



Circular Procurement: Strategies for Circular Criteria

Considerations to support the development of circular procurement criteria.

Produced for the Circular Cities and Regions Initiative by the Circular Innovation Council,
with support from FCM's Green Municipal Fund.



About the Circular Cities and Regions Initiative

The Canadian Circular Cities and Regions Initiative (CCRI) aims to build circular economy knowledge and capacity in the Canadian local government sector – offering a national webinar series on innovative approaches and providing direct support, guidance, and peer-to-peer exchange to Canadian communities as they take steps to become more circular. The CCRI is a collaboration of the National Zero Waste Council, the Federation of Canadian Municipalities' Green Municipal Fund, the Recycling Council of Alberta, and RECYC-QUÉBEC. Find out more at www.canadiancircularcities.ca.

About the Circular Innovation Council



The Circular Innovation Council (CIC) is a national, independent, not-for-profit environmental organization with more than 40 years of experience. CIC works to drive awareness of and action on Canada's transition to a circular economy. Its mission is to boost sustainability by realigning production and consumption within planetary boundaries. Find out more at www.circularinnovation.ca.

Authors:

Jodi Houston (Circular Innovation Council), Jo-Anne St. Godard (Circular Innovation Council) and Rob Arkell (Cambium Inc).

Acknowledgements:

Corey Pembleton (FCM-GMF), Joanne Gauci (National Zero Waste Council and Metro Vancouver), Lindsay Seidel-Wassenaar (National Zero Waste Council - CCRI) and Etienne Angers (RECYC-QUÉBEC).

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Introduction

Public procurement presents a significant opportunity to accelerate Canada’s circular economy transition. With a total annual value of \$400 billion, public procurement represents 15 percent of the country’s GDP, with municipalities accounting for 80 percent (\$320 billion) of total government spend. Governments, therefore, have the power to shift markets toward lower-carbon and lower-waste goods and services. CIC is committed to raising awareness about procurement’s potential role and impact and to supporting governments through engagement and education.

Aim of this document

This guide is designed to support municipal staff who work in procurement and related functions. It summarizes key goals and strategies in circular procurement, aligned with the three phases of the procurement process: pre-purchase, purchase and post-purchase. The guide also explores the five circular business models: sharing platform, product as service, product life extension, circular supplies, and resource recovery. These models show how to encourage supplier innovation and assist buyers and suppliers in developing and responding to outcomes-based circular criteria for both products and services.

In March 2023, CIC partnered with the Circular Cities and Regions Initiative (CCRI) to build on momentum and support the Initiative’s goals via tools including knowledge sharing, implementation support and workshops to help participants develop circular economy roadmaps.

Recognizing the challenge of aligning public procurement practices with circular principles, CIC developed this document to assist all governments, municipalities in particular, in moving toward more circular economies.

Additionally, the guide presents self-evaluation questions buyers can consider in each procurement phase. These questions help users determine the most suitable circular business model(s) for their circular procurement goals and serve as a foundation for developing circular procurement criteria.

Circular procurement

Public procurement can be a useful tool to help governments advance their environmental and social objectives. Changing procurement is an opportunity to deliver circular outcomes. In addition, governments can work together to share information and/or standardize procurement requirements, collectively influencing markets and simplifying the approach for buyers and vendors alike.

Circular procurement, as defined by the European Union, “sets out an approach to green public procurement which pays special attention to the purchase of works, goods or services that seek to contribute to the closed energy and material loops within supply chains, whilst minimizing, and in the best case avoiding, negative environmental impacts and waste creation across the whole life cycle.”¹ In other words, circular procurement is a holistic approach in that it considers goods and services from source through use and end-of-life and challenges the procurer’s traditional role and procurement method. Circular procurement moves beyond a simple financial transaction to focus more on outcomes and long-term value, minimizing the negative environmental impact of products and services and promoting their long-term positive impact.

In addition to encouraging a circular economy, circular procurement:

- Advances multiple United Nations Sustainable Development Goals.
- Expands and enhances current sustainable procurement activities.
- Goes beyond environmental gains by also prioritizing social and economic benefits.
- Drives innovation.
- Builds capacity within both the public and private sectors.
- Shifts markets independent of legislation.
- Aligns with and delivers on several policy objectives simultaneously—fiscal prudence, greenhouse gas emissions reduction and protection of biodiversity and ecosystems—while also generating economic opportunities.

