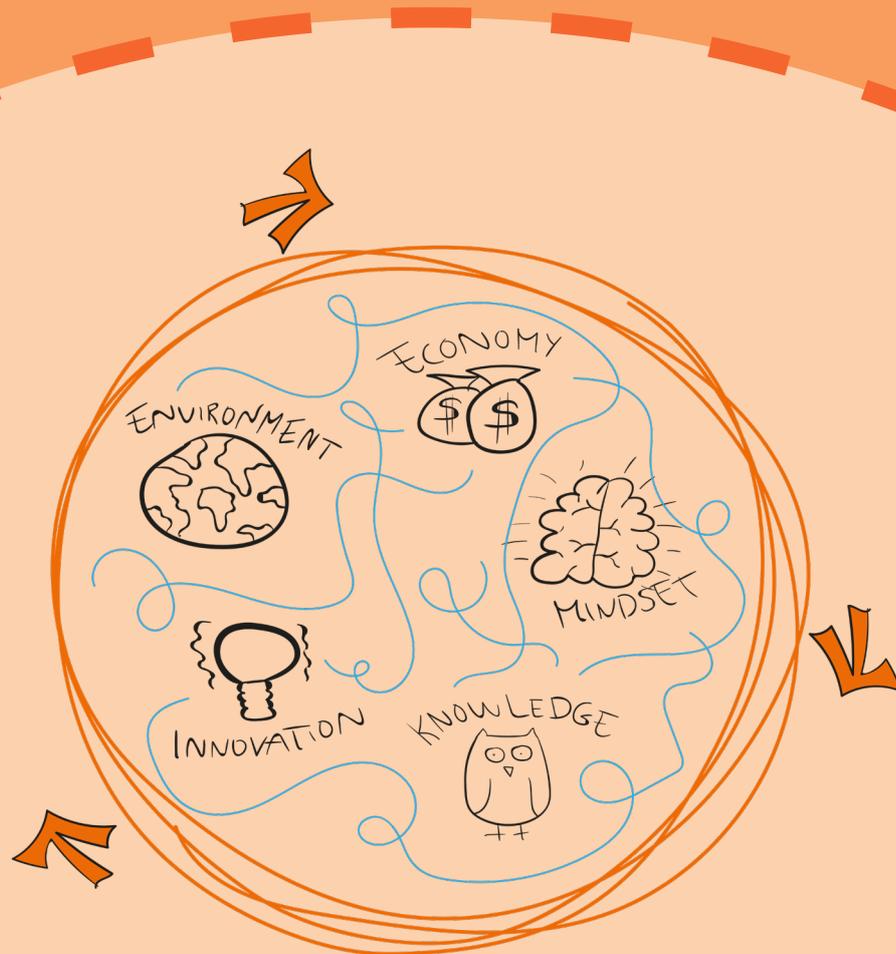


Lessons learnt from the procurement pilots in the Circular PP

Published december 2020



Summary

In Europe, the public sector buys around 2 trillion euros worth of goods and services annually. That is about 14% of the EU's GDP. Circular economy is an economic system that represents a paradigm change in the way that society relates to nature and aims to prevent the depletion of resources, close energy and material loops, and facilitate sustainable development. By experimenting with non-conventional business models, focusing on quality of products and services and creating resource loops, circular procurement aims to lead the way to a circular economy.

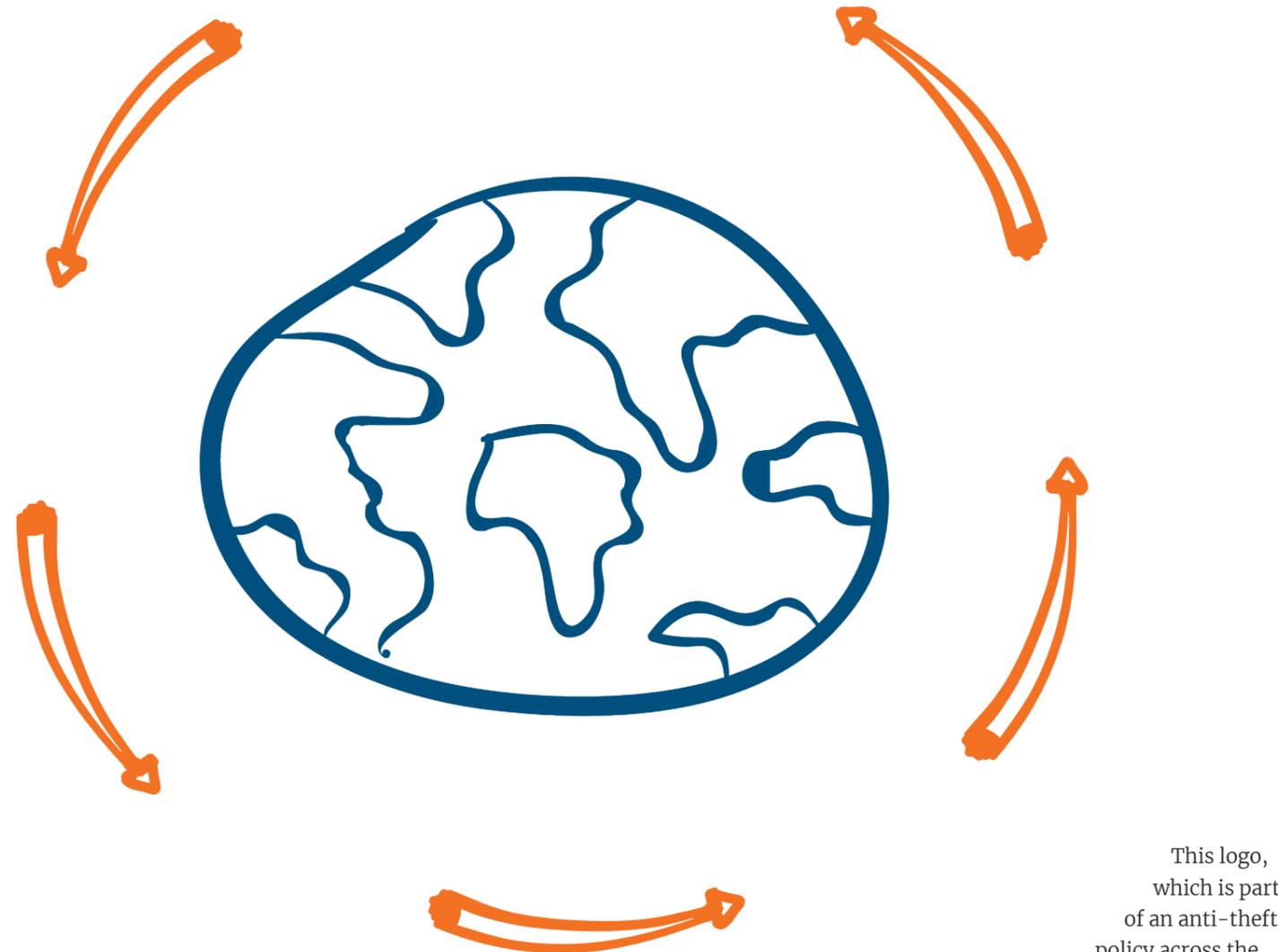
Circular Public Procurement (CPP) is a three-year project between 2017-2020, supported by the Interreg Baltic Sea Region Programme. The main goal of this project is to develop an adequate framework for circular procurement in the countries belonging to the Baltic Sea Region, one part of this is by learning from the circular procurement pilots that have been carried out in the project.

Circular procurement pilots were carried out in the City of Aalborg, the City of Malmö and by the Latvian Environmental Investment Fund (LEIF).

The Latvia partner LEIF, Latvian Environmental Investment Fund, is not a municipality as in Sweden and Denmark. LEIF has been working with several municipalities during the CPP-project. One of LEIF's focused projects has been on furniture for a dormitory in Smiltene. Circular requirements that were included were prolonged warranty, availability of details, guidelines for maintenance, easy to repair and transform. LEIF has also been working with a catering procurement

for a school where organic products and waste minimisation were included in the tender. Reducing food waste was also a big part of the tender, and the pupils decide their meal in advance to avoid surplus food.

One of Aalborg's cases during the CPP-project has been in ICT and about creating a service for buying back used ICT equipment from the municipality (including, for example, mobiles, tablets, computers, laptops, wires, storage and servers). This will prolong the lifetime of the ICT equipment. Another great potential for environmental and economic savings could be achieved if an engraved logo, which is mandated to be on all municipal computers and laptops, was to be removed.



This logo, which is part of an anti-theft policy across the municipality, not only represents a cost, but also significantly reduces the price that suppliers are willing to pay for used ICT equipment. The second case in Aalborg is a pilot for a playground /outdoor area, where the municipality wants to emphasize a more holistic way of thinking. The main emphasis is on the terrain, hills, play surface, learning and tools. Hills, terrain, trees, etc. make a valuable play environment with endless opportunities that continue to challenge for creative play. Based on the idea of circular thinking, Aalborg aim for longevity with materials that can be part of a new circular loop. When hills, terrain, planting, etc. are established properly, there is minimal maintenance with a long service life. The pilot is aiming for a

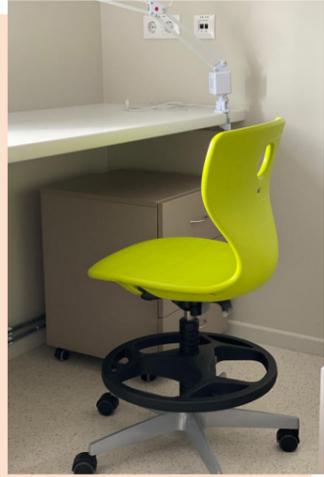
framework for all future playgrounds in Aalborg.

Malmö has been working with a tender for non-new furniture, with the aim to not only be able to buy secondhand furniture but also take better care of the furniture already owned by the municipality, refurbishing existing furniture and collaboration between internal functions and external suppliers. Since January 2019, Malmö has a framework contract with four suppliers and in the first year the contract was valued at almost 600 000 euros and has saved 170 509 kgs of CO₂, which equals 68 round trips to Thailand. Malmö has also, during 2020, started the pre-tender phase on a tender for a procurement on waste management.

Lessons learnt and conclusions

It takes time and engagement to do circular procurement. Organizations are on different levels and people are different in how they tackle new challenges and implement new behaviours. But common for most organizations doing circular procurements is that its important to put a lot of energy into the pre-tender phase and anchor the procurement and process.

It might also be a success factor to start with something easy where the market is ready. This way its easier to get a successful first case that will likely lead to more circular procurements. Talking to market is necessary to understand how cooperation is done in the best way to achieve the contact the organization needs. Last but not least; plan for the implementation of the tender. It takes time to implement a new contract and a new behaviour.



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ABOUT THE PROJECT

Using innovation procurement and capacity building to promote Circular Economy (Circular PP) was a 3-year project between 2017-2020, supported by the Interreg Baltic Sea Region Programme. The aim was to address the societal challenge of resource efficiency, in favour of a more circular system. The project had a multidimensional perspective, ultimately affecting both the market, the public procurement strategies and practices of partner cities. By experimenting with non-conventional business models, focusing on quality of products and services and creating resource loops, circular procurement is one method of leading the way to a circular economy.

Circular PP consisted of, in total, 10 partners from seven different countries. Together, these partners carried out five work packages (WPs) over the last couple of years. The main activities of the WPs are described below. This Lessons Learnt Report is one of the deliveries in WP4.

Circular PP has conducted an exhaustive research on state of the art of Circular Procurement among the countries of the Baltic Sea Region. The research will serve as the main basis for the development of the capacity building activities, which will take place in the project. All reports are to be found [here](#).

The research has been divided into three main groups of activities:

- State of the art on circular procurement policy.
 - Alternative business models and partnerships for improved circularity.
 - Institutional set-up of bodies relevant to circular procurement.
- Circular procurement requires capacity building e.g. an internal behaviour change in organisations to catalyse actions that has to take place among public authorities, but also among suppliers and final users of products. The aim is to provide a common understanding of circular procurement to all stakeholders.
 - State of the art workshops, mentoring programme, Awareness Workshops; Circular Procurement Training; Market Building Activities has been carried out during the project.
 - Circular PP has delivered six circular public procurements based on improved competences from the capacity building activities and best practices within the Baltic Sea Region. In this report the Lessons learnt from these procurements will be shared.



