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## Guidelines for Civil Servants on Circular Public Procurement

Summary version





## Circular economy

"The value of products and materials is maintained for as long as possible. Waste and resource use are minimised, and when a product reaches the end of its life it is used again to create further value. This can bring major economic benefits, contributing to innovate, growth and job creation."

European Commission Definition of Circular Economy

The European Union, in the **Communication 98/2020** "A new Circular Economy Action Plan For a cleaner and more competitive Europe", established the following aspects of circularity, that should guide the design of goods, services and works:

- 1. Improving product durability, reusability, upgradability and reparability;
- 2. Reducing hazardous chemicals in products;
- 3. Increasing product energy and resource efficiency;
- 4. Increasing recycled content in products, while ensuring their performance and safety;
- 5. Enabling **remanufacturing** and **high-quality recycling** (that implies dissolvability for homogeneous materials);
- 6. Restricting **single-use** and countering **premature obsolescence**, introducing a **ban on the destruction of unsold durable goods**;
- 7. Incentivizing **product-as-a-service**;
- 8. Reducing carbon and environmental footprints;
- 9. Mobilizing the potential of **digitalization** of product information, including solutions such as **digital passports, tagging and watermarks;**
- 10. Rewarding products based on their **different sustainability performance**, including by linking high performance levels to incentives.

https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC 1&format=PDF



## Circular public procurement

- Circular public procurement means that **the public sector purchases products and services according to the three principles of the circular economy**. These three principles are 1. eliminating waste and pollution, 2. circulating products and materials at their highest value and 3. regenerating nature.
- Above all, circular procurement means a new way of thinking about the procurement process. We have to ask ourselves several questions: Do we have to purchase anything, or could the existing products be repaired? Do we have to own the product, or can we share the product with another organization? Instead of a product could we buy a service and promote the local economy at the same time? And before the purchase we must remember that the product must be long-lasting, and we have to find out whether the product can be repaired and whether spare parts are available. We have to pay attention to the energy efficiency of the product and the properties of its materials and ensure the circulation possibilities of them. A life-cycle assessment can provide us comprehensive understanding of the product's environmental impact.

#### • Benefits of circular public procurement

Cost Reduction: Achieve short and long-term cost savings, focusing on Total Cost of Use or Total Cost of ownership.
Reduced Procurement Frequency: Extend product life, leading to less frequent procurements.
Decreased Waste Management Costs: Reduce or eliminate the need for extensive waste management, resulting in cost reduction.

Waste Prevention: Prevent waste and minimize the use of hazardous substances.
Resource Conservation: Mitigate depletion of scarce raw materials, addressing geopolitical and environmental concerns.
Supply Chain Transparency: Enhance transparency in the supply chain.
Cohesive Cooperation: Foster cohesive cooperation in the supply chain for a robust and resilient network.

#### Why it matters?

Public procurement is estimated to account for **15-20% of global GDP**, placing it at the forefront of shaping the model of local economies. This means that it has a high potential to facilitate the transition to circular economy. When civil servants in the public sector engage with potential suppliers during procurement processes, they can play an important role in encouraging the suppliers to adopt more circular practices. This will aid in directing public finances towards a wider adoption of circular solutions.



## Circular public procurement

#### Procurement criteria examples

1.**Eco-efficiency:** preference for raw materials and products that generate fewer negative environmental impacts during the life cycle;

2. **Turn a product into a service:** Turn the purchase of a good into a service, a rental;

3. Purchasing products that have **environmental certification** according to existing Type I schemes (which refer to multi-criteria life-cycle-based, objective, established by independent authorities)

4. Choosing products that use **renewable raw materials** or products derived from renewable materials;

5. Avoiding, if and when possible, the purchase of products that contain **critical raw materials** (for more info, see the Fifth list 2023 of critical raw materials for the EU);

6. Choice of renewable raw materials and/or products;

7. Purchasing goods that are used and/or prepared for **reuse** (subjected to inspection, cleaning, disassembly and repair so that they can then be reused and re-marketed);

8. Selection of recyclable raw materials and products;

9. Selection of raw materials made from waste materials (by-products);

#### 10. Avoid single-use products;

11. **Ecodesign**: purchasing products designed to be disassembled / repaired / reused / remanufactured / recycled;

12. Prefer to purchase **bulk goods** or with packaging with reduced environmental impact;

13. Purchasing products that allow optimization and monitoring of consumption;14. Purchasing products that guarantee service aimed at extending the useful life of products.

