



How to procure circular

Lessons from 30 pilot procurements





ABOUT THIS REPORT

This report contains lessons learned from more than 30 circular procurement pilot projects and other activities performed within the Interreg NSR project ProCirc (2018-2023). The report has been developed by Bax & Company based on an analysis of pilot case studies and interviews with piloting organisations conducted during 2021-2022. The material is enriched and contrasted with other project outputs such as communities of practice webinars and reports, guidance documents and tools, as well as external reference material on circular procurement.

Authors: Camilla Sandberg, Gerard Don, Sebastiaan van Herk (Bax & Company)

Contributors: Christian Tangene, (DFØ); Veerle Labeeuw; Melody Van den Acker (OVAM)

Design: Camilla Sandberg (Bax & Company)

Special thank you to all the ProCirc partners and all organisations and people piloting and promoting circular procurements in ProCirc pilots and other activities.

Content

1. EXPERIMENTING WITH CIRCULAR PROCUREMENT.....	3
2. PROCIRC PILOTS.....	4
3. CIRCULAR FURNITURE CONTRACTS.....	5
4. CIRCULAR CONSTRUCTION PROJECTS...	10
5. WASTE MANAGEMENT PROJECTS.....	14
6. CIRCULAR ICT.....	18
7. CIRCULAR TEXTILES.....	20
8. CIRCULAR EXAMPLES.....	22
9. FIVE RECOMMENDATIONS FOR PROCURING ORGANISATIONS.....	24
10. CIRCULAR PROCUREMENT CHECKLIST...	25
11. REFERENCE MATERIALS OTHER RESOURCES.....	26

Reference this document: Sandberg, C., Don, G., & van Herk, S. (2023) *How to procure circular: lessons from 30 pilots*, Barcelona, Bax & Company

This report is financed by Interreg NSR and the Norwegian Agency for public and Financial management.

Published: 4th of April, 2023



EXPERIMENTING WITH CIRCULAR PROCUREMENT

Unsustainable consumption and production patterns are major contributors to the climate crisis. EU public authorities are spending €2 trillion annually on public procurement. By changing the way these procurements are done, procurement organisations can play a leading role in accelerating the transition to a circular economy.

A circular procurement is more than just a transaction. It is about formulating a need and meeting that need while adhering to the circular economy principles of shortening and closing product and material loops. This means rethinking requirements, criteria, contract principles, business models, and internal practices in order to minimise the use of virgin materials, eliminate waste, create clean loops, and drastically reduce CO₂ emissions.

Over the last four years, public and private organisations in the North Sea Region have embarked on a joint learning experience to accelerate the field of circular procurement.

Their efforts show the feasibility of including circular criteria in more than 30 procurements in a variety of sectors. The ambition and innovative attitudes of the people and organisations involved have led to new solutions that generate high-impact projects for their organisations. While inevitable some barriers were encountered, the lessons learned from these will help other organisations go one step further in their circular ambitions.

The objective of this report is to inspire and show procuring organisations and their procurers, management, and sustainability managers, examples of existing opportunities for circular procurement. The report targets the main sectors of the ProCirc activities including:

- furniture,
- construction,
- waste,
- ICT, and
- textiles.

For each sector, experiences of what the market can deliver are described together with considerations when designing criteria and preparing the internal organisation for circularity.



PROCIRC PILOTS

Furniture

- Furniture for circular building 't Centrum (Kamp C, BE)
- Refurbished office furniture (Agency For Facility Operations, Flemish Government, BE)
- Circular furniture in office move (DFØ/Digdir, NO)
- Federal contract for circular furniture (Norway federal government, NO)
- Education & Office Furniture Framework (Scotland Excel, SCT)
- Domestic Furniture Framework (Scotland Excel, SCT)

Waste

- Circular tendering of waste treatment (Kolding municipality, DK)
- Waste management services (City of Malmö, SE)
- Waste management services (bpost, BE)

Textiles

- Reusing post-consumer textiles for the refurbishment of office chairs (Municipality of Groningen, NL)
- Circular tender criteria for professional clothing (Integral UK Ltd, EN)
- Introducing circularity of PPE through contract management, Recycling lives (EN)
- Corporate Clothing Procurement (Scottish Parliament, SCT)

ICT

- Sustainability criteria for workplace ICT hardware (Dutch government, IWR, NL)
- Federal contract for reuse of ICT equipment (Norway federal government, NO)

Construction

- Social housing neighbourhood renovation (Zonnige Kempen, BE)
- Circular Building 't Centrum (Kamp C, BE)
- Construction and temporary occupation of a circular hub and Makerspace (City of Leuven, BE)
- Demonstration box for circular construction within De Potterij (OVAM, Flemish Government, BE)
- Circular tender for reused office building (Kolding municipality, DK)
- Aberdeenshire New Build & Refurb Projects (Aberdeenshire Council, SCT)
- Sustainable and circular supply chains (Scottish Power Energy Network, SCT)

Other

- Sustainable vending machines with healthy products (bpost, BE)
- Fossil fuel to green energy in waste management vehicles (Kolding municipality, DK)
- Employee Christmas Presents (Kolding municipality, DK)
- Playground Equipment Framework (Scotland Excel, SCT)
- Catering Sundries Framework (Scotland Excel, SCT)
- Energy Efficiency Contractors Framework (Scotland Excel, SCT)
- Circular signs and navigation (City of Malmö, SE)
- Prolonging lifetime of baby strollers for preschools (City of Malmö, SE)

See more information about the ProCirc pilots [here](#).