A BACKGROUND TO CIRCULAR ECONOMY AND CIRCULAR PROCUREMENT

Linear vs. circular economy

To understand the circular economy, we must first understand the linear economy. Our current economic system is a direct consequence of the industrial revolution, which was the first time in history when mass production was made possible at reasonable prices. This is often referred to as a linear or take-make-waste economy. This take-make-waste economy intensified even more during the depression in the 1930's, when industries introduced the notion of planned obsolescence. Planned obsolescence is a design strategy that intentionally limits the technical lifecycle of products, leading to increasing sales volumes and is hence consequently boosting the economy (London, 1932). Today in the US, only 1% of consumer products remain in use after half a year. This means that 99% of the materials that are sourced, manufactured and transported are thrown away within six months (Leonard, 2011).

At the same time, we know that our current lifestyle is more than the planet can take. In 2019, the Earth Overshoot Day, i.e. "humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year" took place in July. If we continue with a linear economy, this date will only fall earlier and earlier, especially since the population is still growing and more and more people will achieve a higher level of wealth (as we measure wealth today in

Defining circular economy

A major breakthrough in circular thinking was realized with the publication of the first of a series of reports by the Ellen MacArthur Foundation (2012). This report presented the economic benefits of transitioning to a circular economy (CE), leading to a widespread adoption of the concept of the CE. However, the CE is a complex issue and there is an abundance of interpretations, you can find over 100 different definitions (Kirchherr et al., 2017). The short version of the definition of the CE used by the Ellen MacArthur Foundation states that:

"A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems."

terms of consumption).

In order to break this pattern of depleting the planets resources, we need to rethink our economic system. Circularity is about minimizing resource waste and maximizing value retention of resources and materials. However, circular products by themselves will not solve the problem, we also need to fundamentally change our consumption patterns and our way of measuring wealth.

Click [here](#) to find an animated video about the project.

Circular Economy on a European level

In 2015, the European Commission launched its first Circular Economy Action Plan, with 54 actions that have all been delivered or are being implemented. In 2019, the Commission adopted a new updated Action Plan, which is an important part of the European Green Deal, Europe's new agenda for sustainable growth. The Action Plan outlines a set of both general and material-specific actions, the main ones are described in the box below.

The new circular economy action plan presents measures to:

1. Make sustainable products the norm in the EU
2. Empower consumers and public buyers
3. Focus on the sectors that use the most resources and where the potential for circularity is high, such as: electronics and ICT; batteries and vehicles; packaging; plastics; textiles; construction and buildings; food; water and nutrients
4. Ensure less waste
5. Make circularity work for people, regions and cities
6. Lead global efforts on circular economy

Click [here](#) to read more.

The EU recognizes that the transition to a circular economy will require adaptation and collaboration between stakeholders at all levels - EU, national, regional and local levels and at the international level. Therefore, the Commission calls on EU institutions and bodies to support the action plan and actively contribute to its implementation. Member States are encouraged to adopt or update their national strategies, plans and actions for the circular

economy in the light of the ambition in the action plan.

Circular Procurement in 8 steps

The traditional focus of procurement has been only on buying at the lowest price, but in modern times, the public sector is taking an increasing responsibility for ecological and social effects of procurement. As the public sector is a massive consumer with considerable purchasing power, procurement is a powerful tool to push the green transition and reduce CO2 emissions. By putting strong requirements on the suppliers, the public sector can help influence pricing, availability of raw materials and can create opportunities to spur technical innovation and sustainability. Within sustainable procurement practice it is therefore natural to use purchasing power to promote a circular economy. As part of the Circular PP project, one of the partners (Rijkswaterstaat - the Dutch Ministry of Infrastructure and Water Management) has published a book, describing an 8-step approach to circular procurement, which you can find in its entirety [here](#). The eight steps of the book are described briefly below.

Rijkswaterstaat (RWS) has long experience in working with circular procurement and the book is based on this experience. The role of RWS in the Circular PP project has been to support the other partners with their knowledge, and the content and process of the book has been used to mentor the partners during their pilot studies in how to create circular procurement.

Circular Procurement in 8 steps

1. Circular procurement - why and what? Begin by examining why you would like to work with circular procurement in your organization. In this process, you should also break down what circular economy/ circular procurement means in your or-

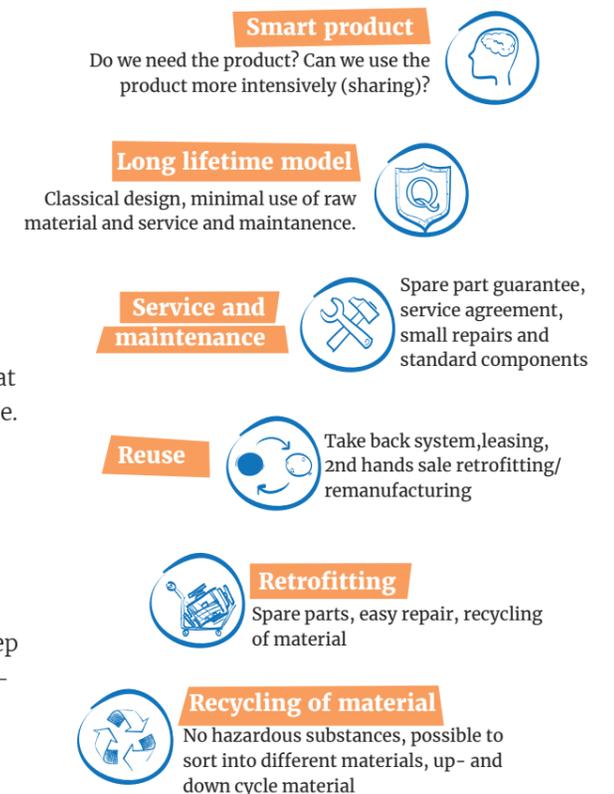
ganization, which definition you can work with. Furthermore, when you are new in the field of circular procurement, make sure to start with something relatively easy for the first pilot study.

2. Internal organization and alignment Still in the initial phase, make sure to present the benefits that circular procurement can contribute with and form the alliances that are needed between different departments etc. Get the internal stakeholders on board.
3. Formulating your question Make an inventory of your exact needs, focusing on the function rather than the product. Formulate your need of function in a way that allows suppliers to come up with innovative solutions.
4. Collaboration Make sure to take charge of a larger collaboration process, as it is likely that all stakeholders would benefit from engaging the market early on. Initiate and direct dialogues between your organization, suppliers and other partners in the value chain.
5. Tendering procedure Be clear with what you wish to achieve with your procurement and adjust the tendering procedure according to that. Also, explain the scope of your tender at an early stage, so that it is clear to all what the legal limitations of your procedure are.
6. Measuring and assessing circularity Formulate a framework of circular criteria that will help you determine which supplier can give the best offer to align with the aim of the procurement. This step should also include measurement and assessment of circularity.

7. Securing circularity Examine how financial incentives can help to guarantee a circular use of products, finding the best circular revenue models for the specific case. Also, develop the contract so that it is based on collaboration and continuous development.
8. Managing circular contracts As signing the contract is only the beginning of the business collaboration between the client and contractor, make sure to maintain a good relationship throughout the contract period, so that there is room for optimization.

Circular PP infographics with different steps of circularity

There are many ways of how to introduce circular criteria's in tenders. Below a figure shows the steps and different approaches, that one might take towards implementation of circular economy into tenders. For more infographics on Circular Procurement click [here](#).



PILOT PROCUREMENT PROCEDURES IN SWEDEN, DENMARK AND LATVIA

Introduction to the circular procurement pilot within the Circular PP project and Challenges for circular public procurement

Circular procurement pilots were carried out in the City of Aalborg, the City of Malmö and by the Latvian Environmental Investment Fund (LEIF).

In this chapter the full story from the three procuring partners in Circular PP will be presented, from finding the right pilot studies to pre-tendering phase, market engagement and implementing the tender. When this report is written all pilot studies are not ready yet, so the length and depth of the stories vary a lot. After each story you will find a page with the Lessons Learnt elaborated from each partner. There is also a summary of lessons learnt in the beginning of this report.

In the Circular PP project, the three procuring partners the City of Aalborg, LEIF and the City of Malmö all had a lot of time to spend on the pilot procurements that were made. There was also a mentor with experience from circular procurement that helped each partner.

Other procurers might not have as much time and resources as the partners in Circular PP to carry out a circular procurement, but hopefully this report can help those who are in the process of starting with circular procurement.

The Lesson Learnt are lessons from the procuring partners in the Circular PP project and might not be applicable in other

situations and contexts. Furthermore, some of the lessons learnt might not come as a surprise to the reader. Lessons learnt from any process where new ideas are tried out and implemented might look quite similar, for instance that it usually takes time and energy to change processes.

Organizational context and mentoring

The contexts for the three partners are also quite different. The Latvian organization LEIF aims to support municipalities, whereas the City of Aalborg and Malmö have been working within their own organization. In addition, the contexts within these two municipalities differ as well as the scope of the product groups being procured. The lessons learned might therefore be contradictory since the organization and preconditions in each country vary.

An important component of the Circular PP project has been to encourage capacity building around circular procurement. In terms of the pilot studies; one of the ways to work with this was through a mentoring process. Each partner delivering a call for tenders received one-on-one guidance with an expert in the field. The structure of the mentoring process turned out to differ greatly between the different partners.

In Malmö, there was not so much focus on building the organizational support, but rather there was a very clear idea on how to conduct the pilot from the beginning

and the process started quickly. Aalborg, on the other hand, put more resources in to building the organizational support, bringing aboard a lot of different municipal departments. There are different strengths and difficulties with these approaches. Malmö's strengths were the high level of ambition and the fact that collaboration between the environment department and the procurement department was already started. For Aalborg, it was difficult to get started since they were dependent on so many people and departments, but on the other hand it might benefit them in the long run since they have a very broadly embedded project. In terms of the mentoring process, Aalborg was very aware of what to do, and the mentors could assist with external analysis, looking at what has been done in other municipalities and countries, bringing examples and criteria.

As the pilots in Sweden and Denmark were carried out by one fairly large and experienced municipality in each country, the context in Latvia was very different. Instead of a municipality, LEIF is an organization working with many small municipalities. Initially, the work revolved around identifying municipalities and partners that could participate, and much of the mentoring was focused on getting them up to speed on the sustainable advantages and benefits that circular procurements could deliver. The mentor of Latvia was much more actively involved in the process, compared to Malmö and Aalborg, and forming the organizational support in Latvia was a much bigger challenge since there was not just one municipality. In Latvia, the mentor participated in several meetings with various municipalities to find pilots.

During the Process of the piloting, challenges and barriers for conducting circular procurement arose

Price	How much (more?) will the circular solutions cost? Are they always more costly? Or is there a possibility to save money?
Systemic challenges	The difficulty in tendering circular products and services in a linear economy, circular procurement needs to be more than just reuse and recycling, focus is only on different parts like material etc, not the whole chain.
Legal and technical barriers	Are there legal and technical barriers for having circular procurement?
Target conflicts	Mostly on chemical substances – how to make sure that we do not continue to circular material that is potentially hazardous? Is there a possibility that circular materials and business models generate higher CO ₂ because of more transportation?
Political and organizational challenges	Do politicians or managers need to be convinced? Is the organization ready to try circular procurement?
Market readiness	Are the market and suppliers ready? How will they create revenues in this new type of economy?
Capacity of procurers	Capacity of procurers is there interest/time/possibility to implement new thoughts and ways of working to change this.
Behavioural change	Has to do with the above. Changing behaviour and habits takes time and energy, for the procurer/working group, but also for the users. In procurement processes and others processes to make circular solutions, this step is not often taken into consideration. It is also essential that people/ recipients of the procured goods and services – really use the circular options.

In the next chapter you will see how some of the challenges were faced in each pilot.



