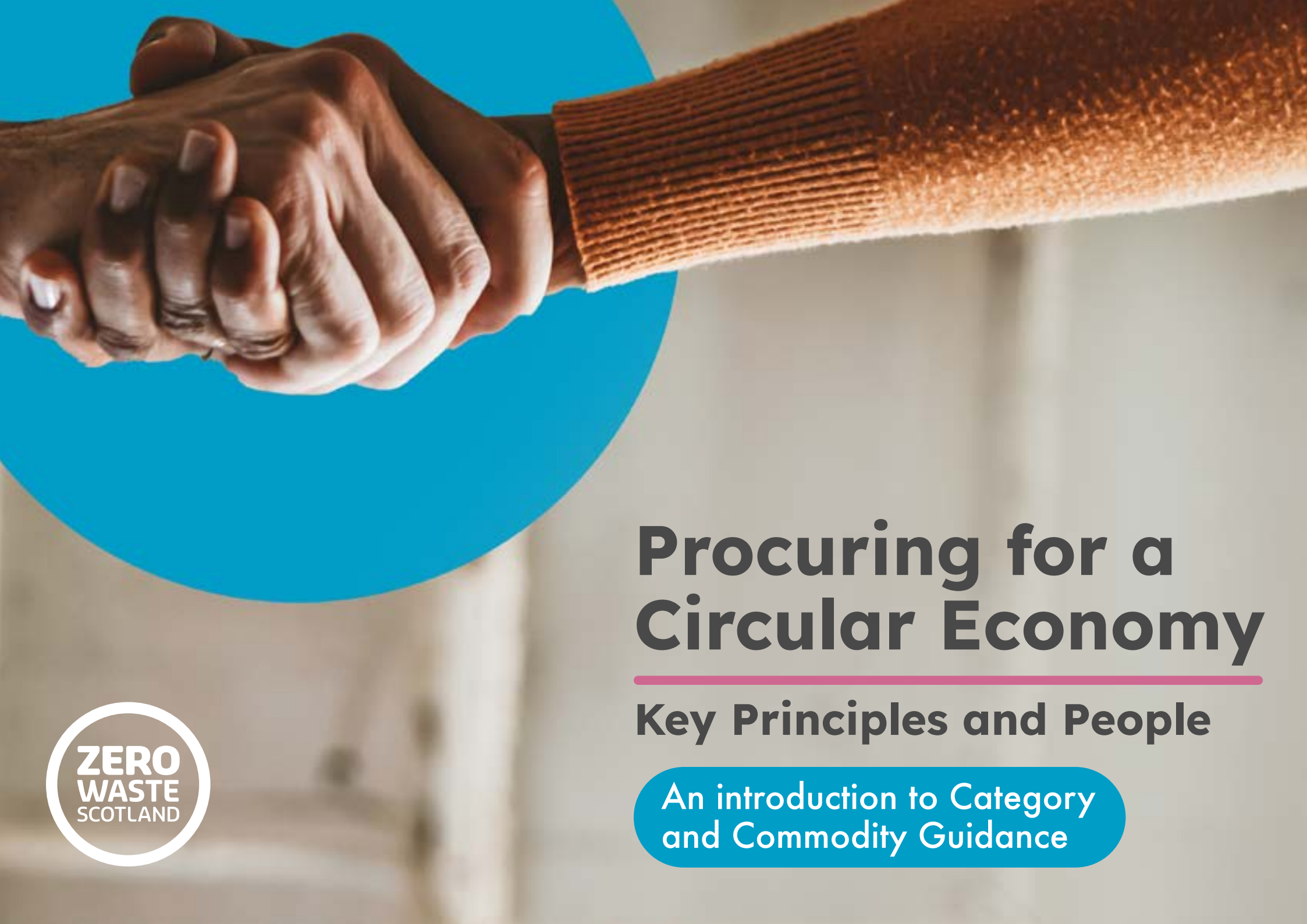

Procuring for a Circular Economy

Key Principles and People

An introduction to Category and Commodity Guidance

ZERO WASTE SCOTLAND

Contents

Introduction to this guide

This guide is an introduction to the role of the procurement of goods and services in supporting the essential transition to a circular economy and 'net zero' and the environmental and socio-economic improvements possible.

