Examples of recycling and waste management

From the Best Practice Charter 2025 reports

Developer	Project Name	Case Study
AGL	Various	We have a Site Transition Sustainability Strategy in place with a 90% recycling target. We are also keeping this front of mind in our design and delivery of our new energy projects. Throughout our responsible procurement activities, we are mandating responsible end-of-life activities, and ensuring our contractors have a plan for end of life.
Acciona	Various	As technology progresses and new recycling facilities are established, the percentage of recycled products will increase. ACCIONA Energía's turbine supplier Nordex will increase its recycling target for its turbines from 85%-95% to 100% recyclable turbines by 2032 as part of the group's sustainability strategy
Acciona	Draft Surf Collaboration	In 2025, we unveiled the world's first surfboards made from decommissioned wind turbine blades. In collaboration with professional surfer Josh Kerr and his surfboard brand, Draft Surf, we've created 10 prototype surfboards that utilise retired turbine blades. This project is part of our Turbine Made initiative, which explores innovative ways to repurpose retired wind turbine blades into new materials and products. By transforming blades into surfboards, we're not only reducing waste but also pushing the boundaries of sustainable innovation in the renewable energy sector. The initiative was recognised for its leadership as a finalist in the 2025 Clean Energy Council Awards. ACCIONA Energía was ranked among the top companies for Sustainability in the Australian Financial Review. The initiative has sparked a national conversation about the potential of turbine blade recycling, and conversations with local councils and Australian innovators and manufacturers are underway.
Ark Energy	Various	Comprehensive waste management, recycling, decommissioning and rehabilitation plans will be developed for each project and updated during operations, as technology and practices evolve. Ark Energy is committed to ensuring end of life management for each project aligns with the best recycling technology and practices available at the time. Secondary battery materials and resource recycling are strategic business focus areas for Ark Energy's parent company Korea Zinc, which has a battery recycling business that utilises its existing non-ferrous metals refining capability. End-of-life batteries from Ark Energy's projects will likely be recycled within the Korea Zinc Group.
Atmos	Hornsdale Wind Farm	At Hornsdale Wind Farm, parts of turbines that are at end of life are forwarded to local TAFE training colleges, helping students see the impact of wear and tear of an operational wind turbine. The ability to work on actual equipment for the students is invaluable. Hornsdale WF has participated in this program for a number of years.
Atmos	Various	Atmos is evaluating various recycling processes and technologies to select partners that align with its sustainability goals and regulatory requirements. Our focus for 2025 is to help support and accelerate the establishment of a sustainable PV module recycling industry in Australia.
Cubico	Various	Cubico has commissioned a concept study into establishing a turbine component recycling facility in the Western Downs Region. This move aligns with Cubico's broader commitment to reduce landfill waste and promote circular economy practices in renewable infrastructure. The study will assess the composition and recyclability of turbine components, evaluate the feasibility of a regional recycling facility and explore opportunities to repurpose or recycle equipment locally. It will also identify potential for job creation and long-term economic benefits in the region. The concept study will provide a foundation for further planning, collaboration and investment in the region. Cubico will continue to engage with local stakeholders, including the WDRC and industry groups, to advance the project in a way that benefits both the energy transition and the Western Downs community
Beoen Energy Solutions	Quoen Park Solar Hybrid	In past projects, site compounds that housed office spaces, toilet blocks, break and meeting rooms ran on diesel generators that used almost 6,000 litres of diesel per month. With a focus on sustainability, Beon and Potentia Energy addresses this issue by constructing a hybrid power system (HPS), which uses a combination of solar panels, batteries and back-up generator. The HPS at Quorn Park runs entirely on energy generated from the 'golden row' – the first few rows of installed solar panels. Utilising these solar panels to run the HPS was based on lessons learned from its initial set up at Girgarre, a solar farm that Beon built in northern Victoria, on Yorta Yorta Country

Beoen Energy Solutions	PV Industries Partnership	Beon installs hundreds of thousands of solar panels every year, with a small proportion inevitably defective or damaged. Sending these panels to landfill doesn't align with our commitment to sustainability so we partnered with PV Industries to close the loop. Through our partnership, Beon and PV Industries have been able to process bi-facial solar panels to produce clean output materials that can be utilised in other manufacturing components. Solar panels present unique recycling challenges. Components are sealed within a plastic polymer to ensure reliable performance in harsh outdoor conditions, making cells difficult to dismantle and process at the end of their life. PV Industries has developed a mechanical recycling process designed specifically for solar panels, improving on existing systems that rely on chemicals or repurposed electronic waste recycling methods. In July 2025, Beon delivered 500 damaged panels to PV Industries' Derrimut facility to support the company's research and development program. These panels are the latest handover from more than 5,000 Beon has collected through the construction of solar farms across Australia's eastern states since 2022.