#### Circularity examples in business when choosing the supplier

#### Value proposition and key partners

- Extended product life, product disassembly for parts, materials cycling or reuse, extended warranty, regeneration, safe disposal, virtual product, increasing customer awareness regarding sustainable consumption
- Co-operative production, recycling waste, parts by third parties, cooperation within the service network, collection for end-of-life products, product components after their end of use

#### Key resources and activities

- Use of raw materials, resources originating from recycling, other forms of recovery
- Use of better technical quality materials, less harmful to the very internation of the second seco
- Protection of natural resources, renewable energy use, water, energy and material saving
- Human capital
- Product design and extending the lifetime of the products
- Maintenance, servicing, availability of spare parts
- Logistics of returns
- Increasing efficiency and performance, eliminating waste in the whole supply chain

#### **Customer relations and channels**

- Production upon order
- Long-term relationships
- Virtual communication with the customer, channel of returns, spare parts, materials

#### Cost structure

• Savings and costs of implementing the CE

# The principal steps to elaborate a circular strategy

#### Step 1 – Determine the current situation

•Do we already do something that supports circularity in procurement?

- •What kind of procurement processes are currently in place?
- •What are the main items/services/materials we purchase today?

#### Step 2 - Set scope and targets

- •What product or service categories do we want to focus on?
- ·Construction and infrastructure, services, materials, food, furniture, ICT
- •What are the main targets of the procurement?
- •Longevity and durability, reusability, closing material loops
- •Reducing waste by 20% by 2030, increasing product life for at least 3 years
- •What are the key performance indicators (KPIs) for determining success?
- \*Amount of waste or energy saved per year, amount of recycled material used

#### Step 3 - Develop action plan

- •Ideally, a document with clear, practical details on how the targets will be achieved
- •Relevant stakeholders, division of responsibilities, available resources, implementation in practice, measurement, time frame
- •Training and communication within the organization
- •Getting and collecting new ideas within the organization
- Incentives for sustainable procuring

#### Step 4 - Implement action plan

•Conduct and provide regular updates and reviews to make sure things stay on track

#### Step 5 - Monitoring and reporting

- •Evaluation of the results of the action plan
- Analyzing possible problems and developing solutions
- •Communication about the results with the internal and external stakeholders

## Circular public procurement process

The following is a general model of a simple (open procedure) circular public procurement process (for specific information & practices, familiarize yourself with the procurement regulation and other related information of your region and the EU).



Determine what are the organization's actual material needs (avoid purchasing new when possible), circularity ambitions/objectives (e.g. reducing waste), preferred and feasible contract-types (e.g. buy, hire, service-models), relevant environmental/circularity criteria and principles (e.g. DNSH), budget/cost estimates and suitable procurement procedures (open, restricted etc.). Publish a possible prior information notice.

Define the procurement subject with necessary technical, functional, sustainability/circularity, cost-related specifications and quality scoring, criteria for supplier selection and awarding, possible procurement procedure-specific details, essential contractual terms, time limit and other formalities (e.g. format, structure and used languages) regarding the submission of tenders.

Publish the procurement notice & the call for tenders on the official public procurement channels (in the open procedure the call for tenders is linked to the procurement notice. In other procedures, the procurement notice serves as an invitation to apply for participation in the process.)

 Required communication (e.g., providing additional information regarding circularity specifications) with potential bidders during the process 4 Evaluation of tenders

## 5 Awarding the contract

6 Contract

managementt &

preformance

monitoring

Ensure that the submitted tenders meet the defined requirements.Communication with bidders, when needed.

• Perform the evaluation of tenders based on predefined specifications and criteria. Use quality scoring in the evaluation, if specified in the procurement documents (e.g. price can be scored 60-70 and quality 30-40).

• Select the offer that best meets the requirements and notify all participants of the selection decision.

• Draft and sign a contract with the selected supplier based on the specifications & criteria defined in the procurement documents (including possible performance-based sanctions and bonuses) and publish a contract award notice.

•Ensure that the terms of the drafted contract are followed during the contract period. If necessary, apply the possible performance-based sanctions or bonuses.

• Communicate with the supplier, monitor performance and quality, report on the results, and utilize the lessons learned during the contract period in the future.

## Examples of award criteria

#### Case Reusing staff workwear, Denmark

Met the requirements and was deemed to be the 'most economically advantageous' considering the following assessment criteria and weightings:

#### 1.Price: 50% of total score

- 2.Climate impact assessment: 20% of total score
- 3. Function, design, and quality of protective apron: 15% of total score
- 4.Share of renewable material: 10% of total score (awarded points based on the proportion of renewable material)
- A higher proportion of renewable material than 70% would be
- awarded as follows: (71-75% = 1 point, 76-80% = 2 points, 81-
- 85% = 3 points, 86-90% = 4 points, 91-95% = 5 points, 96-
- 100% = 6 points)
- 5. Time schedule for test series and full delivery: 5% of total score

#### Case Lighting-as-a-service, Belgium

The award criteria were weighted as follows:

#### • Availability fee per building / 100

The cost-benefit of lighting-as-a-service per building, calculated by comparing energy bills (including index and inflation) and maintenance costs over the duration of the contract to the proposed service fees of the bidder. The price the city has to pay to the provider per year over the 15 years. The supplier with the lowest price scored 100 points, and the other bids received fewer percentage points.