¹ European Commission, “Public Procurement for a Circular Economy: Good Practice and Guidance”, 2017

Procurement phases and the role of market engagement

When building circularity into the procurement process, it is important to think about procurement as having three distinct phases: pre-purchase, purchase and post-purchase.

Each phase provides an opportunity to include circular considerations. Circular procurement asks that procurers **prioritize long-term thinking and consider broader impacts across the entire life cycle.**

Pre-purchase

The pre-purchase phase is the most significant opportunity to optimize circularity within procurement. This is when procurers examine all stages of the product life cycle and develop procurement criteria. In this phase, buyers should first consider whether a purchase is necessary and, if so, determine which circular business model might enable a more circular outcome. Market engagement plays a vital role in this phase. By communicating with vendors, procurers can share their circular ambitions and learn about current and future business and product developments. Vendors also gain an understanding of procurement priorities to help them meet future demand.

Figure 3 shows the procurement phases and connects each one to the circular procurement goals outlined in the following section.

Purchase

The purchase phase incorporates findings from the pre-purchase phase into the procurement approach. This can be done through product specifications and outcome-based criteria. The focus in this phase is on making better purchasing decisions to:

- Reduce the total amount of materials used and the reliance on virgin inputs in the production process.
- Increase the efficiency of product manufacturing or use by consuming fewer non-renewable resources and materials.
- Extend a product's useful life.
- Optimize the reusability and/or recyclability of a product or its materials.

When making purchasing decisions, procurers should keep the product life cycle in mind and consider specifications and criteria across four key areas:

- Supplier selection
- Products and accessories
- Servicing, delivery and maintenance
- End-of-life impacts

Considering the full life cycle
Circular procurement addresses all stages of product life cycle:

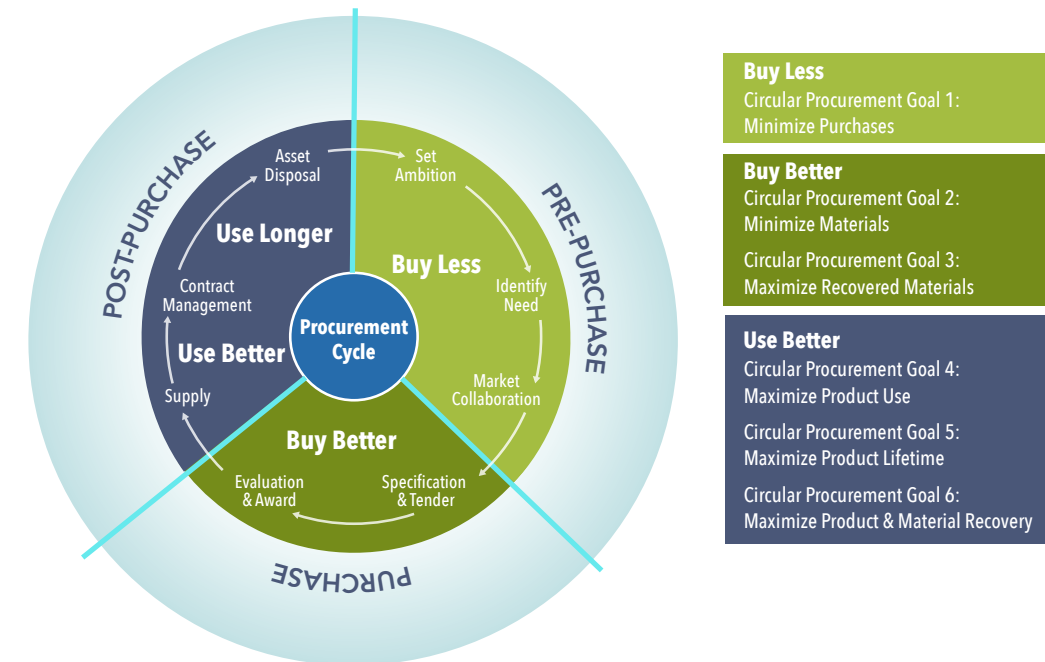


FIGURE 3: CIRCULAR PROCUREMENT PHASES. ADOPTED FROM THE CFIT FRAMEWORK FOR CIRCULAR AND FAIR ICT PROCUREMENT.