Iberdrola	French Forest Office	In late 2024, the closure of our Frenchs Forest office in NSW—following the integration of the Smart Energy Solutions team into our Sydney CBD office—required us to responsibly clear and restore the vacated site. This involved removing and recycling all rooftop solar panels and warehouse stock.As our utility-scale solar farms have not yet reached end-of-life recycling milestones, the project presented an opportunity to explore available recycling options.We partnered with PV Industries, a local Sydney specialist in solar panel and inverter recycling, successfully recycling 91 solar panels.
Iberdrola	Various	Looking ahead, Iberdrola Australia has set clear targets to further enhance its circular economy practices: Wind turbine blades: 50% recycled by 2025; 100% by 2030 Solar units: 50% recycled by 2025; 100% by 2030 These actions reflect our commitment to minimising waste, promoting resource recovery, and leading by example in sustainable project lifecycle management.
icubed consulting	Various	Sustainability is a core principle guiding our design process. We believe that renewable energy projects should not only contribute to reducing carbon emissions but also promote long-term environmental and social sustainability. o Recycling and Waste Management: During the construction and operational phases, we recommend practices that promote the recycling or repurposing of materials whenever possible. CEC Best Practice Charter Report - 2025 Page 3 of 3 Our designs are optimised using high-quality products, components, and materials to enhance durability and minimise waste. o On-site Reuse: Our designs incorporate the reuse of soil and rock excavated during construction. These materials can be repurposed for grading, landscaping, or the construction of access roads, reducing the need for imported materials and further minimising waste
Intium	Various	Intium adopts a design-for-reuse approach, prioritising recycling and responsible decommissioning. Strategies include preventative maintenance, parts replacement and site inspections, which support waste minimisation. Further examples include: ▤ Reuse, reprocessing, recycling, and energy recovery ▤ Waste audits under the POEO Act ▤ Worker education on segregation, spill risk, and record keeping ▤ Licensed transportation and disposal ▤ Reuse of spare construction products and timber ▤ Avoidance of soil disturbance and unnecessary excavation ▤ Compliance with Environment Protection Licence Intium's procurement strategies prioritise local suppliers, reinforcing Intium's commitment to sourcing and servicing locally. Our Procurement Policy encourages sourcing from regional, rural and remote resources, SMEs, and disability employment organisations. The majority of regularly used suppliers are based in regional NSW locations. Intium is committed to tracking relevant KPIs related to waste and recycling, such as: ▤ % of waste diverted from landfill ▤ Contracts with recyclers ▤ Decommissioning plans approved
Kilara	Various	Kilara's commitment to the important objectives of recycling and responsible decommissioning is demonstrated through: • Clearly stated intentions and requirements around decommissioning and / or repowering on our Agreements for Lease and Lease documentation, including a commitment to decommissioning bonds, and • A clear emphasis on expectations and requirements relating to recycling in project procurement strategies. The Wilan Wind Farm project will for example, coordinate closely with the Hay Shire Council in utilising its new state of the art, waste management and recycling facility.
Lightsource BP	Various	With limited handling and processing facilities in Australia that specialise in renewable energy components and infrastructure, we're looking at additional procurement and on-site measures to incentivise waste reduction. However, we acknowledge these measures can only go so far and that further research and investment into minimising our waste footprint over a project's lifecycle is critical to reducing our environmental and social impacts. These include: • Committing to requirements and targets in Engineering, Procurement and Contracting, including directing the segregation of metals, cardboard, plastics and timber for recycling. • Raising awareness about the importance of resource re-use, recovery and waste through the construction phase as part of an on-site induction. • Enforcing compliance with our sustainable procurement policy that encourages our contractors and suppliers to consider a product's lifecycle when selecting equipment and components. • Preparing Decommissioning or Repowering Plans for our projects that detail the removal, recycling or reuse of modules, inverters, cabling, foundations and ancillary infrastructure. • Committing to recycling photovoltaic modules wherever feasible, by working with accredited recycling facilities and prioritising responsible end-of-life management
Origin	Various	Waste management is an important element of sustainability and as such forms part of transparent reporting within Origin's Sustainability Report. Waste Management Plans are developed for all renewable development projects during the EIS process.