Procurement & the Circular Economy	Demystifying 'Circular Procurement' so that it can enable national and local economic, environmental, and social intended outcomes.
Principles	Key principles and success factors behind circular procurement, to achieve the most positive outcomes.
People	The role of all key people who influence decisions regarding the procurement of goods and services, within the public sector, but also private and third sector procurement and supply.
Performance & Development	Of circular approaches by markets, businesses, and suppliers.

It also introduces the linked practical '**Category and Commodity Guidance**' for specific categories, which are commonly procured across the Scottish public sector and for which circular approaches are particularly relevant. This does not replace essential consideration of relevant and proportionate contract requirements but emphasises the importance of this and key opportunities for circular approaches to these categories.

Category & commodity guidance	
• Catering products and services.	• Maintenance & repair.
• Cleaning products and services.	• Sports & recreation.
• Electrical and electronic products, services and systems.	• Waste services – with key links to and from other categories.
• Flooring.	• Workwear & PPE.
• Furniture.	• Packaging – a common issue for all categories.

Complements other guidance

This guidance also complements related guidance and information, such as at here, and the following:

Scottish Government
Riaghaltas na h-Alba
gov.scot

sustainableprocurementtools.scot

This platform contains tools designed to help public sector (and other) organisations identify and address how they can optimise the economic, social and environmental outcomes of their procurement activity.

It also contains topic specific guidance (e.g. climate change, materials, waste, employment, skills & training, and others) that supports the tools and circular economy as well as case studies.

(Free registration is needed to access some of this)

sustainableprocurementtools.scot

This platform also contains e-learning which is intended to help buyers and suppliers understand their role in mobilising procurement and supply in the transition to a Circular Economy and 'Net Zero'.

It is recommended that readers view this module.

(Free registration is needed to access this)

Procuring Resource Efficient Construction Projects[i]:

This guide supports clients and contractors embed relevant resource efficient and circular requirements within the procurement of construction and infrastructure projects.

It reflects Scottish construction policy and legislation, including "Making Things Last", Scotland's Circular Economy Strategy.

Interreg North Sea Region ProCirc
EUROPEAN UNION

This guidance has been developed through the Interreg ProCirc programme, in partnership with Zero Waste Scotland which was set up to experiment, implement and learn how circular economy and procurement can benefit the North Sea region. Useful information and examples are available from here[ii].

Other useful information is referenced in the sources of information section.

Procurement that supports a circular economy and sustainable outcomes

The problem

The current 'Linear' economy results in waste and emissions at each stage and a massive loss of value.

Natural resources are finite, and many are being depleted rapidly due to the above flow of materials - many end up as waste. This results in significant climate change emissions.

The resources and waste have significant value which needs to be retained.
Labour and resource costs have also risen significantly.

The solution

In a circular economy we stop waste being produced in the first place.
It is based on three principles, driven by design:

1. Eliminate waste and pollution.
2. Circulate products and materials (at their highest value).
3. Regenerate natureiii.

Procurement is an essential strategic enabler of the circular economy, as 80% of Scotland's carbon footprint is caused by the goods and materials which we produce, consume and often waste.

The benefits

Socio-economic

- Whole life savings and value.
- More resilient (and local) supply chains.
- SMEs & Third sector development and social value.
- Innovative businesses.
- Skills, Training & employment.

Environmental

- Supports transition to 'net zero' decarbonisation.
- Maximises value from products, assets, materials and services procured.
- Keeps materials in circulation for longer.
- Minimises waste.

Images source BS8001[iv]

Demystifying 'Circular Procurement'

Circular procurement is part of sustainable procurement and advances relevant outcomes. It supports a system which maintains life cycle resources at their highest possible value, creates value and social improvement, supporting a regenerative economy.