AALBORG

The City of Aalborg, organizational context

The City of Aalborg (lead partner of Circular PP) is a city located in the northern region of Denmark with approximately 215,000 inhabitants and an annual procurement budget of 2,141 million EUR. The structure of the municipal organization is divided into seven different administrative departments with separate political boards, which are all in charge of their own procurements. There is, however, a centralized procurement department of the municipality as well, AK Indkøb, where approximately 10% of all the tenders takes place. Even with this small centralized department, Aalborg's procurement system arguably has a very decentralized structure, which can be challenging when aiming to set citywide procurement requirements.

Aalborg has been committed to sustainability for several decades, even giving its name to the 1994 Aalborg Charter for local environmental action, which was signed by over 3000 local authorities in support of local environmental action. Aalborg's most recent Sustainability Strategy (2017-2021) highlighted the central importance of a circular economy approach to resource use and waste. City of Aalborg has been actively implementing green procurement for the last 10-15 years and has experience in the circular procurement of school furniture before the project. Click [here](#) to read more about the procurement in a case study published in GPP in practice newsletter. During Circular PP, the City of Aalborg has been working with two tendering processes, one of them focusing on lifetime extension of ICT equipment, and the other focusing on developing a new circular playground for children.



Denmark and circular procurement

- In the Danish Strategy for Circular Economy, published in 2018, it is stated that the government will ensure that Denmark continues to be among the frontrunners in green and circular public procurement
- POGI is the national effort of green and circular procurement. Around 15 municipalities and other public organizations are members at POGI. Forum's members are from the public and private sector.
- In 2019 there has been a lot of attention on circular procurement. The State and Municipal Purchasing Service in Denmark (SKI), Confederation of Danish Industry (DI) and the Local Government Denmark (KL) have all made ambitious strategies and goals for circular procurement.

Information from State-of-the-Art report from Circular PP. Read more at circularpp.eu

What was procured

An optimization of a service for buying-back used ICT equipment from the municipality (including for example mobiles, tablets, computers, laptops, wires, storage and servers)

What was included

Buy-back solution, Data deletion and anonymization, Transportation from more than 800 location (administration, kinder gardens, schools, nursing home etc), Rent of cages for storage, Hourly rate for dismantling and setting up new ICT equipment.

Circularity

The focus was on making sure that ICT products that are discarded by the City of Aalborg were refurbished and re-sold to another user for a new life. When worn out it was to be recycled so that the material can be used in new products. CO₂ and waste are reduced when optimizing the life span of the products. The supplier must work actively with sustainability and circular economy. For instance, reducing energy consumption, re-cycling of packages.

Environmental and social criteria

- Transportation, EURO norm 6
- Employed on special terms
- The supplier must co-operate with a material recycling company that has to be legal according to WEE and Danish law
- All equipment will be re-sold in the EU
- Evaluation of how well the circular element is carried out: how many laptops, tablets etc. are resold and how many will end up as recycled material

Challenges

One of the major target conflicts in buying back and reselling ICT products from the municipality was Aalborg's policy of engraved logos on ICT products, aiming to make theft more difficult.

There is a list of ICT products in use but a lack of a system that make sure that the used equipment is handled back to the ICT departments when replaced with new ones. A small investigation showed that 30 % of old laptops had not been returned. *(continues on next page)*



Behavioural change: valuing the ICT-equipment higher as well as recognising the remaining value of the equipment when no longer used in the City of Aalborg. It is simple to take care of the equipment, e.g. putting the laptop in a bag when transporting it between home and work and making sure to re-sell it as soon as possible when it is no longer in use.

Background and build-up of organizational support

Each of the seven departments of the City of Aalborg have their own ICT unit, and they are each in charge of making their own agreements and procurements. When the CPP project started in late 2017, three of the seven ICT units already had ongoing agreements that allowed suppliers to purchase some used equipment (more specifically laptops and computers) from their department. The suppliers would determine the residual value of the equipment, which was paid as an income to the municipality. When the products had no value remaining, the departments treated it as waste, either sending it to a recycling company or to a waste treatment facility.

As part of the established routine in the city (completely independent from the CPP project), the leaders from the seven ICT units meet monthly to address topics relevant to all their departments. In early 2018, one of these meetings was attended by the CPP project manager, who carried out a presentation and introduction of the CPP project, as well as highlighting the relationship between the ICT and the environmental challenge with ICT, the municipality's own sustainability goals and the Sustainable Development Goals. The ICT leaders agreed to be participants in the project and created a small working group with representatives from four of the seven units that would act as liaison with the CPP project.

Identification of barriers and needs

Further interactions between the CPP project manager and the recently created ICT

working group took place. This included, for example, two presentations made by the CPP project manager: The first one presenting the findings of a survey that focused on current practices for disposal/collection of used equipment across all departments. The second focused on environmental impacts related to manufacturing of ICT equipment. Based on the meetings held between ICT unit leaders and the CPP project team, a catalogue was drafted with initial needs to be considered for a potential framework agreement. The catalogue also included a mapping of differences between the seven departments.

This was conducted by asking the following questions:

- What kind of agreement do you have now for used ICT equipment?
- Do you need a supplier to make a list of delivered equipment?
- Where do you need equipment to be picked up (number of locations)?
- How many cages do you need and what sizes?
- Does the income from selling the equipment go to the ICT department or the part of the organization where the user is?
- Would you like to have a supplier employed on special terms?
- Would you like to have circular/sustainable elements in the tender?
- What do you need: deletion of data, anonymization, price based on fixed prices or fixed rejection based on damages?

- Do you need a report of the data deletion and do you need to delete the logo?
- Do you want to be a part of the market dialogue?
- Do you need take-back of ICT equipment, data wiping, compliance with GDPR rules, and on-site collection?

From the perspective of the CPP project manager, raising awareness across the ICT units and their departments is just as important as the actual tender taking place. At the beginning, the ICT departments did not see themselves as a part of the agenda of "green change" but as a service for the employees to support them with a well-functioning digital workstation.

According to the CPP project manager, this pre-tendering process has helped to slowly change the mind-sets of the final users, which she expects will facilitate the implementation phase of the procurement.

During the pre-procurement phase there is a big opportunity to make sure that sustainable criteria and requirements will be included. Later in the process, it might be more difficult to include these criteria that is why the pre-phase is so important. In the pre-tendering phase, there is also a possibility to map behaviour regarding ICT. There can be low-hanging fruit e.g. informing the users in how to take better care of the devices and the importance of selling used equipment

as soon as it is no longer in use. There is a remaining value and it can be re-used by another owner.

The ICT departments will procure for around 2.5 % of the total purchases made by the municipality. This includes both hardware and software and is a significant amount of money. Through the cooperation with the ICT departments in the pilot for used ICT equipment, there is a great possibility that the ICT departments will put sustainable and circular requirements in tenders in the future. There are a lot of potential sustainability gains with procuring circular in the ICT sector. The sustainable and circular requirements in the life extension of ICT can be upscaled by the ICT departments when they make tenders in the future. A challenge is that the City of Aalborg buys new ICT equipment through a national framework agreement and is tied to this agreement for another two years. Because of this, the City of Aalborg decided to work with used ICT equipment and with this work, affect the coming national agreement. It is anticipated that the next national agreement for new ICT equipment will contain more circularity and sustainability.

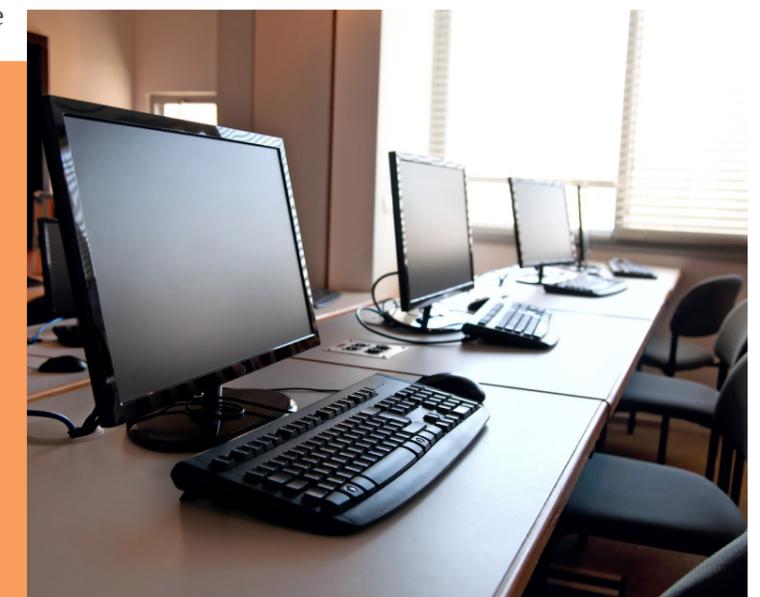


Photo: Colourbox

Logo policy – A technical barrier that was solved

During the meetings with the ICT unit leaders, the CPP project manager addressed specifically the potential for environmental and economic savings that could be achieved if an engraved logo were to be removed. At that moment, the logo was mandated to be present on all computers/laptops owned by the municipality, as a part of an anti-theft policy. The logo not only represents a cost but also significantly reduces the price that suppliers are willing to pay for used ICT equipment. The process to change this policy, which was originally defined (and required to be changed) at a political level, has been completed and now the policy is labeling with stickers and DNA. It is considered a significant spin-off effect from the CPP pilot project.

Benchmarking and market engagement

Regarding this pilot, three opportunities for market dialogues were organized. In the context of the discussions with the market, external analysis of ICT procurements and benchmarking was carried out by the CPP project manager and the mentor.

The mentor compiled an overview of existing standards and criteria relevant to lifetime extension of ICT, including appropriate reuse, transportation, packaging, data security, WEEE compliance, contract performance clauses on monitoring outcomes and social clauses.

Click [here](#) to see a video about one of the first market engagement activities in Aalborg

First opportunity

In September 2018, an open market dialogue was organized by the CPP project

Potential CO₂ savings

Based on the mapping the project manager also made a calculation of saved CO₂-emission if all laptops were given another three years of lifetime within or outside the municipality. The result is based on an estimation, but the level of saved CO₂ is not to be mistaken. If the lifetime of all laptops would be extended by three years, the city of Aalborg will save around the CO₂ emissions from all the municipality's administrative buildings (electricity), or the same as CO₂ emissions from the total life cycle of 40 cars.

These estimations are only based on laptops, then there are mobile phones, storage, keyboards etc.

management team, where the intention to develop a pilot project focused on ICT buy-back services was expressed. The purpose of the event was to get the market aware of circular procurement in general. Soon after, several suppliers began contacting the municipality in order to hear more about the potential agreement, or to directly offer their services.

Second opportunity

In August 2019, the CPP project manager arranged a face-to-face dialogue with four companies that at that point were already offering ICT take-out services for the municipality (unfortunately no one from the ICT working group attended). At the meeting, two main topics were add-



The following three examples, with a focus on services, were discussed

- 1) A digital platform in which primary school students can buy their used school laptop/tablet back
- 2) Pick up of used ICT equipment on site by the supplier
- 3) Replacement services on site, including delivery of new equipment and collection of used from the user.

As for the second focus of the meeting, the list of circular criteria was compiled by the CPP project manager, who made an external analysis based on desktop research (for example analyzing other call for tenders on ICT across Europe), consulting other municipalities in Denmark to draw experience from similar procurements, and consulting external partners from the CPP project.

Included in the list of criteria were things like having requirements of the percentage of reuse, estimated purchase price or cost of collection, suppliers providing proof that the used ICT equipment will be re-sold or processed for recycling within Europe, circular systems for transportation and packaging, job creating opportunities particularly for people in need of "special terms" etc.

ressed: the potential services that suppliers could provide and a list of potential circular criteria.

Regarding the criteria of putting a number on the percentage of re-use, this proved to be difficult as the suppliers would then have to know beforehand very specific information about the equipment they would receive, which the municipality would not be able to provide. In trying to find a solution for this, it was debated whether some sort of hypothetical list of equipment from the municipality could

serve as a kind of baseline for the suppliers, but in the end, the uncertainty would still have been too big to give a realistic estimate of the percentage of re-use. As facts about the amount, type, condition and location of the equipment were unknown, it also raised other issues, such as estimating the purchase price or cost of collection.