OX2	Muswellbrook Solar Farm	A waste management plan (WMP) is being prepared for the project and will be implemented in consultation with the local authority to effectively manage waste during construction, operation and decommissioning of the project. PV module recycling companies are emerging in Australia, and they are expected to be well established by the time the project is decommissioned as the industry develops. A feasibility study is being developed for a solar recycling plant at a neighbouring retired coal mine.
OX2	Horsham Solar Farm	X2 commissioned a Circular Material Management Plan (CMMP) during the development of the Horsham Solar Farm project. The CMMP supports sustainable, circular management of materials throughout the project's lifecycle – from design and construction to operation and decommissioning. While renewable energy plays a key role in reaching net zero targets, it's increasingly important to consider how materials are used, reused, and managed. The CMMP aligns with the three core principles of the circular economy and proposes strategies to be applied to project components: • Eliminate waste • Circulate Materials • Regenerate Nature Although circular materials management may be new for some suppliers, it is gaining traction across infrastructure projects – including renewables. Promoting transparency and end-of-life reporting along the supply chain will help improve material recovery and reuse.
Ratch	Collector Wind Farm	The construction phase of the Collector Wind Farm (NSW) required a specific waste management plan that focused on the waste hierarchy of: (i) avoidance in the first instance; (ii) recycling where possible, and (iii) waste disposal as a last resort. Successful implementation of this plan was demonstrated by the contractor reporting all waste management records monthly, showing over 800,000 m3 of recycled waste (packaging, paper etc) and over 170,000 kg of recycled steel. The workforce also recycled bottles and cans through the NSW 'return & earn' scheme both to reduce waste and raise money for the local Collector school.
RES	Dulacca Wind Farm	RES takes responsibility for products and services through improving waste and material management, repurposing, recyclability and promoting the use of sustainable materials where possible. Throughout construction of the Dulacca Wind Farm, the site contractors donated transport packaging and excess components to the Trade School at Miles High School, and the broader community, saving 104,000kg of steel, 61,000kg of timber and 50 cubic metres of high-density plastic from going to landfill or paying for it to be transported for recycling. This saved approximately 104,000kg of steel, 61,000kg of timber and 50 cubic metres of high-density plastic from going to landfill or paying for it to be transported for recycling. With the recycling donations from Dulacca, Miles High School has more than enough materials to replace their entire materials budget, and this funding can now be reallocated elsewhere within the school.
Spark Renewables	Various	Spark Renewables has established several university collaborations and industry partnerships to drive the diversion of solar panel waste from landfill and find sustainable end-of-life solutions for solar panels: We are collaborating with UNSW on a machine-learning project funded by ARENA using solar panel data from the Bomen Solar Farm. We have partnered with PV Industries and participate in the Circular Solar Trial to support end-of-life solutions for solar and battery technologies.
Squadron	Waste and recycling: Dubbo wastewater treatment plant	Squadron and Dubbo Regional Council are delivering water security to the region through a public private partnership to build a new advanced wastewater treatment facility at Dubbo Sewerage Treatment Plant. Squadron and Council are co-funding the advanced wastewater treatment facility capable of treating up to 700 megalitres of water per year. The partnership was a finalist in the 2025 Clean Energy Council Awards. The turning of the first sod for the project took place in August 2025.
Total Energies	Various	For any construction projects, we are committed to ensuring that recycling and waste management is a key component in the EPC (Engineering, Procurement, Construction) contractor's responsibility and considered as part of the selection criteria. These programs must be recorded, assessed and maintained for the life of construction, with an operational management plan implemented during operations.
Zenviron	Various	Zenviron works closely with our clients, to minimise the waste generated during construction through: • Minimising packaging brought to site through effective procurement. • Segregating all waste on site to maximise the salvage of recyclable material. • Working closely with local waste facilities to understand limitations on materials that can be processed and accepted. • At Lotus Creek Wind Farm, a can and bottle recycling scheme has been established with all proceeds donated to local community groups