It requires consideration of sourcing strategies - what you buy, how you buy or who you buy from, use and end of life. How this is aligned with procurement stages is simply described in Figure 1. For example:

Buy less	Can you avoid procurement e.g. reduce consumption and new products or materials - reconsider ownership?
Buy better	Close loops e.g. recycle materials - displace virgin materials - reduce Landfill.
Use better & longer	Optimise lifetime e.g. optimise utilisation of existing assets - repair/ refurbish existing products - reuse: internally or externally.
	Extend lifetime e.g. remanufacture - design for deconstruction/ disassembly - end of life collection.

Figure 1: Circular procurement and procurement stages

Policy context

Scotland's Circular Economy Strategy, 'Making Things Last' , and net zero emission reduction targets, are reflected in Procurement Policy Note SPPN 3/2022[vi]. This clarifies procurement expectations with respect to climate and circular economy considerations.

The use of Sustainable Procurement Tools includes consideration of potential relevant circular approaches.

The 'Golden Thread' in Figure 2 emphasises how circular outcomes are aligned with the above.

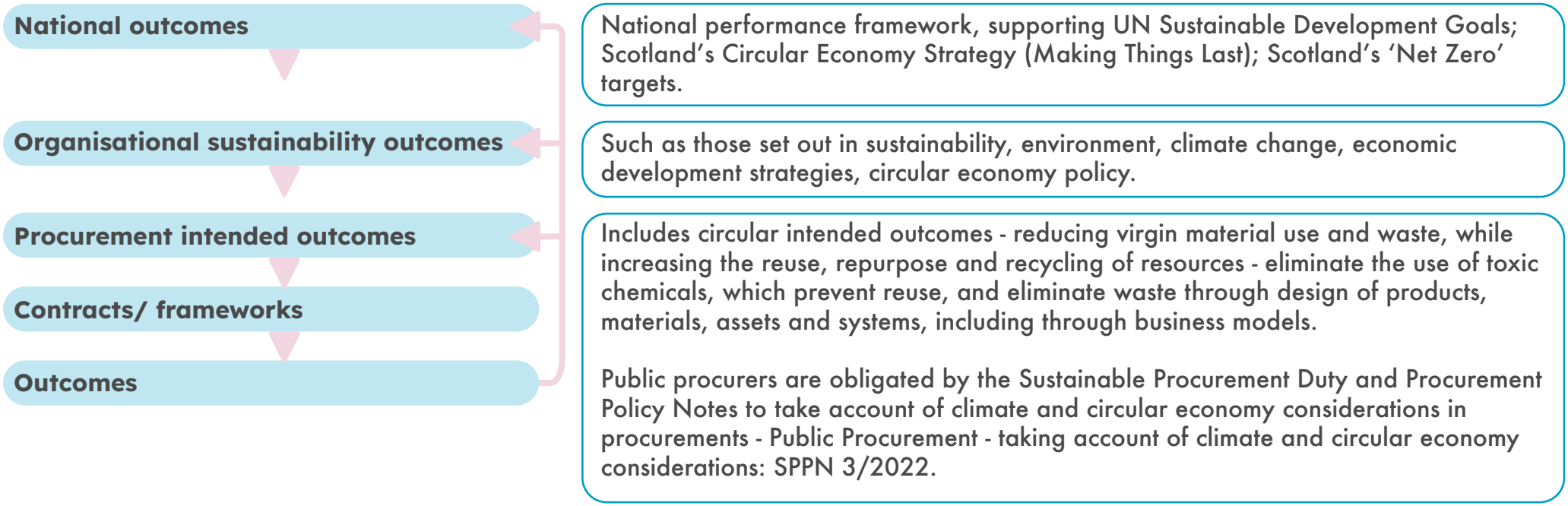

Figure 2[viii]: 'Golden Thread' - aligning procurement with national and local objectives.

Scope of circular procurement
As well as a focus on the design and use of products and materials, it includes the use of materials within services and works.

