Circular Procurement Toolkit

March 2026

Introduction to the Hunter JO Circular Procurement Toolkit

Welcome to the Hunter JO Circular Procurement Toolkit. This resource helps councils bring circular economy principles into everyday procurement in a practical, achievable and locally relevant way.

Circular procurement does not require new approval steps or complex systems. Instead, it builds on what councils already do: planning well, engaging the market early, selecting quality products and managing contracts effectively.

Public procurement has a powerful influence on asset durability, waste generation, local industry capability and long-term community outcomes. Circular approaches - such as choosing durable products, enabling repair and reuse, and planning for refurbishment or remanufacturing - help councils reduce waste, lower life cycle costs, improve service performance and strengthen regional resilience.

These approaches also align with NSW policy directions, including the Decarbonising Infrastructure Delivery Policy, which emphasises reducing material impacts across public infrastructure.

This toolkit is designed for busy council officers, engineers, procurement staff, asset managers and project teams. You do not need to be a circular economy specialist to use it. Each guide provides simple guidance, practical tools and examples you can apply directly to your work.

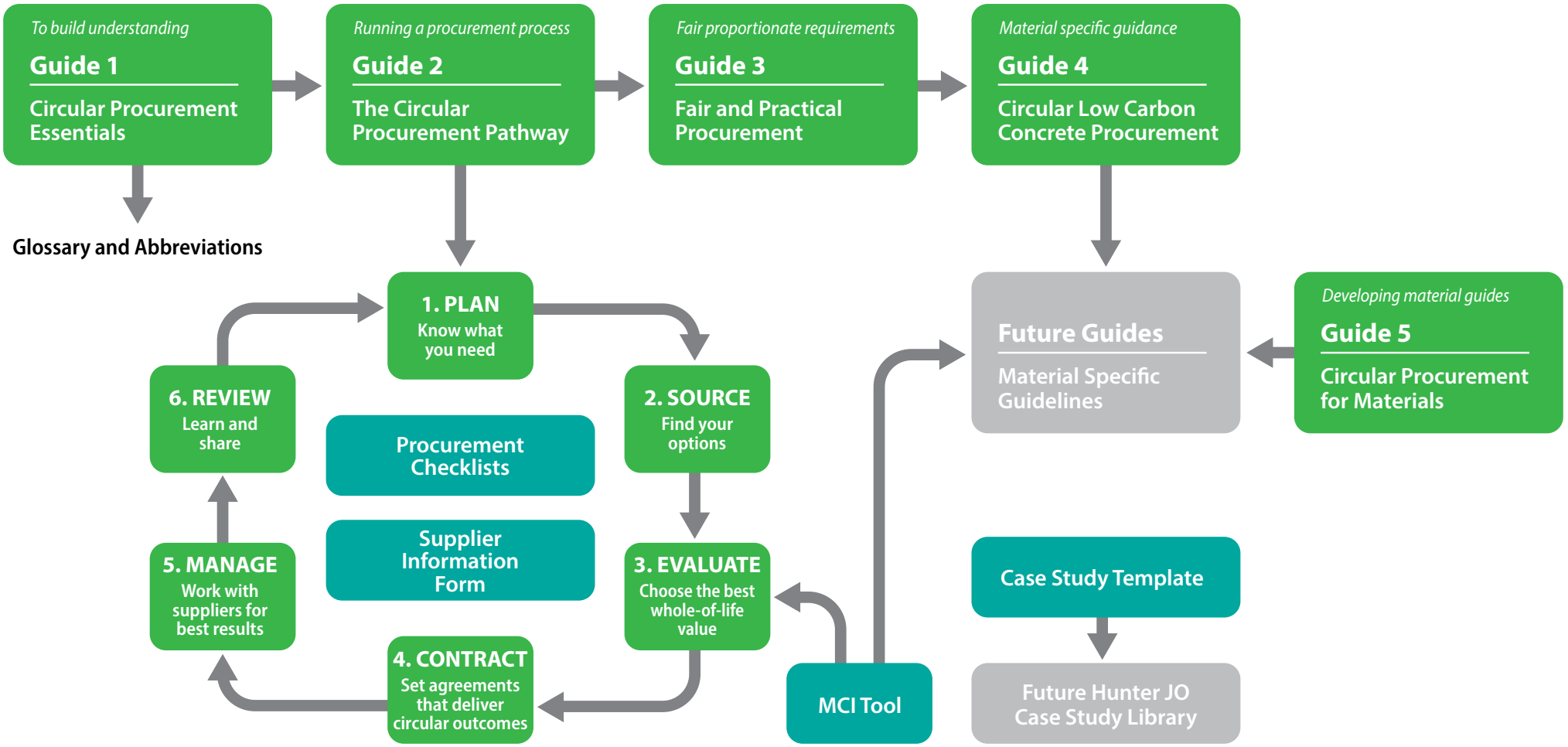
Circular procurement is about making better decisions at each step, not adding more work. The guides in this toolkit help councils do exactly that, in a way that is proportionate, practical and achievable within existing systems.

The toolkit is designed to be flexible, practical and easy to apply, helping councils to improve procurement outcomes across cost, risk, waste and community value.

This project is an initiative of the NSW Environment Protection Authority under the NSW Government's Waste and Sustainable Materials Strategy, and is funded from the waste levy.

This toolkit was prepared by thinkstep-anz on behalf of Hunter Joint Organisation.

The flow of the toolkit is visualised below.
You can refer to this infographic to understand which guide will be relevant to you at your current stage in the procurement process.



Your Circular Procurement Toolkit

Guide or Document	What it is	When to use it
Guide 1 - Circular Procurement Essentials	What circularity means for councils: the principles, the R-strategies, why recycling is only part of the solution and a set of practical circular options council teams can apply.	Use first if you are new to circular procurement or need a shared understanding before starting a project or updating templates.
Guide 2 - The Circular Procurement Pathway	A step-by-step guide explaining how circularity fits into existing procurement workflows. It follows a six-phase pathway and includes practical actions, questions to ask and links to tools.	Use when planning, running or reviewing a procurement process. Jump to the phase you are working on.
Guide 3 - Fair and Practical Procurement	Guidance on setting evidence requirements that are proportionate, achievable and fair. This guide includes a tiered evidence approach and practical examples of evidence suppliers can provide.	Use when writing specifications, setting evaluation criteria or deciding what evidence to ask suppliers for.
Guide 4 - Circular Low-carbon Concrete	Guidance for specifying and evaluating circular low-carbon concrete, Material Circularity Indicator (MCI) tool.	Use this for construction and infrastructure projects involving concrete.
Guide 5 - Circular Procurement for Materials	A standard framework for developing future material-specific modules within the Hunter JO Circular Procurement Toolkit.	Use this for developing guidance for materials which are not already included in the toolkit, to be used as a future reference.
Supplier Information Form	A structured questionnaire to collect consistent information from suppliers on durability, repairability, materials information and end-of-life options.	A form to send to suppliers (or adapt into RFQs) to collate all relevant information.
Procurement Checklists	Quick-reference prompts to help apply circular thinking without adding complexity.	Use these as a day-to-day aid when planning, sourcing, evaluating or managing contracts.

Abbreviations and Glossary

Term / Abbreviation	Definition
AS	Australian Standard that sets safety and performance requirements for products, materials and services.
Circular economy	An approach that designs out waste, keeps materials in use for as long as possible and regenerates natural systems.
Circular procurement	Buying goods or services in a way that supports reuse, repair, refurbishment, remanufacturing, durability and responsible end-of-use / end-of-life recovery.
DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water.
Durability	How long a product is expected to last under normal use conditions.
EPD – Environmental Product Declaration	A verified report showing a product's environmental impacts across its lifecycle, based on standardised LCA methods.
FSC – Forest Stewardship Council	Certification for responsibly sourced timber and paper products.
GECA – Good Environmental Choice Australia	A certification scheme for products that meet environmental, health and social criteria.
GHG – Greenhouse gas	Gases that contribute to climate change, such as carbon dioxide and methane.
GWP – Global Warming Potential	A measure of how much heat a greenhouse gas traps in the atmosphere relative to carbon dioxide (CO2).
ISO – International Organisation for Standardisation	Develops global standards, including circular economy standards like ISO 59010 and ISO 59020.
JO – Joint Organisation	A regional collaboration of councils, such as Hunter JO.
LCA – Life Cycle Assessment	A method for assessing environmental impacts of a product from raw materials through to end-of-life.
LCC – Low carbon concrete	Concrete designed to reduce embodied carbon (often using SCMs) while still meeting required Australian Standards.
MCI – Material Circularity Indicator	A single score showing how circular a product is, based on recycled content, lifespan and recovery at end-of-life.
Modularity	A design approach where components can be replaced, upgraded or repaired without replacing the whole product.
Outcome-based specification	A specification that focuses on the results required (e.g., durability, repairability) rather than prescribing a specific material, brand or method.

Abbreviations and Glossary

Term / Abbreviation	Definition
PCF – Product Carbon Footprint	Reports the greenhouse gas (GHG) emissions associated with a product during its life cycle, expressed as Global Warming Potential (GWP).
PCR – Product Category Rules	Guidelines for Environmental Product Declarations (EPDs) which ensure that EPDs in the same product category follow the same rules and can be compared fairly.
Refurbishment	Restoring a used product so it can continue to perform its intended function (e.g., reupholstering, refinishing).
Remanufacturing	Rebuilding a product to original or better performance using a mix of used and new components.
Repairability	How easily and affordably a product can be repaired, including spare parts availability.
RFP / RFQ – Request for Proposal / Request for Quote	Formal procurement processes used to seek offers from suppliers.
R-strategies (10Rs)	A hierarchy of circular actions: refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle, recover energy.
SCM – Supplementary cementitious materials	Materials (e.g., fly ash, slag) used to reduce the cement content of concrete and lower its carbon footprint.
Service model / Product-as-a-Service (PaaS)	A model where councils pay for a service (e.g., lighting, IT) rather than owning the product; the supplier retains responsibility for maintenance and end-of-life recovery.
SME – Small and medium-sized enterprise	Commonwealth Procurement Rules define SMEs as businesses with less than 200 staff.
Take-back scheme	An arrangement where suppliers collect products at end-of-life for reuse, refurbishment, remanufacturing or recycling.
Traceability	The ability to track a product's materials, sourcing, and end-of-life outcomes, often supported by certifications or digital product passports.
Whole-of-life (life cycle) thinking	Considering all costs and impacts of a product across its full life—from purchase to use, maintenance, repair and end-of-life recovery.

HUNTER JOINT ORG.

COLLABORATION OF HUNTER COUNCILS

Guide 1

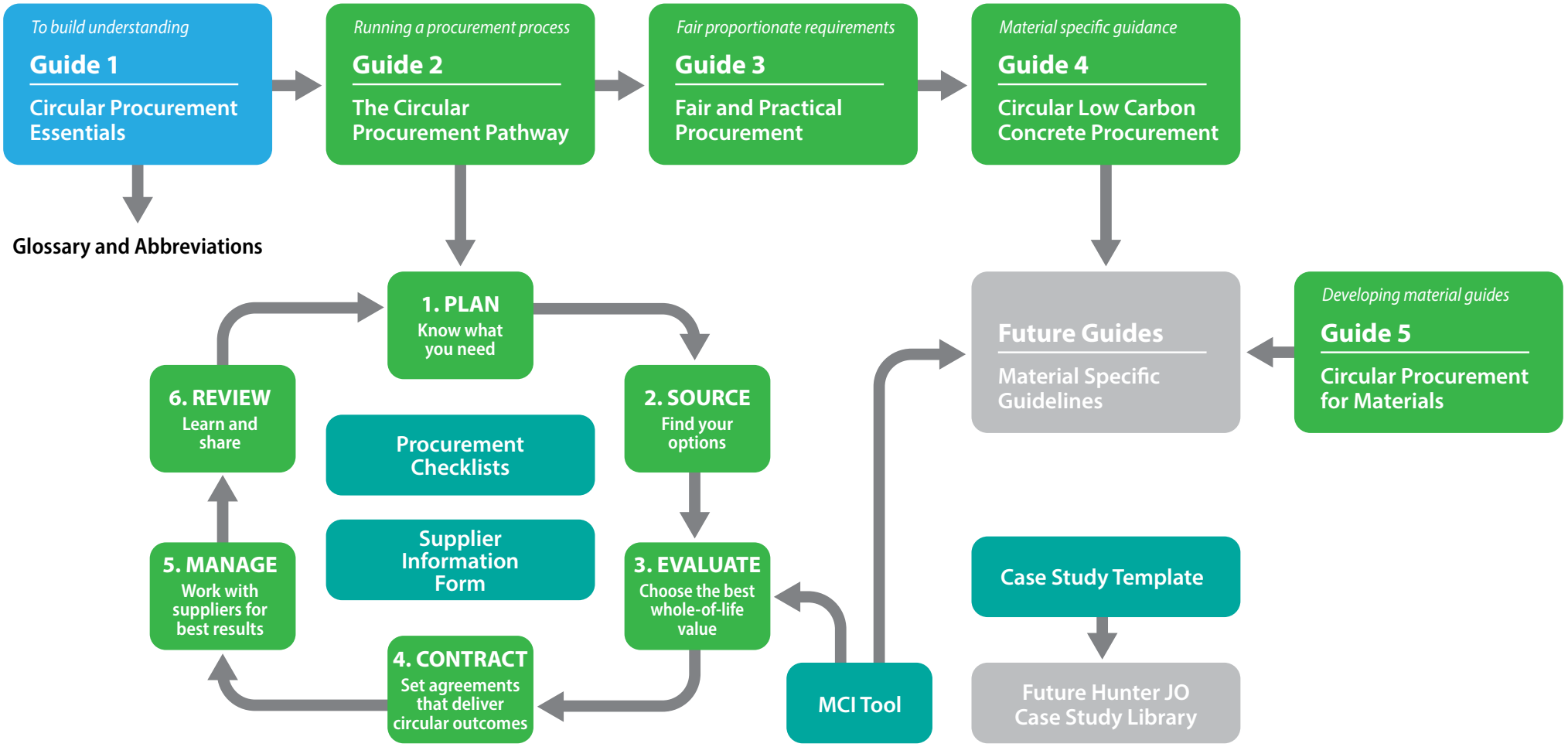
Circular Procurement Essentials

Guide 1 of 5 of the Circular Procurement Toolkit

March 2026

The Hunter JO Circular Procurement Toolkit

This is **Guide 1** of the toolkit. You can use this guide to build your understanding on the circular procurement essentials.
The visualisation below shows how this guide fits into the rest of the toolkit.



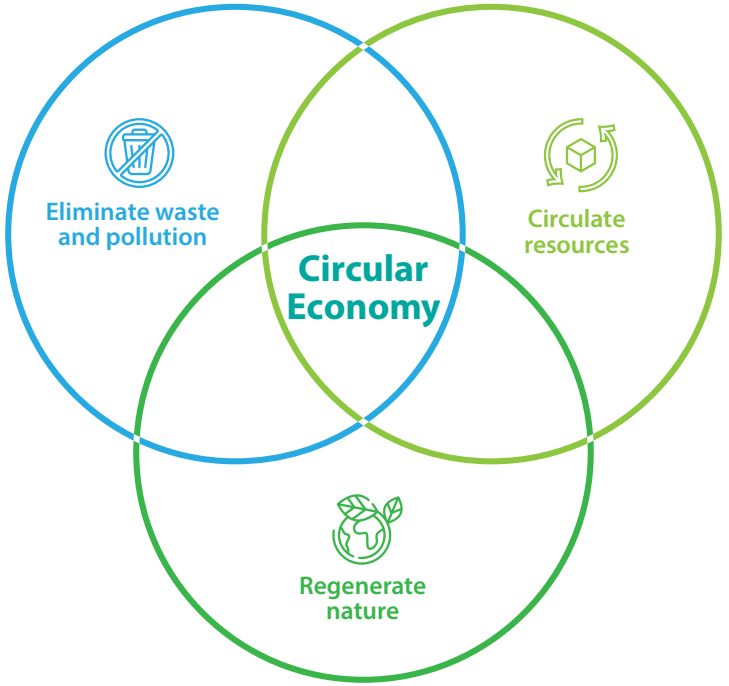
Circular procurement essentials

This guide introduces the core ideas behind circular procurement and explains what they mean for councils in practice. It sets the foundation for the rest of the toolkit.

Inside this guide you will find:

- A clear explanation of the circular economy and why it matters for local government
- The key circular principles and R-strategies explained in practical terms
- How circular procurement supports value for money, waste reduction and policy alignment
- The difference between biological and technical materials and why it matters for procurement
- An overview of relevant standards such as the ISO 59000 series and ISO 20400
- Simple ways to measure circular performance, including the Material Circularity Indicator (MCI)
- Practical circular options councils can apply immediately across everyday operations

This guide is designed for councillors, executives, procurement teams and project managers who want a clear starting point. It provides the essential knowledge needed before moving into the more detailed guidance in the following toolkit documents.



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Council Policy Spotlight

Our current linear economy isn't sustainable ... now a significant global momentum behind the transition to a circular economy. By growing new and emerging industries, including circular economy precincts and renewable technologies, we can provide diverse employment options for our residents.

Lake Macquarie – Integrated Planning and Reporting

1. Circular economy essentials

What is the circular economy?

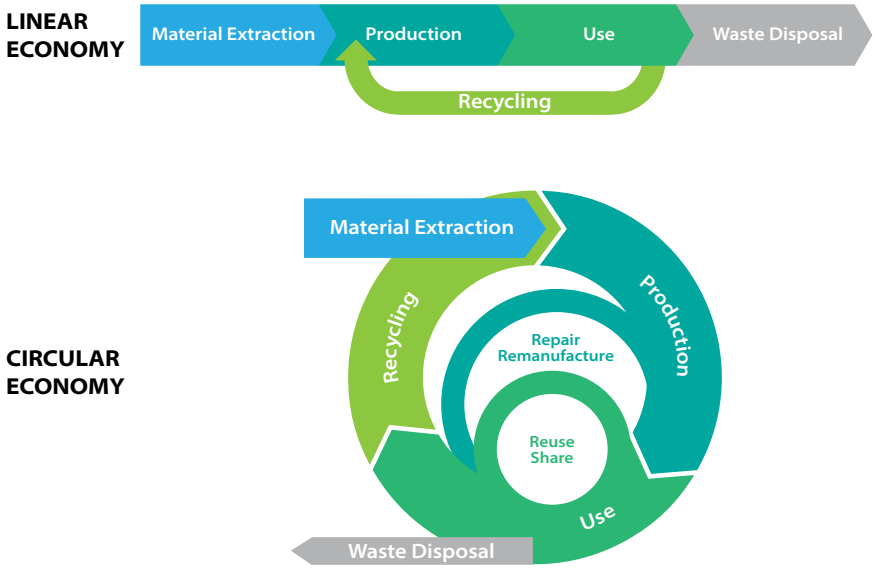
A circular economy is a different way of managing resources. Instead of the usual take → make → waste system, circularity keeps products and materials in use for as long as possible. It focuses on:

The circular economy principles

Eliminate waste and pollution
Avoid waste before it happens. This means designing services, contracts and projects so unnecessary materials, packaging and disposal are reduced from the start.

Circulate resources
Keep materials and products in use for as long as possible through reuse, repair, refurbishment and recycling.

Regenerate nature
Look after natural systems so they can keep providing for communities. Councils can do this by selecting materials and practices that improve soil, restore ecosystems and reduce pollution.



Read More

- Ellen MacArthur Foundation – Circular Design & Procurement Resources

  Frameworks and practical resources on circular design, product lifecycles and procurement approaches.

- NSW Circular Economy Policy Statement

  Outlines the NSW Government's commitment to designing out waste, keeping materials in use and regenerating natural systems. It encourages public sector buyers to prioritise circular options.

Why circular procurement matters for councils

Circular procurement supports existing NSW and Australian Government policies that aim to reduce waste, lower emissions and improve the performance of public assets.

Councils are not required to create new systems to respond to these policies. Circular approaches work within existing procurement processes and help councils meet expectations around:

- value for money
- sustainability and emissions reduction
- waste avoidance and resource recovery
- local industry participation and economic development

This toolkit builds on the key policies, strategies and standards shaping circular procurement and low-carbon materials in NSW and Australia, including:

- NSW Government Procurement Policy Framework requires value for money, sustainability and support for economic development. Circular procurement supports these principles through durability, repairability and waste reduction
- Australian Government Environmentally Sustainable Procurement Policy promotes environmentally sustainable purchasing and whole-of-life assessment
- NSW Guide to Environmentally Sustainable Procurement provides practical guidance aligned with circular approaches

Circular procurement helps councils meet these expectations in a practical, proportionate and cost-effective way.

Council Policy Spotlight

Taking a circular economy approach in waste management reduces waste generation and maximises resource use, promoting sustainability across industries. Embracing circular economy principles can drive local business innovation, reduce environmental impact and create green jobs.

Maitland – Draft Economic Development Strategy

Read More

- ICLEI (Local Governments for Sustainability) Circulars – Public Procurement Resources

  Toolkits, templates and case studies tailored to local government circular procurement.

- Sustainable Public Procurement Guidance

  International guidance on embedding circular and sustainable principles into procurement processes.

How councils benefit from circular procurement

Councils manage growing waste volumes, ageing assets, tight budgets and increasing community and regulatory expectations. Circular procurement helps respond to these pressures while improving long-term value for money.

Lower whole-of-life costs

Using fewer materials, extending asset life and avoiding unnecessary replacement reduces total expenditure over time. Durable, repairable and modular products may have similar or slightly higher upfront costs, but they usually cost less across their full life cycle. Reuse, refurbishment and service models can also defer capital spend and reduce disposal costs.

Stronger risk management

Supply chain disruption, resource scarcity and rising landfill costs create financial and operational risk for councils. Circular products reduce exposure by being designed to last longer, be repaired locally and remain reliable in service. Whole-of-life thinking also reduces unexpected failures and emergency replacement costs.

Less waste, lower disposal costs

Avoiding waste at the source delivers direct savings. Reuse, repair and refurbishment reduce volumes sent to landfill and associated transport and gate fees. Designing assets to be recovered at end-of-life also reduces long-term waste liabilities.

Better asset performance

Durable and modular assets perform better for longer. Replaceable components, clear maintenance pathways and strong warranties reduce downtime, improve service reliability and support predictable maintenance planning.

Greater community value

Circular procurement can support local jobs in repair, refurbishment and recycling. It keeps materials circulating within the regional economy and reduces landfill impacts, demonstrating responsible stewardship of public resources.

Alignment with policy and regulatory expectations

NSW and other states are shifting toward circular economy outcomes. Councils are expected to reduce waste, recover more materials and influence suppliers. Circular procurement supports these goals while working within existing procurement processes.

Read More

- NSW Waste and sustainable materials strategy 2024

  This strategy sets long-term goals to reduce waste, improve material recovery and support more sustainable use of resources. It emphasises avoiding waste, increasing reuse, repairing products and supporting markets for recycled materials.

The biological and technical cycles

Circularity treats materials differently depending on where they come from:

Biological cycle

The biological cycle returns biodegradable materials and products like food, cotton and wood safely to the earth through activities like composting. Before they re-enter this cycle, they can often be reused, repaired and sometimes even recycled for example wooden furniture and clothes.

The technical cycle

The technical cycle looks at mined materials, petrochemicals and synthetic compounds that nature does not know how to deal with. As these materials are not biodegradable, we need to use them as long as possible and make sure we get the full value from them.

Biological materials can safely return to the earth, but technical materials cannot. If technical materials are not designed to stay in use, they quickly become long-term waste, creating disposal costs, environmental risk and lost value for councils.

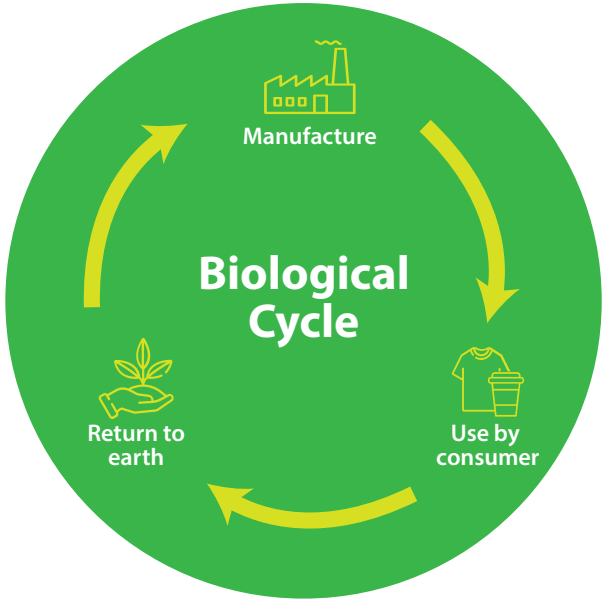
Problems often arise when products combine technical and biological materials in ways that make it difficult to separate them at end of life. Common examples include textiles that blend natural and plastic fibres, or composite products used in public spaces and facilities. When these materials cannot be easily separated, they are often downcycled or sent to landfill.

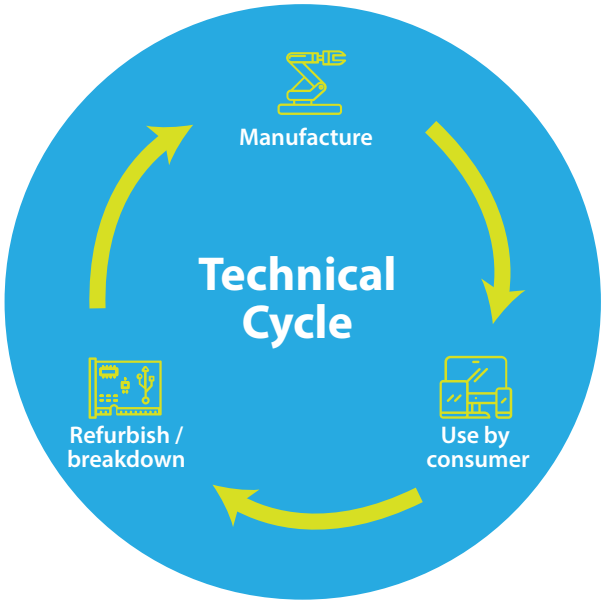
Understanding this difference helps councils make better procurement decisions. It shows why circular strategies such as modular design, long warranties, repairability and take-back schemes are so important - they keep technical materials in use for as long as possible and reduce the need for new raw materials, landfill and repeated replacement.

Council Policy Spotlight

Our community uses resources sustainably, efficiently and equitably.

Port Stephens - Integrated Planning and Reporting





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What are R-strategies in the circular economy?

R-strategies, or the R-hierarchy or pyramid, are actions that focus on reusing materials and products as much as possible. Each 'R' represents a strategy, ranked from most to least circular and resource-efficient.

The framework shows that the higher the strategy sits in the hierarchy, the greater its potential to recover value, cut resource use and reduce environmental impacts.

Recycling is only part of the solution. Recycling sits toward the bottom of the circularity pyramid because it deals with waste only after it exists. By then most of the product's value has already been lost, and recycling still requires energy, processing and often new raw materials.

Higher-value actions like refusing, reducing and reusing avoid waste in the first place and keep materials in use for longer, which is why recycling is a last resort rather than the main solution.

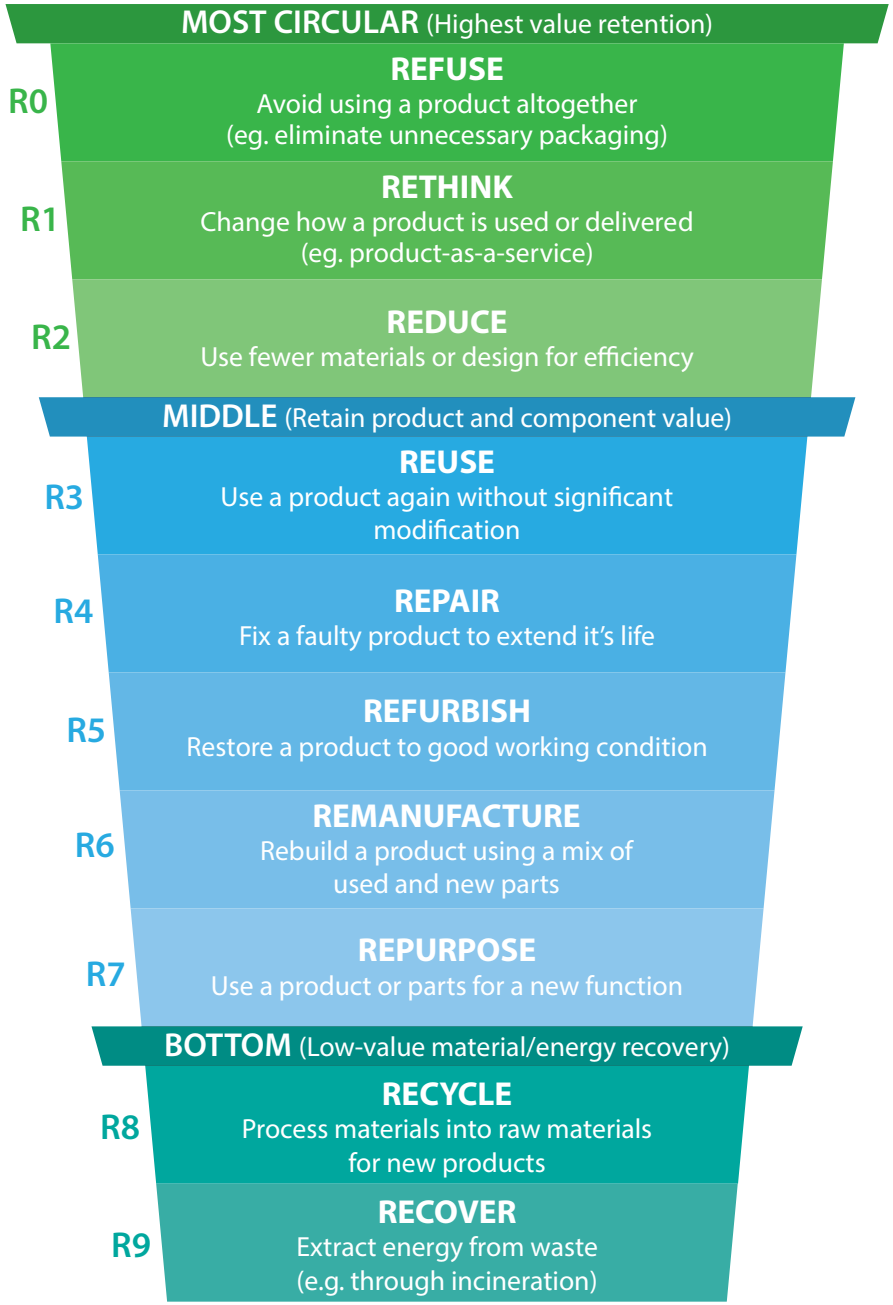
Recycling is like cleaning up after a party.

A circular economy is like planning the party so there's no mess to clean up at all.

Council Policy Spotlight

Council events avoid, reduce or recycle waste and demonstrate benefits / educate the public.

Singleton – Waste Management Strategy



Are there standards for circular procurement?

There are a number of circular economy frameworks, that all use different scopes, language and steps. This makes it difficult to report and compare progress. That's where the ISO 59000 series, the international framework for the circular economy, comes in.

Key circular economy standards at a glance

The ISO 59000 series is a global framework for guiding circular principles, transition planning and measurement. They help councils and suppliers use the same language and metrics when applying circular economy principles

- ISO 59004 – Principles, terminology and concepts
- ISO 59010 – Guidance for integrating circularity into strategies, operations and business models
- ISO 59020 – Measuring circularity performance
- ISO 59032 – Reviewing existing value networks
- ISO 59040 – Product Circularity Data Sheets (PCDS)

Sustainable Procurement

- ISO 20400 – Sustainable Procurement Guidance

This standard provides practical guidance on embedding sustainability into procurement governance, processes, risk management and supplier engagement.

How they work together

The ISO 59000 series supports the transition from a linear to a circular economy and provides consistent methods to measure and communicate circular performance.

ISO 20400 supports councils to integrate these sustainability and circular principles into procurement decision-making.

Used together, ISO 20400 provides the procurement framework, while ISO 59020 and ISO 59040 provide the tools to set targets, assess suppliers and report circular performance in a consistent way.

How to measure circular performance?

Councils can measure whether circular strategies are working by looking at how well they keep materials in use and how they support the organisation's economic, environmental and social goals. The table below gives examples of simple metrics that can be used.

When choosing what to measure, it is best to prioritise actions that avoid using materials in the first place or extend the life of what councils already own. This follows the same approach used in recognised frameworks such as ISO 59020, the Material Circularity Indicator (MCI) and the Circular Transition Indicators (CTI). Each of the measures below is only part of the circularity picture, together they provide a better view of how the various R-strategies are met.

Ecolabels can also support good procurement decisions. Standards from trusted organisations like Good Environmental Choice Australia (GECA) and Global GreenTag include requirements on recycled content, durability, reuse and recyclability. Certifications like the Forest Stewardship Council (FSC) are important for indicating responsible/regenerative sourcing, a key aspect of circularity for bio-based materials.

These can guide tenders and project briefs. You can find more information on evidence in Guide 3.

How to measure circular performance?

Metric	What this could look like
Cost savings	Money saved through longer-lasting products, reuse, refurbishment, remanufacturing or service-based models.
Waste reduction	Less waste going to landfill through reuse, repair, refurbishment, repurposing, recycling or energy recovery.
Material efficiency	Reduction in total materials purchased, reduced use of virgin materials, and increased recycled content.
Life cycle efficiency	Lower whole-of-life costs, including repairs, maintenance and reduced need for replacements.
Circular procurement	The percentage of purchased items that are reused, refurbished, remanufactured or made from recycled materials.
Supplier engagement	Number of suppliers offering take-back schemes or circular options, or percentage of spend linked to these agreements.
Product durability	More products with long warranties, modular designs, repairability features or durability certifications.
Recovered value	Amount of material recovered or reused, recycling rates and waste diverted from landfill.
Traceability	Percentage of products with third-party certification or a digital product passport.

What is the Material Circularity Indicator (MCI)?

The Material Circularity Indicator (MCI) is a single score that measures how circular a product is, from 0% (linear, take-make-waste) to 100% (fully circular). It shows where materials come from, how they are used and what happens after use.

Developed with the Ellen MacArthur Foundation and aligned with ISO 59020, the MCI helps compare products, designs and procurement options on circularity performance.

What a product's score tells you

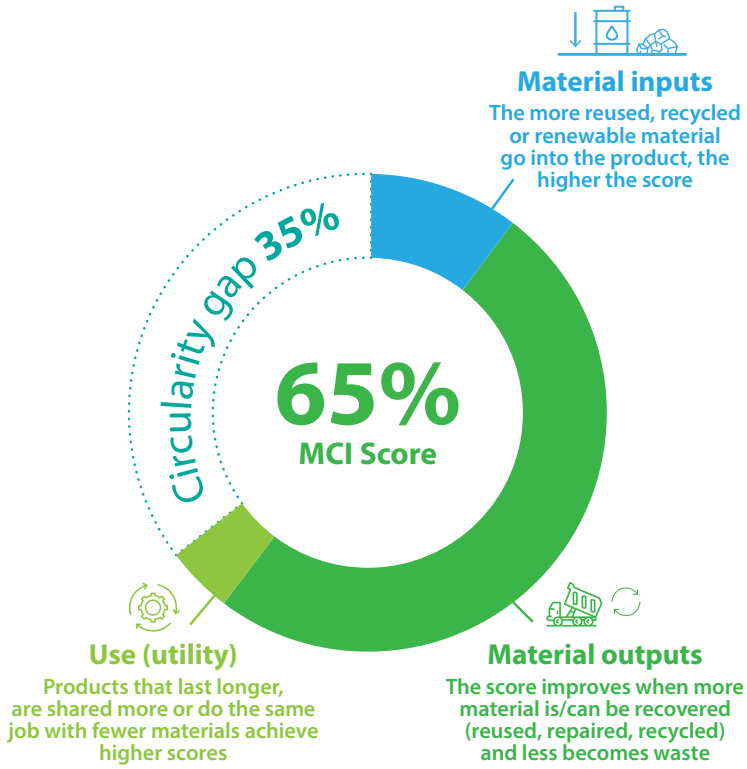
The score can be broken down to show the contribution from material inputs, outputs and use. The difference between the score and 100% is the circularity gap. An MCI score gives you one clear number that enables you to compare different products It tells you:

Material inputs: how much virgin material you avoid

Material outputs: how much waste you prevent

Use: how effectively your product is used

You can access the MCI calculator tool, which includes concrete-specific reference data, in Guide 4. You can adapt the tool in future to include reference data of other materials and products as you wish.



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2. Circular options councils can use now

This section focuses on practical circular options councils can apply straight away, using existing procurement processes and budgets. These approaches move beyond recycling to prioritise actions that avoid waste, extend asset life and get more value from what councils already own.

The examples that follow show how circular strategies can be applied across everyday council activities, from parks and facilities to fleet, IT and infrastructure, without adding complexity or new approval steps.

These examples are not exhaustive; they are included to demonstrate how circular economy concepts can be applied in practice and to encourage councils to think beyond standard approaches.

Refuse and rethink

Examples:

- Before building a new local office, conduct a circularity audit to assess whether council-owned buildings can be adapted or repurposed
- Consider product-as-a-service models for items such as printers, lighting or fleet vehicles instead of outright purchase

Reduce: Only buy what is needed

Examples:

- When upgrading a community centre, retain existing joinery, shelving and partitions where safe and compliant
- Review design briefs to remove unnecessary finishes or over-specification

Reuse: Use existing assets instead of buying new

Examples:

- Reuse playground components, benches or fencing that are still safe and functional
- Salvage materials during refurbishment for use on other council projects

Repair: Fix items to extend lifespan

Examples:

- Repair cracked litter bins or damaged wayfinding signs instead of ordering replacements
- Partner with local repair services or social enterprises to deliver maintenance programs

Read More

- National Waste Policy Action Plan

  Sets national direction for waste reduction, repair, reuse and recycling. Supports the development of strong markets for recycled materials and higher value resource recovery.

- Repair Café International

  Examples and practical resources to support community-based repair initiatives. Useful for councils looking to establish or support local repair networks.

Refurbish: Restore worn items to good condition

Examples:

- Refinish worn office desks, repaint steel bollards or reupholster library chairs instead of buying new furniture
- Upgrade mechanical systems where possible rather than replacing full assemblies

Remanufacture: Use suppliers who rebuild old products with a mix of used and new parts

Examples:

- Replace end-of-life fleet components with remanufactured engines or gearboxes that meet safety and warranty requirements
- Specify remanufactured office equipment in procurement documents where available

Design for durability and modularity

Choose products that last longer, can be repaired easily and have components that can be replaced or added without throwing out the whole item.

What this can look like for councils

Examples:

- Parks: choose modular playground equipment where individual platforms, rails or slides can be replaced
- Facilities: install modular flooring tiles - when one section wears out or is damaged, only that tile is swapped, reducing cost and waste
- IT teams: buy devices with replaceable batteries instead of sealed units

Council Policy Spotlight

City of Newcastle

Through our transition to a circular economy, we design out waste, creating new opportunities and technologies in our local economy, promoting renewable products, and sustainable infrastructure, and rethinking our use of resources as a circular flow.

Newcastle – Integrated Planning and Reporting

Read More

- The Circular Design Guide | Ellen MacArthur Foundation

  A practical online resource with methods, tools and case studies to help embed circular thinking into design and procurement decisions.

- Better Buildings Partnership – Circular Economy & Procurement Guides

  Templates and guidance on reuse, deconstruction, furniture procurement and durable design for commercial and public buildings.

Recycled content and recyclability

Buy products that contain recycled materials and can be recycled again at end of life. This helps keep materials in use and reduces landfill.

What this can look like for councils

Examples:

- Roads and infrastructure teams prioritise recycled content - asphalt, concrete and road base
- Parks teams choose benches and bollards made from recycled plastics
- FOGO (Food Organics and Garden Organics) derived mulch and compost are used in council parks, street tree planting and landscaping projects, closing the loop on organics collected from the community
- Procurement asks suppliers to provide Environmental Product Declarations (EPDs) or material specifications showing recycled content percentages

Ask "And then what?". For example, will a product with recycled content be recyclable again, or does its mix of materials mean it will still end up as waste?

Consider durability. A product with higher recycled content that fails sooner may create more waste than a longer-lasting product with lower recycled content.

Service models

Instead of buying products outright, councils pay for a service. The supplier remains responsible for maintenance, upgrades and recovery at end-of-life.