- Lighting plan proposal technical concept / 10
- Proposal for offered light fittings: quality of material and appearance / 10
- Proposal for a maintenance plan: maintenance of installed luminaires and guarantee of light level / 30
- Execution deadline: delivery and installation of light fittings (planning per building) / 10
- Circular economy: the plan of approach at the beginning and during the execution of the contract / 10
- Circular economy: the plan of approach at the end of the contract continuity of service provision / 20
- Training of users and technical maintenance personnel / 10

## Tools for circular procurement

## Life cycle costing

The life cycle of a resource – product, service, or infrastructure – means the length of its life from raw material or input stage to disposal or repurposing. A circular approach aims at replacing disposal with repurposing that allows reuse. This reduces the need of new purchases and helps reduce waste and raw material extraction.

Life-cycle costing takes into account all the costs caused to the owner of the resource during its lifetime: the initial purchase, costs associated with operation and maintenance, and disposal costs. Some models also consider social and environmental costs. For example, purchases with a low initial price, but with high maintenance requirements, energy or water use, and disposal costs can end up more expensive and environmentally damaging than purchases with a higher initial price but lower maintenance and longer life.

Life cycle costing can take place at the pre-procurement stage or when evaluating and comparing tenders. The key is predicting future costs of the resource.

Life cycle costing may be used together with life cycle assessment, although it's not necessary. While life cycle costing deals with the costs of the resource during its lifetime, life cycle assessment evaluates the environmental impact of the resource and often requires more time and specialist knowledge to be conducted.

### Joint procurement

A joint procurement means combining the procurement actions of two or more contracting authorities. The key defining characteristic is that there should be only one tender published on behalf of all participating authorities. (OECD)

- Joint procurement can allow for larger quantities of circular products or services to be procured, which can incentivize suppliers to scale up production and reduce costs.
- Multiple contracting authorities collaborating in joint procurement can pool their expertise in circular economy practices.
- By working collectively, public entities can encourage suppliers to develop and provide products or services with improved circular characteristics, fostering a more sustainable market.
- However, a challenge in joint procurement arises from the unique needs of individual procurement units, and this must be taken into consideration.

## Tools for circular procurement

### Market engagement

Market engagement is a process that takes place before, during and after procurement. It aims to identify potential bidders and/or solutions, build capacity in the market to meet the requirements, inform the design of the procurement and contract, help suppliers to submit strong bids and feed back to and debrief suppliers after the process. It can range from looking to inform the market of purchasing intentions through a communication or advertisement to full dialogue and exchange with suppliers to work on a solution together. It's advised to allow 3-6 months for the market engagement process, with larger contracts or processes that involve co-design of goods or services requiring up to 12 months. This can save time in later stages by resulting in fewer supplier clarifications and a more suitable contract for all parties because suppliers have been able to adapt to the procurement's needs.

Fair competition should be ensured at all stages of the market engagement process by making sure that any group of potential suppliers are not disadvantaged and that their intellectual rights are not violated.



Picture: GPP Toolkit Module 6 - Market engagement

Managing the risks can include steps such as:

- act responsibly and with integrity be fair, open and transparent and remain impartial
- plan how and when you will engage with the market
- make the process clear to all suppliers and manage their expectations
- do not favor one supplier over others
- share the same information with all suppliers, for example, by briefing them together
- be open to new players, new ideas and new solutions and do not get 'sold' on one solution
- ask suppliers to identify any aspect of their offerings which they deem to be commercially sensitive – then ensure that you do not disclose this information or use it without their written consent
- keep records of your meetings
- try to include at least one neutral observer
- be clear with suppliers as to what will and will not be shared as part of the market engagement process
- work with other public authorities to share advice and knowledge

## Tools for circular procurement

## Public Procurement of Innovative Solutions

Innovation procurement plays an important role in the modernisation of the public sector services and the adoption of environmentally friendly technology. The European Union supports the use of **public procurement of innovative solutions (PPI)** and **pre-commercial procurement (PCP)** as complementary tools to promote innovations from the demand side.

Through the process of **public procurement of innovative solutions (PPI)**, the public sector can address societal challenges related to the circular economy by acquiring innovations that are not yet widely available on the market, but no longer require research and development. In this way, the public sector acts as an early adopter and facilitates the diffusion of innovations to the market.

The PPI process proceeds as follows:

- 1. A critical mass of demand is created (e.g. through joint procurement) to motivate a larger scale commercialization of the innovative solution.
- 2. An early announcement is made of the innovation needs with necessary product features, schedule and price information.
- 3. The actual public procurement through the standard procedures already in use (e.g. open/negotiated procedure, competitive dialogue).