The Category and Commodity Guidance focuses on some priority groups, given their use of products, materials and assets and the potential to apply circular approaches to procurement.

Key takeaway
Circular procurement is an important part of the Sustainable Procurement Duty and should be considered when using relevant sustainable procurement tools.

It supports a system which maintains life cycle resources at their highest possible value, creates value and social improvement, supporting a regenerative economy.

Principles & success factors

Strategic approach

Circular procurement echoes a strategic approach to sustainable procurement, as the Sustainable Procurement Duty emphasises - asking the right questions early enough, with the right people. (Example right)

Policy
Do we have a policy commitment to support the transition to a circular economy?

Early consideration
Do we consider this early enough? Circular procurement is about making the right choices early in the procurement process.

Asset management
Do we track our assets, planning what can be re-used, repaired, or redeployed at a different site?

Alternatives to the norm
Do we consider alternatives to business as usual that may optimise life cycle value? See Figure 3 below:

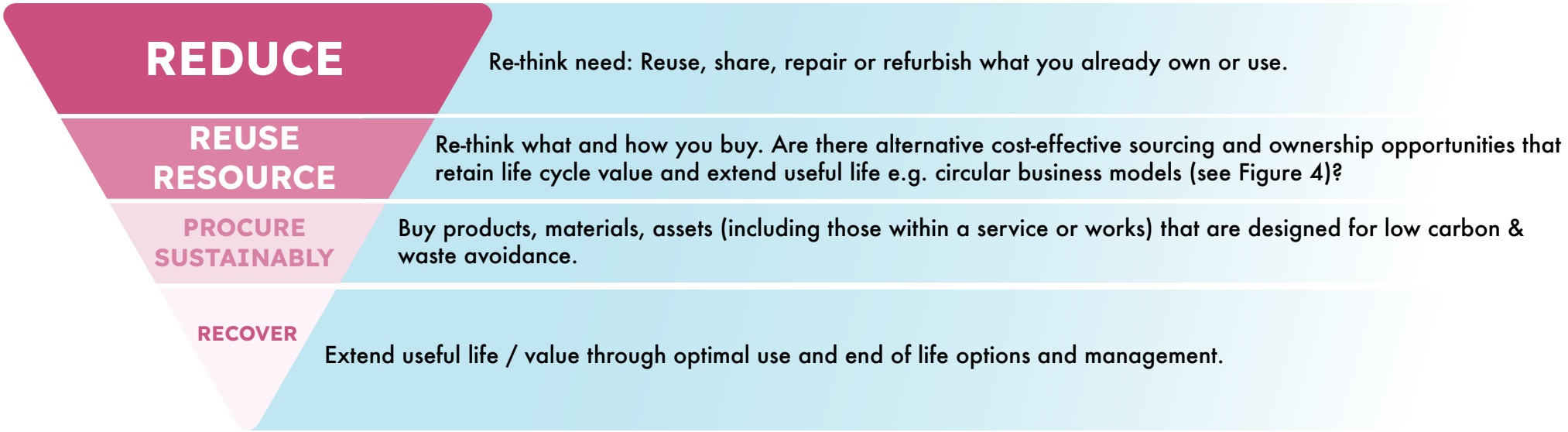

Figure 3: Circular Procurement hierarchy

Collaboration

Maximise opportunities by collaborating internally, with markets and peers.

- Involve key decision makers – for example, those described on page 11.
- Markets/ suppliers – understand capability, concerns and opportunities, including how buyers can work with suppliers to address any issues around quality, safety, legal considerations.
- Peers – how can you learn from others who have sought circular outcomes through procurement?

Performance based procurement

In order to focus on the reduction in use of virgin materials and the generation of waste, specifications may be a mix of technical specifications, including the use of relevant standards and labels (some of which are highlighted within the Category and Commodity guidance), and performance-based specifications which seek circular outcomes and encourage and enable innovation and which are capable of being objectively measured/ monitored and reported. Figure 5 sets out potential approaches within the relevant life cycle[ix].