ProCirc partners

Belgium

- Public Waste Agency of Flanders
- Kamp C
- ACR Plus

Denmark

- Netværk for Bæredygtig Erhvervsudvikling
- CLEAN
- Kolding Kommune

The Netherlands

- Rijkswaterstaat

Norway

- Norwegian Agency for public and financial management (DFØ/Digdir)

UK

- Business in the Community
- Zero Waste Scotland

Sweden

- City of Malmö



CIRCULAR FURNITURE CONTRACTS

Furniture pilots in ProCirc target office furniture and educational and household furniture for governmental social services. The pilot projects consisted of framework contracts, call-off orders, and innovative procurements of services.

Opportunities on the circular furniture market

Circularity in the furniture sector is relatively mature and the potential to scale innovative examples is high. Procurers increasingly include circular criteria for furniture¹ and forward-looking suppliers are ready to meet the demand and improve their offers. The limitation is the lack of competition, with few suppliers offering truly circular solutions in each country.

By setting up collaborations with and across suppliers, and by designing innovative procurements and contracts, there are opportunities to help the reused and refurbished furniture market to develop and grow.

Refurbished and reused furniture

Options for reused, remanufactured, and refurbished furniture are available. With the right type of collaboration, remaining limitations in the offer can be managed.

Suppliers in this segment need access to discarded furniture and material ready to be reused or refurbished. This can take time to find, and requires the capacity to transport and store. As the demand for these options is still limited, the insecurity for suppliers remains high, which hampers their willingness to invest.

Procurements can help the refurbish and reuse furniture market to improve. All circular suppliers, but especially smaller ones with less established infrastructure, benefit from predictability and flexibility. If they are aware of an upcoming need and have the flexibility to find different solutions, they can prepare to deliver. There is no deficit of secondhand furniture, but there are limitations related to timing and design specifications. An increasing number of suppliers are offering integrated solutions consisting of: take-back-schemes, collaborations with other actors in the sector, storage facilities, and IT platforms to manage stock.

¹ The Norwegian, Scottish, Flemish and Dutch government and the city of Malmö are examples of organisations involved in ProCirc with existing framework agreements on circular furniture



Refurbished office furniture Flemish Government, Belgium

In 2019 the Agency For Facility Operations of the Flemish Government adopted a new framework contract for office furniture. The agreement includes a solution where the supplier coordinates the furniture needs of the government's various entities and offices in different locations through a credit scheme. When government organisations have surplus furniture they return this to the system for reuse and as a reward, they get a credit to be used to buy other furniture from the supplier's webshop of reused furniture.

Find full case study [here](#).



The Norwegian Agency for Public and Financial Management (DFØ) launched an innovative tender for 'reuse ideas' for their office furniture to prepare for their upcoming office move. A supplier was contracted to help the organisation to assess potential of existing furniture. The result was 15 shelves being redesigned into new bookshelves that better fitted into the new offices. The experience also gave the organisation new knowledge about circular furniture opportunities to be integrated into future procurements.

Find full case study [here](#).

Circular furniture in office move DFØ/Digdir, Norway

Domestic Furniture Framework Scotland Excel, Scotland

In 2021 Scotland Excel's third Domestic Furniture Framework went live. It helps Scottish councils and housing associations source furniture for tenants and people facing crisis. The framework offers both new goods (Lot 1), provided by businesses, or reused goods (Lot 2), provided through Circular Communities Scotland, a network of charities and social enterprises supporting the circular economy. The previous framework saw £1m spent on reused goods. The new goods are supplied by businesses and Social Enterprises meeting requirements on extended lifetime, sustainable materials and production processes, and end-of-life management.

Find full case study [here](#).





Circular furniture services: consultancy and design services for reuse

The desired option from a circularity perspective is that organisations reuse what they already have available. Complementary to supplying refurbished furniture, some suppliers offer consultancy services to help organisations optimise the reuse of their existing furniture.

Complementary supply of new furniture

When the functional needs cannot be met through reused, remanufactured, or refurbished furniture, a contract on new furniture may be required.

Suppliers of new furniture have less complex business models, but they can still meet many circularity requirements. 'Circular' suppliers of new furniture offer guarantees on longevity, durability, and quality of products. The supplier should actively work towards closed product or material loops through the use of recycled and recyclable materials, design for disassembly, and compliance with chemical restrictions. Ideally, suppliers of new furniture should also offer a take-back system that will allow for reuse and recycling after the item is no longer needed at the procuring organisation.



When Kamp C were planning their move to their new circular office, the office furniture needed a review. For this purpose, they could use the recently adopted framework contract for refurbishment of furniture by the Agency For Facility Operations of the Flemish Government. Through a project-based service agreement, an assessment of the current furniture stock was made and Kamp C received a plan for how to transfer existing furniture to the new office. The advisory led to an updated feel of the interior but without buying any new items.

[Find full case study here.](#)

**Furniture circular building 't Centrum
Kamp C, Belgium**



Success factors when tendering circular contracts for furniture

- **Design your procurement with the interest of a circular supplier in mind.**

Provide predictability to give the supplier enough time to find what you need and be flexible with design and other non-crucial requirements. The more variety in design you can accept, the quicker the supplier can meet your needs.

- **Engage with social enterprises and encourage partnerships and collaborations.** Make sure the possibilities to collaborate on bids are clear at the tendering stage. Show possibilities of involving people at a distance from the labour market in refurbishment activities.

- **Give room for the suppliers to come up with solutions and improve over time.** The furniture category consists of ample opportunity to set minimum circular criteria, whereas the use of award criteria is more challenging. Negotiated procedures and growth trajectories are good complements to the use of minimum requirements.

- **Divide framework contracts into more lots.** Where possible, separate contracts for refurbished, service- or project-based innovation contracts, new furniture, and maintenance and repair services.

- **Link complementary contracts for new furniture directly to the reused furniture contracts.**

The quantities of new items should depend on the availability of items in the reused furniture contracts in order to prioritise reused or remanufactured items.