Post-purchase

The post-purchase phase relates to how products can be better used, maintained and managed after their initial life and at end-of-life. Buyers should consider strategies for better and longer use of products as early as possible to maximize their inherent value. In circular procurement, maximizing value involves:

- Monitoring product use.
- Exploring opportunities for reuse by other organizations or departments at the end of a product's first life if it is still in working condition.
- Performing regular product maintenance to reduce downtime and extend product life.
- Ensuring proper recovery and recycling of products at the end of their life, allowing component parts or materials to be returned to the economy.
- Refurbishing older products to bring them to current use standards and extend their life span.
- Ensuring products have warranties and are manufactured responsibly.

Market engagement

Advancing the circular economy will require coordination between everyone involved and collaboration across multiple governments. When aiming to procure a good or service in a more circular way, engaging with the market is essential.

What is market engagement and why is it important?

Market engagement is a constructive process in which buyers openly communicate and discuss the organization's needs in a pre-competitive way. Market engagement has traditionally taken place during the purchasing phase of procurement, meaning it has been limited due to competition policies or perceived conflicts. To gather and make use of market knowledge, engagement can and should occur in the pre- and post-purchase phases as well.

During the pre-purchase phase, engaging with the market allows for open and pre-competitive conversations where procurers, purchasers and suppliers can share experiences and knowledge to uncover opportunities and barriers as well as provide insight into the market's current capabilities and ability to respond to circular procurement requirements. This information can be used to help steer the direction of procurement and provide a baseline from which procurers can develop circular criteria that are based on outcomes.

When can market engagement be conducted?

There is no limit on when or how often market engagement can be conducted provided that buyers:

- Ensure the engagement is open to all vendors and is fair and transparent.
- Record and share discussions so they can be easily referenced.
- Provide equal access and treat all vendors and suppliers the same.
- Maintain the organization's credibility and integrity by giving all suppliers the same information, preferably at the same time or within a certain time frame.

How to engage with the market

Market engagement can take many different forms. There is no standardized approach. The method or strategy used depends on the organization. However, Sustainable Public Procurement Regions (SPP Regions), a network of European municipalities working together on sustainable public procurement and public procurement of innovation, has developed suggestions based on the procurement phase.

As you can see, the pre-purchase phase is the most significant opportunity for market engagement to inform the development of circular procurement criteria, leverage current market innovations and provide signals about future demand.

Pre-purchase	Purchase	Post-purchase
<ul style="list-style-type: none"> • Attend/host trade shows • Host a meet-the-buyer event • Issue a Request for Information • Host a "show and tell" to allow suppliers to explain their proposed solutions • Meet with industry bodies • Meet with a group of key suppliers or a range of suppliers • Sound out the market • Provide a pre-tender briefing to suppliers • Host industry or market engagement workshops 	<ul style="list-style-type: none"> • Brief suppliers who have submitted a response • Brief short-listed suppliers • Hold a question-and-answer session, or send a list of all questions and their answers to all suppliers 	<ul style="list-style-type: none"> • Let suppliers know who has been successful, including contract awards • Debrief suppliers and ask how the process worked for them • Contract and supplier management • Strategic supplier management • Maintain market awareness and competitor offerings

Source: SPP Regions Market Engagement Best Practice Report

Circular procurement goals and strategies

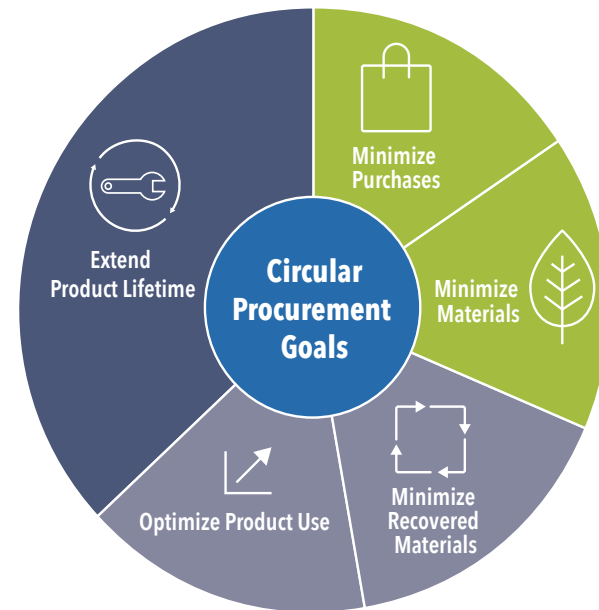
In this section, we introduce the goals of circular procurement and the five circular business models, which are strategies for achieving those goals.

Circular procurement principles and goals

The circular economy is built on the following principles:

- Keep resources in use for as long as possible.
- Extract maximum value while resources are in use.
- Recover and regenerate materials to create closed loops within and across supply chains.