The solution is an evaluation of what happens with the used ICT equipment i.e. how well the circular element is carried out: how many laptops, tablets etc. are resold and how many are going to be recycled. This is related to both the supplier and the city. The company aims to improve what will be re-sold in its original purpose and the city aims to treat the devices well.

In addition, when the discussion passed on to other criteria, the suppliers saw some challenges because they had never been met with such requirements before. For example, none of the suppliers had experience of specific requirements on transportation and could not fulfill them at the time. Neither had they encountered requirements about packing, however they all have experiences with sustainable packaging, e.g. the use of waste textiles instead of plastic wrapping and recycled plastic. Furthermore, the criteria that suppliers should provide proof that the used ICT equipment would be re-sold or processed for recycling only within Europe also proved difficult but could be achieved.

However, there is no tracking system in place yet so what happens after the immediate buyer is unknown.

All in all, a conclusion that can be drawn is that the ICT market is simply not ready for these types of requirements if they were to be the minimum level demanded. However, it is possible to let the suppliers compete on these criteria, and the CPP project manager learned that the companies are willing to explore these topics in the future. The market dialogue was also a way to set a direction for what will come in future tenders.

Third opportunity

Later in 2019, the Sustainability Festival in Aalborg offered another opportunity to consult the market. This time, the focus was not so much on dialogue with the 18 ICT companies that took part but on the CPP manager being able to explain the process and intentions of a potential ICT buy-back agreement. It also offered the opportunity to reinforce the message of Aalborg's high sustainability requirements in an attempt to put pressure on the market to keep up with the trend towards a more sustainable future, not just in Aalborg.

Fourth opportunity and decision to make a optimization of existing agreement

During the process, a decision was taken to postpone the tender a couple of years and instead optimize the agreements the seven ICT departments temporally had entered. Six out of the seven departments had the same supplier.

A purchaser, a senior person in the ICT departments and the project manager had got a mandate from all seven departments to negotiate with this supplier.

In May - October 2020 we had several rounds of negotiation and visits to the company. The project team is working on the agreement and it seems like everybody will be happy with it and that it will meet all the sustainable and circular requirements.

Procurement Design

As mentioned earlier, three of the seven municipal departments had some sort of detached agreement on ICT buy-back already at the start of the CPP project in 2017. However, by early 2020, all seven departments from the municipality had some type of temporary individual agreement involving the sale of used equipment to suppliers (including a socio-economic

enterprise). These contracts differ in terms of the scope of equipment covered by the contract and none included validation mechanisms for re-sale or re-use, which is one of the main priority criteria for the CPP project.

Therefore, the CPP project management team decided to move forward with the intention to design a common call for tenders focused on a buy back arrangement, also known as "take-outs", applicable for all departments and covering various types of ICT equipment, including laptops, mobiles, storage, tablets etc. The communal agreement was expected to guarantee that used ICT equipment across the municipality would be purchased, repaired as well as re-sold to external customers. If no product value remains, the material was to be recycled according to the WEEE directive and Danish law.

Purchasing used ICT equipment was left out of the scope since all the ICT leaders were hesitant regarding this, they considered used equipment unable to fulfill their requirements. Furthermore, Aalborg municipality is currently under a SKI framework agreement for purchasing of (new) ICT equipment. However, the current SKI framework does not offer an option for purchasing used ICT equipment nor does it consider buy-back agreements with suppliers. It has been discussed among the Circular PP team to try out a smaller pilot with used ICT equipment at the environment department.

Another potential service that was left out includes the circulation of used equipment inside the municipality. This service consists of suppliers purchasing ICT equipment from one part of the municipality (e.g. administration), repairing it and installing a new software, and re-selling it inside the public sector to another area that requires a lower equipment capacity (e.g. elderly homes). This service was left out of the contract, as the internal ICT departments can perform this function on a small scale.

Furthermore, the ICT departments started a process of analyzing the organization of ICT in the City of Aalborg. The report will be finished during the latter part of 2020. One of the results of the report is to gather "hardware" in one unit, another to utilize the size of the city when buying and reselling ICT equipment.

The agreement will contain

- Data deletion and anonymization
- Rent of cages for storage
- Hourly rate for dismantling and setting up new ICT equipment
- Transportation, EURO 6
- Employed on special terms
- The supplier must co-operate with a recycling company that must be legal according to WEE and Danish law
- All equipment will be re-sold in EU
- The supplier must work with sustainability, circular economy etc. E.g. by reducing the energy consumption, re-cycling packing and type of fuel for transportation

Evaluation of how well the circular element is carried out: how many laptops, tablets etc. are resold and how many are going to be recycled material.

Behaviour change and campaign

The communication that will be done after the agreement is settled and will be based on;

- Used ICT is not waste, others can benefit from it after you
- Used ICT must not be left outdoors, as rain can damage the equipment so others cannot use it after you
- Used ICT can be used by others after data deletion e.g. by re-sale

- Used ICT can be sold for money
- ICT has a large environmental impact when it is produced e.g. CO2, water and materials
- Other problems in ICT production e.g. blood minerals, working conditions in Asia, designed so that products cannot be repaired, ensure that waste does not end up in Africa
- After use, it must be ensured that the ICT is used as optimally as possible, e.g. direct recycling, as spare parts are included in a material loop, plastic and metal can be used again in new products
- Used ICT must be packed neatly in cages, so it does not get damaged e.g. the heaviest at the bottom
- Used ICT must not be torn apart for content, e.g. RAM, HDD, CPU, etc, because then it cannot be reused
- The most sustainable thing is that we ensure as long a lifetime as possible either with Aalborg Municipality or with an external new user
- ICT in use must be protected so screens and cabinets do not crack

Click [here](#) to find a video about green and responsible purchase and life extension of IT in Aalborg.

Aalborg: Lessons learnt and success factors about circular procurement

Lifetime extension of ICT equipment

Don't stop if you don't get a yes in the first place

Do not stop the process if you can see a huge benefit that is in line with the municipal strategies. Often the missing YES is a result of uncertainty, lack of time or lack of information. In this case, the stakeholders didn't know the project management team and it was the first time the stakeholders would be working with circular procurement. The stakeholders might be afraid that the process wouldn't be a success. Now the stakeholders are very satisfied with the collaboration and positive to the result. To keep the stakeholders interested you must find some carrots, e.g. the saved CO2 emission and in our case, the saved money by changing the logo policy. The interaction between the CPP project team and ICT departments has helped to visualize some wasteful practices beyond the original scope of the procurement, which has resulted in some parallel projects, including:

- Initiating the change in policy in relation to engraving a logo on computers
- Consider refurbishing ICT before replacement with new equipment or keeping the laptops for a longer time
- Avoiding "trade off" clauses when buying new equipment, which provides a discount to the municipality if the equipment is destroyed
- Start an analyze of the organization of ICT in City of Aalborg
- Energy consumption: screens, docking stations etc.
- What to buy in order to get the most sustainable and circular ICT equipment

Pre-tendering phase

Give a lot of focus to the pre-tendering phase. This is where you can gather the stakeholders and get a common idea to what kind of supplier and service you are looking for. It is also during this phase you will be able to make a list of all the sustainable and circular requirements that you would like to add to the tender.

A contract with one single supplier

Awarding a contract to a single supplier limits the potential to create systems for circularity in which different stakeholders can bring unique competences into the arrangement, overall reducing the potential for value creation. For example, dividing the contract into different lots would have opened the opportunity for socio-economic enterprises to participate and potentially obtain a part of the contract which would be a driver for social value creation in the area. This is something to take into consideration for the next tender.

Market dialogues

The market dialogues gave an opportunity for us to obtain feedback regarding potential services and criteria. For suppliers, the dialogues represented an opportunity to understand the needs and priorities of the municipality. The market dialogues also gave us the possibility to talk to many different potential ICT suppliers about what kind of requirements we will place in the upcoming tenders. The five step plan developed as a part of Circular PP gave us good guidance as to how to approach the market. Read more about this plan in the next chapter.



**Birgitte Krebs
Schleemann**

Project manager

Outdoor learning Environment/playground

The second case from Aalborg is an outdoor area/playground that is a part of the Stigsborg Children and Young Universe. The experience of this case will also form the basis for future playgrounds in Aalborg Municipality.

Background

Stigsborg is the fourth and final quarter of the portside of Aalborg City to be developed. It is planned to include housing, schools, kindergartens, nurseries, and leisure facilities for more than 8,000 people. The municipality aims to establish a universe for children and youngsters in the age range 0 – 16 including school facilities for 1,000 pupils as well as an integrated day care institution for 160 children in nurseries and kindergartens.

Stigsborg children's and young universe must be completed in 2024, and work is currently underway on the total contract for the entire project.

What will be procured

Outdoor learning Environment/playground

What was included	Landscape modelling with the terrain, play surfaces, planting, learning environments, outdoor workshop, playground equipment and learning.
Circularity	Long lifetime, Maintenance, Recycled materials and share of recycled materials in new products.
Environment and social criteria	Emphasize the holistic thinking around the outdoor area/playground, where the emphasis is on terrain, hills, play surface, learning and playground equipment. Hills, terrain, trees, etc. gives value to playing by creating endless opportunities that continue to challenge and boost creativity. When hills, terrain, planting, etc. are established properly, there is minimal maintenance, a long service life and materials that can be included in new material loops.
Challenges	The outdoor/play area tender is part of the total contract for the entire Stigsborg Children and Young Universe. The tender material has incorporated the ideas of circular economy, while it is expected that the award criteria will include less in the overall tender, but the supplier must still comply with them.

Finding the Scope and doing benchmarking

Outdoor areal/playgrounds was chosen early in the process, as Aalborg wanted to use the experience from a previous circular tender of learning environments, promote green transition and support the

circular economy. Aalborg started their circular procurement of playgrounds by revisiting what had already been done. The mentor conducted desk research on existing solutions and sought experiences from other public buyers. They found that no truly circular playground had so far

been made, making this a first of its kind. As a baseline, the mentor compiled an overview of existing standards and criteria relevant to different stages of the lifecycle of playground equipment, landscaping and green space management.

During 2020 the Circular PP project group has been participating in various initiatives arranged by the Stigsborg Children's and Young Universe group, among others, input to a kick-off event, a workshop on: *Movement, outside and local environment.*

Steering group

A steering committee was formed with representatives from the Schools Department, Family- and Employment Department, City and Landscape Department, the Procurement Department and Building Department. The steering group was very important, and they managed to link Aalborg Municipality's policies together in the project. This included, among other things, purchasing policy, sustainability strategy, health and the visions of the schools. There were several changes in the composition of the steering committee during the process, which meant that it consisted of many competencies as well as the right management level in order to make decisions.

The playground tender is, as described, part of a bigger project and the steering group brought knowledge and information between the two projects which benefited the process.

Experience with tendering for learning environments (for schools), and how that contributed to this procurement

In 2016, Aalborg started the process of establishing a new framework agreement for school furniture. The municipality decided to use the opportunity to transform their approach from a focus on just tables and chairs, to one that creates an inspiring learning environment, that support

pupils' needs while also strengthening the circular economy. Thus, Aalborg's approach to this procurement was to ask bidders not just to supply, but to inspire and challenge, and provide a comprehensive proposal for a new classroom environment.

After seven market dialogue meetings, the call for tender was published in April 2017, and in May 2017 an initial pre-qualification round was conducted. In this, Aalborg assessed to what extent applicants had relevant experience in areas such as; working with the principles of circular economy in connection with interior design solutions; in dialogue with schools; guaranteeing the possibility of recycling existing furniture; maintaining and refurbishing existing furniture.

The idea of working with the circular economy with requirements connected to lifetime, maintenance, recycled materials as well as the ideas of learning are pervasive in the two tenders.

Market Dialogue

The market consultation began already in September 2018 with a general information and showcase seminar at the Aalborg Sustainability Festival, where the municipality presented the ideas for two new tenders. In February 2020, the Circular PP team attended a Playground fair with the participation of 15 suppliers. The team discussed their ideas for a circular tender and received feedback from the various suppliers on their ideas of sustainability in relation to the playground tools, where circular economics was conceived in relation to no toxic chemicals, spare parts and maintenance.

The next step in the market dialogue was a webinar held on the 16th of April 2020, with 74 participants. Even in the planning stage of this event, the Circular PP project team experienced strong interest from numerous companies and individu-

als aiming to become part of this unique project that will set new standards for public procurement in the Municipality of Aalborg.

The composition of the programme for the day was very diverse as the ideas for the Stigsborg area were presented, as well as the project team's thoughts on a circular tender. In addition, a cultural sociologist talked about children's development, a landscape architect spoke about designing spaces for children and how to adapt and improve the city for everyday life. After that, there were pitches from seven potential bidders for the project (six from Denmark and one from The Netherlands). Their ideas were the background for the dialogue, discussion, and feedback with the purpose of adjusting their suggestions so that they eventually match the ideas of the project in the best way. It was valuable for the project as new ideas were presented, questions were asked, and a broader perspective was introduced. In conclusion, it can be said that it was a truly beneficial session for everyone, great satisfaction with the process and outcome was shown and the findings from this pilot project will form a precedent to future playground development and establishment in the municipality of Aalborg.

The fact that the market dialogue was online instead of a physical meeting made the Circular PP team reach a broader audience in Denmark, both in terms of suppliers, but also other interested parties such as other municipalities. However, an online event lacks the physical small talk and exchange of ideas that come during breaks and over coffee.

Legal and technical barriers

The biggest barrier faced in the procurement process so far is whether the playground/outdoor area should be a separate tender or part of the total contract. It was

the steering group for the entire Children and Young People Universe that ultimately decided on the total contract. The advantage of this is that circularity might be incorporated into more parts of the whole project and be communicated to all people involved, a disadvantage might be that the circular requirements might not be as prioritized as they would be in a smaller project.

Guide for circular playgrounds

- The CPP project team is working on a guide based on their experiences that will help others who want to buy playgrounds/outdoor areas
- The guide is called "Preparing for a Circular Playground: procuring creative spaces to play and learn in the City of Aalborg"



Photo: Learningspaces.dk

Aalborg: Lessons learnt and success factors about circular procurement

Circular playground for children

Market engagement via seminars etc is very valuable for creating an interest in tenders and to learn a lot more about what kind of solutions are out there. The corona crisis led to the seminar being held online, which was not the plan at first, but with this more people could participate. The market engagement was successful because we reached out to suppliers, but also other stakeholders such as municipalities. For a closer look, click here.

Circular procurement is not straightforward, but Aalborg learned that the best way forward is to just get started! Only by conducting procurement in practice is it possible to identify challenges, find innovative solutions, build necessary experience, and use the results to change mindsets.



Julie Bastholm
Project Manager



Birgitte Krebs Schlemann
Project Manager

5-STEPS FOR MARKET ENGAGEMENT AHEAD OF A CIRCULAR PUBLIC PROCUREMENT



1 GENERAL INFORMATION MEETING
On-line streaming during which the new focus on circularity in the selected number of requests for tenders in municipalities is announced and explained.



2 SHOWCASING SEMINAR
Example: Circular Public Procurement for the furniture sector. Explanation of thought process on circularity the furniture sector and presentation of good practices.



3 SEMINAR
(What do we want for the coming circular procurement on of office furniture?) Presentation of the municipality call for tender for tender on circular furniture, explaining the requirements and expectations in order to get feedback from companies.



4 FEEDBACK FROM COMPANIES
Collecting and analyse the feedback on the circular public procurement documents received from the companies and implementing recommendations.



5 CIRCULAR PUBLIC PROCUREMENT MEET THE BUYERS
An open event focused on presentation of request for tender organised for all interested companies.



MALMÖ

The project manager for the Circular PP project in Malmö is the Environment department, but before applying for the Circular PP project the centralized procurement unit was involved and gave a positive response to participating in the project. The City of Malmö is Sweden's third largest city, with a procurement volume of around €0.9 billion per year. Malmö has been actively implementing sustainable procurement for many years, which the city defines as procurements that help to achieve the goals of the Environmental Programme for the City of Malmö 2009-2020 and the United Nations Sustainable Development Goal 12 – Sustainable Production and Consumption. For instance, about 70% of the food served at preschools, schools and elderly homes is organic, and almost 100% of all the cars used by the employees are electric cars or biogas cars.



Sweden and circular procurement

- The national agency for public procurement supports procurers with Circular Public Procurements (CPP). However, more attention is paid to innovative and sustainable procurement, and the circular economy (CE) is not a specific target, yet.
- There is a national procurement strategy that also includes goals for promoting CE.
- The government has appointed a delegation for the CE, with one of the main targets being to support public procurement to become more focused on the reuse of products and prolonging life cycles.
- A number of projects and processes have been ongoing over the last couple of years, with the aim of supporting public authorities to progress with CPP.

Information from State-of-the-Art report from Circular PP. Read more at circularpp.eu

What was procured

Framework contract for non-new furniture and related services

What was included	Used furniture (at least 13 different models), and related services; Reconditioning, Furniture upholstery, Carpentry and painting, Re:design, Interior analysis with action, Temporary spare furniture, Inventory of existing furniture, Repurchase/Sell, Rent, Storage
Circularity	Focus was on prolonging the life of products. Suppliers had to add a circular plan as part of the circular criteria
Environment and social criteria	Chemical substances; no Chromium and PVC in old furniture. When adding textiles or paint when upholstering etc, same requirements as new furniture, which are very strict as to what can be used
Challenges	Continuing to maintain potential hazardous chemicals in the loop when buying old furniture. Malmö is extremely cautious in terms of the environment for pre - schools as children are more sensitive to chemicals, therefore the furniture from this tender cannot be used in environments that are intended for children

Non-new furniture was chosen to become the pilot right at the beginning of the project for two main reasons. Firstly; there was a need for a contract for second hand furniture, the City of Malmö already purchased used furniture but without any contract, and secondly the procurement officer of this area was already a front runner in sustainable procurement at the City of Malmö and had an interest in circular procurement. The procurement officer was in charge of developing the

tender together with the project manager for the Circular PP project at the Environmental department, known as "the Circular PP team".

Before the Circular PP pilot project, the City of Malmö already had internal services and tools related to the reuse of furniture inside the municipality. One of these services is an internal online market (known as Malvin) which is a platform for exchanging furniture within the municipality. In the past, Malvin had a storage

unit where they could store furniture that was available on the website, however, the storage is not available at the moment and only the online exchange platform remains. The other existing service relating to re-use of furniture is The Employment Unit, Labour Market and Social Administration (ASF) which is a part of the municipal organization that offers various services related to furniture such as moving, cleaning, painting, carpentry, textile work, and upholstery, for people who are having difficulties entering the labour market. In the beginning of the Circular PP project in 2017, the City of Malmö had recently produced a new framework contract for new furniture, with very high environmental requirements. Part of the reference group for that tender was later to become a part of the tender for non-new furniture. Since the procurement officer worked with that tender for many years, she had gained a lot of knowledge about the furniture industry, and she had a big network and an established position within the City of Malmö, which was crucial for the project.

A reference group was formed with representatives from different departments, namely the schools department, ASF and service department. The main aim with the first meeting was to understand if an external contract for non-new furniture would compete with the internal functions. But the reference group soon reached the conclusion that a contract with external suppliers and a focus on prolonging the life of furniture would be an opportunity to focus light on the internal functions, such as Malvin and the textile studio. One of the people in the group was also in charge of helping departments with disposal. He therefore helped to estimate how much furniture was thrown away in 2017 and the total amount was about 70 tonnes. When this number was revealed the reference group was even more positive to starting with the procurement process.

Rejected ideas

A first idea that came up during the initiation phase was to implement an ID-system for furniture within the city of Malmö. During the research phase Malmö found out that many departments had a lot of furniture in storage and that 70 tonnes of furniture was thrown away in 2017. This led to the idea that an ID system with the possibility to trace the furniture in the possession of the municipality. During a remake hackathon the challenge was presented and an innovation team worked for 24 hours with the idea. This group later developed this idea further and the discussion about ID-system for furniture is still ongoing within several branch organizations. Malmö later decided that this was something that could not be done by the municipality alone but rather through some kind of standard.

Benchmarking

In the beginning of 2018, the procurement officer started to do some benchmarking to see what kind of tenders with second-hand furniture that already existed in Sweden. She found that some smaller municipalities had written tenders for used furniture but nothing like the tender Malmö planned. The City of Gothenburg, the second largest city in Sweden, was also about to write a similar tender, so contact was made with them and there were two meetings where the tender documents were discussed. Gothenburg also gave Malmö the inspiration to create a priority list for the buyers, to communicate together with the new contract. (see the priority list below). As a part of the Circular PP project, Malmö and the other procuring partners, had a mentor that could help them during the process. Malmö's mentor, a senior advisor in Circular Economy set up a meeting with the project manager at the Dutch ministry of Infrastructure and Water Management that was in charge of managing the furniture tender

and contract for the Dutch Ministry. This contract has a very high circular ambition with the aim to prolong life of the already existing furniture and includes purchasing new circular furniture. Click [here](#) to read more about the contract.

Market readiness and market engagement

As mentioned above, Malmö already knew that there were companies with a business model of selling used furniture. The Circular PP-team had listened to one of them at several conferences for circular economy during 2016 and 2017, and the procurement officer's benchmarking also gave us information about potential suppliers. Malmö had also been using several of them in the past for smaller projects but without any framework contract. During the summer of 2018, study visits were made to four potential suppliers to get feedback on the tender documents. Some of the things discussed during these meetings were delivery costs, and home page/store on the city's internal web-based marketplace via the intranet. In Malmö's contract for new furniture, the delivery cost is included in the price and there is also a marketplace on the intranet where you can see the furniture before you order it. After the discussion with the potential suppliers, the tender documents were adjusted so that delivery costs could be added and there was no need for a home page or marketplace at the intranet. Not having a home page is a risk, because the process to order reused furniture instead of new can be perceived as more difficult when you cannot see the actual furniture before ordering. The buyer might ask the supplier for pictures, but it is a longer process than for ordering new furniture. The study visits made the City of Malmö confident that the potential supplier was able to deliver even to a big municipality such as Malmö. The companies previously had big clients, as well as smaller municipalities as customers and all suppliers had

large stocks of furniture. The furniture the suppliers for non-new furniture have is often bought from offices that are being moved, redecorated or companies that have gone bankrupt.

Legal and technical barriers

There were no big legal or technical barriers to deliver this tender. The big topic discussed during the pre-phase of the tender and during market dialogue etc was the risk of keeping potentially hazardous chemicals in the loop by buying second-hand furniture. This furniture has often been constructed before harder regulations were in place. The City of Malmö decided to take some kind of middle ground

Reusing and circular furniture in a Swedish context

In Sweden there have been several projects about circularity and furniture over the last couple of years. The project [cirkularitet.se](#) focusing on circular business models and IVL s (Swedish Environmental Research Institute) project with the aim to measure the CO2 and cost saving of decorating/refurbishing offices with reused/redesigned furniture and construction material, e.g. inner walls and windows.

Furniture could also be seen as a pilot/project/procurement with low risk, compared to circular construction material, for instance. When using parts from old buildings in a new construction it is essential to make sure that the material will last for many many years and that there are no potential hazardous chemicals. When dealing with used furniture there is no risk of "building in a problem" like with circular constructing.

Also, in a Swedish context Malmö understood quite soon that the market was ready to deliver bids to a municipality our size and that there were several potential suppliers.

and forbid chromium and PVC in furniture that is being sold to the city. As children are especially sensitive to being exposed to chemical substances it was also decided that the pre-schools should not buy furniture from this contract for indoor environments where children spend their time.

Another issue that was being discussed in the pre-tender phase is if there is a possibility to sell furniture that the municipality owns to the suppliers. This was clarified after some investigation that it is legal. The sale of the furniture has to be done at an auction where the suppliers are asked to give a price for the furniture and the municipality chooses the supplier that gives the highest price.