## **Pre-Commercial Procurement**

**Pre-commercial procurement** (PCP) is a process that focuses on the public procurement of research and development services. Through the pre-commercial procurement, it is possible to create products and services that are better suited to the needs of the public sector.

Pre-commercial procurement has several benefits for both public organizations and suppliers, which include:

- It allows for the comparison of several different innovative solutions during the development phase and shares the risks and benefits associated with product development between the private and public sectors.
- It provides a proof of concept and demonstrates the market potential of a new product or service.
- It creates an attractive customer reference for pioneering companies and provides access to public procurement markets.

The process can be divided into three different phases (*solution exploration, prototyping* and *testing*), between which an interim evaluation and selection of the most interesting solutions is carried out.

- In the *solution exploration* phase, the general feasibility of competing solutions is examined from different perspectives.
- In the *prototyping* phase, efforts are made to ensure that the different solutions meet the procurer's requirements.
- In the *testing* phase, the functionality and cost-benefits of the solutions compared in real-life situations.

European Commission; Commission of the European Communities 2007; Valovirta /VTT 2010\_

# Case example: circular procurement in road construction

•What: The project applied a design and build (D&B) operating model, in which the chosen contractor is appointed to both design and then construct the works described in the contract. This way the expertise of the contractor can be utilized instead of depending on the city's internal resources of know-how and expertise.

•How: At the beginning of the project the city of Tampere collaborated with an expert panel of academia, procurement specialist and companies to create baseline circular procurement criteria that ensured effective but realistic standards and avoided applying too of stringent measures from the offset. After defining the initial criteria, procuring officials participated in market dialogues to explain the circular and sustainability aims of the procurement and initiate a deeper discussion with the companies. A period of 4 weeks was reserved for companies to comment on the new circular criteria and ask questions before submitting their application.

•What to learn: The procurement of the contract favored products and supplies with lower carbon emissions. The award criteria of the tenders awarded points for various factors in the following themes: reducing the amount of waste, conserving natural resources and reduction of other environmental impacts. Tenders were then evaluated based on the most economically advantageous tender: 30% given to the quality criterion and a 70% to the cost criterion. As a result, utilizing recovered material and low-emission equipment on Yliopistonkatu generated positive environmental impacts. The market dialogue also allowed potential contractors to influence the procurement process through circular economy related ideas and innovations for the first time. Because of the extensive interviews to formulate the initial criteria, the process was longer than a traditional procurement process.

•When: 2021

•Where: Tampere, Finland



Picture: Karoliina Tuukkanen

https://green-business.ec.europa.eu/green-public-procurement/good-practice-li brary/introducing-circular-economy-procurement-road-construction-city-tamper e\_en

Picture: Karoliina Tuukkaner



## Towards circular economy

#### The European Green Deal

The EU aims to be the first climate-neutral continent by 2050, achieving this by means of reducing emissions by at least 55% by 2030 compared to 1990 levels.

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-greendeal\_en

#### **Circular economy action plan**

Adopted as an updated version in 2020, the Circular economy action plan is one of the key components of the European Green Deal aimed at reducing pressure on natural resources, creating sustainable growth and jobs, and halting biodiversity loss. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:9 8:FIN

#### Corporate sustainability reporting

As part of the European Green Deal, the EU requires large companies and listed companies to publish regular reports on their social and environmental risks, and on how their activities impact people and the environment, inc. resource use and circularity. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464

#### EU Taxonomy

The EU Taxonomy is a financial classification system that helps direct investments to the economic activities most needed for the green transition, in line with the European Green Deal. Transition to circular economy is one part of it.

https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-susta

#### The EU Ecolabel

A voluntary, third-party verified scheme awarded to products and licenses that clearly demonstrate environmental excellence. It includes multiple criteria and tackles the main environmental impacts of products along their full lifecycle.

https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel-home\_en

#### Green public procurement criteria and requirements

Green public procurement (GPP) is a voluntary instrument aimed at boosting resourceefficient economies. As a part of the Circular economy action plan, the European Commission is proposing minimum mandatory GPP criteria and targets. https://green-business.ec.europa.eu/green-public-procurement/gpp-criteria-and-requir

#### About the project

The guidelines are compiled as part of the Erasmus+ funded CIRGREEN project and aim to serve as a concrete, practical toolkit for municipalities to incorporate the principles of circular economy in their procurement processes. The guidelines are compiled in cooperation with EcoFellows Ltd, Provincia di Parma and Mancomunidad Integral Sierra de San Pedro. This document is a summary version of the entire guide.

#### The full version of the Guidelines can be downloaded from the link: