WHAT ARE CIRCULAR PROCUREMENTS?
Concepts and developments in CircularPP project

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CircularPP - Using innovation procurement and capacity building to promote Circular Economy

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A Taste of Sustainability
– Mobilizing Public Procurement and Catering Services in the Baltic Sea Region

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What are circular procurements?

- [https://www.youtube.com/watch?v=QdlMWDdBUUb6E](https://www.youtube.com/watch?v=QdlMWDdBUUb6E)
Circular public procurement follows the objectives of CE

The objective of a circular economy (CE) is to maintain the value of products, materials, and resources in the economy by closing material loops and minimizing waste generation.

- Procurement that supports circular economy

- Procurement that stimulates and creates demand for goods that contribute to the circular economy
  (Green Deal, Circular Procurement, 2013)

- Procurement with no negative external impacts or waste
  (NewForesight, 2014)

- Procurement or recycled / reused products and parts with no harmful substances
  (NewForesight, 2014)
How is cycling of materials taken into account in the procurement process? For example: recycling of materials is required, use of recycled materials is required, use of secondary materials is allowed, etc.

How are non-risky cycles and materials taken into account? What is the chemical content of the procurement?

How is life extension taken into account? What kinds of requirements e.g., for:
- Eco-design
- Maintenance
- Guarantee
- Refurbishment
- Repair
- Modification
- Reuse/leasing

How is efficiency or intensity of use improved through procurement? For example, concept of shared use, etc.

What kinds of criteria are used?

What kinds of contract terms are used?
## FOUR APPROACHES TO CIRCULAR PUBLIC PROCUREMENT

<table>
<thead>
<tr>
<th>Procurement including GPP based &quot;circular&quot; criteria</th>
<th>Procurement of new &quot;circular&quot; products and materials</th>
<th>Procurement of services and new business concepts</th>
<th>Procurement promoting circular ecosystems</th>
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</thead>
<tbody>
<tr>
<td>Improved products and services are procured by adding more GPP and circular criteria to the tender competition:</td>
<td>New products and materials are procured and/or developed by innovative public procurement:</td>
<td>Product - service systems are procured and concepts that promote circular aspects are applied:</td>
<td>Investments are made that stimulate the development of &quot;circular ecosystems&quot;:</td>
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<tr>
<td>- Recyclability</td>
<td>- Products that are significantly better in terms of recyclability, share of recycled materials, long lifespan, disassembly</td>
<td>- Leasing concept</td>
<td>- Develop or support closed loops</td>
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<td>- Share of recycled materials</td>
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<td>- Buy per use</td>
<td>- Create networks and alliances</td>
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<td>- Reuse</td>
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<td>- Shared use</td>
<td>- &quot;Waste as material&quot;</td>
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<td>- Packaging material</td>
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<td>- Buying and selling back</td>
<td>Examples:</td>
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<td>- etc.</td>
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<td>- Buses running by locally produced biogas</td>
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<td>- Construction projects with closed material loops</td>
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</table>

### Examples:
- Packages
- Paper products
- ICT devices
- Furniture parts

- Building components of recycled material
- Textiles made of recycled material

- Buying light instead of lamps
- Leasing furniture instead of buying it

Better quality products | New products | Service concepts | Circular ecosystems
Circular public procurement process

**Preparation phase**
- Circular solutions are sought for in the preparation and planning.
- Active market dialogue is undertaken in order to come up with circular solutions.
- The need for circular solutions is clearly informed (e.g., how circular solutions could improve the quality of the public service).
- Certain tools, e.g., eco-design and LCC can be used in the planning.

**Description**
- The subject matter is respective to circular economy (e.g. procurement of textiles of recycled materials).
- The supplier is asked for a new solution, or the subject matter is “open” to innovative circular solutions.

**Tendering**
- Circular procurement criteria are used, including e.g. extension of lifespan, refurbishment, intensive use, cycling of biological or technical materials, non-toxic substances, etc.
- A description of circular processes is asked, e.g. the supplier should describe how the materials are to be circulated, what the end product and markets are, etc.

**Decision**
- Procurement of competitively priced products, services, or systems that lead to extended life spans, value retention, and/or remarkably improved and non-risky cycling of biological or technical materials, making use of and supporting the circular business models and related networks.
- Solution that improves the quality and cost-effectiveness of the service.