- **Include circular criteria in tenders for new furniture:**

- Longer lifetime: 5-year warranty, product quality testing certificates based on recognised methods, textile robustness, availability of spare parts, and information on repair and maintenance possibilities.
- Closed product or material loops: recycled content, recyclable materials, and design for disassembly; end-of-life management with approaches to reuse within the organisation, donation to the third sector, or recycling.
- Clean loops: compliance with the chemicals restrictions in the European REACH Regulation and ban of chrome and nickel.



Move towards a circular furniture system

Changing perceptions around reused items and breaking old habits of disposal of functional products, are success factors for the implementation of a circular furniture model.

Preparations in the procuring organisation

- Reused and refurbished items face the challenge of negative perception at first but typically the scepticism towards the design and quality vanishes when they are installed. Involve the people affected, present the options in a visually appealing way, and showcase the benefits clearly. A user intelligence group that helps to consider different options early on in the process may help.
- Cost reductions may be an argument for refurbishment. However, a business case calculated in a standard way may not be convincing.

To show the full potential of a circular furniture contract, it is important to explain the benefits over the lifetime of the product by calculating and understanding the true cost i.e. 'life cycle costing'.

- Framework contracts lower the threshold for organisations to include circular criteria. For frameworks to reach their full effect, it is important to explain the overall vision, the benefits, and the involved mindset shift to all potential buyers and users of the contract.
- Multidisciplinary procurement teams are important for more innovative and sustainable furniture procurements. Involve a larger team and clarify the roles at the start, including who will be responsible for contract management and how this will be done.



"It's just as important to work on routines and changes in the organisation's guidelines as it is to have sustainable framework agreements. It is not sustainable if we buy more new furniture than what we actually need. The focus should first of all be to preserve what we have instead of procuring new environmentally friendly and circular furniture".

Christian Tangene, DFØ



CIRCULAR CONSTRUCTION PROJECTS

ProCirc construction pilots cover infrastructure investments, innovative experiments in temporarily occupied spaces, and building or rebuilding of new offices.

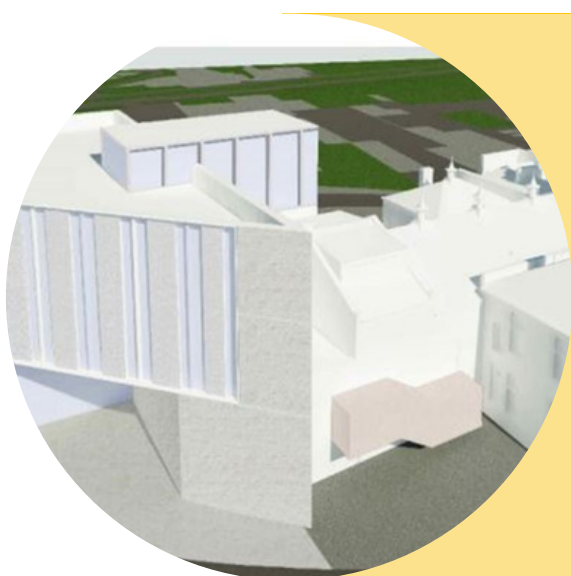
Insights about the circular construction market

The opportunities for circular construction are almost infinite and only restricted by the budget, time available, and the functional needs of the building. The general awareness in the sector is relatively high, but the implementation at scale remains challenging. To go from a circular vision to implementing a circular construction project can take many paths with different procurement processes, contract models, and circularity focus depending on the needs of the procuring organisation.

Newbuild and refurbishment projects

Newbuild and renovation projects offer good potential for including circular principles. There are many suppliers interested in these contracts but to achieve higher circular ambitions, close engagement with the industry and local partners is crucial.

In circular construction, one needs to think of many potential future scenarios and make the design compatible (e.g. can the building be easily repurposed by future occupants, can it be expanded or shrunk, can it be moved entirely?). Disassembly and reuse potential are important aspects to consider at this stage. To do this, it is crucial to have a close dialogue with the different players on the market about the available solutions. All involved actors also need to fully understand the circularity vision.



The objective of the new office building of Aberdeenshire Council in Ellon was to ensure that the construction was highly energy efficient and built in line with circular economy principles. Circular principles were integrated in the design of the building by using a layering concept that would enable the building to be repurposed if needed and that would ease disassembly for reuse. The project focused on creating impact in terms of waste reduction and finding alternatives for excess furniture and other office material.

Find full case study [here](#).

Aberdeenshire New Build & Refurb
Aberdeenshire Council, Scotland



Innovative circular demonstration projects

Innovative demonstration projects refer to construction or rebuilding projects that start from the vision of making it circular and then create the process and optimal designs to achieve this.

These projects are attractive to progressive market players to test and showcase their solutions and further develop their creativity and innovation capacity.

Demonstration for circular construction OVAM, Flemish Government, Belgium

The demonstration box for circular construction within De Potterij aims to develop a unique space for temporary use without creating much waste. The project is based on a partnership where the 15 participating suppliers offer construction and other materials in exchange for visibility. The materials remain the property of the suppliers and can be re-harvested and reused (in- or ex-situ) after the temporary occupation stage of the building finishes. The project shows an alternative to traditional procurement and gives the opportunity to create new solutions based on available materials and test new ways of collaborating.

Find full case study [here](#).



Kamp C's project t'Centrum was developed to inspire the construction industry. The ambition was to make the construction of the new office building fully circular, future proof, and comfortable. The tender was launched asking the market for an office building for 100 employees at a fixed budget and with a requirement that suppliers would form a consortium. There was big enthusiasm from the market to work on this with 7 bidding consortia offering many good solutions. Four years later the building is completed and during its 20 years lifetime, it is expected to have a negative carbon impact of -62 tons CO₂eq.

Find full case study [here](#).

