)	2,000 m ³
Concrete – foundations of substation and O&M Building	400 m ³
Concrete for fence footings	1,800 m ³
Concrete for the BESS facility slab	400 m ³
Metal (components for mounting system, delivery system containers, fencing, site buildings, transmission line poles)	26,000 tonnes
Glass for panels	4,500 tonnes
Silicone for crystalline wafers	1,200 tonnes
Water during construction	200,000 KL



4 PROPOSED DISPOSAL

Edify remains committed to exploring various options for the disposal and recycling of waste generated from the project. This effort includes engagement with the NSW EPA in February 2023 in regards to applicable waste levies and to identify a range of potential disposal and recycling locations that can be utilised to ensure environmentally responsible practices are implemented.

The Planet ARK online directory for Business Recycling provides a host of commercial pick-up and drop-off recycling services for various waste materials. It is expected Edify and the Construction Contractor can enter into an agreement, in consultation with local councils of the region, for the drop-off or collection of construction wastes. Potential services for the Project construction and/or operation wastes can include but are not limited to:

- Remondis Australia PTY LTD (Penrith City Council, Maitland City Council). This company provides a pick-up service within New South Wales for construction and demolition Wastes, chemicals and liquids, industrial and manufacturing and paper and cardboard wastes to name a few.
- All Product Recycling (Campbelltown City Council). This company offers a national pick-up service for industrial and manufacturing, metal, paper and cardboard and plastic wastes.
- JR Richards and Sons (Port Macquarie-Hasting Council). This company offers NSW pick-up services for all materials, with construction, demolition, industrial, manufacturing, metals, paper, cardboard and plastics being of particular relevance for the Project waste generation.

Community Recycling Centres are also available at Dubbo and Gilgandra, which could be utilised during operation in consultation with the respective Councils and the NSW EPA.

4.1 FACILITY LOCATIONS

Narromine Shire Council manages three waste disposal facilities within their LGA. The details of each waste facility are listed in Table 5 below. A Construction Waste Management Plan (CWMP) will be prepared prior to issue of Construction Certificate in consultation with Narromine Shire Council.

Table 5: Narromine LGA Waste Disposal Facilities

Facility	Location	Approximate distance to Project	Opening Hours	Comment
Narromine Waste Management Facility	Gainsborough Road, Narromine 2821	24km south	Closed Tuesday and Thursday 9am to 4.00pm 5 days a week	This facility operates a cardboard and paper recycling program for small and large quantities in conjunction with AMCOR which is used to bale waste paper and cardboard, as part of the NetWaste program. The facility does not except Liquid wastes. This facility is licenced. Waste limits are defined for each waste type in Schedule 1 of the POEO Act. Contact: (02) 6889 9999



Facility	Location	Approximate distance to Project	Opening Hours	Comment
Trangie Waste Management Facility	Trangie Tip Road (Salesyards Road), Trangie	50km west	Closed Monday, Tuesday and Thursday. Open 9am-4pm Saturday and Sunday. Open 8am-12pm Wednesday and Friday.	The facility has a trailer that transport paper and cardboard to Narromine facility for processing. The facility does not except Liquid wastes. Contact: (02) 6889 9999
Tomingley Waste Transfer Station	Gundong Road, Tomingley 2869	60km south	Closed Sunday, Monday, Wednesday and Friday. 8am-12pm Tuesday, Thursday and Saturday.	The facility has a trailer that transport paper and cardboard to Narromine facility for processing. The facility does not except Liquid wastes. Contact: (02) 6889 9999

Hazardous Waste

The three waste facilities in Narromine do not accept Hazardous Wastes. Any identified hazardous material (including potential asbestos containing material) will be disposed in accordance with relevant waste legislation administered by the EPA and relevant Occupational Health and Safety legislation administered by WorkCover NSW and Australian Standard AS 2601:2001 – *The Demolition of Structures*.

Following testing, a licensed third-party contractor will be engaged to remove potential hazardous (including asbestos) materials, which will be disposed of at a facility licensed to accept that material.



5 MANAGEMENT AND MITIGATIONS

See Table 6 for a summary of waste related controls to be applied during the construction of the BSF. Edify acknowledges that additional controls not recommended in Table 6 may be required during construction and these will be applied as required.