Announcing the tender and awarding the contract

During autumn 2018, the tender was announced, and four companies bid on the tender. As the market dialogue was thoroughly done, there were not many questions that arose from the bidders during the announcement. After the evaluation, all bids were accepted, and the contracts came into effect in February 2019. The circular plans that were asked for in the tender were of quite varying quality and ambition and in the end they served more as background material, an insight to the business model and as the ambition of the supplier more than an actual circular plan to use at the follow up. The Circular PP-team had a start-up meeting with all the suppliers and the reference group where, for instance, cooperation between the internal functions and the new suppliers was discussed.

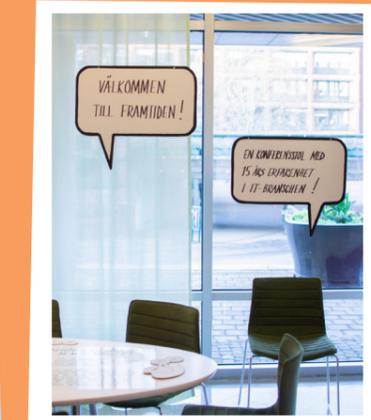
Marketing of contract and Behavioural change

Right from the start of the process of creating a tender for circular furniture, there was an awareness in Malmö that

just a tender and a new contract would not be the whole solution to a more resource efficient way of dealing with the furniture issue in Malmö. Activities to spread information and inspiration regarding non-new furniture had to be done. The aim is to create a new mindset when the need for furniture arises and a priority list was created with input from City of Gothenburg. Since the City of Malmö did throw away furniture in the past and since the first impulse for most people is to buy new furniture the priority list was developed as a first step to change the mindset of the buyers. The priority list was communicated on the intranet together with the information about the tender. The second step was to have two information meetings where the buyers could meet the suppliers and learn more about their

Priority list for the city of Malmö, regarding furniture.

1. The goal is to first utilize the furniture that is available in the city of Malmö by doing an inventory of what is in store and in office, or in the internal second hand market
2. If furniture has been found, this can be renovated internally, at the textile studio.
3. If furniture has been found, this can be renovated externally by contract supplier for non-new furniture.
4. If furniture has not been found, examine the furniture range externally with the contract suppliers for non-new furniture
5. Purchase brand new
6. Sell Furniture to the suppliers
7. If there is furniture in the city of Malmö that is not considered to have a usable resale value, they may go to recycling. This is the last step of the furniture lifecycle and should be avoided as far as possible. Internal services manage transport to recycling.



Exhibition at the City Hall in Malmö.

”Welcome to the future”

”An office chair with 15 years of experience”

business models and see what kind of projects the suppliers have completed in the past with a lot of inspirational pictures. There was also information about potential CO₂-saving from buying second-hand furniture.

As mentioned above, there is no market place on the intranet or a homepage where images of non-new furniture, as with other products that the buyers are able to buy, and it is a bit unfortunate that it is a separate system for non-new furniture. There was a concern that this might hinder the buyers from ordering non-new furniture, and this might have been the case, but the value of the contract for the first year was higher than expected.

As a next step in the communication strategy, an exhibition was set up at the City Hall to show the content of the contract in a fun and informative way. The exhibition showed that second-hand furniture can be just as comfortable and aesthetically pleasing as new items. The exhibition was a success and the reception desk at the city hall said that a lot of people had visited the exhibition and used the office spaces for meetings etc during the exhibition,

which was the plan.

In the beginning of 2020, a new contract for interior architects was agreed upon, and in the contract the architects are encouraged to work with the priority list. There is also a requirement that the architects must do at least one project with focus on prolonging the life of furniture. A start up meeting was held with the architects in October 2019 where the topic of circular economy and reuse of furniture was discussed, and the supplier was positive to working with reused furniture. Hopefully the services these suppliers will provide can help Malmö to have a more resource efficient way of dealing with furniture. This contract will be closely monitored in order to be able to see how the architects can influence the buyers in Malmö.

One year follow up

In March and April 2020, Malmö conducted a follow up for the first year of the contract, looking at how the contract has been used, how much the contract has been worth and interviewed the suppliers to learn more about their experiences.



Photo: The City of Malmö, "Welcome to the future"

For the first year the contract was worth almost six million Swedish crowns, about 560 000 Euro. The first estimation was four million crowns the first year, so that was almost 50% more than the Circular PP project team expected. Two of the suppliers have been far more popular than the other two. One of the suppliers sold furniture for less than 100 000 Swedish crowns. This supplier has a completely different business model than the other suppliers, and mostly sells new furniture but is in the process of developing their business model towards more upholstering and renovation etc.

The suppliers have been satisfied with the first year, the year started a little slowly but when the orders started to come in and information about the contract started spreading organically, more and more people became aware of this contract.

The circular criteria, namely the circular plans that were asked for at the tender, were meant to be a part of the follow up, but during the process Malmö noticed that it was difficult to use the circular plans for follow up. As mentioned above, the circular plans were very different in ambition and the suppliers had interpreted the task quite differently. A lesson learnt from this is to be more specific about what is asked for from the supplier, and maybe also deliver a sort of template to be used by them to describe the circular ambitions. Many of the suppliers are bidding or have won tenders for non-new furniture in other municipalities after they became a part of Malmö's contract, which is very positive.

It was expected that the suppliers had mostly been selling furniture and that the related services, like upholstery, redesign, painting etc was not used a lot. This is something that Malmö wants to communicate more during the summer/autumn of 2020. That the suppliers are also able to take care of the furniture that has already been sold, and that Malmö needs to be

better at taking care of the furniture that they have already bought.

CO₂ savings of the non-new furniture

During the market dialogues, the potential suppliers were asked if they were able to provide numbers for CO₂ savings, some of them were and others were not. At the end this was not put into the tender as a requirement, but it will be in future tenders. But with this said there was still an urge to measure CO₂ savings and in the end a tool from circularitet.se was used. The tool is very simple but still gave an estimation of the CO₂ savings made.

The estimation is that about 170 000 kg CO₂-emissions was saved, which corresponds to about 70 round trips back and forth from Sweden to Thailand.

There was an ambition to calculate cost savings also but, in the end, it was too time consuming. Other similar projects estimate the cost saving of at least 30% lower costs when buying second-hand furniture.

Click [here](#) to read more about the procurement in a case study publish in GPP in practice newsletter.

Click [here](#) to find a video about circular furniture in the City of Malmö.

Malmö: Lessons learnt and success factors about circular procurement

Framework contract for non-new furniture and related services

Behavioural change

There is a need to create engagement and activities for behavioural change in the post procurement phase. Any procurement team using a similar approach should ensure they have the resources for these implementation and follow-up activities, or else there is a risk that the framework will not be used.

Activities to spread information and inspiration regarding non-new furniture had to be done. The aim is to create a new mindset when the need for furniture arises and with a priority list, see box above, a first step towards this was created. There were also many meetings held and a lot of communication was done at the intranet.

As a next step in the communication strategy, an exhibition was set up at the City Hall to show the content of the contract in a fun and informative way. The exhibition showed that second-hand furniture can be just as comfortable and aesthetically pleasing as new items.

A year and a half into the contract a film was also done to show what an office could look like when its decorated with second-hand furniture, this film was communicated internally as well as externally to spread the message that second hand can look as new.

Engaged and experienced procurement officer

One of the success factors which made the tender process run very smoothly in Malmö was that the procurement officer is very experienced and engaged and has been working for several years with furniture tenders and contracts. She was also very interested in circular economy and willing to try something new. The process was created and driven by the Circular PP team and the results of 6 million Swedish crowns of sales for the first year with this contract without any strict recommendation from senior management must be seen as very impressive.



Victoria Boysen
Procurement officer



Emma Börjesson
Project Manager

Start with something easy, where the market is ready

Circular procurement is something new, at least in Sweden. Sustainable procurement is something that has been incorporated quite successfully in the tender processes in Malmö for many years. But when comparing sustainable procurement to circular procurement, circular procurement is more about changing a system and maybe also an infrastructure and is a big task to take on. Beginning with non-new furniture was therefore seen as a big enough challenge for Malmö. It is low risk to buy circular or non-new furniture, compared with the built environment, where you might end up incorporating materials into a building that have not been tested and proved to work, or for instance with IT, where security and operational system might make it more challenging to start procuring circular. With this said, tendering circular IT and built environment is possible and has been done many times before! For us it was also important not to look for the perfect circular tender, the Circular PP project is about trying out circular procurement and learning from it. Perfection was not important to us, but rather gaining new insights that might also be incorporated into other tenders. To add to that, if the first tender is seen as a success, it will also hopefully make other procurement officers willing to try out circular requirements in their tenders.

As mentioned above, we also knew that the market of suppliers was good, we already knew a handful of potential suppliers, and after the market engagement tour we were convinced that they were able to deliver to a big municipality like Malmö.

The circular criteria, namely the circular plans that were asked for at the tender, were meant to be a part of the follow up, but during the process we noticed that it was difficult to use the circular plans for follow up. As mentioned above, the circular plans were very different in ambition and the suppliers had interpreted the task quite differently. A lesson learnt from this is to be more specific about what is asked for from the supplier, and maybe also deliver a sort of template to be used by them to describe the circular ambitions.

Pre-tender for procurement of centralized waste collection for general waste in City of Malmö. And a first step towards a minimization of waste

How waste issues are managed in Sweden

In Sweden, the municipalities have a great deal of responsibility for waste management and are both decision makers, operators and the permit / supervisory authority in waste management, but several actors are responsible for different parts of the waste management.

The municipality is responsible for taking care of the waste from the households. Examples of household waste are food and residual waste, and sludge from individual wastewater treatment plants. The municipalities are responsible for collecting, transporting and recycling or disposing of household waste, including rough waste and hazardous waste from households.

In Malmö this is handled by the publicly owned waste company VA Syd.

The municipalities are also responsible for the operational waste that arises in municipal operations, such as street operations, sewage treatment plants, energy plants, property management and park management. Littering issues, such as making sure there are rubbish bins and other types of containers for waste in public places, as well as street cleaning, is also the municipalities' responsibility.

Producers of certain products are responsible for collecting, disposing, recycling, and / or energy recovery that arises when the product is discarded. The purpose of the producer responsibility is to stimulate the production of products that are more resource-efficient and easier to recycle and that do not contain hazardous substances. Manufacturer responsibility exists for: packaging (paper, plastic, metal, glass), recycled paper, batteries, incandescent lamps, electrical products, cars and tyres. Producer responsibility assumes that consumers sort out packaging, recycled paper and more and leave these types of waste to the collection systems offered. Anyone operating a collection system must hold a permit for this. A municipality can also conduct collection of packaging and recycled paper within the municipality on behalf of a producer organization that has a permit.

What will be procured

Waste collection/waste management for the City of Malmö.
The waste is from the offices and municipal buildings of the city (schools, care homes etc) rather than private homes and businesses.

Circularity	Measuring waste and higher percentage of recycling.
Environment and social criteria	Fossil free vehicles, route optimization, common labelling system, waste containers made of recycled materials.
Challenges	Creating a contract for all workplaces when there is not a register for all potential pick up sites.

Orientation on waste management in Malmö

All waste treatment shall be done in accordance with the waste hierarchy's priority, see Figure 1. The best thing is when waste never arises - then waste is prevented. For the waste that has arisen, it must primarily be recycled, second the material should be recycled and, third, recycled through, for example, energy recovery. Only waste that cannot be recovered in any other way should be disposed of. The priority scheme applies, provided that it is environmentally and financially reasonable. Hazardous waste, for example, needs to be treated based on its properties.