Circular business models examples

Product as a service - performance / service system
A service based on delivering the performance of a product where supplier retains ownership, has greater control over products' production, and therefore more interest in producing a product or material that lasts. May include hire or leasing as an alternative to purchasing.

Resource recovery - incentivised return
Offering a financial or other incentive for the return of 'used' products, which can be reused, repaired, refurbished and re-sold.

Circular supplies
Design to facilitate reuse, repair, upgrade, refurbish, disassembly and recyclability of all components and equipment.

Sharing platforms - collaborative consumption
Rental or sharing of products between members of the public or businesses, often through peer-to-peer networks.

Extend useful life
Products, materials or assets designed for long life, supported by guarantees and trusted repair services – to enable disassembly, reuse, repair, upgrade.

Key takeaway
Circular procurement involves considering need/ required function/ life cycle costs and alternatives to the norm, with key internal and external stakeholders, early in the procurement process. This can include circular business models.

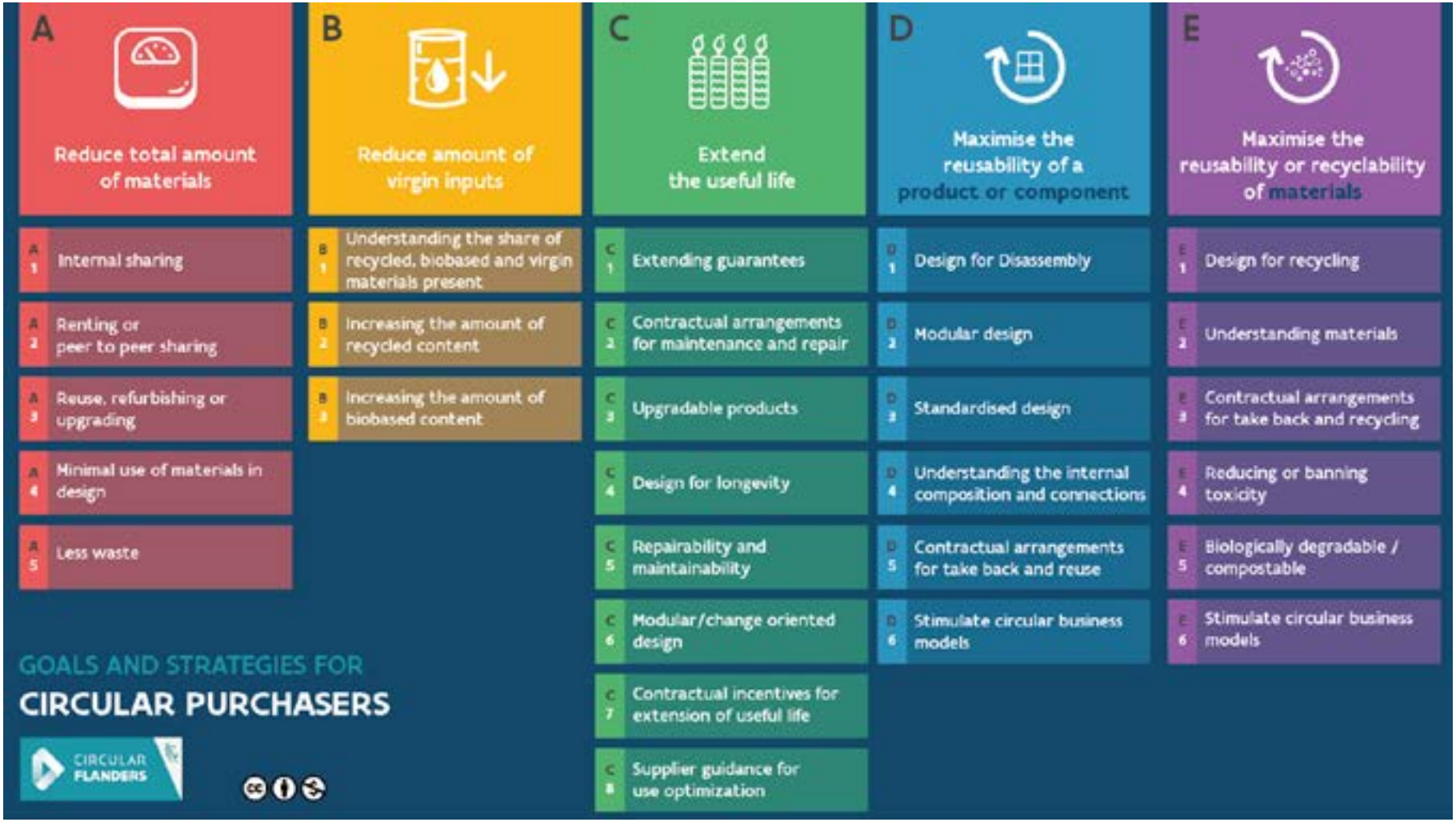

Figure 5: Circular Flanders - Strategies for Circular Purchasers

People

Who is this introduction and the Category and Commodity Guidance intended for?

All who influence key decisions.
This introduction is particularly relevant for all those who have the greatest opportunity to change or influence for the better. This includes those involved in policy setting, strategic planning, options appraisal, business cases, budgeting, specifying, procurement and managing contracts and suppliers, such as:

Executives - Senior Responsible Officers – Finance - Budget holders - End users – Procurement - Facilities Management – Waste Managers – Sustainability – Others.

It also includes those involved in the development and use of frameworks.

Public and other stakeholders.
While the policy and process information contained here may reflect the Scottish public sector, the principles and application are potentially relevant to those who are involved in public, private and third sector procurement and supply.

While the Category and Commodity Guidance focuses on specific categories, important principles and examples may be transferable to other categories.

Category and Commodity Guidance.
Pre-Procurement - this is the critical stage to ensure the right decisions are made early enough. Consideration of opportunities that support the circular economy can be challenging as it can include rethinking the need for procurement and a shift to a focus on required functionality.

It is important therefore that all relevant stakeholders are involved in consideration of how to achieve relevant outcomes. This part of the guidance is therefore intended for all who influence these decisions.