Table 6: Construction Waste Management

Action	Responsibility	Timing
<u>Controls</u>		
<p>Waste materials, including spoil and construction wastes, should be separated onsite into dedicated bins/areas where practicable, for either reuse onsite, or to be recycled or disposed of in an appropriate manner at licensed facilities.</p> <p>Local commercial reuse opportunities will be investigated where reuse onsite is not practical (EG. Use of waste concrete by Council in road pavement construction/maintenance as per the EPA Specification for Supply of Recycled Material for Pavements, Earthworks and Drainage 2010 (10).</p>	<p>Construction Contractor</p> <p>Subcontractors</p>	<p>Project duration</p> <p>Project decommissioning</p>
<p>Topsoil from disturbed (hardstand) areas will be stored for use in future rehabilitation activities onsite.</p>	<p>Construction Contractor</p> <p>Subcontractors</p>	<p>Project duration</p>
<p>Waste storage facilities and spoil placement areas shall be located in dedicated easily accessible locations, away from existing drainage lines.</p>	<p>Construction Contractor</p> <p>Subcontractors</p>	<p>Project duration</p>
<p>Watercourse, site drains and waterbodies shall not be polluted by waste. This will also be managed in part through a Construction Water Quality Management Plan as part of the Environmental Management Plan.</p>	<p>All Personnel</p>	<p>Project duration</p>
<p>Ordering will be limited to only the required amount of materials.</p>	<p>Construction Contractor</p> <p>Subcontractors</p>	<p>Project duration</p>
<p>Lids and seals shall be maintained on all odour generating waste material; and all domestic and food scrap waste shall be secured to prevent pest wildlife access</p>	<p>All Personnel</p>	<p>Project duration</p>
<p>No waste is to be burned or buried on site</p>	<p>All Personnel</p>	<p>Project duration</p>
<p>Storage and disposal of chemicals shall be in accordance with SDS and Australian Standards for storage of chemicals and dangerous goods.</p>	<p>Construction Contractor</p> <p>Subcontractors</p>	<p>Project Duration</p>



Action	Responsibility	Timing
Regulated wastes shall be stored in an dedicated secure containment area and managed by appropriately qualified licensed contractors.	Construction Contractor Subcontractors	Project Duration
<p>It is envisaged that all sewage waste generated on site shall be collected and pumped out as necessary for offsite disposal to an appropriately licensed facility.</p> <p>In the event a bio-cycle septic system is installed on site, necessary approval will be sought from Narromine Shire Council prior to construction commencing.</p>	Construction Manager	Project Duration
Vehicle haulage is to occur as outlined under the Burroway Project Traffic Management Plan.	All Personnel	Project Duration
All loads must be covered as per NSW RMS requirements during delivery and removal from site. Materials with the potential for generating dust must be covered to prevent the spread of fugitive dust emissions.	All Personnel	Project Duration
<p>In the event of a spill, appropriate spill management response will be undertaken in line with the EPA Spills Fact Sheet (11) such as:</p> <ul style="list-style-type: none"> • Stop the spill • Contain the spill. • Report the spill • Clean up the Spill. <p>Use an adequately and suitably stocked spill kit (with all onsite staff being appropriately trained in its use).</p> <p>Any spills unable to be contained or of sufficient quantity that causes or threatens material harm to the environment must be reported as pollution to NSW EPA on 131 555.</p> <p>Emergency response systems implemented and monitored for effectiveness.</p> <p>Contaminated spill material would be removed offsite by a licenced contractor.</p>	All Personnel	Project Duration
<u>Monitoring</u>		



Action	Responsibility	Timing
<p>Inspections of the waste storage area and facilities shall be conducted, as part of the scheduled environmental inspection. Inspections shall include:</p> <ul style="list-style-type: none"> • Ensuring the waste material is being properly separated, stored and labelled, • General inspections of work areas and roads onsite to monitor whether personnel are using waste receptacles provided, • Checking the condition of the receptacles and secondary containment systems, • Ensuring any reporting required is being completed and submitted to Regulator (where required), • Ensuring the spill kits are available and full, and PPE is available where required. 	SHEQ Adviser	Project duration
<u>Induction</u>		
<p>The Site Induction & toolbox training shall include information on the following waste management issues:</p> <ul style="list-style-type: none"> • Reuse and recycling strategies, • Waste handling, waste storage and disposal, • Classifying Environmental Incidents to determine appropriate response measures, • Management and reporting of waste spills, contamination and contaminated material. 	SHEQ Adviser	Project duration

5.1 IMPLEMENTATION OF WASTE MANAGEMENT

Training and awareness

All personnel and/or subcontractors shall be formally inducted and provided with specific awareness training in relation to the environmental aspects and mitigation methods outlined above, as they apply to each activity. All personnel will receive training in appropriate waste management procedures associated with the Construction Waste Management Plan as part of the site induction. This includes classifying environmental incidents and determining the appropriate response measures.

Edify and the appointed Construction Contractor shall ensure that all project personnel are aware of and understand the environmental requirements of the project relevant to their role and responsibilities. This includes regulatory requirements, any contractual environmental requirements and associated procedures.

Reporting Incidents to Regulatory Authorities

During the construction and operational phase of the Project, the Department must be notified in writing to compliance@planning.nsw.gov.au immediately after project staff become aware of an environmental incident. The notification must identify the development (including the development application number SSD-55968733 and the name of Burroway Solar Farm) and set out the location and nature of the incident.

Pollution incidents that cause or threatens material harm to the environment must be reported to the NSW EPA through 131 555.



6 REFERENCES

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4. NSW Environmental Protection Authority, "Circular Solar Grants Program- Program Snapshot," NSW State Government, 2023.
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