Circular Building t'Centrum Kamp C, Belgium



Success factors when procuring circular construction projects

- **Develop a common vision among all involved stakeholders.** The pre-tender and market engagement phases need sufficient time to create a shared vision and goal for the project together with potential suppliers and the stakeholders of the building. A stakeholder working group, involving representatives from the industry and the contract managers, can work together to identify key issues and how to mitigate them. A Prior Information Notice and Open suppliers' events are useful for further market engagement.
- **Start with circularity.** In construction tendering it is common practice to describe the end result with details about the materials and expectations of final design. For a circular project, it is more useful to describe a starting point such as 'we want a circular and innovative result' and work towards this step by step.
- **Translate your ambitions into functional specifications and qualitative award criteria with room for innovation.** This way the offers can be assessed on their contribution to the ambitions (rather than measured).
- **Aim for collaboration.** A fixed price contract with openness to collaboratively find solutions stimulates creativity and innovation. It makes the supplier and buyer work together based on shared values and a joint vision of what should be created.
- **Think about the full life cycle of the building.** Make sure the tender covers requirements on both the materials that are used, how they are prepared for disassembly, and how the design of the space facilitates flexibility for how it is used to extend and optimise the building's usable lifetime.



Prepare the organisation for a circular construction project

The circular opportunities are many in construction projects. To fully exploit them, the internal organisation needs to be prepared and strive towards the same goals.

Considerations for successful circular construction projects

- Multidisciplinary teams and partnerships give better results. To combine functional, financial, and circular requirements in relation to a building project, the interests of the different stakeholders should be represented in the project group.
- Awareness of circular design principles is essential. The whole project team needs a basic understanding of circular principles. If the organisation is new to circularity, capacity-building activities will be useful at the start of the project.
- Innovation needs time and commitment. Allow enough time for the project and make sure to communicate with internal stakeholders regularly and at important milestones to keep the commitment from management and the engagement of other stakeholders high.

"Think about circular construction as a way of achieving more value for all. Circular construction is not only about climate action and environmental impact. If low price is the main tendering criterion, the best offer will often be submitted by companies chasing revenue with no focus on quality. If we make values like health, future-proof quality, and comfort the main tendering criteria, the best offers will be those of entities sharing these values. The chances of positive cooperation in the construction process are much higher when there is a mutual interest instead of a regular price-based construction project with opposing interests."

Emiel Ascione, Kamp C





WASTE MANAGEMENT PROJECTS

ProCirc waste pilots focus on waste management services for either organisations' own sorted waste and/or waste available at the municipal recycling stations.

Opportunities in circular waste management

Waste management falls under specific legislation meaning that only contractors fulfilling specific safety criteria are allowed to handle materials considered as waste. Besides targeting how waste is being managed and treated, a circular waste contract can also be designed to reduce impact by helping the procuring organisation to reduce waste, or by placing criteria on the operations of the contractor.

Managing and treating collected waste and materials

The shorter loops the better, so ideally, waste and material for recycling are managed as locally as possible. Often, there are relatively few treatment plants in the geographic vicinity that are able to process each waste fraction. The limited number of suppliers means that competition around completely new solutions is less feasible. When this is the situation, the opportunity lies in helping existing plants improve their recycling methods' circular performance. This may include investments in technologies that promote the circular economy at the plant: e.g. by extending the life-time of equipment, developing cleaner recycling technologies, and developing new methods to overcome bottlenecks from sorting. For some material groups, there is also good potential for engaging with social and ethical enterprises in the recycling process to refurbish and remake some of the collected material.



The Municipality of Kolding tendered 3 contracts for a total of 19 waste fractions from their recycling sites. The aim of the new contracts was to create possibilities to work with suppliers to help them improve. The winning contractor had to account for their circular projects that promoted circularity in relation to the handling of the waste fraction in question, including circular partnerships with other companies locally, regionally, or nationally. Suppliers also had to describe the efforts made to extend the life of their own equipment and other technologies promoting circularity in their operations.

Find full case study [here](#).

Circular tendering of waste treatment
Kolding municipality, Denmark



Reduced waste and improved recycling at the procuring organisation

Many suppliers offer the service of providing data on quantities of different waste fractions. This is highly valuable information for an organisation that wants to minimise the generation of waste. In combination with this data, the suppliers also offer first-hand knowledge of what happens with collected materials and the impact that is resulting from different ways of treating them. Since recycling depends on the willingness to sort, real facts on recycling have the potential to change behaviours.

Sustainable equipment and processes

Just like any business, also waste management contractors can make efforts to improve their circular performance within their own operations. This may include assuring recycled materials in containers and making efforts to extend the useful life-time of cars, machines, buildings, and other tools.

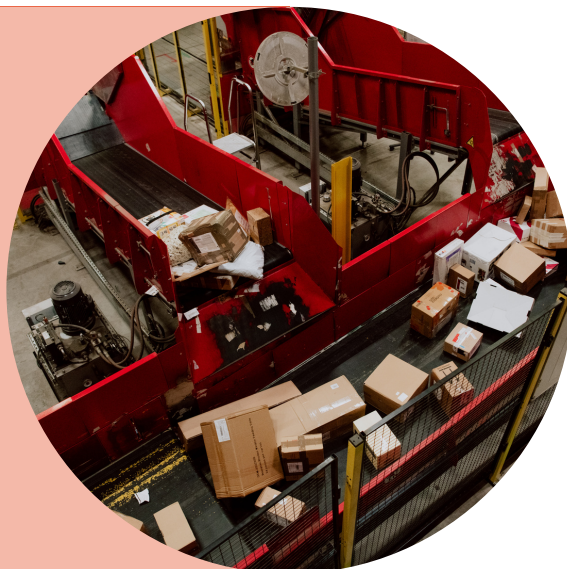
Impact from waste collection can also be improved through route optimisations for collection services and use of renewable fuels

Success factors when tendering waste management services

The procurement and contract terms can be used to challenge and encourage existing suppliers to improve. Typically, there are few operators available in each location, especially when it comes to recycling and waste management facilities. Therefore, it can be beneficial to work with the local suppliers and develop together. A requirement for suppliers to provide statements on circular economic activities motivates the contenders to reflect on their practices, for instance. Another opportunity is to develop the circularity approach further with negotiation-based tenders. Growth trajectory approaches and possibilities for the supplier to implement improvements during the contracting period are also useful.