**Contract period**
- Continuous improvement of the service during the contract period.
- Feedback from the end users and related actions.
- Bonuses/sanctions.
- Reporting.
Potential sectors for circular procurement - High procurement volume and possibilities for circular solutions

- **Construction**
  - Buildings
  - Roads / infrastructure

- **Furniture**
  - Components made of recycled materials
  - Planning services
  - Life cycle furniture services (leasing)

- **Food and catering**
  - More efficient food chains, reducing disposal of raw materials in the value chain
  - Concepts on how to reduce the disposal of food
  - New protein sources

- **Local energy production and biobased energy**
  - Public transportation based on biofuels

- **Textiles**
  - Use of recycled (and recyclable) material

- **Waste management**
  - Multilocker collection system
  - Buying resource efficiency instead of waste handling

- **Waste water treatment**
  - Efficient and clean cycling of nutrients
The main goal of CircularPP project is to develop a framework for circular procurement in the countries belonging to the Baltic Sea Region, by following a four steps approach:

1. **Analysis of the status quo** in Circular Procurement in the Baltic Sea Region and identification of improvement potentials at a local, national and transnational level.
2. **Building necessary capacity** on circular procurement for all relevant stakeholders of the value supply chain, namely public procurers, SMEs and policy makers.
3. **Delivering call for tenders** aligned with the defined priority areas to enable learning by doing and ensure the projects develops practical capacity building material (e.g. training, guidance, future recommendations).
4. **Disseminating widely the project results** among European public procurers and SMEs, using strategic partners and relevant channels.
State of the art on circular procurement policy

- The combination of
  - expert interviews (18 experts from 7 countries)
  - in-depth case studies of best practice examples (23 cases)
  - an overview of circular approaches in existing call for tenders (50)

provided a thorough analysis of the current state of the art of public procurement policy and practices in the Baltic Sea Region, from which a set of recommendations for future actions are provided.

Link to the report:
State of the art on circular procurement policy

RESULTS – country review

• Challenging Concept – CPP – SPP – GPP? Most of the work is done under SPP and GPP.
• Policy actions and competence are at different level in countries
• DE, SE and FI have worked towards SPP both on governmental and on local level. LV and PL have started work to promote GPP.
• The high government level commitment does not necessarily lead to activities in local level. Municipalities play important role in implementing CE activities.
• Guidance about CPP for procurers exists.
• Criteria for SPP or GPP have been developed - the data on their usage is not gathered.
• Price is still the most significant criteria in most of the procurements.
• Interest among key stakeholders is growing.
• The importance of a dialogue between suppliers and procurers has been recognized.
State of the art on circular procurement policy

RESULTS – best practice examples

• Requirements for
  • use of non-toxic chemicals
  • material choices / safety
  • recycled material in packaging
  • recyclable packaging
  • durability
  • easy maintenance
  • guidance for correct use and user manual
  • a long guarantee or the length of guarantee are presented in cases.
Pilot circular procurements

- Aalborg, Malmö and several Latvian municipalities
- CircularPP will deliver 5-8 circular public procurements.
- The tenders will be coordinated and managed by partner cities supported by mentors according to the following steps:
  1) Pre-procurement stage – includes a definition of the needs, defining the needs, early marked engagement activities, publication of preliminary information and preparation of procurement documents.
  2) Procurement Stage – delivering the different procurement procedures, awarding the contracts and consulting the market if necessary.
- An evaluation of the tender processes will be conducted with a report about the main lessons learned.
Non-new furniture and related services
City of Malmö

Priority list of action when a need of furniture appears (need, benchmarking, Malvin, internal services).

Dutch criterias in tender (an action plan)
1. Circular development
2. Incentives for using the framework agreement
3. Collaboration

Green requirement in tender

Results
• 4 tenders
• 4 suppliers
• New framework briefing
• Education continues

Related services in the framework agreement
• a) Reconditioning
• b) Furniture upholstery
• c) Carpentry and painting
• d) Re:design
• e) Interior analysis with action
• f) Temporary spare furniture
• g) Inventory of existing furniture
• h) Repurchase/Sell
• i) Rent
• j) Storage
Procurement pilot on playground

Playground at Stigsborg Children’s and youth Universe

- The pilot becomes a part of Stigsborg Children’s and youth Universe - finally decided in September 2019

- Part of the total enterprise and thereby city of Aalborg’s building department is the developer/builder and is responsible for making one total enterprise (turnkey) for both playground and school.

- Large process with several stakeholders
  - in august 2019 kick off meeting
  - Vision seminar
  - Study tour

- Collaboration on market dialogue

- We will draw the circular criteria

Stigsborg Children’s and youth Universe

Age group 0 – 15 years
School with 1000 students
Integrated institution with 160 children (60 nursery and 100 kindergarten)
Leisure and youth services
Sports facilities including hall and ballcourts
Link til park and fjord
Play and learn with water as theme.

Ideas circular playground

Smart m2 – open for all – multifunctional – learning environment – leasing – leasing with maintenance –
17 SDG goals – SMART – use water – LAR – 25 % of the lessons must be outdoor – the green – underlay – integrated teaching – school gardens – vertical cultivation – recycled materials – fence for institution is part of the learning – different heights
Procurement pilot on lifetime extension of ICT

Organization: SC-group, user group, project manager, purchaser

Action plan, project plan and time schedule

Base line – interview with 7 ICT departments

Catalog for how it is today – what to included in the tender

Calculate reduction of CO2 emissions, waste and water

Gather lessons learned from other municipalities in Denmark and EU

1:1 Market dialog (4 with known companies)

Market event – 52 participants from 18 different companies, Small video (EENA)

Articel on the internale process (in process)

The pilot tender (in process)

Environmental efforts

Blood minerals
Child labor
Work condition in Asian
Short lifetime – time for expiration is short
Hard to repair – glued together
Difficult waste management – 3. world countries

Spinoff

ICT-dep. will use criteria for other tenders
Trade off, will not enter into new agreements
Logo policy
Test: using ICT equipment for 5 – 6 years instead of 3 – 4 years
Energy consumption for docking station, monitors etc.
Leasing: maybe in the future
Buying laptops – which one to buy for the most sustainable/circular
Next national tender for ICT equipment...
Procurement on Catering services in the Pļaviņu region gymnasium

Pļaviņu region
- Size: 377 km²
- Inhabitants: 5,763
- Unemployment: ≈ 5%
- Budget income 2015: 870 Euro / inhabitant
- Pupils in gymnasium: 410, staff: 77
- Duration of contract: 2018.01.09-2021.03.31.05
- Published: 27.06.2018.
- Decision: 02.08.2018.

2 bidders participated
Contract value: 361,638 Euro
Criteria for financial value: price a la carte: 2.69 Euro (nonwinning 1.4 Euro)
Procurement „Catering services in the Pļaviņu region gymnasium“

Exclusion criteria:
- The Applicant has not violated the terms of the catering service contracts related to GPP during the previous 3 years

Award criteria (economically most advantageous)

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
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<tbody>
<tr>
<td>Price (a la carte menu)</td>
<td>30</td>
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<tr>
<td>Nutritional quality of technological cards (compliance)</td>
<td>15</td>
</tr>
<tr>
<td>Compliance with healthy diet (comparative assessment)</td>
<td>15</td>
</tr>
<tr>
<td>Nr. of certified products in menu (organic, integrated, list of producers)</td>
<td>15</td>
</tr>
<tr>
<td>Environmentally friendly transportation ≤ 50 km</td>
<td>20</td>
</tr>
<tr>
<td>Participation in “School Fruit”</td>
<td>5</td>
</tr>
</tbody>
</table>
Procurement „Catering services in the Pļaviņu region gymnasium“

Technical specification:
• The use of disposable plastic dishes is not allowed
• Use of seasonal fruits and vegetables
• At least 50% of milk: organic
• In cooperation with the client, the service provider evaluates at least 2 times a year detailed feedback of pupils about the food and quality, and uses results for waste prevention.
• The service provider ensures food distribution that enables client to determine composition and size of portion (joint large dishes or voucher system).
Procurement „Catering services in the Pļaviņu region gymnasium“

Technical specification:

Waste management:

- The service provider sorts the waste according to the waste manager's instructions (biological, packaging, other).
- The service provider regularly (2 times a year) carries out the inventory of waste generated in the kitchen and catering, analyzes it and agrees with the contracting party on an action plan for waste reduction.
- The customer determines the use of surplus food.
- The service provider shall inform about the most important actions for the prevention of food waste (educational notes, etc.).
Results from new procurement

1. **Difficult starting** - confusion when the new system was introduced (pupils select own portions), insecurity about pupils choices (diversity + healthiness)
2. **After half a year** - pupils and catering service is used to the new system, and like it.
More information

• Ebook on circular procurements in 8 steps
• Publisher: Rijkwaterstaat et al.
• English translation done in CircularPP
• Available soon at www.circularpp.eu
With regard to food, the principles of the CE can be applied to catering in e.g. following ways:

- **Protein content**: over time, shift the plant/animal protein ratio to 60/40 or even 70/30.
- **Origin**: ask suppliers to use local and seasonal food as much as possible.
- **Food waste**: prevent food waste in banqueting by interfacing actively with the event organisers.
- **In addition**, the following aspects are relevant for the operational management of restaurants:
  - **Restaurants**: minimise the consumption of water and energy and use renewable energy.
  - **Packaging material**: Minimise the use of packaging material where possible and only use monopacks if this is necessary to prevent food waste.
  - **Equipment**: assess the viability of maintaining ownership of, for instance, coffee dispensers or small kitchen equipment, and focus on Total Cost of Ownership.
  - **Decide which aspects are important to your organisation** and conduct a market consultation to involve market players.
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Circular Procurement Projects and initiatives
<table>
<thead>
<tr>
<th>Project name / Initiator</th>
<th>Focus / Research questions</th>
<th>Report / Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circular Procurement Guide</td>
<td>Good practice and guidance, also sector specifically</td>
<td><a href="https://wegwijzer.gdci.nl/en">https://wegwijzer.gdci.nl/en</a></td>
</tr>
<tr>
<td>Public Procurement for a Circular Economy</td>
<td>Good practice and guidance</td>
<td>European Commission, 2017</td>
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<tr>
<td>Exploiting the potential of public procurement – opportunities for CE</td>
<td>This study analyzed public procurement opportunities to promote circular economy</td>
<td>Alhola, K., Ryding, S-O., Salmenperä, H. &amp; Busch, N., 2018</td>
</tr>
<tr>
<td>Circular procurement in the Nordic Countries (CIPRON), NCM</td>
<td>Definition for circular procurement Different types of circular procurement Best practise cases in the Nordic countries</td>
<td>Alhola et al., 2017</td>
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<td>REBUs Towards a Circular Economy model for Procurement</td>
<td>Benefits of circular procurement Content of circular procurement Examples of sectors suitable for circular procurement</td>
<td>Prummel, J. &amp; Jones, M., 2016</td>
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<td>Harnessing Procurement to Deliver Circular Economy Benefits, REBUs</td>
<td>Circular procurement principles and key lessons</td>
<td>Report, PIANOO 2017</td>
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<td>REBU reports and tools</td>
<td>Pioneering resource efficient business models (REBMs) for a circular economy</td>
<td>REBU, 2017</td>
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<tr>
<td><strong>10YFP / Sustainable Public Procurement and the CE</strong></td>
<td>European Union Circular Economy Package 10YFP SPP Programme</td>
<td>Yaker, F., UNEP, 2016</td>
</tr>
<tr>
<td>Circular Procurement Guide / MVO Nederland</td>
<td>Intended for procurement staff and gives specific guidance to introduce circular procurement.</td>
<td>MVO Nederland</td>
</tr>
<tr>
<td>Using Product service systems to enhance SPP, UNEP</td>
<td>Intended to assist governments in evaluating the potential of product-service systems to act as a driver in achieving their sustainability goals.</td>
<td>UNEP Technical report, 2015</td>
</tr>
<tr>
<td>Danish EPA / Ellen McArthur Fnd.</td>
<td>Denmark: Public procurement as a circular economy enabler</td>
<td>Ellen McArthur Foundation – Case studies, c 2017</td>
</tr>
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<td>INNOCAT Sustainable catering</td>
<td>Towards a CE model for Procurement Circular food &amp; nutrient loop</td>
<td>Jones, M., 2016</td>
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<td>Circular procurement</td>
<td>Pilot study on circular flooring. Circular economy guide outlines a process of five steps for preparing a circular business case.</td>
<td>ABM Amro</td>
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<tr>
<td>Getting started with circular procurement / PIANOO</td>
<td>Guidance to circular procurement, including useful tips, background details and practical examples.</td>
<td>PIANOO</td>
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<tr>
<td>Using Product Service Systems in Circular Procurement</td>
<td>Training module for circular procurement provides insights and practical guidance to procurement officials, policy makers and suppliers on how adopting circular procurement principles.</td>
<td>Prummel, J., 2016</td>
</tr>
<tr>
<td>Results Green Deal Circular Procurement</td>
<td>Experiences from Green Dear Circular Procurement (45 participants of the Green Deal Circular)</td>
<td>Starmans, E., 2017</td>
</tr>
</tbody>
</table>