What this can look like for councils

Examples:

- Facilities teams use lighting-as-a-service where the supplier installs efficient lighting, maintains it and replaces components over time
- IT teams lease laptops and tablets, returning them for refurbishment or remanufacture
- Waste services pilot bin-sensor monitoring as a service, avoiding purchase of hardware outright
- Carpet tiles are hired rather than purchased, encouraging more durable materials to be used and for tiles to be easily removed and reused when no longer needed

Read More

- ReMade in Australia

  Encourages buyers to prioritise products made with Australian recycled content, helping build strong local markets for recovered materials.

- Planet Ark – Business Recycling

  A searchable directory to find recycling services and suppliers of recycled-content products across Australia.

- Product-as-a-service (PaaS)

  Read more about how product-as-a-service models work, including benefits, risks and implementation considerations.

Bio-based and low-toxicity options

Use products made from renewable, natural or low-toxicity materials that have lower environmental and health impacts.

What this can look like for councils

Examples:

- Building projects: use timber, bamboo or other responsibly sourced bio-based materials instead of high-impact alternatives
- Parks teams: choose mulch and soil conditioners made from certified organic material
- Cleaning contracts: specify low-toxicity, biodegradable chemicals, improving indoor air quality in offices, libraries and community centres

Council Policy Spotlight

Consider circular economy principles to minimise environmental impact, increase demand or recycled products and keep products and material in use longer.

Maitland – Procurement Policy

Read More

- GECA | Good Environmental Choice
  Australia shows which products meet robust environmental and health standards. Read more on ecolabels in Guide 3.
- Responsible Wood
  Sustainable timber in Australia explains responsible sourcing of timber, supporting biodiversity and lower environmental impact in construction projects.

Circularity strategies for councils at a glance

Strategy	What it means	How councils can apply it	What councils gain
R0 – Refuse	Do not buy things you do not actually need.	Ask, "Do we already have something that can do this job?" Stop unnecessary purchases, building projects or redesign the service so no new asset is required.	Lower spending and waste Fewer emissions across the whole life cycle
R1 – Rethink	Rethink how the service or product is provided.	Consider service models (e.g., leasing laptops, lighting-as-a-service). Share items between teams rather than buying more.	Better use of assets Lower long-term costs and waste
R2 – Reduce	Use fewer materials or choose items designed to last.	Choose durable, long-life products. Pick modular items where only parts (not whole units) need replacing.	Less maintenance Lower resource use and end-of-life waste
R3 – Reuse	Use existing assets again instead of buying new.	Check if second-hand or surplus council items can be reused. Buy refurbished furniture, IT or equipment. Use supplier take-back schemes.	Lower purchasing costs Fewer usable items sent to landfill or recycling
R4 – Repair	Fix things instead of replacing them.	Require suppliers to offer repairable products with spare parts. Use local repair services (e.g., playground, depot tools, furniture).	Longer product life Lower ongoing costs
R5 – Refurbish	Restore worn items so they can be used again or continue to be used for a longer period.	Refinish or repaint tired furniture. Restore roads and bridges. Refurbish playground components or indoor fitouts rather than replacing whole units.	Lower capital costs Reduced demand for new materials
R6 – Remanufacture	Rebuild old products so they perform like new.	Choose suppliers who offer remanufactured parts (e.g., fleet components, pumps, IT hardware).	Avoid virgin material use High-quality performance at lower cost
R7 – Repurpose	Find a new use for items instead of disposing of them.	Repurpose buildings, furniture etc. Donate suitable items to community groups.	Lower disposal costs Better value from existing materials
R8 – Recycle	Ensure materials can be recycled – and choose recycled-content products.	Specify recycled-content asphalt, concrete, plastics or steel. Choose products that can be easily recycled at end-of-life. Work with recyclers and track outcomes.	Supports local recycling providers Reduces landfill and emissions
R9 – Recover energy	Use energy recovery for materials that cannot be reused or recycled.	Send only non-recyclable residuals to approved energy recovery facilities.	Less landfill Energy generated from materials that cannot be circulated

HUNTER JOINT ORG.

COLLABORATION OF HUNTER COUNCILS

Guide 2

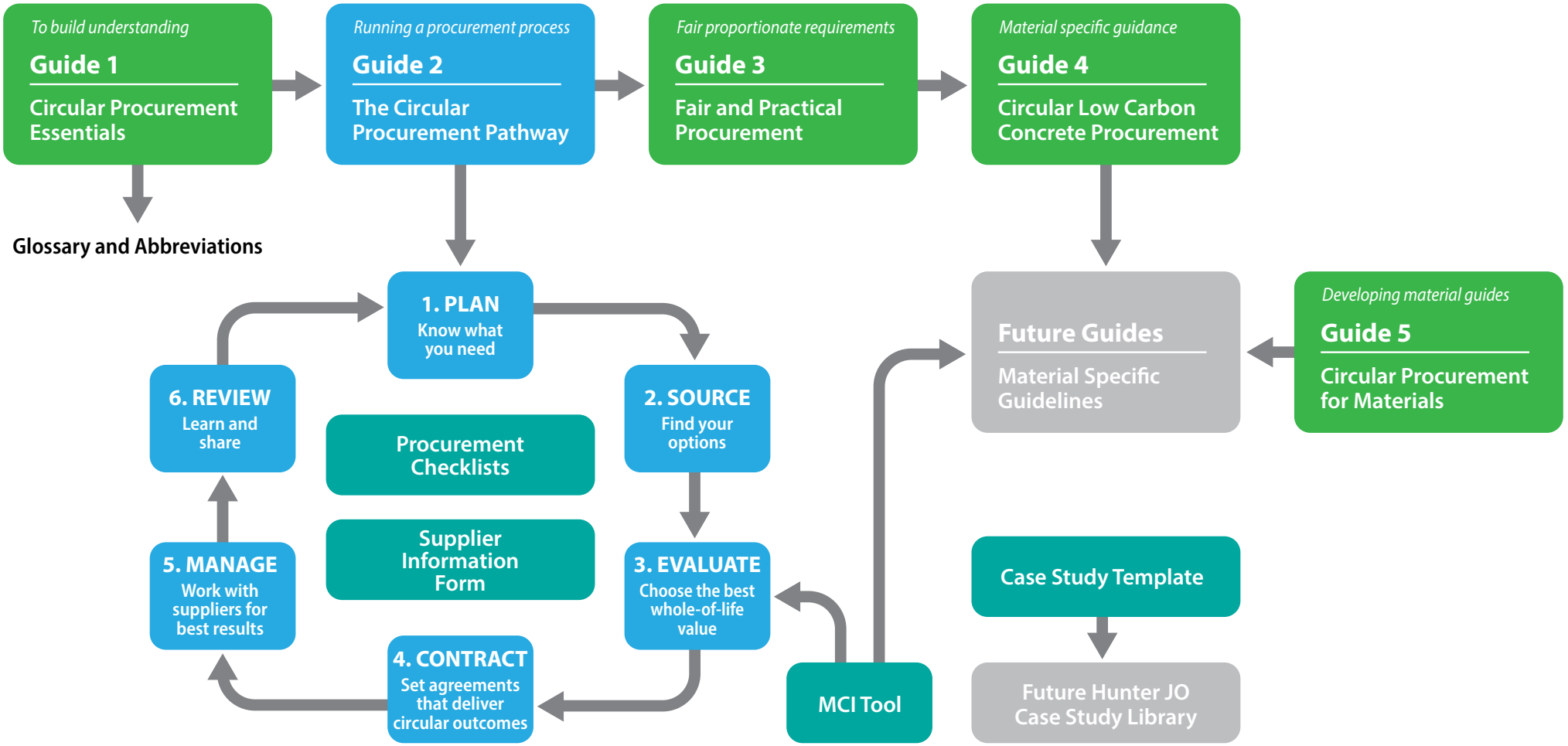
The circular procurement pathway

Guide 2 of 5 of the Circular Procurement Toolkit

March 2026

The Hunter JO Circular Procurement Toolkit

This is **Guide 2** of the Toolkit. You can use this guide to run a procurement process.
The visualisation below shows how Guide 2 fits into the rest of the Toolkit.



The circular procurement pathway

This guide is for council staff involved in planning, buying or managing assets and services. It provides a simple, practical pathway to bring circular thinking into everyday procurement. Circularity should be built into existing procurement workflows.

The guide is organised into six phases that follow a typical council process. Each phase of the procurement cycle offers opportunities to improve value for money, reduce waste, and strengthen local capability.

Use this pathway whenever you start a new procurement process. It will help you avoid unnecessary purchases, choose longer-lasting and repairable options, support local suppliers and reduce waste - all while delivering better value for your community.

The circular procurement pathway at a glance

Phase	What this phase is about	Why it matters for circular outcomes
Phase 1: Plan - Know what you need	Clarify the real need and consider circular options before going to market.	Avoids unnecessary purchases and sets up durability, repair and reuse from the start.
Phase 2: Source - Find your options	Engage the market and write specifications that allow and encourage circular solutions.	Encourages suppliers to offer products with recycled content or repairable, reusable or service-based options.
Phase 3: Evaluate - Choose the best whole-of-life value	Assess tenders using whole-of-life value, not just upfront cost.	Rewards longer-lasting, lower-waste solutions and reasonable evidence from suppliers.
Phase 4: Contract - Set agreements that deliver circular outcomes	Lock in circular commitments through clauses and warranties.	Ensures repair, take-back and performance outcomes are delivered in practice.
Phase 5: Manage - Work with suppliers for the best results	Work with suppliers during delivery to track performance and outcomes.	Prevents waste, improves asset life and builds supplier capability over time.
Phase 6: Review - Learn and share	Learn from what worked and feed insights into future procurement activities.	Strengthens future decisions and supports continuous improvement across councils.

Each phase links to a dedicated section below. You can use the links to jump straight to the phase you need.

Phase 1: Plan – Know what you need

Before you go to market, pause and confirm whether a new purchase is actually needed. Check if existing assets can be reused, repaired or shared, and clarify the outcome you need rather than the product you think you want.

Practical actions

- **Challenge the need:** Check whether a new product is required or if the need can be met another way
- **Apply whole-of-life thinking:** Assess costs and impacts across acquisition, operation, maintenance, repair and recovery
- **Consider reuse, repair or shared access:** See if existing assets can be repaired, refurbished or shared between teams or users
- **Keep specifications open:** Avoid over-specifying; describe the outcome you need instead of naming a brand or material
- **Set realistic evidence requirements:** Identify what information is genuinely required from suppliers and set evidence expectations that are proportionate to the risk and scale of the procurement
- **Align internally:** Speak early with engineering, sustainability, procurement and contract managers to ensure everyone is on the same page

Council Policy Spotlight

Central Coast Council

Facilitating the achievement of value for money by incorporating total cost of ownership into procurement decisions.

Central Coast – Procurement Policy

In-depth

Evidence requirements based on risk

When setting evidence requirements, consider the risks associated with the procurement activity. This will often be related to the scale of the activity – for example, a simple footpath vs a building development. Assess the risk of the procurement activity against:

- Time
- Cost
- Quality (including technical, emissions and circularity issues)

Low risk will mean that lower-level expectations can be set that are proportionate to the risk. Higher risk will mean that greater assurance is needed through more rigorous evidence requirements. See Guide 3 for detail on fair and proportionate procurement.

Questions to ask

- *What outcome do we actually need (e.g., lighting levels, durability, safety)?*
- *Do we already have something that can do this job?*
- *Can this asset be repaired or refurbished instead of replaced?*

Helpful tools and further information

- Guide 1**: Circular procurement essentials:** Understand circular principles and options before planning a purchase
- Procurement checklist: Quick prompts to challenge need and promote reuse and whole-of-life thinking
- Guide 3**: Fair and practical procurement:** Guidance on setting proportionate evidence expectations early

Engage First Nations Peoples early

Where possible, involve First Nations Peoples at the planning stage. Their knowledge and perspectives can guide long-term stewardship, material choices, land connection, and the way assets support Country over their lifetime. Early engagement also helps ensure procurement reflects cultural values and local context.

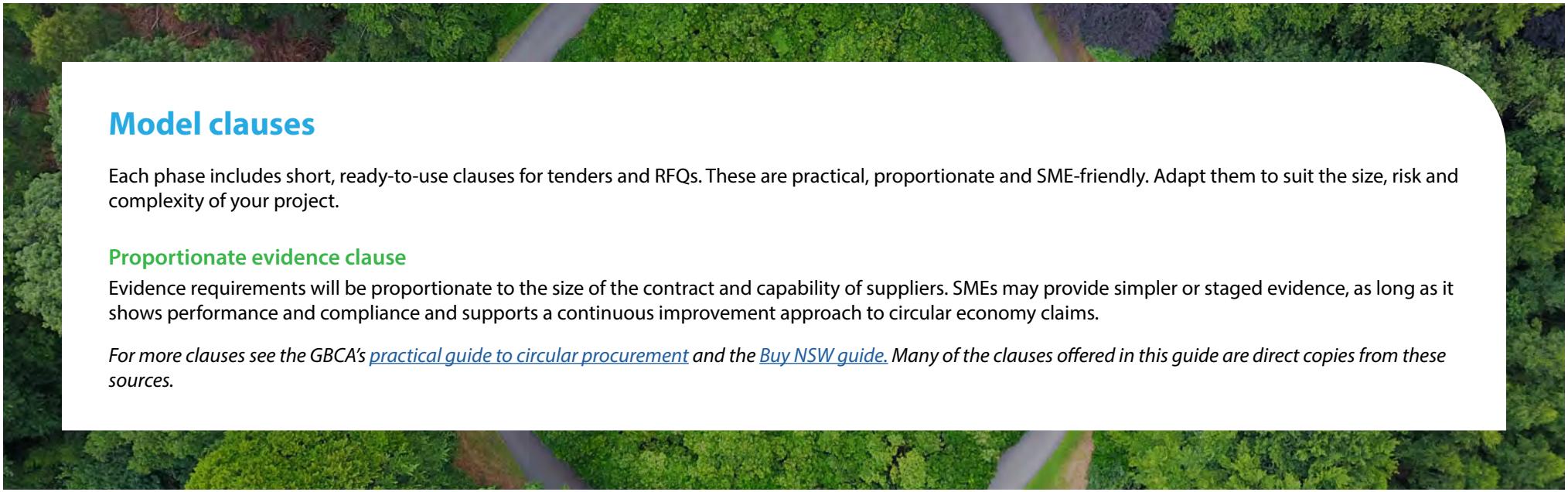
Council Policy Spotlight

MIDCOAST council

A robust sustainable procurement approach would see sustainable services and goods sourced on a whole-of-life cost basis, which will tend to favour efficiency and lower lifetime cost.

Similarly, contractors and suppliers who are sustainable in their own operations are likely to have lower, not higher costs.

MidCoast – Climate Action Strategy



Model clauses

Each phase includes short, ready-to-use clauses for tenders and RFQs. These are practical, proportionate and SME-friendly. Adapt them to suit the size, risk and complexity of your project.

Proportionate evidence clause

Evidence requirements will be proportionate to the size of the contract and capability of suppliers. SMEs may provide simpler or staged evidence, as long as it shows performance and compliance and supports a continuous improvement approach to circular economy claims.

For more clauses see the GBCA's practical guide to circular procurement and the Buy NSW guide. Many of the clauses offered in this guide are direct copies from these sources.

Phase 2: Source – Find your options

Focus on the outcomes you want to achieve and allow flexibility in how suppliers deliver them. Engage suppliers early to understand what circular options are available and provide opportunities for suppliers to engage and investigate more circular options. Ensure requirements are achievable for regional suppliers and SMEs where appropriate to the level of risk. Keep the door open to other sources of stakeholder value and to the widest range of solutions.

Practical actions

- **Write outcome-based specifications:** Focus on performance (e.g., lifespan, repairability, reused content) not product type
- **Engage early with suppliers:** Investigate what circular options exist and clarify feasibility before the tender goes live. Ask suppliers where they see opportunities to deliver outcomes in a better way
- **Make participation fair for SMEs:** Allow flexible evidence, avoid mandatory certifications if not needed and consider support mechanisms to enable SMEs to compete and upskill. Find more information in Guide 3
- **Avoid over-prescribing:** Do not specify a single circular solution; let suppliers propose the best approach
- **Align with NSW guidelines:** Consider guidelines such the Department of Climate Change, Energy, the Environment and Water's Low Carbon Specifications, while not disadvantaging suppliers with developing data

Council Policy Spotlight

SINGLETON COUNCIL

Council will ensure that the environmental performance of goods and suppliers is considered by adopting criteria linked to the principles of ESD:

- purchasing in accordance with the waste hierarchy - prevent, reduce, reuse, recycle and recover
- considering the desirable life of the product
- developing and sustaining markets for sustainable products and services....

Singleton – Procurement Policy

In-depth

Prescriptive vs performance-based specifications

Prescriptive specifications state exactly what product or material must be used. They provide certainty and reduce risk because the solution is known and tested.

Performance-based specifications describe the outcome required, such as durability or lifespan. This allows suppliers to offer innovative and more circular solutions.

Performance-based approaches can reduce material use, support repair and reuse and promote innovation. However, councils must manage risk by ensuring all proposed solutions meet technical, safety and durability requirements and are properly tested or verified.

Questions to ask

- *What circular solutions are available in the market now?*
- *Do circular solutions match or exceed safety and performance of traditional solutions?*
- *Can suppliers offer repair, reuse, refurbished products or take-back services?*
- *Are our requirements achievable for regional suppliers and SMEs?*
- *Are we unintentionally blocking innovation by specifying too narrowly?*
- *Where are opportunities to deliver more value by doing things differently?*

Helpful tools and further information

- Guide 3**: Fair and practical procurement:** Outcome-based specification tips and SME-friendly sourcing
- Supplier information form: Use for early market engagement or RFQs to test circular options
- ASPIRE – Industrial Symbiosis Marketplace: Matches surplus materials from councils and businesses with organisations that can reuse or repurpose them
- NSW EPA – Product Stewardship Schemes: The NSW EPA maintains a list of mandatory and voluntary product stewardship schemes operating in NSW, including schemes for electronics, batteries, paint and other priority products

Council Policy Spotlight

Lobby Local Government Regional Procurement to give Local Governments freedom to undertake direct invitation tenders with suppliers that have particularly strong sustainability credentials and expertise.

Upper Hunter – Sustainability Action Plan

In-depth

Supporting regional businesses

Where early market engagement is not possible, councils can still build regional supplier capability outside of live tenders.

Regional development teams can provide general information on council procurement processes, typical evidence expectations and circular requirements. This might include explaining acceptable forms of evidence, sharing examples and helping SMEs understand how to progressively improve data and reporting.

These activities would normally occur outside active tenders and remain general in nature.

This approach keeps the process fair, helps local businesses to build their skills, improves the quality of future tenders and supports the regional economy.

Model clauses for tender briefs

Acceptable evidence clause

Suppliers may provide a range of evidence to demonstrate durability, repairability, responsible sourcing, recycled content or end-of-life pathways. Acceptable forms include formal certifications, independent test reports or verifications, service records, sample products, photos, or written declarations.

Suppliers should provide evidence that, at a minimum, includes material sourcing, product use phase and end-of-life management.

Recycled and reused materials requirements

The Supplier must produce a plan to demonstrate how they will optimise the use of recycled and reused material from NSW. It must also explain how the Supplier will endeavour to ensure that use of recycled and reused material from NSW will not compromise quality, safety or create adverse environmental impacts in relation to the Supplier's delivery of Goods and/or Services under the Contract.

"Adverse environmental impacts" are negative environmental impacts that include, but are not limited to, pollution of the air, water or soil, caused by harmful substances within the recycled or reused material.

The Supplier must comply with all relevant requirements and specifications associated with the delivery of Goods and/or Services under the Contract including, but not limited to, the following: (here are some examples, adjust to be relevant for your project)

- Provide quarterly reporting on the percentage (by weight or volume) of recycled and reused material used in delivering the Goods and/or Services
- Provide evidence of the source and type of recycled content (e.g. supplier declarations, weighbridge dockets, invoices or third-party certification where available)
- Confirm that recycled and reused materials are free from contaminants that could cause adverse environmental impacts
- Notify Council of any proposed substitutions that may affect recycled content or environmental performance before implementation

Alternative circular design and material optimisation proposals

The tender response may include alternatives where the supplier can provide improved environmental sustainability outcomes, for example, in relation to the use of recycled content, supporting the transition to a circular economy, or reducing greenhouse gas emissions.