Bpost published a tender on waste management services for several waste fractions at all Bpost buildings in Belgium. With the new contract, Bpost aims to achieve a 5-10% reduction of residual waste. This should be done in partnership with the contractor to help Bpost prevent waste, improve sorting, and increase recycling. A baseline will be created at the start of the contract. This will be monitored yearly through an audit on residual waste track progress after which corrective actions will be introduced if needed.

Find full case study [here](#).





In Malmö, value-added criteria for non-fossil fuel were used in the new waste tender. This makes sure that no one is excluded but it is still a clear signal to the market. Associating an economic value with sustainability requirements made the evaluation clearer when there were several suppliers bidding

In the case of Kolding Municipality, they learned the importance of making sure that cost and recycling share can not be the only criteria when contracting services for waste treatment. When targeting only this, there is a risk that bidders lose focus on the overarching vision of circular economy and instead try to meet the specific criteria and recycle material that could be better reused. Kolding opted for requesting statements from providers regarding their circular development projects.

They also included collaboration during the contracting period to develop new circular initiatives.

Bpost focused the criteria on setting up a partnership with the contractor to effectively work on the prevention of waste, better sorting and increasing the share of recycled waste. As the overall objective is to prevent and reduce waste, the KPIs and monitoring components are of great importance in waste management contracts. Sometimes a first contract can serve as a baseline of how the organisation is handling waste currently, based on this knowledge additional measures can be implemented (in the organisation or with the supplier) to improve. Make sure the data requested is actionable for the organisation to further improve internal practices.



The city of Malmö tendered the collection of sorted waste from the municipality's facilities. The aim of the new contract was to get an overview of the waste and recycling levels across the operations to later improve. The tender included criteria on non-fossil fuel vehicles, recycled plastic in containers, and access to data about sorted waste. After the market dialogue, the evaluation model was adjusted from what was originally planned. With limited access to accurate statistics on waste, it was difficult to set a realistic pricing model. The first version of the published tender had to be withdrawn and updated before the contract was awarded in 2022.

Find full case study [here](#).

Waste management services
City of Malmö, Sweden



Prepare the organisation for circular waste management

Circularity in waste management needs to go together with behaviours favouring resource efficiency in general in the organisation.

Important considerations for better waste management

- A motivated internal organisation that understands the benefits of reducing and sorting waste. For waste management contracts to be successful, the organisation's waste prevention and sorting strategies must be successfully implemented within the whole organisation. Getting the employees on board is both a barrier but also a great opportunity with a new waste contract.

A new contract can serve as an excuse to further inform and inspire employees around waste hierarchy and benefits of different strategies.

- Focus on continuous improvements through contract management. Include criteria for provision of data on actual waste generated and the recycling levels of the organisation in the contract with the supplier. Specific statistics will help to understand the current situation and which activities have a bigger impact. To make the most of this data, a collaboration between the contract manager (if a procurer) and a sustainability or environmental department can be beneficial.



“Do not try to create grand models or perfect systems, but start by asking the right questions - both in general and in every single purchase. In general, ask: Starting tomorrow, what products can we commit to buying used rather than new? Are we truly willing to commit to sustainability, and if so, what other priorities are we willing to compromise on? In every procurement, ask: Do we really need this? Can we buy it used? Can we buy alternatives which would be less of a burden to the climate?”

Martin Pedersen Stub, Kolding Kommune



CIRCULAR ICT

Circular ICT hardware equipment such as computers and phones, and related accessories has been the focus of two ProCirc pilots and multiple Communities of Practices.

Opportunities on the circular ICT market

Production of monitors, laptops, workstations, smartphones etc. generate extensive environmental and social impact. Production is often based on the extraction of scarce raw materials in complex environments, and low-cost labour. Frequent design and software updates have made the relevant lifespan of devices shorter. More sustainable options are available from niche suppliers, and with increasing demand, also bigger players start reviewing their product and service offers.

Product-as-a-service and take-back systems

Instead of buying, using, and disposing of devices, there is the possibility of leasing devices or that the purchase comes with a guarantee of the supplier taking back the product after its useful life.

When these models are combined with requirements on recycling levels and residual outputs, they incentivise suppliers to extend the devices' lifetime and design for recycling.

Reuse and refurbishment

Models that stimulate the reuse and re-deployment of equipment helps avoiding the disposal of valuable materials. More and higher quality reuse and refurbishment within ICT is desired and a higher demand is pushing the market to find solutions that meet new requirements on performance and warranty.

Vision-driven strategic partnerships

The procurement of strategic partners instead of specific products can help to both cover short-term needs and develop and enhance circularity performance during the contracting period.

Lower-impact products and production

When buying new, the impact can be reduced significantly by requesting products that live up to industry standards on chemical content, recycled materials, and a ban on certain raw materials.

The Dutch government recently developed a framework agreement on circular workplace hardware. The awarded contract includes a 'product as a service' model designed to incentivise the market to take back and reuse or recycle devices. Recycling is capped at 20% and made efficient since the supplier knows how to treat the materials. The reuse measures extend the lifetime of products which maximises the profit of each device. The work has set a new precedent for future tenders, and it has shown how public procurement can trigger the market to raise the bar when it comes to sustainability.

Find full case study [here](#).





Success factors when tendering ICT equipment

- **Align on the type, brands, and functionality.** Limited variation between teams and departments within the same organisation increases quantities. This helps in negotiation with suppliers. It also creates a better basis for repair contracts and reuse within the organisation.
- **Create different contracts or lots to combine different business models and circular approaches.** E.g. different contracts focusing on device-as-a-service, second- and third-life approaches, emissions throughout the life cycle, the materials used, and recyclability etc.
- **Make sure your contracts include mechanisms and KPIs to showcase the impact and monitor progress.** Consider working with the CO2 performance ladder and Ecovaris.
- **Consider developing a framework agreement for ICT equipment.** This helps the market to understand the need for sustainability and prepare for it.

Circular ICT at the procuring organisation

It is important to make sure that activities of the suppliers to extend lifetime (e.g. requiring longer warranty time) are paired with campaigns that make end users use the devices longer.

- Introduce a systematic approach to involve all stakeholders to understand how the procurement will help to deliver on the organisation's goals. An ambition web can help the organisation to visualise the impact different decisions have and shape requirements that balance different needs with environmental and social impact. Make sure to invite IT managers, procurers, contract managers, facility managers, sustainability managers, and others in the process.
- Provide awareness raising and capacity building towards end users. This can focus on agreeing on common standards for how to decide the end-of-life moment of a device, changing perspectives of when to buy new, and policies on using the same devices for work and private life to avoid duplication.



"Circular procurement is a holistic approach to mitigate climate change, biodiversity loss, pollution, social injustice, and support security of supply. To succeed, you should start early, work in collaboration between management and procurement departments, and formulate a clear ambition. To ensure that the contract is performed as intended, make sure to also define the contract management procedures and inform your internal organisation."

Joan Prummel, Rijkswaterstaat



CIRCULAR TEXTILES

Textile pilot projects in ProCirc cover procurements of workwear as well as textiles that are a part of other products, like reusing textiles for the refurbishment of furniture.

Circular opportunities in the textile sector

Production of textiles and clothing has large impacts in terms of water use, chemical and microplastic pollution, greenhouse gas emissions, and violation of workers and human rights of textile workers across the world. For many textile materials, there are technologies available to recycle specific fibres (cotton, polyester etc.), but to recycle blended materials is still challenging, and closed loop recycling is not yet available at scale. The textile industry is working hard to overcome technological barriers in the recycling system and explore new methods for collection and sorting. Other market players are rethinking business models focusing on rentals and take-back systems.

Closed-loop take-back schemes

In this model, the supplier has a collection and return-for-recycling system in place. From the supplier's side, it is crucial that the textile products are designed and manufactured in a way that allows them to be 100% recyclable (single-fibre). In this way, end-of-life garments can be turned back to raw textiles and then made into new clothes, rather than downcycling the material for lower-value uses. From the buyer's perspective, it is important to ensure and incentivise a high return rate. To reach its full potential, more investment in closed-loop textile recycling is needed to enable more and better sorting and closed-loop systems.

Reusing and recycling textiles for the refurbishment of furniture

Circular procurement is about thinking in opportunities, and that involves looking at other sectors for open loops. Closed textile loops as described above can also be re-directed towards other value chains, for example towards refurbished furniture. In this system, a furniture value chain is closing the loop of a garment value chain.

The Municipality of Groningen's project Gronings Goud aims to showcase circular economy opportunities and social impact. The municipality's circular office furniture contract provides room to innovate and experiment. It links local post-consumer textiles to the refurbishment of the municipality's office chairs. The textile is collected, sorted, spun to yarn, and woven into fabrics. The success of the project was achieved by engaging multiple stakeholders: the furniture manufacturer, social enterprises, and innovative companies. The municipality wants this to be an example of a scalable and replicable system approach.

Find full case study [here](#).





New products with recycled content

For textile materials such as polyester and cotton, the recycled fibre market is already providing options. Technologies exist and producers offer certifications for the type and share of recycled content. A remaining challenge in products with recycled materials is chemical content. This is a barrier for specific product groups, such as baby strollers where children's safety requirements impose strict chemical restrictions. Eliminating all potentially hazardous substances is essential as this is the only way to assure clean loops in future recycling of the materials.

Success factors when tendering circular textiles

- Use the knowledge of the market to get information about circular possibilities. Ask focused questions to understand their capabilities. The industry is under continuous development. Including a Growth Trajectory question in the tender—asking how the supplier will improve circularity during the contract duration—helps you to adapt to changing contexts.
- If you buy new, get informed about the recycling potential of different materials and include criteria on fibre composition that facilitates recycling. Single-fibre products have the highest potential to be 100% recyclable.
- Design with end-of-life in mind. Focus on single-fibre fabrics, think of how to remove logos of long-lasting work wear, and how to separate different material types when a product is disassembled.

Circular thinking for circular textiles

- Share the vision to inspire engagement. Circularity in textiles, regardless if it's for workwear, refurbished furniture, or repair of equipment like baby strollers requires users to think circularly. Show the potential impact of extending the life of a product through repair to build a more resource-conscious organisation.
- For take-back systems to be effective, you need to have a high return rate. Create systems that incentivise the return of all workwear that is no longer used.



Business in the Community supported Integral UK Ltd on including circular principles in their new workwear tender. The bids were assessed through a balanced scorecard, and suppliers could earn extra points by indicating what innovative approach they would use to keep improving over the course of the contract. This positively pushed the market to innovate. The selected supplier, who was also the existing supplier, offered new circular solutions, such as a return-for-recycling system, and shirts designed to be 100% recyclable. Given the company's turnaround of 3000 garments annually, the estimated saving potential is 11 tonnes CO2 per year.

Find full case study [here](#).



CIRCULAR EXAMPLES

Circular signs and navigation City of Malmö, SE

The City of Malmö set out a tender for a framework contract of navigation signs with the ambition to lower the climate impact through stimulation of reuse. The tenderer could receive added value for three different circular criteria: how to reuse products within Malmö's organisation, take back system for reuse within the suppliers' operations, and processes for optimal recycling. As the first framework contract on signs in the city, the focus is on the process and how to create a circular system together with the supplier. Malmö expects to learn from this process and evaluate the possibility to develop similar contracts with one supplier covering a whole circular system, also for other product groups.

Find full case study [here](#).



In 2021, the contracts for the Belgian post service bpost's 500+ vending machines across different locations were due for renewal, presenting an opportunity to test a circular procurement approach. The requirements focused on energy use and incorporating sustainable products through a growth trajectory during contract execution. The circular requirements were somewhat new to the market so the procurement process was a learning experience. A main win of this process was the internal collaboration it stimulated within bpost. The circular procurement methodology applied is now integrated into bpost's Strategic Sourcing Methodology and mandatory for tenders over 1 Million Euro.

Find full case study [here](#).

Sustainable vending machines Bpost, BE



Baby strollers for preschools City of Malmö, SE

The City of Malmö uses baby strollers and baby buses in preschools and in social services. To prolong the lifetime of this equipment, Malmö wanted to contract service and maintenance support. A Request For Information led to a realistic yet ambitious tender with aspects like spare parts, longer warranty time, and circular and children's safety criteria. The niche market (2-3 suppliers) could offer repair of the strollers, but not of the buses. To compensate, the city collaborated with the labour and social department to involve people at distance from the labour market for the service. The greatest gain with the contract was the implementation of new circular routines within the organisation that can spread and inspire new behaviours.

Find full case study [here](#).



Scotland Excel's second-generation Energy Efficiency Contractors Framework helps councils and other social landlords to retrofit existing buildings. It helps them source the necessary technical and service requirements to implement energy efficiency measures. The framework reflects the aims of the Scottish Government's Heat in Buildings Strategy. It has social and environmental policy objectives at its core, to support our members to tackle fuel poverty, reduce carbon emissions and aid a green recovery. The circular requirements in the framework are expected to result in waste and carbon saving during the contract's lifetime.

Find full case study [here](#).

Energy Efficiency Contractors Framework Scotland Excel, SCO



FIVE RECOMMENDATIONS FOR PROCURING ORGANISATIONS

#1 Dare to try: start, learn and adjust

In almost all product categories there is potential for reducing the impact on CO₂, waste, virgin materials, and other environmental indicators by doing things differently. The market is constantly developing new solutions and sustainability factors are becoming a competitive advantage. Current procurement regulations already allow for inclusion of circular principles as part of the quality criteria. Pick a product category of interest and just try. You will learn from the process, you might need to adjust, and you will see impact.

#2 Find the balance: push the market and encourage development during the contract

Circular procurements require a market that is ready to deliver and a buyer that knows what to ask for. Start by clarifying your vision in market dialogues and in the tender documents. Once you show where you want to go, the supplier can help come up with innovative solutions for how to get there. Different types of criteria can stimulate continuous improvements, including growth trajectory approaches; collaborative development projects between buyer and supplier; and negotiated processes that facilitate the co-development of solutions together with suppliers.

#3 Create alignment: link the organisation's goals to the procurement practices

A circular procurement reaches its full potential when the contract is used in the intended way. Different types of contracts need to be combined with different behavioural change approaches. These can either target the use of certain products or the approach for a standard procurement. Awareness raising within the organisation can include information on circularity vision and principles; checklists and decision support of when to buy new and how; and approaches to end-of-life and take-back systems. Impact at scale is only achieved when lessons learned in experiments are mainstreamed into practice. To do this, you need your whole organisation engaged.

#4 Appreciate innovation: dedicate sufficient time and resources to find new solutions

The best results will be achieved when there is room to be creative and enough time to find the right balance between ambition, capability of the market, and readiness within the own organisation. Several activities in a circular procurement process may require more time than business as usual. Time is needed to agree on requirements with internal stakeholders; during market engagement to understand the capacities of suppliers; and for the market to respond to the needs (e.g. longer lead times for used furniture since the sourcing process is longer). When the innovation process has started, the investment for each new procurement will reduce over time.

#5 Use existing knowledge: network, tools, and experience sharing

Experiments in circular economy procurements have been underway for several years now, and expertise is constantly growing. Find ways to use and build on this existing knowledge. Check what other organisations did in their procurements and how you can reuse that. Find and use suitable tools to guide you through the process. Use experts that help guide market dialogue and interpret responses into specific, evaluable criteria. Join networks and projects to continue to develop a specific sector and circular procurement in general.

CIRCULAR PROCUREMENT CHECKLIST

1

Improving the support base in your organisation

- Identify your stakeholders: who will be affected and who can help you to advocate for more circularity within your organisation?
- Ambition and expectations: what are your circular and other goals and what is your business case for the procurement?
- Monitoring: how will you measure results and progress?
- Communication is key: can you increase momentum by communicating about the project?
- Training: do you need capacity building efforts before you are ready to start?

2

Setting requirements

- Choose a 'pilot procurement project': projects with limited risks, some flexibility, and high visibility are suitable
- Involve all internal stakeholders, e.g. financial department, maintenance staff, Sustainability manager, and internal client)
- Set the scope of your project: is a purchase necessary or can the need be covered in a different way?
- Define the priorities: what are the main circularity goals you want to reach with the procurement?
- Set functional specifications that leave room for innovative, circular solutions

7

Evaluation of the procurement process

- Set clear success and failure indicators with all internal stakeholders from the start
- Plan a thorough evaluation moment with the stakeholders before a new procurement cycle begins
- Evaluate success of circular criteria used in the tender process, as well as the process itself and how the contract was used during the contracting period
- Link your evaluation to organisational goals and ambitions on circularity, climate change, biodiversity, pollution, and social impact

The best way to a successful circular procurement is to see it as a journey. The Procurement Transformation Journey outlines 7 procurement phases in which organisations are faced with a variety of opportunities for optimising circular performance.