The upcoming procurement

In the past, Malmö municipality's various departments have procured themselves an entrepreneur who collected the waste that can be recycled, i.e. the waste that goes under the producer's responsibility, for example paper packaging, plastic packaging, glass, etc. The problem is that this is unnecessarily expensive and takes a lot of time for people who are not used to working with procurement or have a lot of other responsibilities in the organisation. Another problem is that many have not procured the service at all and then do not have a recycling system in their operations. Therefore, there are many reasons why this centralized procurement would

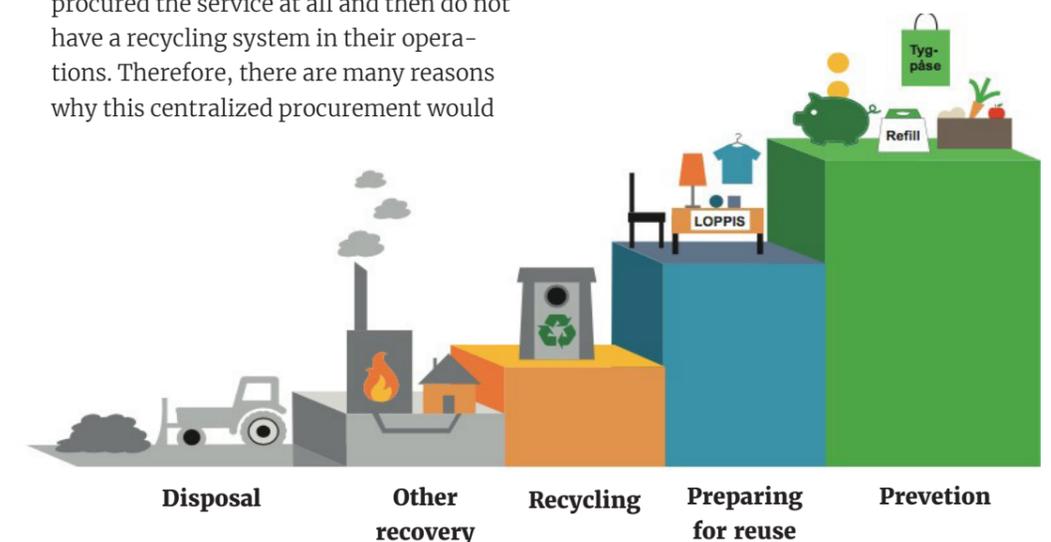
solve a lot of problems. It is law in Sweden to sort waste and the municipality has several documents concerning the topic of waste.

To solve these problems, Malmö will make a procurement of waste collection for the whole organisation. Increased communication and new goals in the waste plan will hopefully bring a situation where all of Malmö's departments will have a system for recycling of packaging.

Malmö's wasteplan for 2021-2030

Still in the political process.

Va Syd together with the City of Malmö and Burlöv municipality have **developed a waste management plan** with the goal of reaching a climate neutral system for waste management by 2030. One important aspect is to change the perception of waste management by shifting the focus to resource efficiency and sustainability. In addition, Malmö and Burlöv are committed to reducing the amount of municipal waste by 30% by 2030. The goals and priorities of the waste management plan are in accordance with the waste hierarchy illustrated below. (continue to next page)



The waste hierarchy, or the waste staircase, which shows the priority order for how waste is to be handled and treated in order to minimize environmental impact.

In order to achieve a climate neutral waste management system, the plan lists several important initiatives. These include developing existing systems for collection of waste and make it even more available to sort the waste (especially hazardous waste), a higher degree of re-use of resources as well as adjustments for the local context. For example, the needs of a highly dense and populated area will vary from a less populated area.

Important tools for the municipalities in accomplishing the goals and initiatives mentioned in the waste management plan are taxes on waste, circular procurement, attention to inefficient resource use and city planning to encourage more circular lifestyles. Communication to spur behavioural change, cooperation between actors within the municipalities, as well as regional and technical innovation are also mentioned as crucial in bringing about the desired results.

Benchmarking

The city of Gothenburg has been a big inspiration in the pre-tender phase. They are now on their second contract for a centralized waste management contract. They have been able to share their requirements and criteria as well as input how to implement the contract. VA Syd also help with requirements, both them and the municipal housing company MKB are measuring their waste and could give input to this topic. The neighbouring municipality Burlöv made a similar journey a couple of years ago to that which Malmö will make, going from a decentralized contract and low control and inability to follow up, to a centralized and centrally steered process a couple of years later. Their input has also been valuable. Avfall Sverige (the Swedish Waste Management Association) could help with templates/models of how much waste a typical operation generates. This helped the Circular PP project team a lot, since estimation of

the value for the upcoming tender has to be calculated.

Internal reference group and questionnaires

During the pre-tender phase, for a centralized waste procurement in Malmö, two meetings were held with a reference group consisting of representatives from each department in the city. In the first meeting needs and challenges, types of waste to be collected and the importance of communication to the employees were discussed. The second meeting focused on how best to communicate to the employees to make recycling as effective as possible. The importance of making the recycling process clear, in unison and available to everyone was mentioned especially.

To find out more about the different operations and workplaces within the departments of the city a questionnaire was sent out. The departments were asked to list all the addresses for waste collection, the



Photo: VA Syd

number of people working at the different addresses and the need for collecting any waste that was out of the ordinary. The questions were asked to estimate how much waste is produced and how much the procurement will need to handle at most.

Challenges – finding the correct numbers of workplaces and making an estimation of the value of the procurement. Avfall Sverige, as mentioned above, has estimations of how much waste an operation of a specific kind generates, as there is not a previous contract to estimate how much waste is produced in the pre-phase of this procurement, a lot of time was spend on trying to understand the value of this tender. This has to do with the fact that the City of Malmö did not have a centralized contract for the whole of the municipality before.

Market consultation

To find potential suppliers, a search was done in the city of Malmö's economy system (EKOT) to find the suppliers Malmö has previously used for waste management. A meeting together with five suppliers was held. In general, they were positive to a central procurement for waste management in Malmö. Many of the suppliers recommended that the procured supplier could adjust e.g. the sizes of the bins, the supplier has the most knowledge and can suggest the best solutions if there is room for adjustment in the contract.

The market for waste management is, by tradition, conservative but has seen recent developments. The available suppliers on the market vary in their services, e.g. not everyone has collection of recycling material. One of the suppliers that attended the meeting could offer "real

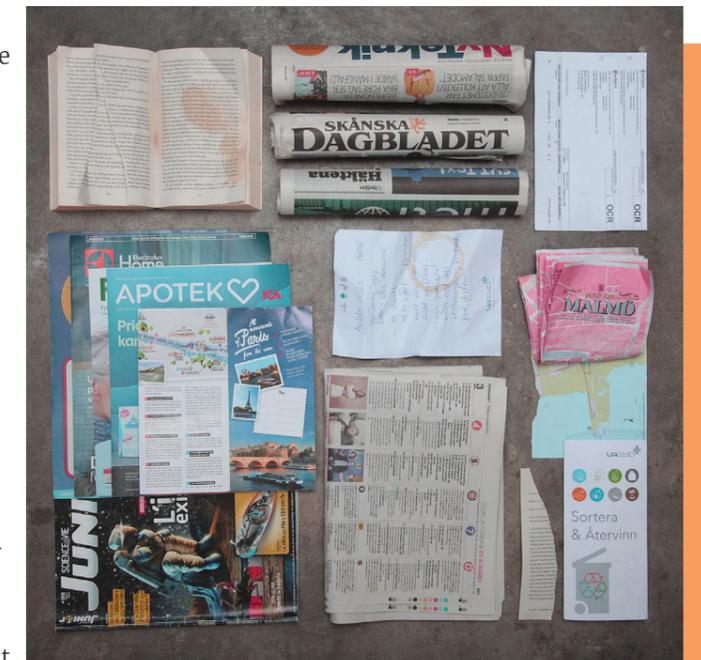


Photo: VA Syd

weight" of the waste collected, meaning they have scales in their vehicles. Others estimate the amount of waste through pre-calculated charts, the accuracy, however, is dependent on the bins not being under or over packed. The suppliers suggested that calculating using charts is trustworthy, while asking for "real weight" will exclude around 80 % of possible tenders. It is important, however, that a dialogue around bin sizes is maintained, and that the city gets the statistics on how much waste is collected and the amount of CO2 emissions saved by recycling.

One supplier or many?

Using multiple suppliers could be beneficial because it would increase the number of possible tenders and decrease the risk of appeal. However, the pre-tendering study suggests that one supplier would be more convenient for the city. This is mainly due to the difficulties regarding how to divide the different municipal departments within the city and pair them with the suppliers. One way of dealing with this would be to create several geo-

graphical areas or to divide the departments depending on their size. The pre study found difficulties with both solutions, the first being hard to manage (who would be the contact person for the area?) and the second because of the uncertainty about the number and sizes of the departments that will connect to the new waste management contract.

Communication

There are two main areas of communication for this procurement. One is communication with all employees, as mentioned earlier, who have varying degrees of access to information as well as knowledge of the Swedish language. The other is contacting the different departments in the city to make them use the new waste management contract. There is a need to clearly communicate to the departments in the city of Malmö that they are responsible for recycling waste and therefore following the new contract.

A unison symbol system for recycling signs is another important step to ensure the communication in the city is as clear as possible. Different suppliers have different symbols on their signs, however there is a common system for recycling signs that the organisation Avfall Sverige (Waste Sweden) has developed that is free of charge. The idea is that when the signs are known and easily recognised, the risk of waste ending up in the wrong bin is minimized.

Fossil free transports and electrified vehicles

An investigation into the market for fossil free and electrified vehicles within waste management showed that asking for fossil free cars is not an unreasonable request today. The consulted experts saw it rather as the duty of a municipality to push the development towards more sustainable fuels. Waste collection vehicles fuelled by biogas are marginally more expensive

than diesel, and biogas is 10% more expensive. The market for electrified trucks is developing fast, however these are still considerably more expensive.

Minimizing waste

This procurement will not by itself lead to waste minimization, but rather that waste, to a higher degree, is recycled. However, since the CPP project is about reducing waste, and this is also a theme that is high on the agenda in the municipality, two different tracks did arise during this pre phase for procurement of waste collection.

First, try to avoid packaging in other tenders, e.g. minimize packaging for products that are delivered to the city of Malmö. When this was investigated further, the Circular PP project team found out that there is an ongoing process to present a “criteria library” for reduction of packaging on a national level.

Secondly, a mission has started within Circular PP and another project called SINA aiming to investigate how the city of Malmö can become more resource efficient. The administrative departments need to avoid unnecessary purchases and use existing resources for a longer time period, thereby preventing municipal waste from being produced. One way of doing that will be to reach out to the people who are employed within the city and try to change their behaviour and attitudes regarding resources. What is seen as waste and what can be reused needs to be reassessed. How this can be achieved will partly be investigated by conducting surveys to employees in some chosen departments/functions of the city. The main products group that will be investigated are textiles, single use products (mostly plastic), ICT and furniture.

Malmö: Lessons learnt and success factors about circular procurement

Waste collection/waste management for the City of Malmö.

It is worthwhile to talk to the market

Market dialogue was crucial for this type of procurement. It is useful to discuss the challenges and possibilities with them, to be able to set realistic requirements. It is also an opportunity for them to get to know the buyer better. We were able to talk to them about our goal for the tender and also tenders to come in the future.

Benchmarking and take from others

You will usually find somebody that already has a lot of knowledge about a similar project or tender like yours. Just use the things that were successes from their tender and avoid the pitfalls that they did.

Organization's needs

The pre-tender phase is important! You cannot guess what others are thinking and what their needs are. During the meetings with the reference group, it was very clear that communication will be an important part of getting people to sort their waste. This is of course not new information but in a big organization like a municipality the size of Malmö, it is crucial to acknowledge that all employees have a different way of getting information. Therefore, signs at the bins will be very important because all employees do not read the intranet, nor understand how to sort the waste. A communication plan will be developed for the implementation of the contract.



Helena Nilsson
Project Manager



Emma Börjesson
Project Manager



LATVIA

The Latvian partner Latvian Environmental Investment Fund (LEIF) has had a completely different experience and set up in the Circular PP project as they are not working within their own organization, which was the case for Malmö and Aalborg. The Ministry of Environmental Protection and Regional Development of Latvia is in full financial control of the Fund. The main goal of LEIF is to promote the implementation of environmental protection projects and aim to increase the capacity of municipalities and commercial organizations throughout the whole life cycle of projects, from ideation to implementation. LEIF conducted a lot of awareness raising meetings to get municipalities on board with the project and therefore their story will be a little bit different. The lessons learnt for this chapter will focus on what lessons can be drawn when engaging municipalities for circular public procurement.