Specifications - the guidance also provides practical procurement specifications and examples which procurement professionals and others may consider through the procurement cycle.

Suppliers.
Businesses who supply relevant goods and services may also find the information useful.

This may help their understanding of customer objectives and potential requirements as well as any implications for their business offering and development.

Businesses who currently apply or are developing circular solutions should engage with customers to help their understanding of market capability, including the potential for innovative solutions.

Performance & development of circular supply by businesses

Dialogue with the market

Circular procurement may change relationships with suppliers as it involves circular solutions for your functional needs. Buyers need to factor in sufficient time to conduct effective market dialogue.

- Being transparent about the buying organisation's objectives (the need), so that the market is clear what may be expected of them.
- Understanding the current market capability to deliver intended circular outcomes.
- Understanding whether the need is currently capable of being met or not - is there a potential need for innovative solutions and wider supply chain collaboration? This sends a message to market that you will buy the developed solution.

Potential suppliers also need to understand the customer's objectives (the need), so that they know what is expected. How does this affect capability to deliver circular approaches? This may mean changes in business models/ creating partnerships with businesses or third sector organisations.

Maturity of circular supply

Business sectors and individual businesses can vary in their approach to circular approaches. There is, however, greater emphasis on circular solutions being available now, including local reuse and other solutions and emphasis on collaboration with markets/suppliers. This includes business models that may be relevant for planned procurements, and which represent a focus on the required 'function' and alternatives to traditional approaches, including ownership.

The market response to procurement depends on a combination of factors including maturity (understanding, capacity, competition etc) and the complexity of the product/asset (technical composition, function, lifetime, length of supply chain etc). Typically, the more complex a product/asset is, the greater the difference in knowledge between the buyer and the supplier. This will inform the procurement approach in terms of asking more functional or more technical (and prescriptive) questions. The more mature the sector, the more functional your specifications can be. Mature sectors typically have more knowledge to work with functional requirements and can use them to offer more circular outcomes. Sectors with less experience of circularity will require more guidance and/or initially market engagement.

For example, Figure 6 sets out a simple representation of complexity v maturity for major sectors and provides a starting point for a focus on circularity within categories of procurement.

The Category and Commodity guidance reflects and develops this.

Examples of circular approaches that buyers and businesses have developed are shown below and included within the Category and Commodity guidance.

Snapshot examples

Within the category guidance are examples of circular approaches applied to various procurements.

It is recognised that during the lifetime of this guidance circular approaches may change, markets and innovative solutions will develop, and new examples will be available.

However, these snapshots are relevant as they highlight important key lessons and approaches which are expected to remain relevant.

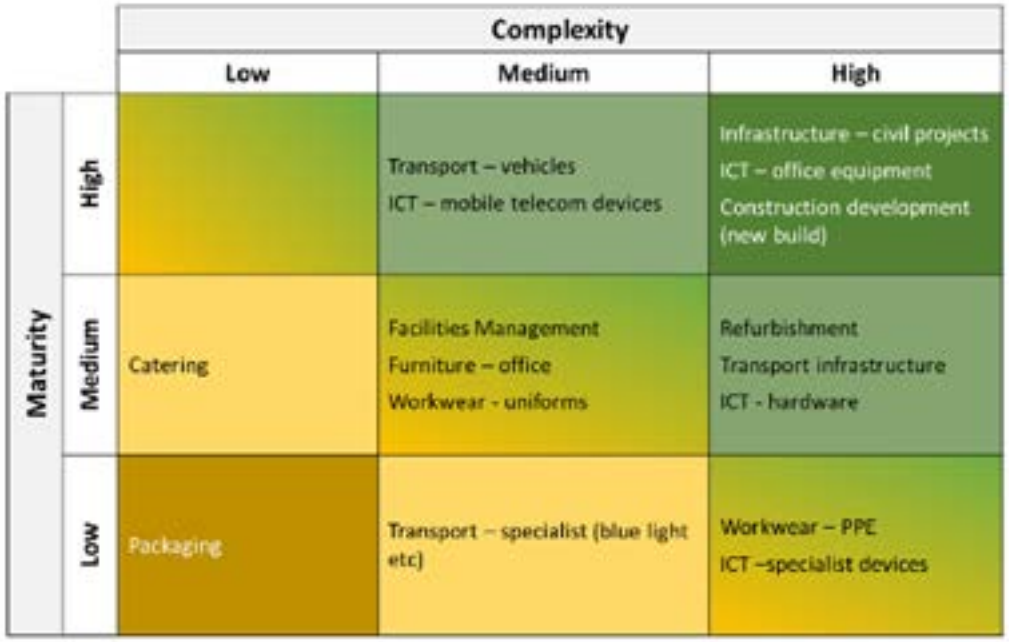

Figure 6: Maturity v Complexity - sector circular approaches

Key takeaway
While sectors and businesses may vary in their maturity regarding circularity, there has been an increase in the availability of circular approaches. Buyers have an important role in understanding market capability and identifying further opportunities to support and enable development within markets.

Suppliers need to understand the opportunities such approaches may present and key success factors.

Category and commodity guidance

The Category and Commodity Guidance comprises, for each category:

Background

- The scope of the guidance.
- Relevant life cycle circular approaches.
- A commentary on the market for the category and the status of circular approaches within it.

Pre-procurement

- Essential strategic and planning considerations to ensure a focus on the most positive outcomes, involving the right people early enough.

Procurement stages

Guidance, example clauses and relevant snapshot examples at each stage:

- Pre-contract notification.
- Supplier selection.
- Specification.
- Contract and supplier management.

Using the guidance

- The guidance may be easily navigated using a hyperlinked navigation map and buttons within each category.
- Users should refer to the caveats included within the guidance to ensure relevance and proportionality at all times.

Category and Commodity Guidance

1. Catering products and services.
2. Cleaning products and services.
3. Electrical and electronic products and systems.
4. Flooring.
5. Furniture.
6. Maintenance & repair.
7. Office equipment - print & publishing products and services.
8. Sports & Recreation.
9. Waste services.
10. Workwear & PPE.

Plus, **Packaging** – a common issue for all categories.

Click the below link to access the guidance:

Category and Commodity Guidance

Glossary

'By-products': An inevitable result of certain types of material processing and agriculture. In a circular economy all by-products can be feedstock for another production process.

'Circular business models': Business models designed in ways that are aligned with one or more of the circular economy principles. For example, product-as-a-service is a business model where the ownership of the product remains with the manufacturer, incentivising, for example, longer product life, easier refurbishment, and better recycling, meaning it is more likely to lend itself to the principles of a circular economy.

'Circular Economy': A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

'Circular Procurement': Circular procurement can be defined as the process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, whilst minimising, and in the best case avoiding, negative environmental impacts and waste creation across their whole life-cycle.

'Closed loop': closing product and materials loops.

'Internet of Things': the network of physical objects – "things"– that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet.

'Lifetime Optimisation': Product/asset lifetime refers to the useful life of a product; the time during which the product remains integer and usable for its primary function for which it was conceived and produced.

'Lifetime Extension': Product/asset lifetime extension is the postponement or reversal of the obsolescence of a product through deliberate intervention, thus contributing to circular economy.

'Low impact': Products/ materials that have lower environmental impact (e.g. energy consumption, resource use, industrial waste reduction) during any process from collection of raw materials through use phase and at end-of-life.

‘Materials sourced from regeneratively managed resources’: Materials grown in ways that improve whole ecosystems, including by increasing soil health and carbon content, water quality, and biodiversity. The concept goes beyond retaining the status quo of natural systems (unless those systems are not degraded in any way) and extends to improving their health and capacity to regenerate themselves.

‘Material sourced from sustainably managed resources’: The material was grown in a way that preserves the ecosystem without degrading it further but falls short of being sourced from regeneratively managed resources. Sustainable sourcing is considered a transition stage towards a regenerative way of managing materials sourcing. Most well-known sustainability certification schemes fall under this category (e.g. FSC, or equivalent, 100%).

‘Recycle’: ‘recycling’ means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

‘Refurbish’: Act or process of cleaning, decorating, and providing new equipment or facilities. Especially (but not exclusively) relating to buildings.

‘Remanufacture’: The rebuilding of a product to specifications of the original manufactured product using a combination of reused, repaired and new parts.

‘Reuse’: Reuse is the action or practice of using an item, whether for its original purpose (conventional reuse) or to fulfil a different function (creative reuse or repurposing).

‘Waste’: Unwanted materials or substances. In a circular economy, waste is designed out.

Sources of information

[i]Procuring Resource Efficient Construction Projects: Procuring Resource Efficient Construction Projects

[ii]Interreg NSR ProCirc: https://northsearegion.eu/procirc/

[iii]The Circular Economy: https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview

[iv]BES8001: https://storage.pardot.com/35972/1675866006A4LUR33H/BS8001_Executive_Briefing.pdf

[v]Making Things Last – a circular economy strategy for Scotland: https://www.gov.scot/publications/making-things-last-circular-economy-strategy-scotland/

[vi]SP Public procurement - taking account of climate and circular economy considerations: SPPN 3/2022: https://www.gov.scot/publications/public-procurement-taking-account-of-climate-and-circular-economy-considerations-3-2022/

[vii]Sustainable Procurement Tools: https://sustainableprocurementtools.scot/

[viii]National Performance Framework: https://nationalperformance.gov.scot/ & UN Sustainable Development Goals: https://sdgs.un.org/goals

[ix]Circular Flanders: https://aankopen.vlaanderen-circulair.be/en

[x]Circular procurement: https://www.zerowastescotland.org.uk/resources/circular-procurement


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