This checklist will help you to start your Circular Procurement Transformation journey.

For detailed guidance and tools to help you on the way, see the **ProCirc Circular Procurement Transformation guidance** and the methodology and tools for **the Procurement Transformation workshop**.

3

Market Engagement

- Research the market to understand the circular maturity and relevant legislation
- Consider organising information sessions and asking suppliers about their circular ambitions
- Maintain a good balance between being realistic and challenging in your ask to the market
- Time Management: are you budgeting and planning for enough time during this pre-tender phase?

6

Contract management

- Discuss achievable performance levels with your supplier before signing the contract and allow for bonuses for overachievement on circularity, as well as penalties for under delivery
- Discuss your ambitions with your current suppliers and see how you can work on circularity in ongoing contracts
- Establish clear processes and task division internally (including hand-over between procurer and contract manager) and secure resources to follow up and monitor supplier performance
- Closing the loop: monitor and follow up on end-of-life procedure, product lifetimes and reuse approaches

5

Evaluation of the offers

- Ensure you have put enough emphasis on circular aspects for the evaluation, balancing the weight of your award criteria and price
- Assessment criteria and evaluation methodology should be transparent and clearly communicated to potential suppliers when setting out the tender: think about how suppliers can prove circularity aspects
- If your chosen procurement procedure allows, explore your options to negotiate the received offers with preferred bidder(s)

4

Specification & Tendering

- Use the market engagement insights to decide on relevant criteria and circular ambitions
- Specify your need: are your requirements best met through a product or a service and how can you adjust the procurement procedure?
- Take into account the functional lifespan of your product when looking at contract duration and think about including repair & maintenance aspects
- Explore how you can use the MEAT criteria to include circular considerations (for example through Total Cost of Ownership or cost for externalities instead of acquiring price)



REFERENCE MATERIALS AND OTHER RESOURCES

ProCirc resources

- Pilot case studies
- Procurement transformation guidance
- Procurement transformation workshop
- Five scaling opportunities for circular procurement, 2023
- Webinars
 - Future of Furniture
 - The future of ICT: Circular solutions for a post-Covid world
 - Procurement as a Building Block for Circular Construction
 - Online workshop: Delivering the EU Green Deal through Circular Procurement
 - Practical guidance for procurers and project managers in circular procurement

Access all ProCirc resources on the [ProCirc website](#).

Consulted reference material

- European Union, (2016) *Buying green! A handbook on green public procurement* (publication)
- Oppen, Croon, Bijl de Vroe. (2018) *Circular procurement in 8 steps guidebook* (publication)
- Circular Flanders; *Textile and Workwear textiles* (website)
- BITC (2021) *Improving the Sustainability of Professional Clothing* (publication)



ACKNOWLEDGEMENTS

- Núria Cases i Sampere, Francesco Lembo (ACR+)
- Peter Ramsey, Maya DeSouza (Business In the Community)
- Lasse Aahave Uhd (CLEAN)
- Christian Tangene (DFØ)
- Emiel Ascione, Anne Goidts (Kamp C)
- Martin Pedersen Stub, Iben Østergaard Fog (Kolding Municipality)
- Emma Börjesson, Johanna Tunlid, Robin Hörqvist, Caroline Hultstrand, Annica Axelsson (City of Malmö)
- Julie Bastholm (Netværk for Bæredygtig Erhvervsudvikling)
- Alexandra Vandevyvere, Melody van den Acker, Veerle Labeeuw, Tim Caers, Karlien Wauters (OVAM/Circular Flanders)
- Imelda Blair, Susan Lagan, Spela Raposa, Steven Menzies (Zero Waste Scotland)
- Lisanne van 't Hoff, Lyke Bosma, Monica Sánchez Groeneweg, Joan Prummel, Mervyn Jones, Cuno van Geet, Priscilla Kramer, Barbara Lugthart (Rijkswaterstaat)
- Craig Matheson, Joel Evans (Aberdeenshire Council)
- Alexander Lemmens, Els Verwimp (Agency for Facility Operations, Government of Flanders)
- Lies De Meyer (bpost)
- Carolina Vogel, Hendrik Jan Withag (Municipality of Groningen)
- Lien Neys, Jessie Van Couwenberghe (City of Leuven)
- Alison Dryhurst (Integral UK Limited)
- Johan Rodenhuis, Lucien Claassen (IWR, RVO, Dutch Ministry of Economic Affairs and Climate)
- Jennifer Bowles, Zoe Brawn, Stefano Ferracuti, Laura Muir, Scott Nixon, Barry Philips, Nicola Howie, Kelly Nugent (Scotland Excel)
- Brendan Little, Graham Porteous, Colin Bell (Scottish Procurement)
- Claire Roxburgh (Scottish Power Energy Networks)
- Philip Duddell, (Sustainable Procurement Ltd)
- Joris Van Der Flaas (Zonnige Kempen)
- Mathis Fay (Bax & Company)



Rijkswaterstaat
Ministry of Infrastructure
and Water Management

The Norwegian Agency
for Public and Financial Management



Kolding
Kommune
en del af Trekantområdet



City of Malmö

KAMP C



The Prince's
Responsible
Business Network



Netværk for Bæredygtig
Erhvervsudvikling
NordDanmark



WE MAKE
TOMORROW
BEAUTIFUL
OVAM



clean
INNOVATING GREEN SOLUTIONS

Interreg
North Sea Region
ProCirc

European Regional Development Fund



EUROPEAN UNION