By aligning with these principles, procurement can support the circular economy transition. We have structured this alignment as five circular procurement goals:

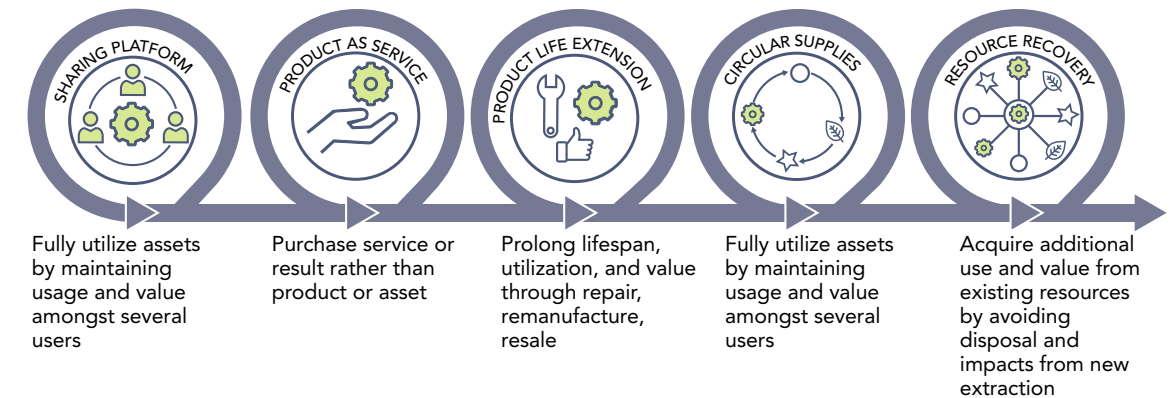


- 1. Minimize purchases (buy less):** Minimize the need for virgin materials by examining whether purchases are truly needed and exploring alternatives such as repurposing existing equipment or resources.
- 2. Minimize materials (buy better):** Maximize resource value by reconsidering ownership, vendors and product design to reduce production, thereby minimizing consumption of materials. Vendor ownership can incentivize better designs, durability, repair and reuse.

- 3. Maximize recovered materials (buy better/use better and longer):** Reduce the demand for virgin resources by purchasing products made from recovered or recycled materials. Ensure that products and assets are recovered and recycled at the end of their useful life.
- 4. Optimize product use (use better and longer):** Optimize asset use to increase function and value, reducing the need for similar products.
- 5. Extend product lifetime (use better and longer):** Extend the lifetime of products and assets through reuse, repair, remanufacturing, and refurbishment.

Circular economy business models

Five business models of circularity



Circular business models as core strategies

Five business models underpin the circular economy, based on principles including reuse, reparability, sharing and material recovery. These models are core circular procurement strategies that can be advanced individually or in combination.

Sharing platform: Enabling the shared use of products or assets among multiple users, reducing the need for individual purchases. This model focuses on increasing how often products and assets are used by distributing them amongst many users instead of just one. Car sharing platforms like Modo and Communauto Car Share are prime examples.

Product as service: Purchasing a product's function or value instead of owning the product itself. Office copiers, lighting, computers and mobile phones are examples of this growing segment that offers product-as-a-service options. Ownership, repair and maintenance remain the supplier's responsibility.

Product life extension: Purchasing from suppliers that support repair, refurbishment or remanufacturing to extend a product's lifetime, and buying products that are designed for easy disassembly or have robust warranties. Repairing what is broken or replacing a part that is no longer working are examples of product life extension. Similarly, buying or selling goods secondhand or repairing and upgrading used products extends an item's value and useful life and reduces the need for new products.

Circular supplies: Relying on inputs made from sources that are renewable, easily recyclable or recoverable. Purchasing from suppliers that use recovered or renewable materials in their products and assets promotes resource and product recovery.

Resource recovery: Finding ways to recover materials from products at the end of their useful life and convert them into a resource that can be reintegrated into another production cycle. Recycling and composting are common examples. An important consideration to optimize this business model is whether recovery can be managed locally. Purchasing from suppliers that incorporate pre-consumed resources into new products or infrastructure reduces the need for primary resource use.

These business models provide the foundation for developing circular procurement criteria and creating demand for more circular goods and services.

Implementing circular procurement

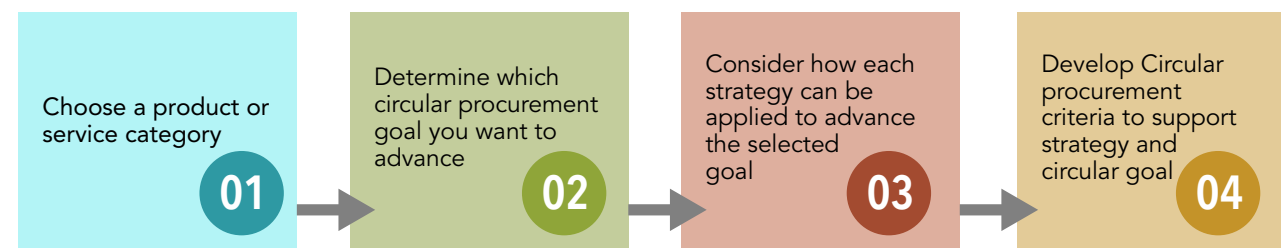
Implementing circular procurement requires a strategic approach that harmonizes with an organization's objectives in areas such as climate, nature, waste, equity, budget, economics and innovation. In this section, we provide a step-by-step guide to help buyers develop circular procurement criteria and implement them effectively.

Where and how do we start?

1. Choose a product or service category to focus on for circular procurement efforts.
2. Identify the circular goal for the chosen product or service. Consider selecting multiple goals to maximize circularity.
3. Meet internally to communicate circular ambitions with all stakeholders that have an interest in or a responsibility for the product category chosen.
4. Explore which circular business goals or strategies can be applied to advance the selected goals, and how. Ask questions to determine the most suitable strategy and iterate through each model as needed. Again, selecting more than one strategy will maximize circularity.
5. Include market engagement in the procurement process. Engage with the market and suppliers and identify what circular business models they are offering.
6. Once a circular strategy is selected, develop criteria that deliver on ambitions.
7. Create a scoring matrix that reflects that procurement is prioritizing environmental and social goals as well as price.

By following these steps, governments can drive the transition towards a more circular economy through their procurement practices.

Where and how do we start?








Appendix: Developing criteria – circular goals and strategies checklist

The following checklist has been created to simplify the integration of circular procurement requirements into procurement activities. It outlines key initial questions and considerations for each circular procurement goal and links them to the advancement of circular business models. Once a circular goal and business model are identified, buyers can use the relevant considerations and questions to inform the development of circular procurement criteria. Some questions are repeated because the models can be used in isolation or in combination and each model considers impacts across the whole life cycle.

Circular Procurement Goal	SHARING PLATFORM	PRODUCT AS SERVICE	PRODUCT LIFE EXTENSION	CIRCULAR SUPPLIES	RESOURCE RECOVERY
1 Minimize Purchases					
<input type="checkbox"/> Do we really need the product?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Do we already own the product?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can we avoid owning the product or just get access to its function/value?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> If we can pay for accessing the product and not own it will the vendor pay for upkeep/repair?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> If we own the product will the vendor support repair?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Will the supplier take back the product? Is the product recyclable locally?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Is there a potential for a second life internally or externally for the product and/or parts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Can the product be dismantled easily to facilitate re-use for the product and/or parts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2 Minimize Total Materials					
<input type="checkbox"/> What are the materials used in the product? Can they be minimized, recovered, or reused?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can the product or asset be shared internally? Externally?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can the asset be reused, upgraded, refurbished, or remanufactured?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> How much waste is generated as by-product of asset? Can it be reduced or reused?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

continued on next page

Circular Procurement Goal <small>continued</small>						
3 Maximize Recovered Materials						
<input type="checkbox"/> Where was the product made? Is it recyclable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Can the product be made with recycled content?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can you buy a previously used product?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can you buy a refurbished or remanufactured product?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can the vendor take back the product to be reused?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Can the materials be recovered and reused as new inputs into the same or secondary process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Was the product made with renewable energy sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Is the product designed for easy deconstruction or disassembly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Maximize Product Use						
<input type="checkbox"/> Can you share the product/asset internally or with other governments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can you share the product/asset externally with the public or other organizations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can you rent or lease the product or asset for a specified time?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can someone else use the product or asset when you no longer need it?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Maximize Product Lifetime						
<input type="checkbox"/> Can the asset be reused, upgraded, refurbished, or remanufactured?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Can the product or asset be shared internally? Externally?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Do you or can you include repair and a maintenance clause with the contract?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Does the product include an extended warranty?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Is the product upgradeable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Is the asset constructed in modular fashion to allow for repair?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Resources:

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