Dematerialisation

- Collaborate with stakeholders to reduce material use and specify lighter, space-efficient materials
- Design layouts that use less material without sacrificing space or functionality
- Explore alternative materials with higher strength-to-weight ratios to reduce overall material volume

Design for lifespan

- Design for disassembly to enable efficient reuse, recycling, or repurposing of components at end-of-life
- Select adaptable systems (e.g., MEP, electrical, plumbing) that allow upgrades or expansions without major disruptions to other layers of the building
- Avoid over-engineering to balance durability, material efficiency, and embodied carbon

For more clauses see the GBCA's practical guide to circular procurement and the Buy NSW guide. Many of the clauses offered in this guide are direct copies from these sources.

Phase 3: Evaluate – Choose the best whole-of-life value

Look beyond upfront price. Compare options based on durability, repairability, warranties, maintenance needs and end-of-life outcomes, using evidence that is proportionate to risk and value.

Practical actions

- **Keep expectations for evidence simple and transparent:** State clearly what proof you need and keep this realistic. Find more guidance on proof in Guide 3
- **Assess durability, repairability and recovery options:** Check warranties, spare parts availability, modularity and end-of-life pathways. Use the checklists as prompts
- **Use the Material Circularity Indicator (MCI) tool:** Score options against circular outcomes in the MCI tool
- **Use whole-of-life thinking:** Consider ongoing maintenance costs, lifespan and take-back services
- **Allow staged or alternate evidence:** Let smaller suppliers provide simplified or phased evidence if appropriate. Can procurement be used as an opportunity for them to develop better data and evidence?

Questions to ask

- Does the supplier show how the product can be repaired or upgraded?
- What happens to the product at end-of-life?
- How long is the warranty and what does it actually cover?
- Will spare parts and repair options be available for the lifetime of the product?
- Which option gives the best overall value over its full lifespan?
- Are there opportunities to support local suppliers to improve their data and evidence?

Helpful tools and further information

- **Procurement checklists:** Quick-reference prompts to help apply circular thinking without adding complexity
- **Supplier information forms:** Structured questionnaire to collect consistent information from suppliers on durability, repairability, materials information and end-of-life options
- **Material Circularity Indicator (MCI) tool:** Use to compare circularity performance when materials or products differ significantly

Council Policy Spotlight

muswellbrook shire council

In assessing sustainability, Council must consider procurements on a whole-of-life basis having regard to the relevant supplier's or contractor's ability to: • minimise waste and pollution and maximise opportunities for recycling and reusing products; • prioritise products with longer life expectancies, better durability and options for repair, rather than replacement • outline end-of-life plans including upcycling and resources recovery.

Muswellbrook – Procurement Policy

Phase 4: Contract – Set agreements that deliver circular outcomes

Use the contract to lock in what matters. Clearly define responsibilities for repair, maintenance, take-back and reporting so circular commitments are delivered over the asset's life.

Practical actions

- **Include repair and take-back clauses:** Specify who is responsible for maintenance and recovery
- **Use performance-based warranties:** Make sure the warranty covers durability and expected performance
- **Support supplier improvement:** Include milestones for developing new circular practices or evidence where relevant
- **Avoid unnecessary certification requirements:** Only require third-party ecolabels that may exclude SMEs where they materially reduce risk

Questions to ask

- *Who is responsible for repairs, maintenance and parts?*
- *Is there a take-back or recovery requirement at the end of life?*
- *Is the warranty linked to performance and durability, not just defects?*
- *Are we unintentionally excluding smaller suppliers?*

Helpful tools and further information

- Guide 3**: Fair and practical procurement**
- Procurement checklists: Quick-reference prompts to help apply circular thinking without adding complexity
- Supplier information forms: Structured questionnaire to collect consistent information from suppliers on durability, repairability, materials information and end-of-life options

In-depth

Governance and handover of circular commitments

In large or staged projects, circular commitments can be lost during handover between planning, design, procurement and delivery teams.

To reduce this risk:

- **Record circular requirements clearly in a procurement plan from the start**
- **Turn commitments into clear, measurable contract clauses**
- **Assign ownership beyond award, typically to the Contract Manager**
- **Actively monitor delivery using agreed metrics (e.g., MCI where relevant)**
- **Review progress regularly with suppliers**

Circular procurement does not end at contract award. It must be managed through delivery and team transitions to ensure commitments are achieved.

Model clauses

Capability-building clause

Suppliers may be asked to improve reporting or circular practices over the course of the contract. Milestones will be agreed collaboratively and proportionately.

No unnecessary certification clause

Certifications will be requested only where they materially reduce risk. Equivalent forms of evidence will be accepted where appropriate.

Product stewardship and take-back clause

The Supplier must demonstrate that it is a member of a relevant mandatory, co-regulatory or industry-led voluntary product stewardship scheme, or alternatively provide details of a take-back scheme for its Goods. (Depending on the good, specify the relevant product stewardship scheme e.g. MobileMuster for mobile phones).

The take-back scheme must meet the following criteria:

- Provide free and accessible take-back for its Goods
- Returned used product is either repaired and resold or dismantled and recycled

The tender response may include alternatives where the supplier can provide improved environmental sustainability outcomes, for example, in relation to the use of recycled content, supporting the transition to a circular economy, or reducing greenhouse gas emissions.

Contract requirements for circular design

Suppliers should provide evidence that, at a minimum, includes material sourcing, product use phase and end-of-life management.

The Supplier hereby acknowledges that a primary consideration for the design and manufacture of the Goods is to ensure, as far as is reasonably possible, that the Goods can be reused, repaired and/or recycled at the end of their life.

Contract requirements for EPDs

The Supplier must provide an Environmental Product Declaration (EPD) covering the product/s supplied under the Contract, which should be third-party verified in line with ISO14025 and appropriate Product Category Rules.

For construction contractors: The Supplier must ensure, as far as is reasonably possible, that it uses products with Environmental Product Declarations (EPDs), which should be third party verified in line with ISO14025, and one of the following appropriate Product Category Rules:

i. EN 15804:2012+A2:2019 ii. ISO 21930:2017.

Reuse audit and circular delivery requirements

The supplier/contractor shall:

- ensure elements are procured and delivered to provide the desired circular outcomes in line with the brief
- conduct an audit to evaluate and prioritise the reuse of existing assets, materials, or components. A final report must be delivered to Council as part of the execution of the contract
- inspect and assess existing assets and materials to determine their suitability for reuse in accordance with project requirements and technical specifications
- refer to material banks and marketplaces for secondary products and materials to be incorporated in the project
- submit a detailed plan outlining the intended use of reused and reusable assets or materials, expected benefits (cost, avoided carbon emissions), and compliance with technical, safety, and operational considerations of the project
- seek approval for deviations from circular performance outcomes if materials or products are impractical, unavailable, or cost prohibitive

For more clauses see the GBCA's practical guide to circular procurement and the Buy NSW guide. Many of the clauses offered in this guide are direct copies from these sources.

Phase 5: Manage – Work with suppliers for the best results

Treat contract management as part of circular procurement. Track performance, address issues early and work with suppliers to meet durability, repair and recovery commitments.

Practical actions

- **Track actual performance:** Record repairs, failures and end-of-life recovery outcomes
- **Manage risks early:** Raise issues with suppliers quickly to prevent wasted time, cost or materials
- **Support supplier improvement:** Share feedback and help suppliers meet circular commitments
- **Collect data:** Capture information from your supplier info checklist that will help improve the next tender. e.g., compare the actual circularity achieved with the circularity proposed using the MCI and identify factors to improve future procurement

Questions to ask

- *Has the evidence of required performance (e.g., recycled content, durability testing, etc.) been provided?*
- *Is the amount of waste during construction meeting expectations?*
- *Does the delivered product match the circular commitments made in the tender response?*
- *Were there any substitutions? If so, were they assessed for circular and environmental performance before approval?*
- *Has packaging been minimised and is it being recovered or returned as agreed?*
- *Are there early signs of over-ordering, offcuts or avoidable construction waste?*
- *Are repairs happening within agreed timeframes?*
- *Are failure or damage rates improving?*
- *Are take-back or recycling commitments being met?*
- *What information should feed into the next procurement activity?*

Helpful tools and further information

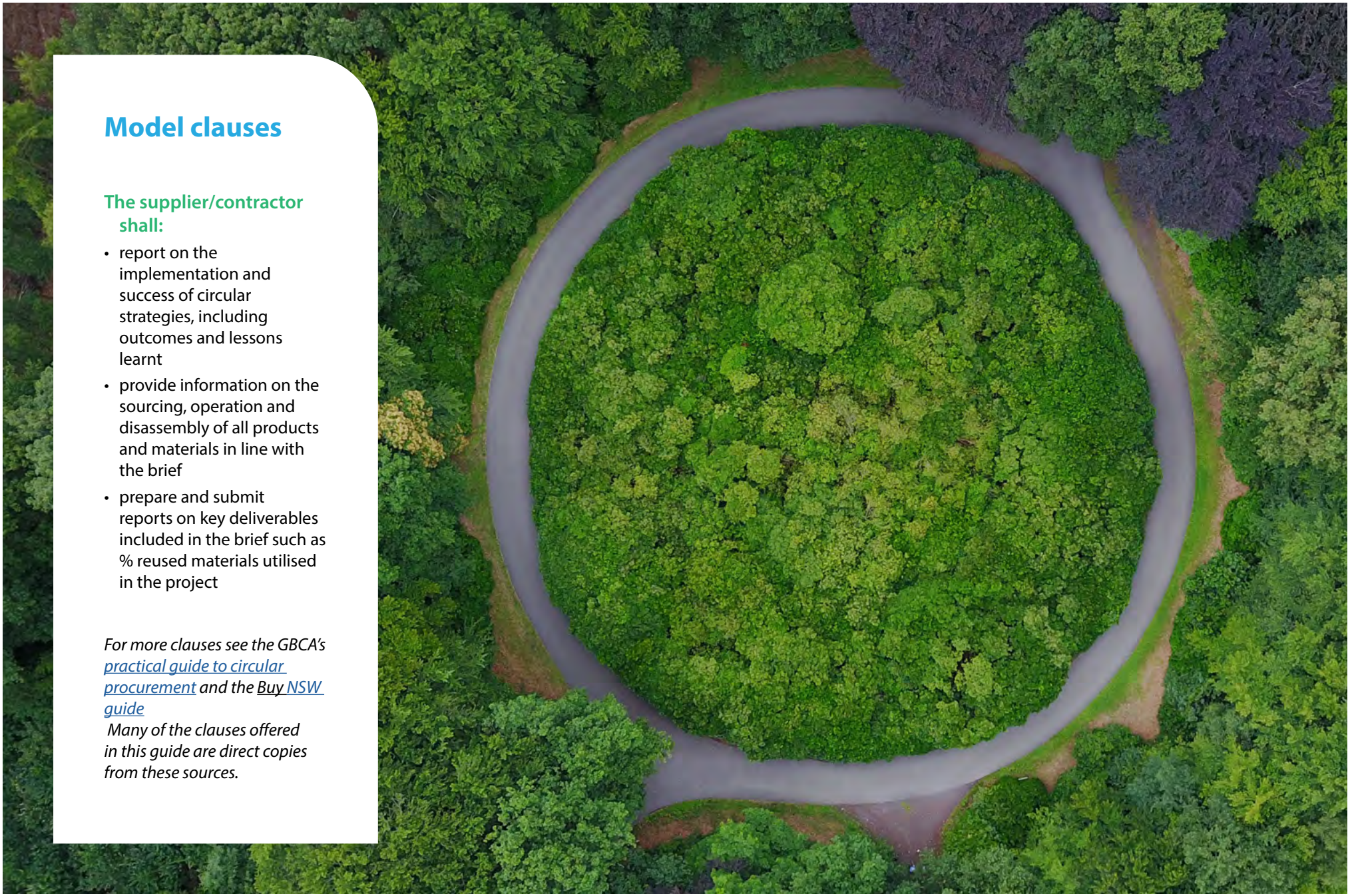
- Supplier information forms: Use as a reference point for what was promised versus what is delivered
- **Product Circularity Data Sheet (PCDS):** Ask suppliers for a PCDS. It is aligned with international standards and best practice, and supports the type of circularity and product data increasingly required in global markets, including for Australian exporters. The MCI Pro includes a PCDS template

Council Policy Spotlight

LAKE MACQUARIE CITY

100% of council tender specifications include recycled, reused and sustainably sourced products, where a functionally and economically viable alternative to new materials is available.

Lake Macquarie – Environmental Sustainability Strategy and Action Plan 2020-2027



Model clauses

The supplier/contractor shall:

- report on the implementation and success of circular strategies, including outcomes and lessons learnt
- provide information on the sourcing, operation and disassembly of all products and materials in line with the brief
- prepare and submit reports on key deliverables included in the brief such as % reused materials utilised in the project

For more clauses see the GBCA's practical guide to circular procurement and the Buy NSW guide
Many of the clauses offered in this guide are direct copies from these sources.

Phase 6: Review – Learn and share

At the end of delivery or contract, review what worked and what did not. Capture lessons learned and feed them into future specifications, templates, case studies and shared council knowledge.

Practical actions

- **Review what worked well and what did not:** Assess outcomes against expectations
- **Ask your suppliers:** Seek similar feedback from suppliers
- **Update your processes:** Feed lessons back into specification, evaluation and contract templates
- **Share learnings with other councils:** Strengthen regional capability and avoid duplicated effort. Share successes as well as constructive learning opportunities
- **Submit case studies:** Help build the Hunter JO case study library by filling in and submitting the case study template

Questions to ask

- *Did the circular strategy deliver the expected benefits?*
- *What would we do differently next time?*
- *What learnings would be useful for other teams or councils?*

Helpful tools and further information

- Case study template: Use the case study template to document lessons learned and share circular procurement outcomes across councils

Council Policy Spotlight

City of Newcastle

The planet we live on has a limited amount of raw materials and limited options to recycle the wastes that we create. Being careful with our planet's resources and looking after their value can maintain the planet's ability to support us in the future. Keeping materials in our economy rather than landfill will benefit our region.

We will invest in global best practices in waste and resource management to catalyse our local circular economy and protect our planet. We will invest and develop our people to collaboratively achieve our vision.

Newcastle – Sustainable Waste Strategy

HUNTER JOINT ORG.

COLLABORATION OF HUNTER COUNCILS

Guide 3

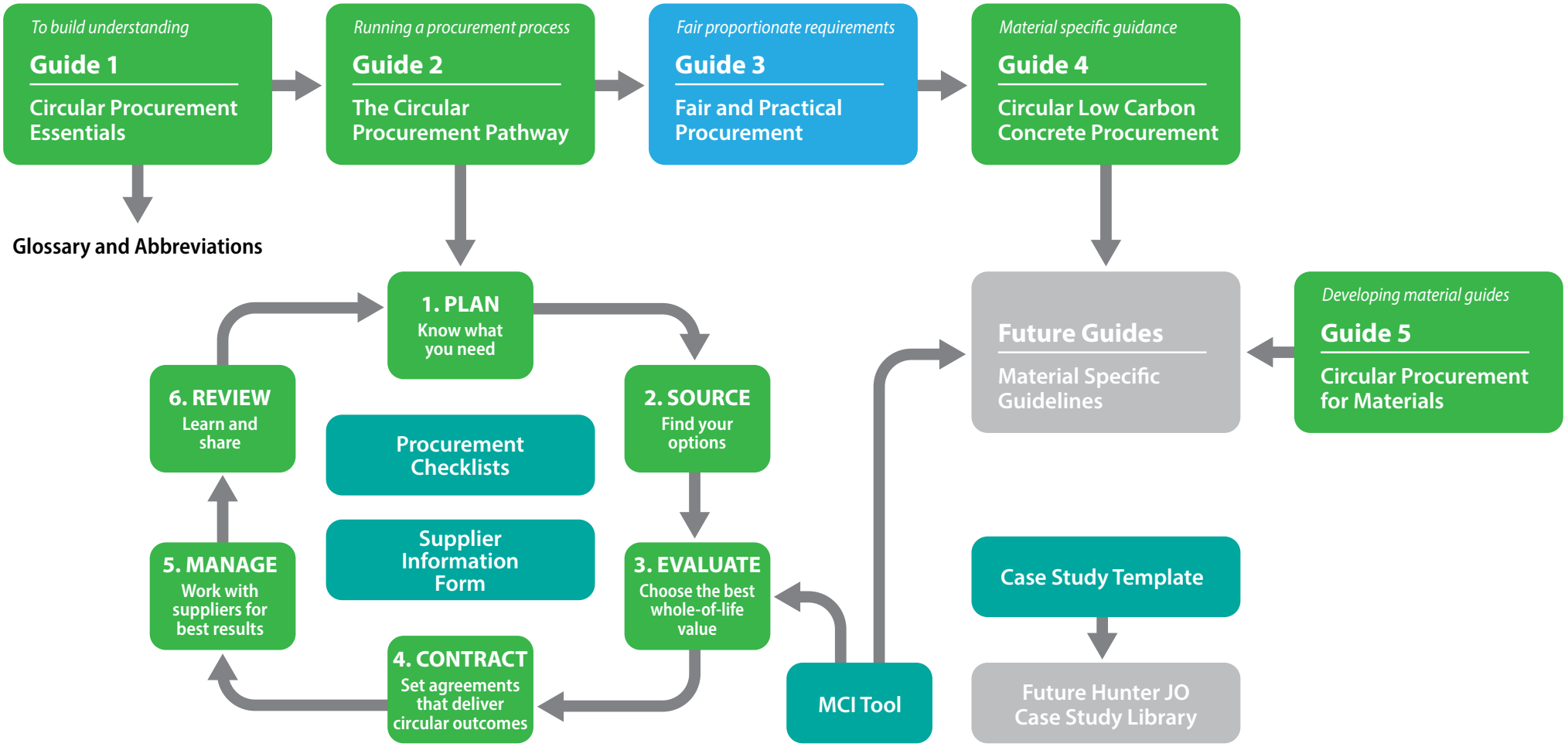
Fair and Practical Procurement

Guide 3 of 5 of the Circular Procurement Toolkit

March 2026

The Hunter JO Circular Procurement Toolkit

This is **Guide 3** of the Toolkit. You can use this guide to ensure fair and practical procurement practices are in place.
The visualisation below shows how this guide fits into the rest of the Toolkit.



Fair and practical procurement

Use this guide whenever you are drafting specifications, planning evaluation criteria or engaging the market.

Circular procurement should be practical and achievable for all suppliers, from large manufacturers with sophisticated reporting systems to small regional businesses with limited resources. This guide helps councils set proportionate evidence expectations, avoid unnecessary barriers, and support suppliers to participate confidently in circular procurement.

The goal is not to lower standards. Instead, it is about keeping requirements fair, asking for the right evidence at the right time, and enabling suppliers to demonstrate circular value in ways that reflect their size and capability and help them prepare for future tenders.

This guide provides:

- guidance on setting the right level of evidence
- a tiered evidence approach suitable for councils
- practical examples of alternative proof that SMEs can provide
- advice on how procurement can stimulate local capability-building

Council Policy Spotlight

Dungog Shire Council has a highly engaged community that is dedicated to transforming its waste management practices and grow its capacity to implement recycling and reuse initiatives. The vision for this Strategy is to continue the positive work progressing towards better waste management and a circular economy.

Dungog – Dungog Waste Strategy

1. Setting the right evidence expectations

Suppliers vary widely in their ability to provide detailed circularity information.
Councils can ensure fair access to procurement by:

Keeping evidence proportionate to risk and value

Proportionate means applying circular procurement requirements that match the scale, risk and influence of the purchase.

In practice, this means:

- **Bigger spend or higher impact** - stronger requirements, for example, major construction or infrastructure projects can justify detailed circularity criteria, supplier reporting and contract clauses
- **Smaller or low-risk purchases** - simpler expectations, for example, minor goods or services may only need basic questions, standard clauses or supplier commitments
- **Focus effort where councils have influence** - use more detailed requirements where the council can realistically shape outcomes, and avoid over-burdening suppliers where influence is limited

Asking for only what is necessary

Unless the procurement risk requires it, avoid requesting:

- unnecessary certifications
- detailed life cycle studies
- extensive documentation

Allowing staged evidence

- Suppliers can provide basic information upfront and more detailed evidence as the contract progresses
- Consider including evidence or data milestones in the contract and budget to support smaller businesses in developing this information

Allowing multiple ways to demonstrate circularity

- Ask for outcomes rather than a specific circular strategy. For example, specifying recycled content may prevent other, more circular strategies from being proposed
- Consider requesting a Product Circularity Data Sheet (PCDS) from suppliers, to help compare different options. More information on PCDS further in this document

Council Policy Spotlight

CESSNOCK CITY COUNCIL

Ensure partnerships are established and secured/ continued to progress the circular economy within the Hunter Region.

Pursue partnerships with local business representatives or associations to educate and adopt sustainable practices such as circular economy, energy and waste reduction while promoting environmental and financial outcomes.

Promote circular economy, energy efficiency and waste reduction initiatives that benefit the business community.

Cessnock – Climate Change Resilience Plan

2. A tiered approach to supplier evidence

This section provides a simple hierarchy to match evidence requirements to supplier capability and contract risk. **Bold items** indicate the recommended minimum for each tier, as appropriate to the type of procurement.

Tier 1 - Basic declarations	Tier 2 - Operational evidence	Tier 3 - Verified evidence
Suitable for low-cost, low-risk procurement. Encourages SME participation. Higher tiers may still apply to large suppliers for the same activity.	**Suitable for medium to higher risk or value procurement. Requires documented evidence of systems and performance. Acts as a stepping stone toward tier 3, particularly for SMEs.**	**Required for high-risk or high-value procurement. May be set as the minimum standard for large suppliers on any contract.**
• **Statement on durability, repairability and expected lifespan (may include samples, photos or client records)** • **List of materials and any recycled or responsibly sourced content (self-declared if necessary)** • **Simple end-of-life plan covering reuse, take-back, refurbishment or recycling**	• **Service or maintenance history** • **Client references** • **Photographs or sample products, components, or refurbishment processes** • **Warranty length and summary of warranty claims or failure data**	• **Environmental Product Declaration (EPDs)** • **Independent test reports, such as NATA (National Association of Testing Authorities) accredited laboratory testing** • **A third-party verified MCI score or circularity declaration** • **Certified recycled content, for example FSC / GECA certification, or a third-party audit and letter of assurance**
• Confirmation of spare parts availability and key replaceable components • Description of any service model, take-back or refurbishment commitment • Brief explanation or diagram showing modularity, disassembly or upgrade pathways • Evidence of past performance where available • Commitment to improve circular reporting during the contract, where relevant	• Basic tracking of repairs, replacements or upgrades • Records showing products returned, refurbished, reused, or redeployed • Describe how products are collected and returned after use, including who organises transport, where they go and what happens to them (reuse, repair, refurbishment or recycling)	• Third-party verification of take-back, refurbishment or remanufacturing schemes • Audited evidence of circular business models or whole-of-life performance *Read on for more detailed information on certification.*

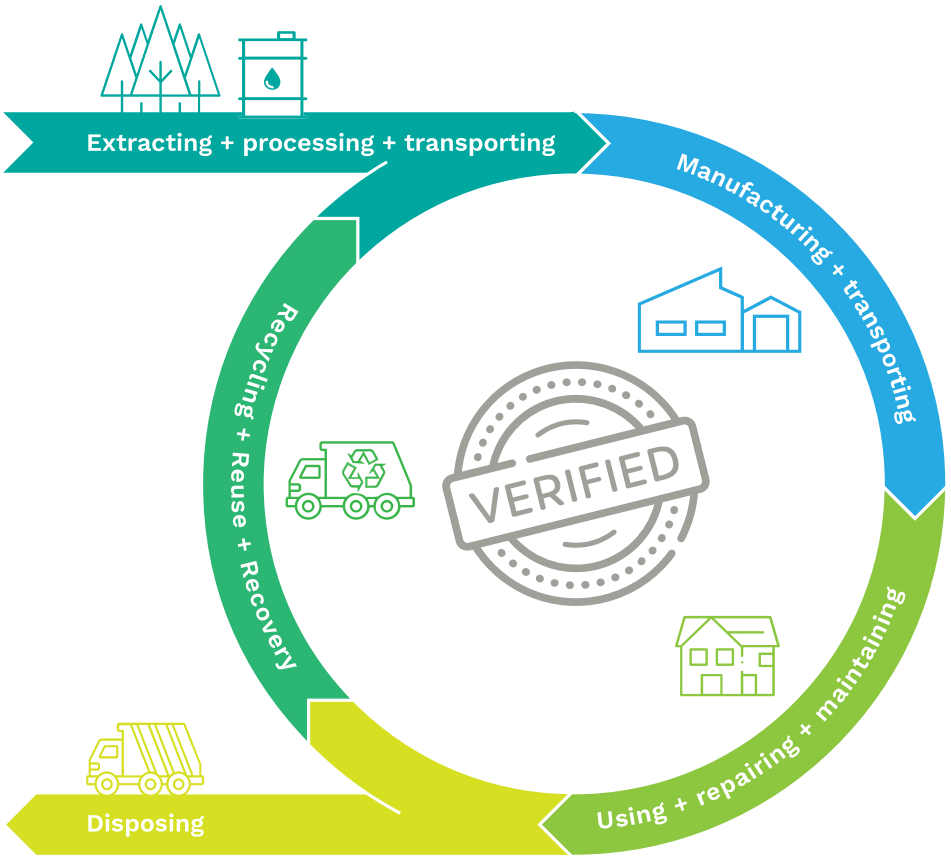
3. Forms of evidence

Environmental Product Declaration (EPD)

An Environmental Product Declaration (EPD) is a standardised, independently verified report that sets out a product's environmental impacts across its life cycle.
It is:

- Based on a Life Cycle Assessment (LCA)
- Prepared according to international standards
- Independently verified
- Publicly available

EPDs are often described as "nutrition labels" for construction products. They present complex environmental data in a consistent format.



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What information does an EPD provide?

For councils, the most relevant indicator is usually:

- Global warming potential (GWP). Reported as kg CO_2e (carbon dioxide equivalent) per unit
- Some EPDs now include circularity information in addition to carbon data, using the MCI

How to check if it is a genuine EPD

- Be published online under a recognised EPD programme such as EPD Australasia
- Be independently verified
- Reference the relevant standard
- In Australia, typically EPD Australasia, EPD International, ECO Platform
- The verifier's name and approval statement must appear in the document
- Usually ISO 14025 and EN 15804 (for construction products)
- Reference a Product Category Rule (PCR)
- A PCR defines:
  - How the life cycle assessment is carried out
  - Which impacts must be reported
  - Which life cycle stages are included
  - How results are calculated

Compare with care

EPDs can only be compared if they follow the same PCR. If two products use different PCRs, the results may not be directly comparable.

Before comparing EPDs, check:

- Same product category (e.g., ready-mix concrete and precast concrete are different)
- Same PCR reference
- Same system boundary (e.g., A1–A3)
- Same declared unit (e.g., per m^3, per tonne, per item)

If these differ, comparisons may be misleading.

How councils can use EPDs in tenders

EPDs can be used to:

Set minimum requirements

- Example: "Tenderers must provide a third-party verified EPD to EN 15804 for all concrete products"

Set performance targets

- Example: "Concrete supplied must demonstrate a cradle-to-gate embodied carbon value (A1–A3) below [X] kg CO_2e per m^3"

Compare submissions

- Use the GWP value from verified EPDs to evaluate bids consistently

Support recognised rating systems

- For concrete, Environmental Product Declaration (EPD) data can be used with recognised rating frameworks such as the Global Cement and Concrete Association (GCCA) and Cement Concrete & Aggregates Australia (CCAA) low carbon concrete bands, which are designed for procurement use in Australia. Refer to Guide 4: Circular low carbon concrete procurement for more information

Product Carbon Footprints (PCFs)

A Product Carbon Footprint (PCF) reports the greenhouse gas (GHG) emissions associated with a product during its life cycle. Unlike an EPD, a PCF focuses only on climate change impacts, not the full range of environmental indicators. A PCF uses 'carbon' as shorthand for the many greenhouse gases that cause climate change, and express impacts as carbon dioxide equivalents (CO2-eq). PCFs are commonly prepared to ISO14067 or PAS2050 standards.

PCFs:

- Are generally simpler and less costly to produce than an EPD
- May be developed using streamlined calculation or estimation methods
- Do not require independent third-party verification under ISO 14067 or PAS 2050

For some suppliers, especially SMEs, a PCF can be a practical first step toward more detailed reporting.

Feature	Environmental Product Declaration (EPD)	Product Carbon Footprint (PCF)
Scope of impacts	Multiple environmental impacts (e.g. global warming potential, resource use, water, waste)	Climate change impacts only
Standards	Typically ISO 14025 and EN 15804 (for construction products)	Typically ISO 14067 or PAS 2050
Product Category Rule (PCR)	Must comply with a defined PCR	May follow or be aligned with a PCR, but not always required and not comparable unless it complies with the PCR
Independent verification	Mandatory	Not mandatory under ISO 14067 or PAS 2050
Cost and complexity	Higher cost and more detailed	Generally simpler and lower cost
Typical use in procurement	Preferred for high-value or high-risk procurements	May be acceptable for lower-risk procurements or where EPDs are not yet available

When can PCFs be compared to EPDs?

PCFs are only comparable to EPD data in limited circumstances. A PCF may be comparable to an EPD if:

- it has been verified in compliance with the EPD standard EN 15804, and
- it follows the same PCR and system boundaries as the EPD data being compared

If a PCF is only described as "aligned with" a PCR, it has not been independently verified to follow the same calculation rules and should not be treated as directly comparable to verified EPD results. Refer to "Compare with care" in the EPD section before using PCF data in evaluation.

How councils can use PCFs in procurement

PCFs can be useful where:

- an EPD is not yet available
- the procurement is lower risk or lower value
- councils want to signal an expectation for carbon transparency

How PCFs fit into the tiered evidence approach

In higher-value or higher-risk procurements, councils should generally prefer third-party verified EPDs. PCFs can provide useful transparency, but must be treated with caution unless independently verified and prepared under the same rules as comparable EPD data.

Tier 1 - Basic declarations	Tier 2 - Operational evidence	Tier 3 - Verified evidence
Suitable for low-cost, low-risk procurement.	Suitable for medium to higher risk or value procurement.	Required for high-risk or high-value procurement.
• A self-declared PCF (to ISO 14067 or PAS 2050) may be acceptable • Councils should confirm system boundaries and life cycle stages included	• A PCF with independent verification is preferred • Evidence of methodology and system boundaries should be provided	• A third-party verified EPD prepared in accordance with ISO 14025 and EN 15804 • PCR with System boundary (e.g. A1–A3) clearly stated

Product Circularity Data Sheet (PCDS)

A Product Circularity Data Sheet (PCDS) is a standardised template for reporting product-level circularity information.

Aligned with ISO 59040, a PCDS typically includes:

- Material composition
- Recycled and renewable content
- Hazardous substances
- Expected lifespan
- Repairability and modularity
- End-of-use pathways (reuse, remanufacture, recycling)

Using a consistent template such as a PCDS helps councils:

- Compare products fairly
- Reduce inconsistent supplier claims
- Support machine-readable and digital reporting

For high-value or strategic procurements, councils may request a PCDS or equivalent circularity data sheet.

Note: The MCI Pro tool (as part of this toolkit) includes a PCDS template.

Council Policy Spotlight

maitland CITY COUNCIL

Procurement decisions will ... incorporate consideration of circular economy principles, such as use of recycled content, designing out waste and pollution and keeping products and material in use for longer.

Maitland – Procurement Policy

Ecolabels

An ecolabel is a trusted, third-party certification that shows a product meets defined environmental and health criteria across its life cycle.

In Australia and New Zealand, recognised ecolabels are considered the current gold standard for verifying sustainability claims in procurement. They provide independent assurance and reduce the risk of greenwashing.

How to ensure a label is credible

Not all labels are equal. Councils should apply due diligence before accepting certification claims.

1. Check if it is third-party certified

The label should be independently verified, not self-declared by the manufacturer.

ISO 14021 – Self-declared Environmental Claims defines requirements for credible self-declared claims and helps identify when claims may be misleading.

2. Review Australian Government guidance

The Australian Government provides guidance on understanding and assessing environmental labels.

3. Check recognition under GBCA's Responsible Products Program

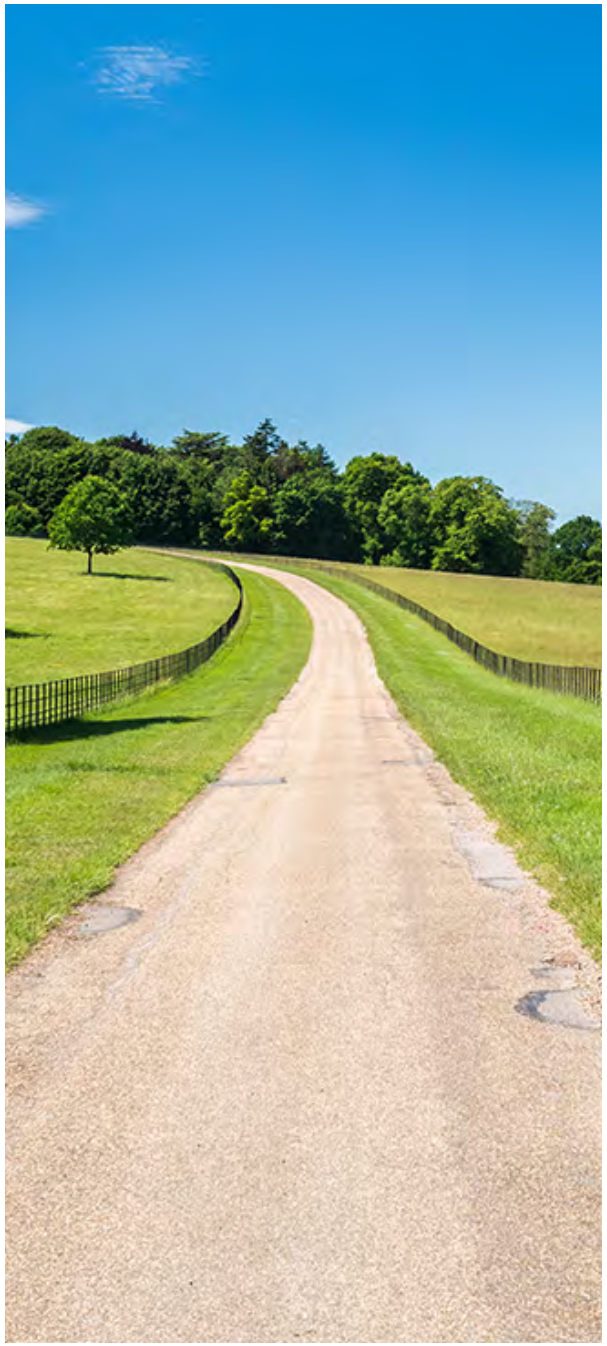
The Green Building Council of Australia (GBCA) assesses certification schemes against rigorous governance and technical criteria under its Responsible Products Program. Each recognised certification is assigned a Responsible Products Value (RPV) score. You can access the score checker with a free online GBCA account.

The higher the RPV, the more comprehensively the certification addresses key sustainability topics such as durability, material health and circularity. Using certifications recognised under this framework provides additional confidence that the label meets strong governance and technical standards.

Before accepting an ecolabel, ask:

- Is it independently certified (not self-declared)?
- Is the certification standard publicly available?
- Does it cover full life cycle impacts or only one attribute?
- Is it recognised by a credible body such as GBCA?

If the answer to these questions is unclear, seek further evidence before accepting the claim.



Recycled content traceability

The Australian Government has developed a National Framework for recycled content traceability to improve confidence in recycled content claims.

Where recycled content is a key evaluation criterion, councils may request:

- Documentation aligned with this framework
- Chain-of-custody evidence
- Third-party audits where proportionate to risk

Traceability requirements should remain proportionate to contract value and supplier capability.

Digital Product Passports (DPP)

Digital Product Passports (DPPs) are emerging tools that provide structured, digital information about a product's:

- Material composition
- Environmental impacts
- Circularity metrics
- Repair and maintenance instructions
- End-of-life pathways

The Ecodesign for Sustainable Products Regulation (ESPR) requires a DPP for various product categories sold in the EU. Where available, councils may accept DPPs as a source of:

- Verified product data
- Circularity information
- Traceability and compliance documentation

Over time, digital and machine-readable product data will reduce administrative burden and improve transparency in procurement.

4. How procurement can help suppliers build capability

Councils can strengthen the regional circular economy by supporting suppliers both outside and within tender processes.

1. Outside the tender cycle (general capability-building)

These activities normally occur outside live tenders and remain general in nature.

Councils can:

- Signal upcoming circular requirements early so suppliers can prepare
- Provide example forms, templates and guidance ahead of tender release
- Offer pre-tender briefings explaining expectations around durability, repairability and take-back
- Share case studies that showcase successful circular suppliers and approaches
- Provide general education sessions or resources to build understanding of circular procurement
- Offer financial or in-kind support to regional businesses to improve their capability and evidence documentation

This helps local businesses understand expectations, improve their systems, compile evidence and compete confidently in future tenders.

2. Within tender and contract processes (proportionate support)

During procurement, councils can:

- Allow staged or flexible evidence requirements where appropriate
- Accept equivalent forms of evidence, not only formal certifications
- Use contracts to set achievable capability-building milestones
- Share constructive feedback after evaluation to help suppliers improve future bids

This approach maintains fairness and transparency while supporting continuous improvement.

Council Policy Spotlight

Enabling and influencing the circular economy by understanding the full material supply chain creating cradle-to-cradle solutions.
Focused on transforming upstream and downstream material flows to become more circular.
Leverage purchasing power to stimulate local circular economy.

Cessnock – Waste and Resource Recovery Strategy

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Guide 4

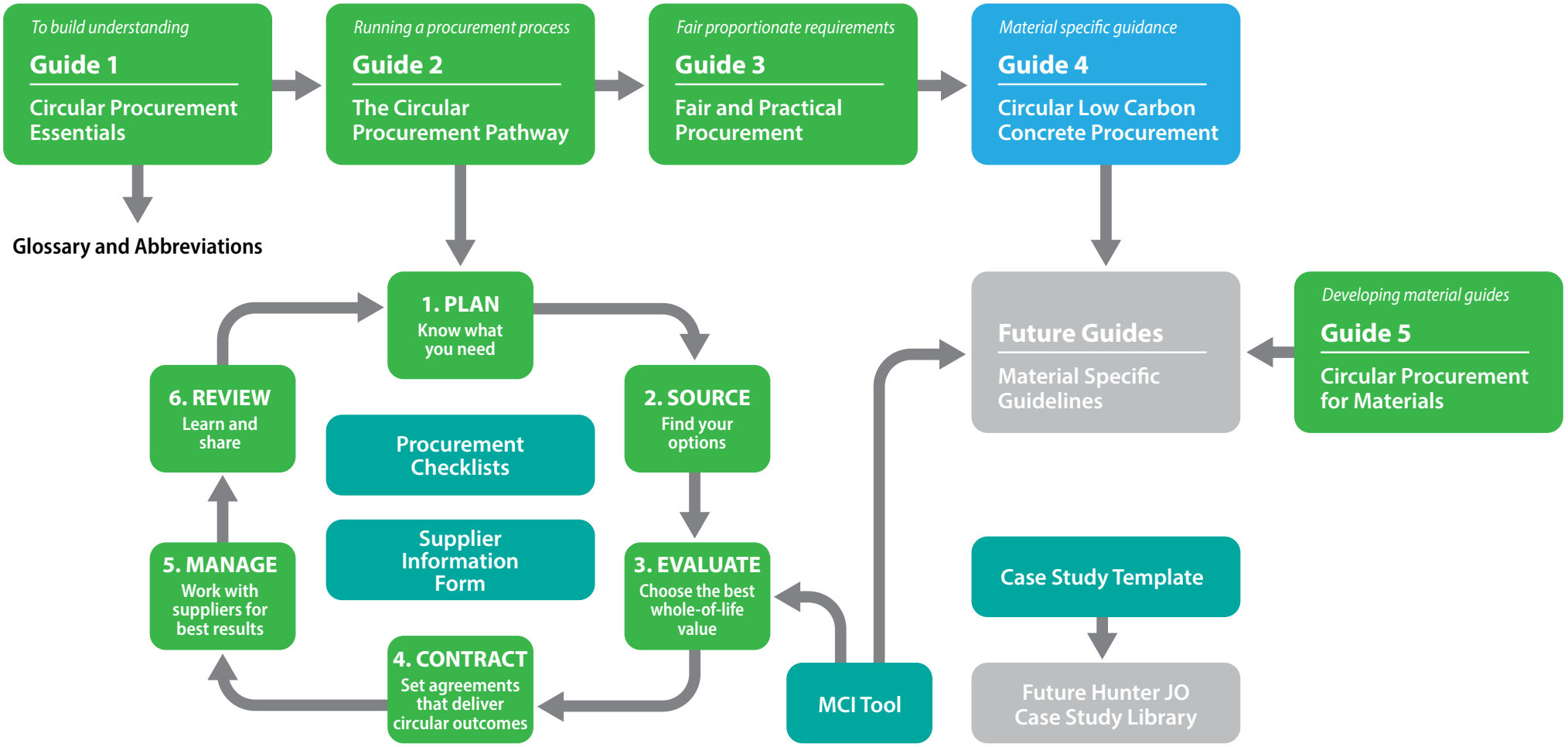
Circular Low Carbon Concrete Procurement

Guide 4 of 5 of the Circular Procurement Toolkit

March 2026

The Hunter JO Circular Procurement Toolkit

This is **Guide 4** of the Toolkit. You can use this guide to procure circular low carbon concrete (LCC).
The visualisation below shows how this guide fits into the rest of the Toolkit.



Circular low carbon concrete procurement

Why concrete matters for councils

Concrete is one of the most widely used materials in council infrastructure. It is also a major source of upfront embodied carbon emissions.

Decisions made today about concrete lock in emissions, costs and maintenance requirements for decades.

By specifying low carbon concrete appropriately, councils can:

- reduce upfront carbon emissions from infrastructure projects
- support circular use of industrial by-products
- manage long-term asset performance and durability
- avoid unintended consequences linked to short-term decisions
- demonstrate leadership without increasing delivery risk

Using low carbon concrete is one of the most practical and scalable actions councils can take now to reduce embodied carbon emissions while supporting circular economy outcomes.

This aligns with:

- **NSW Decarbonising Infrastructure Delivery Policy**, which requires public infrastructure projects to reduce embodied carbon, improve material efficiency and demonstrate life cycle thinking
- **NSW Low Emission Building Materials Guidance**, which frames concrete within broader net zero and waste strategies

Key resources

The NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) has worked with Hunter JO Councils to codesign a Low Carbon Concrete Accelerator Framework (LOCCA) which will provide Hunter JO councils with:

- Awareness, skills and understanding across council staff about Low Carbon Concrete (LCC)
- Content that will enable councils to take action
- Support to pilot LCC in their Local Government Area (LGA)

These documents are signposted throughout Guide 4.

Feature	Description
LCC Carbon Accounting Guide	Guide to assessing the carbon impact of concrete at a project and organisation scale
LCC Comparison	Simple 1 page comparison of traditional concrete and LCC
LCC Frequently Asked Questions	FAQ guide clarifying most frequently asked questions from councils over the last two years of engagement
LCC Myth Busting Factsheet	Addresses myths and perceived risks that are often raised as barriers in council value chains
LCC Policy Update Guide	Guidance for councils in development of policies to support the uptake of LCC
LCC Procurement Checklist	To support councils implement LCC by aligning procurement with NSW Gov processes, and providing clear and practical guidance
LCC Verification and Quality Control Checklist	To provide councils with a structured checklist for verification and quality control for LCC implementation
Low Carbon Concrete Project Data Capture Template	Template for consistent collection of data on concrete for council projects
Opportunities for LCC in Planning Approvals	Report outlining how planning approval processes can accelerate the adoption of LCC
Prioritisation Framework	To provide councils with a structured framework and decision tool for prioritising pilot projects, and including criteria for selection
Specification guide for LCC on council projects	To guide councils in adopting performance-based specifications for LCC

What is low carbon concrete?

Low carbon concrete is concrete designed to reduce greenhouse gas emissions compared to conventional mixes.

Most of concrete's emissions come from cement. Cement production is energy-intensive and releases carbon dioxide through both fuel use and chemical reactions during manufacture.

Low carbon concrete reduces emissions by:

- using less cement
- replacing part of the cement with lower-carbon alternatives
- using recycled or recovered materials where appropriate
- optimising performance so the concrete lasts longer, avoiding future emissions

Low carbon concrete is not a single product. It is a range of mix designs that balance emissions, durability, performance and availability.

How low carbon concrete supports circular economy outcomes

Low carbon concrete contributes to circular economy goals in two main ways.

Reducing demand for virgin materials

- By substituting part of the cement with industrial by-products
- By incorporating recycled materials where this does not compromise performance

Keeping materials in use

- By extending the life of concrete structures through good design and durability
- By avoiding early replacement, repair or demolition

Circularity is not just about recycled content. A concrete mix that lasts longer and performs better over its full life can be more circular than a mix with higher recycled content that needs earlier replacement.

To learn more about the difference between LCC and traditional concrete, refer to DCCEEW's LCC Comparison Table.

Read More

- MECLA guide to low-carbon concrete in Australia
  The MECLA (Materials and Embodied Carbon Leaders' Alliance) guide is an industry-led Australian resource that explains how to specify and use low carbon concrete safely and effectively.
- NSW Low Carbon Concrete FAQs
  A concise NSW Government factsheet addressing common technical, performance and risk questions about low carbon concrete in public infrastructure projects.
- DCCEEW LCC Myth busting factsheet
  A short document with visual aids to provide facts around common myths about low carbon concrete.
- DCCEEW LCC Policy Update Guide
  A guide to support procurement and sustainability teams to update procurement-related policies to incorporate LCC or to create standalone policies on LCC.
- DCCEEW LCC FAQs
  A compilation of frequently-asked questions about low carbon concrete.

What are supplementary cementitious materials (SCMs)?

Supplementary cementitious materials (SCMs) are materials that partially replace cement in concrete.

They are typically by-products from other industrial processes and usually have much lower embodied carbon than cement.

Using SCMs:

- reduces the amount of cement required
- lowers upfront carbon emissions if cement content is not increased
- supports circular use of industrial by-products
- can improve durability and long-term performance

SCMs can be:

- blended into cement at the cement plant, or
- added directly to concrete during batching

Common SCMs used in Australia include:

- Ground granulated blast furnace slag (GGBFS) from steelmaking
- Fly ash from coal-fired power stations
- Silica fume from silicon and ferrosilicon production

Availability of specific SCMs varies by region and supply chains are changing, particularly as coal-fired power stations close. The use of imported SCMs may maintain circularity when more local sources are depleted but can result in a higher carbon footprint due to transport. This aspect should be assessed during procurement and monitored throughout the contract.

Read More

- NSW Supplementary Cementitious Materials factsheet

  A practical NSW Government factsheet explaining common SCM types, their role in reducing cement content and embodied carbon, and key considerations for specification and performance.

- DCCEEW Prioritisation Framework

  A Microsoft Excel document which evaluates opportunities to incorporate carbon reduction and SCMs in concrete structures against defined criteria.

  The matrix is developed to support councils in prioritising projects and elements where LCC may be able to be incorporated.

  This may be used as a tool for prioritisation when selecting a pilot project to trial or when selecting projects/elements to prioritise over a period of time.

Recycled materials in concrete

Concrete can also include recycled materials, such as:

- recycled aggregates from crushed concrete
- reclaimed sand or fines
- recovered materials used in non-structural applications

Recycled materials can support circular economy outcomes by reducing waste and demand for virgin materials. However, they must be used carefully.

Key considerations for councils:

- Recycled content does not automatically mean lower carbon emissions; too much can have the opposite effect
- Quality, consistency and performance matter
- Durability and service life must be maintained

Recycled materials are most appropriate where they:

- are supported by standards or specifications
- are properly designed and applied
- are suited to the exposure environment
- do not compromise long-term performance or carbon emissions
- do not limit the downstream reuse or recycling of the concrete

Trade-offs and performance considerations

Low carbon concrete still needs to meet all structural, durability and safety requirements.

Key performance factors include:

- strength
- exposure classification
- cover requirements
- durability and service life
- constructability and curing time
- resistance to chloride ingress and carbonation

There can be trade-offs between:

- carbon emissions reduction
- recycled content
- early strength gain
- long-term durability

Whatever concrete councils procure, it must be fit for purpose. It must meet the required structural, durability and safety performance for its intended use and exposure conditions. Concrete that requires premature repair or replacement increases embodied carbon, cost and waste over the asset life cycle. Councils should prioritise whole-of-life performance and service life over single metrics such as upfront carbon or recycled content.

To ensure LCC achieves both its technical and carbon reduction objectives, DCCEEW's LCC Verification and Quality Control checklist should be followed. This short guide considers different project delivery contexts, including:

- Direct implementation: where the council project team manages and oversees concrete delivery and placement. This involves councils that have concreters working directly for them
- Contracted implementation: where a contractor or subcontractor is responsible for procuring, producing and implementing LCC in accordance with project specifications. In this context, this checklist contains the required items only for councils

Benchmarks and rating tools

The NSW Government has published Low Carbon Concrete Requirement Guidance to support public sector procurement.

The guidance sets out:

- embodied carbon performance benchmarks for concrete
- percentage reduction targets aligned with NSW decarbonisation goals
- guidance on using EPD data (A1–A3) for comparison
- allowances for regional supply constraints and availability

Councils can reference this document when setting specifications or evaluating tenders to ensure alignment with NSW policy expectations.

Using the NSW benchmarks helps councils set clear, procurement-ready targets without developing their own carbon thresholds.

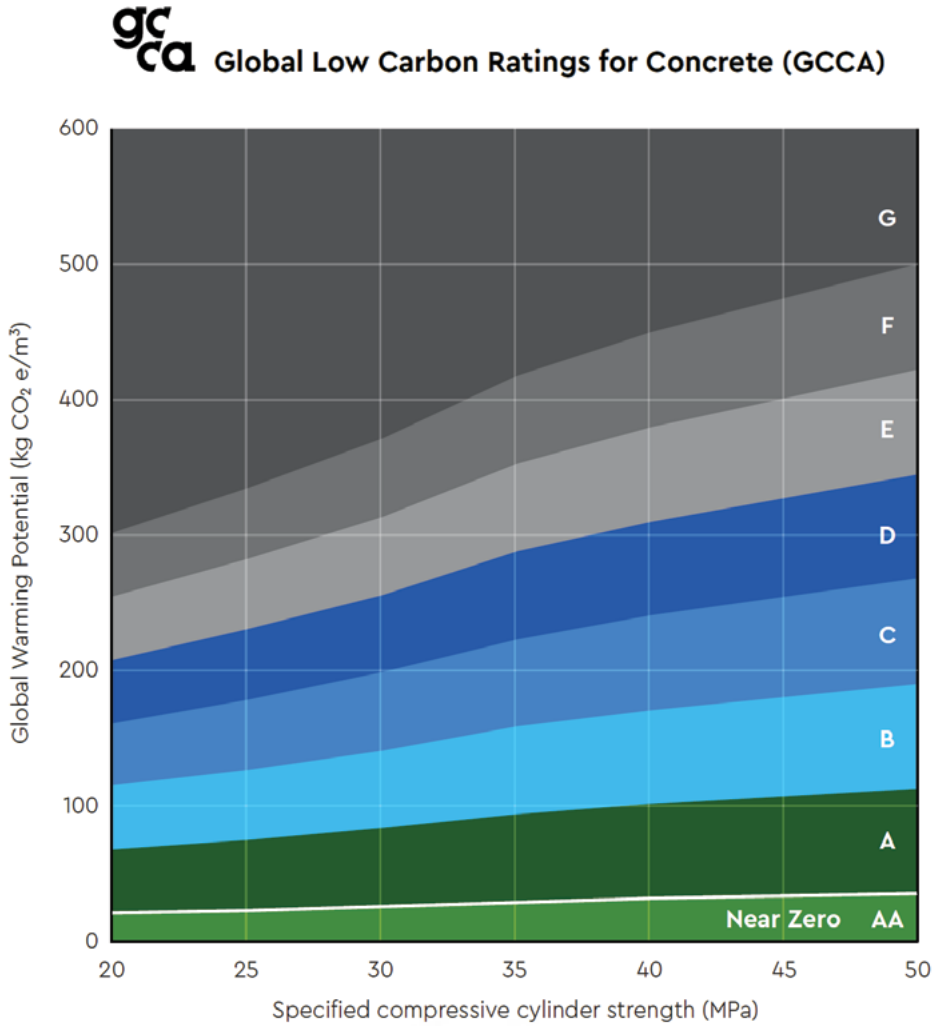
GCCA ratings for low carbon concrete

The Global Cement and Concrete Association (GCCA) ratings classify concrete based on its embodied carbon per cubic metre (kg CO_2e/m^3), as visualised on the right.

In Australia, these ratings have been adopted and extended by Cement Concrete & Aggregates Australia (CCAA) to suit local strength classes and conditions.

The ratings provide a clear, procurement-ready benchmark that allows councils to specify and compare low carbon concrete without developing their own thresholds.

- Ratings are based on EPD data, not marketing claims
- Lower-rated concrete must still meet all durability and performance requirements
- Ratings support fair comparison across suppliers



Procurement guide for Low Carbon Concrete

When procuring low carbon concrete, councils should look beyond upfront carbon metrics and consider how materials are used, maintained and recovered over time. Circular procurement aims to reduce the amount of raw material taken from the environment and minimise waste across the full life of an asset. For concrete, this means focusing on durability, material efficiency and end-of-life outcomes, not just the emissions associated with the initial pour.

We recommend following this guidance alongside DCCEEW's LCC Procurement Checklist.

Focus on material use over time

Circular procurement for concrete prioritises reducing total material demand over the life of an asset. Concrete that lasts longer, performs reliably and needs fewer repairs or replacements will usually use fewer resources overall, even if its upfront carbon reduction is modest. Low carbon concrete can be just as durable as conventional concrete when it is designed to meet the required performance standards.

Consider:

- how long the concrete is expected to last
- how often repairs or replacement are likely
- whether design choices reduce material use and waste year after year

Example: A footpath designed with higher durability concrete that lasts 60 years instead of 40 years avoids future demolition, reconstruction and material use, even if the initial mix is slightly higher carbon than the minimum option.

Encourage recycled and secondary materials where appropriate

Councils should encourage the use of recycled and secondary materials, such as industrial by-products and recycled aggregates, where these meet performance and durability requirements.

This helps to:

- keep materials in circulation
- reduce reliance on virgin raw materials
- support local and regional recovery markets

Prioritise durability and service life

Durability is one of the most important circular outcomes for concrete.

Concrete that lasts longer:

- reduces the need for repairs, replacements and rebuilds
- lowers total material consumption over time
- spreads carbon impacts over a longer service life, reducing impact per year of use

Prioritise mixes and designs that are fit for the exposure environment, such as coastal or high-traffic environments, and intended use, even where this requires balancing early strength, recycled content and long-term performance.

Example: For coastal or high-traffic environments, a more durable or higher strength concrete mix may deliver better circular and carbon outcomes than a less durable or lower-strength option that deteriorates sooner or which leads to earlier reinforcement corrosion and spalling.

Plan for end-of-life from the start

Circular procurement means considering what happens to the concrete at the end of its life, not just during construction.

Design and procurement decisions should:

- support future reuse or recycling of concrete
- avoid mixes or composite designs that make recovery difficult
- enable crushing and reuse as aggregate where possible

Clear records of materials used are critical for future recovery, reuse and recycling.

Example: Avoiding unnecessary additives or bonded composite layers can make future crushing and reuse of concrete simpler and more cost-effective.

Avoid over-prescription in performance specifications

Performance-based specifications should define what the concrete needs to achieve, not limit how suppliers deliver it.

Avoid setting unnecessary constraints that restrict circular outcomes. For example, specifying a maximum percentage of supplementary cementitious materials (SCMs) may unintentionally prevent suppliers from proposing higher SCM mixes that still meet strength and durability requirements.

Well-designed performance specifications:

- focus on required strength, durability class and service life
- align with Australian Standards and exposure conditions
- allow suppliers flexibility to optimise mix design
- keep the door open to more circular and lower-carbon solutions

The goal is not to define what "circular" must look like, but to state the intended level of circularity that is being sought as a minimum (e.g. 80% circular), to clearly state the performance outcome and allow suppliers to propose the most effective way to achieve it.

Example: Rather than prescribing cement content or SCM limits, specify the required structural performance and durability parameters. This enables suppliers to use higher SCM content or other innovations where suitable.

DCCEEW's Specification Guide for LCC on Council Projects should be used to update technical specifications and drawings to integrate LCC requirements. The guide facilitates the transition from prescriptive specifications to performance-based approaches, aligning with broader sustainability goals within industry.

Engage suppliers early

Low carbon and circular concrete solutions may require early planning and validation.

Councils should engage suppliers as early as possible to:

- understand what materials are available locally
- confirm lead times for SCMs and recycled materials
- allow time to validate performance and supply reliability

Allowing more time can lead to better outcomes and reduce delivery risk, particularly where solutions are not yet mainstream.

Read More

- Transport for NSW Register of Materials

  A publicly available register of pre-approved materials and products for use on Transport for NSW projects, including technical requirements and compliance conditions.

- DCCEEW Opportunities for LCC in Planning Approvals

  A report which outlines how planning approval processes can accelerate the adoption of LCC, which presents a significant opportunity for local councils to reduce the carbon footprint of construction projects.

Require material traceability and records

Councils should require clear records of the materials used in low carbon concrete, including:

- concrete grade and quantities
- concrete mix designs and performance requirements.
- sources of SCMs and recycled materials (where possible)

This information:

- helps verify circular outcomes
- supports future reuse and recycling
- improves future procurement by showing what works and where improvements can be made

Example: Keeping mix and material records makes it easier for future projects to reuse crushed concrete or assess suitability for recycling.

Councils should record data using DCCEEW's LCC Data Capture Templates when adopting LCC on council projects.

Treat carbon as an important co-benefit

Circular procurement for low carbon concrete treats emissions reduction as an important co-benefit, not the only objective.

Lower emissions often result from:

- using fewer materials
- increasing durability
- keeping resources in circulation

However, circularity, cost and carbon do not always move in the same direction. Councils should consider these factors together, using a whole-of-life and risk-aware approach when making procurement decisions.

Example: A concrete mix with slightly higher upfront emissions may deliver better long-term outcomes if it lasts longer, uses fewer materials overall and avoids future replacement.

Read More

- DCCEEW LCC Accounting Guide

  A guide which helps councils understand how choices to utilise LCC connects to emissions reporting requirements, sustainability schemes and broader decarbonisation goals.

Using the MCI tool to make decisions

This chapter explains how the Material Circularity Indicator (MCI) can be used in council procurement to support low carbon concrete outcomes. It focuses on when the MCI is useful, how to apply it in tenders and evaluations and how to avoid common pitfalls.

What is the MCI and why use it for concrete?

The Material Circularity Indicator (MCI) is a single score that shows how circular a product is, from 0% (fully linear) to 100% (fully circular). It looks at:

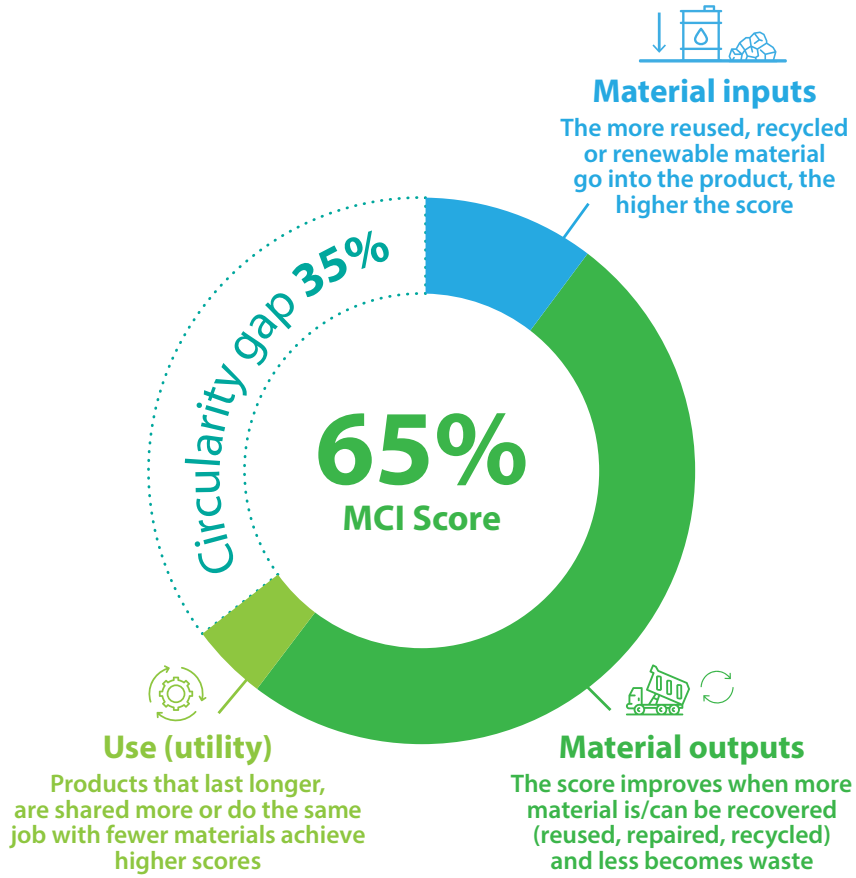
- where materials come from
- how efficiently they are used
- what happens to them at end of life

You can find more information on the MCI in Guide 1 of the Circular Procurement Toolkit.

The MCI does not measure carbon emissions. This is where GCCA ratings come in as a simple indicator. The MCI helps councils understand how material choices and design decisions support circular outcomes, such as:

- reduced use of virgin materials
- increased use of by-products like SCMs
- durability and long service life
- recovery and reuse at end of life

Used together with EPDs and the GCCA low carbon ratings, the MCI adds an extra layer of insight into how concrete performs across its full material life cycle.



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How MCI supports low carbon concrete decisions

Low carbon concrete often relies on circular strategies, such as replacing cement with supplementary cementitious materials or designing mixes for durability rather than minimum compliance.

The MCI helps councils:

- distinguish between concretes with similar carbon footprints but different material profiles
- reward suppliers that reduce virgin material inputs
- encourage long-lasting, well-designed, maintainable solutions rather than short-term optimisation

When to use MCI in council procurement

The MCI is useful when councils want to encourage circular material use or need to compare different circular solutions, e.g. recycled content vs durability.

Verified MCI results are increasingly being published in EPDs and so may already be available for some materials.

Where this isn't the case, MCIs can also be calculated at a preliminary level to provide a good indication of the likely level of circularity of a product based on its design. The **MCI Pro tool** contains typical constituents to enable councils to make their own assessments, which typically takes a few minutes once the information has been assembled.

The MCI can also be useful for target setting and monitoring of outcomes. For example, setting a target MCI provides a useful target for suppliers without limiting solutions in the same way that a recycled content target does.

In-depth

Two concrete mixes achieve the same GCCA carbon rating by using 40% SCM:

- **Mix A uses virgin aggregates and has a standard 50 year design life.**
- **Mix B uses recycled aggregates and includes enhanced detailing giving it an expected 100-year service life.**

Both have similar embodied carbon, but Mix B achieves a higher MCI score due to recycled content and extended service life. Using MCI allows councils to recognise these additional circular benefits.

How to apply the MCI in the procurement process

1. Set expectations early

Signal in early market engagement that circularity matters alongside carbon reduction. This gives suppliers time to prepare data and avoids surprises at tender stage. If possible, use the MCI as a target for suppliers by setting a minimum threshold.

2. Request MCI information proportionately

Councils can ask suppliers to:

- provide a verified MCI score for the proposed concrete mix, or
- conduct a self-assessment and provide supporting information to explain how circular strategies are applied if a formal score is not available

This keeps requirements achievable, especially for smaller suppliers.

3. Use MCI alongside EPDs or Product Carbon Footprint (PCF)

MCI should be assessed together with:

- performance requirements (e.g., compressive strength, chloride/carbonation resistance)
- global warming potential (from EPDs or PCFs) and/or the GCCA rating
- cost (upfront and whole-of-life)

This ensures circularity does not come at the expense of asset life, safety or emissions.

4. Evaluate comparatively, not absolutely

There is no single "good" MCI score for concrete. Councils should:

- compare scores between functionally equivalent options
- look for improvement relative to standard practice
- reward transparency and credible data
- look for supplier commitments to continuous improvement
- allow time to validate performance and supply reliability

5. Build learning into contracts

For longer-term contracts, councils can:

- require suppliers to track MCI over time
- encourage gradual improvement rather than immediate best-in-class performance
- use results to inform future specifications

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Guide 5

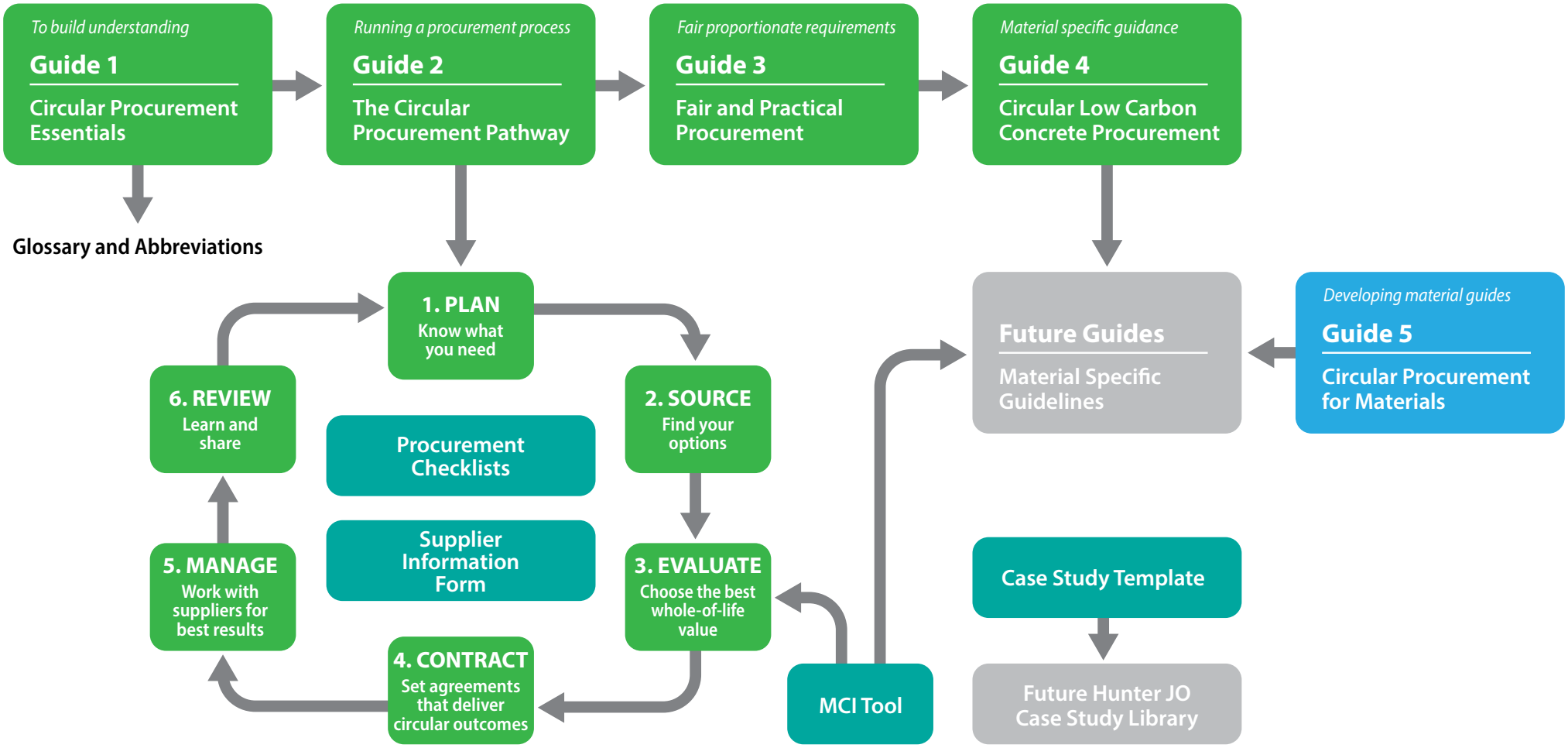
Circular Procurement for Materials

Guide 5 of 5 of the Circular Procurement Toolkit

March 2026

The Hunter JO Circular Procurement Toolkit

This is **Guide 5** of the Toolkit. You can use this guide to help to develop other procurement guides similar to Guide 4: Circular low carbon concrete procurement.
The visualisation below shows how this guide fits into the rest of the Toolkit.



Circular procurement for specific materials

This guide establishes the standard framework for developing future material-specific modules within the Hunter JO Circular Procurement Toolkit.

Guide 4 Circular low carbon concrete procurement demonstrates how a high-impact material can be addressed through clear explanation, performance considerations and practical procurement guidance. As councils seek to apply circular procurement principles to other materials, a consistent structure is needed to ensure future guides are coherent, proportionate and aligned with the Toolkit. Guide 5 provides that structure.

It sets out the recommended format, core sections and guiding questions to support the development of additional modules — whether for asphalt, steel, timber, lighting, pipes, street furniture or other materials relevant to council operations.

This guide is not a technical manual for any specific material. Instead, it is a framework for developing future material guides in a way that:

Aligns with the structure and tone of Guide 4

- Maintains consistency across the Toolkit
- Remains practical and proportionate
- Supports SME and regional supplier participation
- Integrates whole-of-life and circular economy thinking

Concrete is relatively complex and supported by established benchmarks, rating systems and national policy alignment. Not all materials will require the same level of technical depth. This guide supports adaptation, ensuring consistency of approach while allowing flexibility in detail.

All future material modules should follow the structure outlined in this guide unless there is a clear reason to deviate.

The objective is to create material guidance that is clear, usable and directly applicable to council procurement decisions.

How to develop a new material guide

This section provides a practical, step-by-step process for developing a new material guide based on the approach used in Guide 4.

Step 1: Confirm the material warrants a guide

Before developing a new guide, confirm that the material:

- Represents significant spend, volume or risk
- Has meaningful circular or carbon implications
- Appears frequently across council projects
- Would benefit from clearer procurement direction

Step 2: Follow the standard module structure

Each new material guide should follow this structure:

1. Why the material matters for councils
2. What the material is (if clarification is needed)
3. How the material can support circular economy outcomes
4. Performance considerations and trade-offs
5. Supporting resources and benchmarks
6. Procurement guidance
7. Use of the MCI tool (if appropriate)

Sections 1, 4 and 6 are essential for all materials. Sections 2, 3, 5 and 7 may be shorter or optional depending on material complexity. This ensures consistency across the Toolkit and familiarity for readers.

Step 3: Identify material-specific circular opportunities

Using the R-strategies framework from Guide 1, identify:

- Where material demand can be reduced
- Where reuse or repair is possible
- Whether remanufacturing or service models exist
- Whether recycled content is viable
- What happens at end-of-life

Prioritise strategies higher in the R-hierarchy before focusing solely on recycled content.

Step 4: Clarify performance boundaries

Ensure guidance clearly explains:

- Relevant Australian Standards
- Structural or durability requirements
- Any known trade-offs
- Warranty implications
- Risks in regional or remote contexts

Circular ambition must remain compatible with compliance and safety requirements

Step 5: Define procurement application

Translate the material context into procurement actions.

For the material, identify:

- What councils should specify
- What suppliers should be asked
- What evidence is proportionate
- Whether benchmarks exist
- Whether model clauses are helpful
- Whether SME-specific flexibility is required

Reference Guide 2 (procurement phases) and Guide 3 (evidence tiers) to ensure alignment.

Step 6: Determine whether MCI is appropriate

Consider whether the Material Circularity Indicator:

- Adds clarity to decision-making
- Is supported by available data (specific data can be added to the tool)
- Is appropriate at product or system level
- Can be applied proportionately

Not all materials will justify MCI application.

1. Why <<MATERIAL>> matters for councils

Every material-specific guide should begin with a clear explanation of why the material is important in a local government context.

Before developing detailed procurement guidance, take a step back and consider why this material deserves focused attention. Not every product or material requires its own guide. This section helps you determine whether targeted guidance will genuinely support better procurement decisions across councils.

This section sets the context. It helps the reader understand:

- Why councils use this material
- Where it appears in assets and services
- Why it presents cost, waste, risk or emissions implications
- What opportunity exists to improve outcomes

Ask:

- Is this a high-spend material across the region?
- Does it represent significant embodied carbon?
- Does it create large waste volumes at end-of-life?
- Is it frequently replaced due to durability issues?
- Is it subject to new regulation or community scrutiny?

This section should translate technical issues into procurement relevance and link directly to council responsibilities such as value for money, asset stewardship, waste reduction and risk management.

Sources & Links

Include links such as:

- **NSW Waste and Sustainable Materials Strategy**
- **Infrastructure sustainability frameworks**
- **Industry associations**
- **Relevant NSW or Commonwealth procurement policies**
- **Published lifecycle studies (if relevant)**

2. What is <<MATERIAL>>?

Not all materials require detailed explanation. Only include this section if clarification will genuinely help procurement teams make better decisions.

Some materials have multiple types, grades or production pathways that influence circular performance. Others have regulatory constraints that limit substitution.

Consider including:

- Basic description of the material
- Common applications in council contexts
- Variants or grades
- Production methods (if relevant)
- Relevant Australian Standards
- Key performance characteristics

For example:

- Steel may vary significantly between primary and recycled production routes.
- Timber may vary by species, certification and treatment.
- Pipes may differ in material (PVC, HDPE, concrete) with different durability implications

Keep explanations short and focused on procurement implications. Avoid turning this section into a technical handbook.

Sources & Links

- Relevant Australian Standards
- Industry guidance documents
- EPD programme operators
- Government technical notes
- Authoritative industry bodies

3. How <<MATERIAL>> can support circular economy outcomes

This section should connect the material to the R-strategies, or the R-hierarchy or pyramid that was introduced in Guide 1.

Start by asking:

- Can demand for this material be reduced?
- Can design choices extend its life?
- Can components be reused?
- Are repair pathways feasible?
- Is recycled content viable?
- What happens at end-of-life?

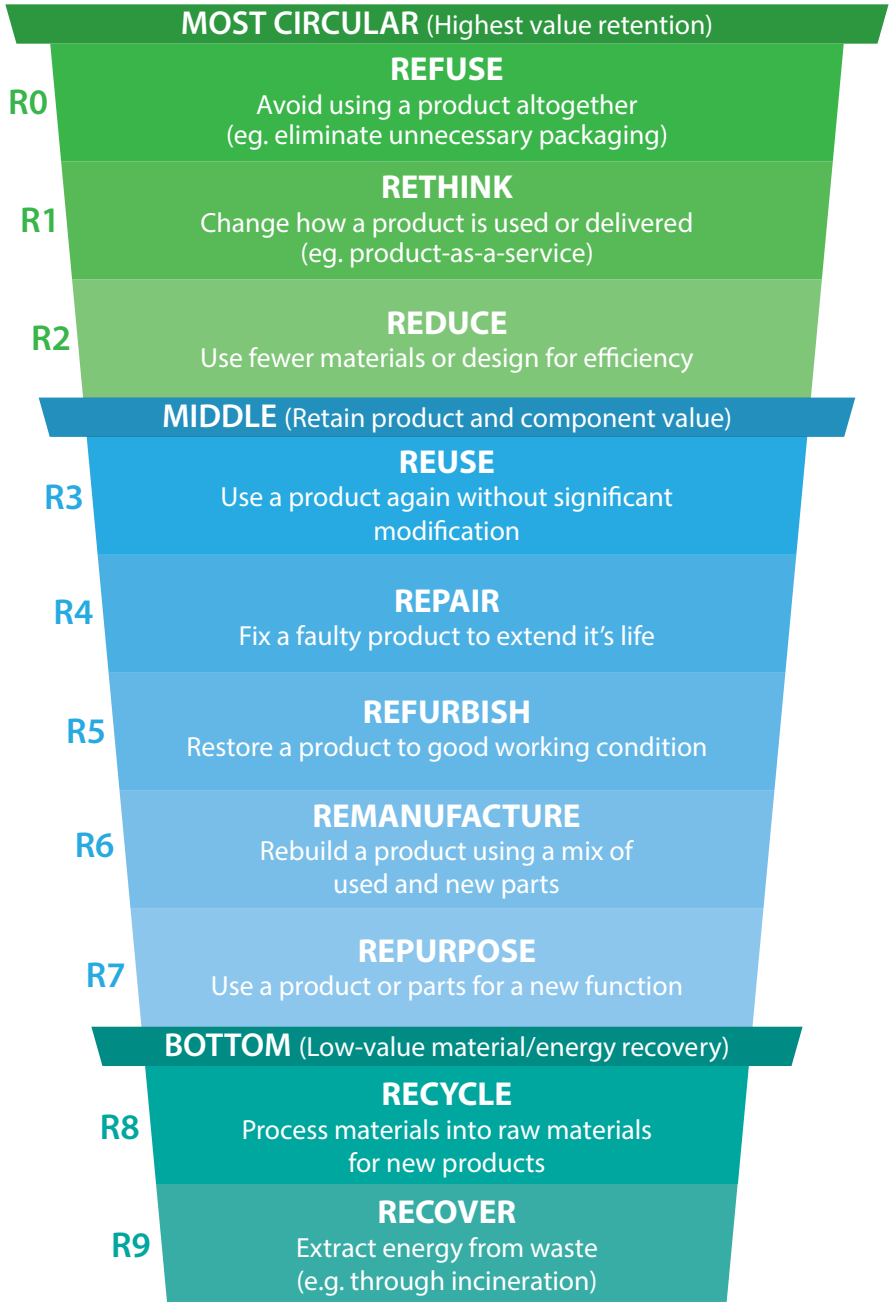
Examples of considerations:

- Refuse or reduce: Can use of the material be avoided or minimised?
- Reuse: Can components be reused or relocated?
- Repair: Can elements be repaired instead of replaced?
- Refurbish or remanufacture: Are there supplier models that support this?
- Recycle: Is recycled content feasible and locally available?
- Recover: Is this only a last resort?

Also consider:

- Availability of circular options in regional areas
- Cost implications
- Market maturity
- Risks of greenwashing
- Compatibility with existing infrastructure

Be transparent about limitations. Not all materials can achieve high circularity in every application.



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4. Performance considerations and trade-offs

Improving circular outcomes must never compromise safety, compliance or long-term asset performance. Before promoting circular options for <<MATERIAL>>, it is important to understand how changes in material composition, recycled content, design approach or recovery pathways may affect strength, durability, maintenance requirements, toxicity, service life or regulatory compliance.

This section helps you identify where circular ambition intersects with engineering reality. It should clearly explain any known trade-offs, practical limitations or standards-based constraints that councils need to consider when specifying the material. In some cases, circular options may enhance performance. In others, they may require careful assessment, testing or staged implementation.

The goal is to provide procurement teams with confidence - showing where flexibility exists, where compliance is mandatory and where specialist advice may be required - so circular decisions are both responsible and practical.

Consider:

- Are there impacts on strength, durability or lifespan?
- Are there toxicity or health considerations?
- Are there maintenance implications?
- Are there standards-based limitations?
- Are there trade-offs between recycled content and performance?
- Are there risks in remote or regional applications?

Be clear about:

- What can safely be varied
- What must comply with standards
- Where councils need specialist advice
- This section should help procurement teams understand where circular ambition meets practical constraints

5. Supporting resources

Material-specific procurement guidance should not attempt to replace existing technical standards or industry expertise. Instead, it should point councils to credible, authoritative resources that support informed and confident decision-making.

This section brings together key references that help councils understand performance requirements, circular opportunities, benchmarks, certification schemes and regulatory expectations related to <<MATERIAL>>. Providing curated and clearly explained links saves council staff time, reduces the risk of misinformation and supports consistent application across the region.

Only include resources that are practical and relevant to procurement. Briefly describe why each source is useful and how it supports decision-making. Where applicable, reference recognised ecolabels, rating systems or benchmarks, and cross-reference Guide 3 for due diligence on certification claims.

The goal is not to overwhelm the reader with links, but to provide a small set of reliable starting points that strengthen confidence and reduce uncertainty.

- Provide short, clearly described links to:
- Authoritative technical guidance
- Industry associations
- Benchmarks or rating systems
- Relevant NSW or Commonwealth policies
- Ecolabels (refer to Guide 3 for due diligence)
- Case studies

Keep descriptions brief. The purpose is to save council staff time.

6. Procurement guidance for <<MATERIAL>>

This section translates the material-specific context, performance characteristics and circular opportunities into practical procurement application.

As in Guide 4, the purpose is not to redesign procurement processes. It is to show councils how to integrate material-specific circular considerations into existing workflows in a proportionate and practical way.

When developing procurement guidance for <<MATERIAL>>, consider the following core questions.

What are the most important considerations for procuring <<MATERIAL>>?

Start by identifying the decisions that most influence outcomes.

These may include:

- Quantity and demand (can use be reduced?)
- Specification approach (performance-based vs prescriptive)
- Recycled or reused content options
- Durability and lifespan
- Repairability and modularity
- End-of-life pathways
- Availability of local suppliers
- Whole-of-life cost implications

Focus on the few procurement decisions that materially affect circular performance. Avoid overwhelming councils with minor technical detail.

Consider the R-strategies

Use the 9R hierarchy to guide procurement priorities.

Ask:

- Can use of the material be avoided or reduced through design?
- Are there reuse or relocation opportunities?
- Can components be repaired or refurbished?
- Are remanufactured options available?
- Is recycled content technically viable and locally available?
- Is recycling realistic at end-of-life?

Prioritise higher-value strategies (refuse, reduce, reuse, repair) before focusing solely on recycled content.

Where relevant, clearly explain practical limitations. Some materials may realistically achieve only modest circular gains in certain applications.

Consider limitations and risks

Be transparent about constraints.

These may include:

- Performance trade-offs
- Compliance with Australian Standards
- Warranty implications
- Health or toxicity considerations
- Availability of recycled inputs
- Market immaturity
- Regional supplier capability

Guidance should help councils understand where flexibility exists and where compliance is mandatory.

Think through the full life cycle

Procurement decisions influence impacts across the entire life cycle:

- Raw material extraction
- Manufacturing
- Transport
- Installation
- Use and maintenance
- Repair or upgrade
- End-of-life recovery or disposal

Encourage councils to consider:

- Expected service life
- Maintenance frequency
- Likelihood of premature replacement
- Disassembly requirements
- Compatibility with local recycling infrastructure

Whole-of-life thinking should inform both specification and evaluation.

Consider the six phases of procurement in Guide 2.

What requirements and evidence are needed?

Align evidence expectations with Guide 3.

Consider:

- What minimum information is required to assess circular performance?
- Are formal certifications necessary?
- Can alternative SME-friendly evidence be accepted?
- Are benchmarks available (e.g., EPDs, rating systems, recycled content verification)?
- Keep evidence proportionate to risk and contract value
- Avoid requiring third-party certification unless it materially reduces risk

Is special guidance for SMEs needed?

Consider:

- Is the market dominated by SMEs?
- Do smaller suppliers have limited formal reporting capability?
- Can staged evidence or improvement milestones be included?
- Are there regional capability-building opportunities?

Material-specific guidance should support fair participation while maintaining standards.

Are specific model clauses needed?

Where helpful, include short, adaptable clauses such as:

- Proportionate evidence clause
- Recycled content or durability clause
- Take-back or recovery clause
- Reporting and improvement clause

Clauses should be practical, clear and proportionate. Cross-reference Guide 3 to ensure consistency.

7. Using the MCI tool for <<MATERIAL>>

The Material Circularity Indicator (MCI) is a practical tool that helps assess how circular a product, component or system is. It provides a single score (0–100%) based on:

- The proportion of virgin versus recycled inputs
- The expected lifespan
- The recovery pathway at end-of-life

In Guide 4, MCI is used to compare different concrete mix designs. For other materials, it can be used in a similar way to compare options where composition, durability or recovery differ.

MCI is not required for every procurement. It is most useful where circular performance is a meaningful differentiator between options.

When to use MCI

MCI may add value where:

- There are multiple design options with different material compositions
- Lifespan varies significantly between alternatives
- End-of-life pathways differ
- Refurbished or remanufactured options are being considered

In many cases, assessing the full asset or system (e.g. a road, lighting system or playground) may be more meaningful than assessing a single material in isolation. MCI should be applied where reliable data is available and where it supports clearer decision-making.

Using MCI in procurement

MCI should support whole-of-life thinking. It can be used to:

- Compare alternative design options
- Test circular improvements during planning
- Inform evaluation
- Track improvement over time

It should remain proportionate. Requiring fully verified MCI scores may not be appropriate for lower-value procurements or SME-dominated markets. Indicative inputs may be sufficient in early stages. MCI is a decision-support tool, not a compliance tool.

In-depth

What MCI 'does' and 'does not' measure

MCI measures:

- ✔ Proportion of recycled vs virgin materials
- ✔ Product lifespan relative to industry norm
- ✔ Recovery and reuse potential at end-of-life

MCI does not measure:

- ✘ Structural or technical performance
- ✘ Safety or compliance with standards
- ✘ Embodied carbon or GWP
- ✘ Toxicity or material health
- ✘ Cost

MCI should always be considered alongside performance requirements, cost and environmental impact indicators such as embodied carbon.

Access to the MCI Tool

Final considerations

Developing material-specific circular procurement guidance is not about creating technical manuals. It is about helping councils make better, more confident decisions within existing systems.

When replicating the approach used in Guide 4, focus on what will genuinely influence outcomes. Not every material requires detailed benchmarking, formal rating systems or complex evidence requirements. The level of guidance should reflect the material's risk, cost, environmental impact and relevance to council operations.

Be realistic about trade-offs. Circular options may improve durability, reduce waste or lower embodied carbon — but they may also introduce constraints, cost implications or data gaps. Good guidance does not oversimplify these issues. It explains them clearly so procurement teams understand both the opportunity and the boundary conditions.

Keep the audience in mind. Council procurement officers, engineers and asset managers need practical direction: what to specify, what to ask suppliers, what to evaluate and what to monitor. Clarity builds confidence. Overly technical language can create hesitation.

It is also important to support regional and SME participation. Guidance should not unintentionally exclude capable suppliers by requiring unnecessary certification or overly complex reporting. Where markets are still developing, consider staged evidence or improvement milestones rather than rigid thresholds.

Finally, use Guide 4 as inspiration, not a template to replicate in full. Some materials will justify detailed benchmarks and structured rating systems. Others may only require a short guidance note with key procurement prompts.

The purpose of this replication guide is to create consistency across future material guides — while allowing flexibility where it is needed. Done well, each new material guide should make circular procurement clearer, more practical and easier to apply across the region.

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Supplier Information Form of the Circular Procurement Toolkit

Supplier Information Form

March 2026

Circular procurement – supplier information form

This form is part of the Hunter JO Circular Procurement Toolkit. It is designed to help councils collect consistent, practical information from suppliers about durability, repairability, materials, circularity and end-of-life options.

When to use this form

Use this form when:

- conducting early market engagement
- issuing Requests for Quote (RFQs) or Requests for Proposal (RFPs)
- evaluating supplier submissions
- confirming contract commitments
- reviewing supplier performance during delivery

It can be used in full for higher-value or higher-risk procurements, or adapted for smaller purchases. Evidence expectations should be proportionate to the size and risk of the contract.

The form helps councils compare options fairly, support SME participation and make better whole-of-life decisions.

Where to find more information

For guidance on how this form fits into the procurement process, see: Guide 2 – **The circular procurement pathway**

For guidance on setting fair, proportionate and SME-friendly evidence requirements, see: Guide 3 – **Fair and practical procurement**

Both guides are available as part of the Hunter JO Circular Procurement Toolkit.

Circular Procurement - Supplier Information Form

(Download a copy of the supplier information form here)

1. Supplier details

Business name: _____

ABN / ACN: _____

Contact person: _____

Email: _____

Phone: _____

Business location and postcode: _____

SME? ☐ Yes ☐ No If yes, list number of employees _____

2. Product or service being supplied

Product name / model: _____

Intended use: _____

Key features: _____

Variants/options: _____

3. Product durability and lifespan

Expected service life (years): _____

Warranty period: _____

What does the warranty cover? _____

What does the warranty exclude? _____

Common failure points and mitigation: _____

Evidence provided: ☐ Durability statement ☐ Test results ☐ Service history ☐ Sample product ☐ Other: _____

4. Repairability and maintenance

Can this product be repaired? ☐ Yes ☐ No

Repairable components: _____

Spare parts availability (years guaranteed): _____

Average repair response time: _____

Cost of typical repair vs replacement: _____

Instructions for repair included? ☐ Yes ☐ No

Evidence provided: ☐ Repair manual ☐ Spare parts list ☐ Photos/video ☐ Declaration

5. Materials and circularity

Primary materials used: _____

Recycled content: ☐ None ☐ Estimated ___% ☐ Verified ___%

Certified responsibly sourced materials: ☐ None ☐ Estimated ___% ☐ Verified ___%

Reused, reclaimed or remanufactured materials? ☐ Yes ☐ No Details: _____

Modular or upgradeable components? ☐ Yes ☐ No Details: _____

Hazardous materials present? ☐ Yes ☐ No Details: _____

6. End-of-life, take-back and recovery

Take-back or recovery offered? ☐ Yes ☐ No

Type of recovery: ☐ Reuse ☐ Refurbish ☐ Remanufacture ☐ Recycle ☐ Compost

Recovery partners or processes: _____

Expected recovery rate (%): _____

Instructions for disassembly provided? ☐ Yes ☐ No

7. Evidence options

- ☐ Simple declaration
- ☐ Material list
- ☐ Maintenance/service records
- ☐ Photos or diagrams
- ☐ Sample product
- ☐ FSC / GECA / other certification
- ☐ EPD or verified environmental claim
- ☐ MCI inputs or score
- ☐ Product Circularity Data Sheet (PCDS)
- ☐ Digital Product Passport (DPP)
- ☐ Other evidence: _____
- ☐ Other evidence: _____
- ☐ Other evidence: _____

8. Social and local capability

Local or regional business? ☐ Yes ☐ No

First Nations-owned business? ☐ Yes ☐ No

Training, repair or local job creation activities: _____

Willingness to build capability over contract? ☐ Yes ☐ No

Details: _____

_____

_____

_____

_____

9. Additional information

Other relevant details (durability, lifecycle, repair, recycled content, recovery)

_____

_____

_____

How will the project contribute to regional development?

_____

_____

_____

Are there any other cultural, social or community benefits associated with this product (e.g., local job creation, repair skills, cultural alignment, reuse initiatives)?

_____

_____

_____

10. Declaration

I confirm that the information provided is accurate.

Supplier name and role: _____

Signature: _____ Date: _____

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Toolkit Checklists of the Circular Procurement Toolkit

Circular Procurement Toolkit Checklists

March 2026

Circular Procurement Toolkit

These checklists are part of the Hunter JO Circular Procurement Toolkit. They are practical, quick-reference tools to help council staff apply circular thinking in everyday procurement without adding complexity or new approval steps.

This document contains two checklists:

- **A one-page checklist for everyday procurement** Use this for routine, low-risk purchases or early market testing.
- **A detailed checklist aligned with the six procurement phases** Use this for medium- to high-value or higher-risk procurements where clearer evidence and stronger commitments are needed.

The checklists are designed for busy procurement officers, engineers, asset managers and project teams. They can be used at planning, sourcing, evaluation, contract management or review stages to prompt better whole-of-life decisions, reduce waste and improve value for money.

For more detailed guidance on how circular procurement fits into council workflows, see: Guide 2 – **The circular procurement pathway**

For guidance on setting proportionate, fair and SME-friendly evidence requirements, see: Guide 3 – **Fair and practical procurement**

Both guides are available as part of the Hunter JO Circular Procurement Toolkit.

Procurement checklist – quick reference

(Download a copy of the procurement checklist here)

Use this checklist for everyday, low-risk or routine purchases. It provides short prompts to help you consider durability, repairability, materials and end-of-life options before buying. It is designed to support better whole-of-life decisions without slowing down procurement. Use it when planning small purchases, requesting quotes or testing the market.

1. Basic product details

- ☐ Product name, model, and intended use
- ☐ Expected service life or durability statement
- ☐ Warranty length and what it covers
- ☐ Compliance with standards, specifications or engineering guidelines

2. Repair and maintenance

- ☐ Can the product be repaired and by whom?
- ☐ Are spare parts available in Australia?
- ☐ Expected repair response times

3. Materials and circularity

- ☐ Does the product contain recycled or reused content?
- ☐ Are materials responsibly sourced (e.g., FSC)
- ☐ Can parts be replaced or upgraded?
- ☐ Is the product recyclable at end-of-life?
- ☐ Is there any material separation required before recycling?

4. Evidence (proportionate to size of supplier)

- ☐ Basic durability statement OR
- ☐ Service history from similar clients OR
- ☐ Relevant certification if available (e.g., FSC, GECA) Find more information on certifications in Guide 3.

5. End-of-life

- ☐ Does the supplier offer take-back or recovery?
- ☐ Are reuse or refurbishment options available?

Detailed supplier information checklist

Use this checklist for medium- to high-value or higher-risk procurements. It aligns with the six phases of the circular procurement pathway and helps you link supplier information to key decision points.

It supports stronger evaluation, clearer contract commitments and better contract management outcomes. Use only the sections relevant to your procurement.

Phase 1 – Plan – know what you need

Do market research and potentially ask suppliers (informally or during early engagement):

- [ ] What circular options exist for this product category (repair, refurbishment, service models, modularity)?
- [ ] What lifespan or durability differences exist between product types?
- [ ] What evidence is reasonable for suppliers of different sizes to provide?
- [ ] Can a local supplier deliver this if supported with clear requirements?
- [ ] Can suppliers explain common failure points and how they can be mitigated?
- [ ] Does the product have design qualities that help it remain valued, usable and aesthetically suitable over its full life?
- [ ] Does the product or service consider insights from First Nations Peoples, such as material choice, durability, stewardship or connection to Country?

Phase 2 – Source – find your options

Product performance and durability

- [ ] Expected service life and warranty terms
- [ ] Maintenance schedule and responsibilities
- [ ] Availability of spare parts and estimated repair times
- [ ] Evidence of durability (test data, reference clients, or service records)
- [ ] Evidence of compliance with relevant standards

Repairability and upgradability

- [ ] List of replaceable components
- [ ] Instructions or diagrams for repair
- [ ] Relative cost assessment of repair vs disposal
- [ ] Ability to upgrade parts (e.g., batteries, electronic modules, hardware)

Materials and chemical profile

- [ ] Main materials used
- [ ] Responsible sourcing certifications (e.g., FSC)
- [ ] Recycled or reused content (estimated or verified)
- [ ] Information on any hazardous materials
- [ ] Safety Data Sheets (formerly known as MSDS)

Reuse, refurbishment, remanufacturing

- [ ] Can components be reused or refurbished?
- [ ] Does the supplier offer refurbishment services?
- [ ] Are remanufactured versions available?

Recovery and recycling

- [ ] Clear end-of-life pathways
- [ ] Take-back programs or recycling partners
- [ ] Disassembly requirements and compatibility with local recovery infrastructure.

Evidence options

Find more information about these in the Circular Procurement Toolkit Guide 3.

- [ ] Estimate or unvalidated claim
- [ ] Project-specific evidence
- [ ] Independently verified evidence and certifications
- [ ] EPD
- [ ] LCA
- [ ] ISO 14021 environmental labels like GECA and GreenTag
- [ ] NATA laboratory testing results
- [ ] GBCA Responsible Products Program
- [ ] ISO 59020 compliant circularity assessment, e.g. MCI
- [ ] Product Circularity Data Sheet (PCDS: ISO 59040)
- [ ] Alternative SME-friendly evidence (service records, photos, sample product, simple declarations)

Phase 3 – Evaluate – choose the best whole-of-life value

Ask suppliers:

- [ ] Whole-of-life cost estimates (maintenance, servicing, replacement parts, disassembly)
- [ ] Expected failure rates or known performance risks
- [ ] Clarification of warranty conditions and exclusions
- [ ] Confirmation of any take-back or recovery agreements

Phase 4 – Contract – set agreements that deliver circular outcomes

Capture supplier commitments that will be written into the contract:

Repair and warranty obligations

- [ ] Repair response times
- [ ] Warranty terms linked to durability and performance, including any limitations
- [ ] Guaranteed spare-parts availability period

Recovery and take-back

- [ ] End-of-life collection responsibilities
- [ ] Materials recovery standards or partners

Reporting commitments

- [ ] What data will be provided (repairs, failures, recovery volumes)?
- [ ] Reporting frequency

Phase 5 – Manage – work with suppliers for best results

Information needed for contract management:

- [ ] Contact details for repairs and servicing
- [ ] Clear escalation pathways
- [ ] Format of service and performance reports
- [ ] Agreed KPIs for durability, repair response times, or recovery

Phase 6 – Review – learn and share

Ask suppliers for:

- [ ] Lessons learned from the contract period
- [ ] Actual circularity achieved vs proposed
- [ ] Additional value delivered by the circular model (including for other stakeholders)
- [ ] Improvements the supplier can implement for future tenders
- [ ] Opportunities for reuse, upgrade or refurbishment at contract end
- [ ] Improvements for council processes that would support suppliers in future.

Councils should also:

- [ ] Review and assess information provided by supplier
- [ ] Examine internal learnings from the project and the procurement processes used
- [ ] Update specifications, templates and contract clauses where needed
- [ ] Share insights and practical learnings with other councils
- [ ] Submit case studies to Hunter JO to support regional capability-building.

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Case Study Template of the Circular Procurement Toolkit

Circular Procurement Case Study Template

March 2026

Circular procurement case study template

(Download a copy of the case study template here)

Thank you for contributing a case study to the Hunter JO Circular Procurement Toolkit.

This template helps you document how circular procurement was applied in your project. The purpose is to share practical experience across councils, build regional capability and support others to apply circular approaches with confidence.

Focus on what you did, what changed compared to business-as-usual and what others can learn. Keep responses clear, practical and evidence-based. Quantify outcomes where possible.

1. Project overview

Please provide a short summary of your project.

Council: _____

Project name: _____

Year completed: _____

Project type (e.g. building, infrastructure, fleet, parks, IT): _____

Contract value (optional): _____

Brief description: _____

_____

_____

What was procured? _____

_____

What problem were you solving? _____

_____

_____

2. Circular opportunity

Describe the circular opportunity you identified.

What circular strategy did you apply? (e.g. reuse instead of replacement, low carbon materials, repair-first approach, service model)

At what stage did you consider circularity?

- ☐ Planning
- ☐ Sourcing
- ☐ Evaluation
- ☐ Contract
- ☐ Delivery
- ☐ Review

3. Actions taken

Explain the practical actions you implemented.

How did you change specifications, evaluation or contract terms?

Did you use outcome-based requirements, durability clauses, take-back agreements or whole-of-life assessment?

4. Outcomes achieved

Describe what changed compared to a standard approach.

Environmental outcomes: Did you reduce waste, embodied carbon or virgin material use?

Financial outcomes: Did you lower whole-of-life costs, defer capital spend or reduce disposal costs?

Operational outcomes: Did durability, maintenance or asset performance improve?

Community or regional outcomes: Did the project support local suppliers, create repair jobs or deliver other social benefits?

Include measurable data where available.

5. Challenges and lessons learned

Be open about what did not go perfectly.

What challenges did you face? (e.g. supplier capability, data gaps, internal alignment)

How did you address them?

What would you do differently next time?

6. Advice for other councils

Provide practical guidance for peers. In one sentence, what is your key tip?

What should other councils consider before applying this approach?

7. Supporting evidence (optional)

Attach or reference supporting material where possible:

- ☐ EPDs
- ☐ MCI results
- ☐ Contract clauses
- ☐ Before/after data
- ☐ Photos
- ☐ Supplier feedback
- ☐ Other: _____

Please complete as much of this document as you can and return it to admin@hunterjo.nsw.gov.au.

Your experience will help strengthen circular procurement across the region.

By sharing what worked, what did not and what you learned, you are helping other councils make more confident, practical decisions. Peer learning reduces risk, avoids duplication of effort and accelerates better outcomes for communities.

Thank you for contributing. Sharing knowledge and experience across councils is essential to building capability, improving consistency and making circular procurement successful at scale.

Applicability and Limitations

Restrictions and intended purpose

This report has been prepared by thinkstep-anz with all reasonable skill and diligence within the agreed scope, time and budget available for the work. thinkstep-anz does not accept responsibility of any kind to any third parties who make use of its contents. Any such party relies on the report at its own risk. Interpretations, analyses, or statements of any kind made by a third party and based on this report are beyond thinkstep-anz's responsibility.

If you have any suggestions, complaints, or any other feedback, please contact us at: feedback@thinkstep-anz.com

Legal interpretation

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