Latvia and circular procurement

There is a national Circular Economy Action Plan, which also includes strengthening of Green Public Procurement (GPP).

- Discussion around the circular economy has started. Circular Public Procurement will be regarded as part of Green Public Procurement (or vice versa), but a decision has not yet been made. Individual activities on Green Public Procurement have already commenced at both national and local levels.
- There is a need for more positive examples and capacity building. In addition, cooperation between the actors in the procurement process must be strengthened. Latvian municipalities are very small, which creates a burden on the administration and procurers. The current ongoing administrative reform will build larger municipalities.

Information from State-of-the-Art report from Circular PP. Read more at circularpp.eu

What was procured

Catering services for school.

What was included

Good quality food and reducing food waste.

Circularity

- The clients (pupils) select composition of the meal
- The use of disposable plastic dishes is not allowed
- In cooperation with the client, the service provider evaluates, at least twice a year, detailed feedback from pupils about the food and quality and uses the results for waste prevention.
- The service provider sorts the waste according to the waste manager's instructions (biological, packaging, other)
- The customer determines the use of the surplus food

Environment and social criteria

- Environmentally friendly transportation, participation in programme "School Fruit" and "School Milk"
- At least 50% of the milk is organic

Challenges

Food quality and more sustainable production versus costs
The ready-made portions (without selection option for client) are easier to distribute during catering.

Background

The municipality of Pļaviņas developed a CPP pilot project, in collaboration with LEIF, which focused on catering services for the municipality's school. The co-operation started in the autumn of 2017, when representatives from Pļaviņas participa-

ted in the national kick off meeting, and continued in the Spring 2018, via several meetings and commenting rounds. The existing contract ended in 2018 and the municipality wanted to procure a three-year contract for catering which included circular principles. The Pļaviņa

gymnasium belongs to the Eco-school network i.e. they already had good traditions and understanding of environmental aims. Eco-school network is a voluntary, international environmental programme for schools promoting environmental education and environmental management at the participating schools. The circular procurement team proposed to change the food service system and provide pupils with the possibility to choose their own meal. The procurer was more sceptical to include criteria for organic food, due to availability and price, but agreed to start with small steps (Latvia has a very small uptake of organic food in public procurement, only a few percent). The argument that good quality food should be provided to children in schools was great motivation for getting the mayor and procurer onboard.

Benchmarking

Prior to this catering project, the school had invested in the reduction of food-waste from catering. It was already a small amount (10 kg per student/teacher / annually), but after the new system was introduced, it was reduced by half. Latvian schools have a practice of circular options in the catering (such as choice of size and composition by client), but

such requirements are not included in the procurement tenders of municipalities. Latvian government has issued guidelines for GPP, but green criteria such as choice of size and composition by the client was not included.

Market engagement

LEIF was engaged in the procurement processes in several ways. LEIF held meetings with the procurement department, the mayor of the city, the director of the school and the supplier that was currently providing the catering service. The procurer also exchanged experiences with procurers from other municipalities in the region. The LEIF expert contacted local producers and potential suppliers afterwards to clarify the availability of organic food, and positive results encouraged them to include requirement in the tender e.g. the market consultation gave an insight into what the suppliers could deliver and what was asked for in the tender. The market readiness was higher than initially thought.

Announcing the tender and awarding the contract

The announcement of tender was conducted as is required by law and was publis-

hed on municipalities' webpage (June 2018) and information to Procurement Surveillance office webpage. Only two bidders participated, and in July 2018 the winner was announced.

Challenges

One of the main challenges in this project, as discussed with the LEIF expert and municipality, was not only in setting the criteria but also the verification means during evaluation and the execution of the contract. Several elements in the procurement design required ongoing verification, for example, compliance with healthy nutrition guidelines, participation in EU funded scheme, conducting a food waste inventory and analysis twice a year, development of an action plan in agreement with the school, permanent educational campaigns, amongst others. In order to verify these expectations, it was stipulated in the contract clauses that the contracting authority (in this case the municipality) would carry out verifications throughout the duration of the contract. From the perspective of the LEIF project manager, the willingness to include circular criteria into the procurement was partly because even though it represented an innovative practice for Pļaviņas, the approach had already been established and used by other schools in Latvia.

Legal and technical barriers

The municipality also included criteria so that only such bidders who had not breached the green procurement contracts in the last 36 months could be selected. These criteria have been largely discussed in Latvia (and included in the GPP regulation) but after discussion were taken out of the Regulation due to conflict with the General Procurement Law allowing only 12 months, and only in case of the respective Contracting Authority. The municipality was very cautious about how to avoid bidders with dumping prices and subsequent

quality problems during the contract period hence such selection criteria gave a feeling of protection from such cases.

The municipality also required that the menus (criterion of the selection criteria) correspond to the health nutrition standards. However, this criterion was difficult for the municipality due to the lack of a healthy nutrition expert in the municipality.

Implementation phase

In the beginning, the new system created problems, as it took a long time for pupils to choose a dish, and it created long queues, thus the school and the caterer were not happy with the new system. But after a while, everybody got used to the system and finally they were pleased with the changes. In order to help pupils adjust to the system, the school included these questions in lessons: how to choose wisely and healthy, how to calculate the money needed for the chosen food etc. The municipality subsidises a fixed sum for each pupil per day, and, if this sum is exceeded, the pupil needs to cover the exceeded sum from his or hers own means. It was good that the canteen did not drop out from the new system after the initial problems but continued. It takes time to implement a new solution/contact/service; it might not run smoothly from the beginning.

The municipality is now satisfied with results e.g. food quality is good, and children are satisfied with the new system. The organic milk reached 100% since it was easier the caterer to purchase all milk from one organic supplier. The municipality would like to continue with the same approach in the next tender. However, the ongoing administrative reform currently decelerates new incentives due to uncertainty, but this is a temporary difficulty.

Click [here](#) to read more about the procurement in a case study publish in GPP in practice newsletter.



Photo: Latvian Environmental Investment Fund

New furniture for dormitories in school

Background

The engagement with Smiltene municipality began in April 2018, when the mayor from the city had expressed an interest in participating in the Circular PP project. This was an encouraging sign, particularly in the Latvian context since, according to LEIF; active political support is a key ingredient in developing innovative procurement projects. Based on the initial interest of the mayor, LEIF followed-up with several visits to Smiltene.

The mayor wanted to develop Smiltene as a municipality open for innovations and to make it an attractive place to live, and also thought that it is important to start with sustainability education for children already in school. Therefore he was open for new pilot projects and thought that through innovations we could reach better result without using “the usual way”. He was interested in the circular economy approach, emphasising that the whole of society should look together at all these aspects (circularity, sustainability) and not on price and costs on this day, but look at the benefits throughout the period of use.

Procurement of refurbished furniture for high school that eventually changed to be furniture for dormitory. Eventually a preliminary subject matter for a CPP pilot project was defined: procurement of refurbished furniture for the gymnasium of the city. After this initial contact, the iterative process of obtaining organizational support and identifying user needs, analysing market readiness and designing a call for tenders began.

What was procured

New furniture for dormitories in school

What was included	Learning furniture (tables and chairs), beds and wardrobes
Circularity	<ul style="list-style-type: none"> • Prolonged warranty • Availability of details • Guidelines for maintenance • Easy to repair and transform
Environment and social criteria	Wood material from proven legal sources, no toxic substances (e.g. on REACH authorisation list etc), ergonomic standards
Challenges	Extended warranty and additional requirements usually lead to higher price.

A idea that never were realized

In September 2018, during a National Seminar organized by LEIF, the mayor of Smiltene participated in a panel discussion addressing the topic of the potential procurement for refurbished furniture. At

this event, representatives from a local company (Pavasara mēbeles) specialized in furniture refurbishment was in attendance. LEIF, a Smiltene representatives and the manager of Pavasara mēbeles discussed the idea of organizing an open-day

event at the Smiltene high school where pupils, parents and staff, could engage in simple furniture repairs in the form of a workshop to promote engagement and acceptance from the various stakeholders involved in the project. Furthermore, it would be expected to build up acceptance of the project as well as reduce misconceptions traditionally associated with non-new furniture (e.g. old, unpleasant to look at, non-functional, etc.)

Even this was not carried out due to the pandemic although it is a good idea to get involvement from the users in the pre-tender phase.

Market engagement for refurbished furniture

A market engagement activity (meet-the-buyers meeting) was organized in July 2019. Only three suppliers participated at the event, although more than 50 were invited through email and phone calls. In this meeting, there were also representatives from the municipality, including procurement specialists as well as the director of the school which would be the public-sector organization procuring the furniture. The director of the school explained the current situation of the furniture and the storage at the school as well as their needs in regards to functionality and deadlines.

According to the LEIF project manager, the three suppliers in attendance were sceptical when they heard the potential criteria that would be included in the procurement. They argued that it would be more expensive, it would take longer and would not be able to meet the expected deadline (two weeks before the resumption of classes at the school) and that the procurers might face complaints from potential bidders. Furthermore, suppliers were surprised to hear these criteria would be incorporated into a local procurement, since their experience was that furniture tenders in Latvia are competitions for the

cheapest furniture in which they find it difficult to compete with polish manufacturers. One of the suppliers in attendance said they already had experience with “circular” criteria by responding to Scandinavian markets.

“It was very interesting to see how surprised these companies were about circular options. For example, the criteria for collecting used furniture from the municipality was refused as a misuse (“you try to place your problems on our shoulders”) this highlighted for us that the companies are seeing it from a point of view that they have furniture and they want to sell it. They do not regard municipality as a client looking for suppliers and services meeting municipalities’ needs.” (Project manager, LEIF.)

To follow up after the market engagement activities, LEIF and the procurer from Smiltene organized a meeting where they were expected to discuss specific aspects of the procurement design, including how to carry out a negotiated procedure and definition of technical specifications and requirements. However, at this point, the pilot project to procure refurbished furniture for school was cancelled (at least temporarily). A combination of factors including a hesitant market response, risk aversion from part of the procurement department as well as a tight schedule all contributed for this outcome.

The municipality also highlighted that since the school has a carpenter hired as staff in charge of maintaining and repairing the furniture and equipment and there was a perception that procuring refurbished furniture would be redundant.

Challenges

Notwithstanding the political support from the mayor, the process of developing a CPP pilot project in Smiltene municipality faced significant hurdles. One worth noticing is employee turnover. Initially, there was a lawyer with more than 8 years

of experience willing to promote circular procurement. The combination of having an engaged mayor of the city, an enthusiastic lawyer and an experienced procurer was very appealing to the CPP management team, however, the lawyer is no longer working for the municipality and the mayor also moved on from his position in January 2020. But the municipality procurer and deputy director still wanted to try out more sustainable and circular procurement anyway.



Change of scope

In light of the cancellation (for now) of a CPP focused on refurbished furniture for the high school, LEIF focused on identifying upcoming procurements that they could influence to adopt circular principles. One of these potential projects was a procurement of furniture for a dormitory. The total value of the contract is smaller, in comparison to the school procurement, which influenced the market engagement strategy as well as the subject matter. It is difficult to take risks in big procurements, but it also has a bigger potential for change and impacts. Smaller procurements are more encouraging for innovations and pilots.

Market engagement and advertisement for furniture for dormitory

In regards to the market strategy, it was assumed that SMEs wouldn't show up for a meet-the-buyers event for a procurement of this size, therefore, it was decided to develop criteria and then contact directly, through phone-calls, different companies in order to analyse whether the market can fulfil the stipulated criteria. In terms of subject matter, refurbished fur-

niture was not considered and instead the focus was on new furniture that complied with green criteria.

A call for tenders has been released for this CPP pilot project and got the sufficient number of bidder responses. This tender was organised according to "lowest price principle" and the main requirements were fixed as technical specifications for furniture (chemical content, extended warranty time, collection of packaging upon delivery and legal origin of wood sources).

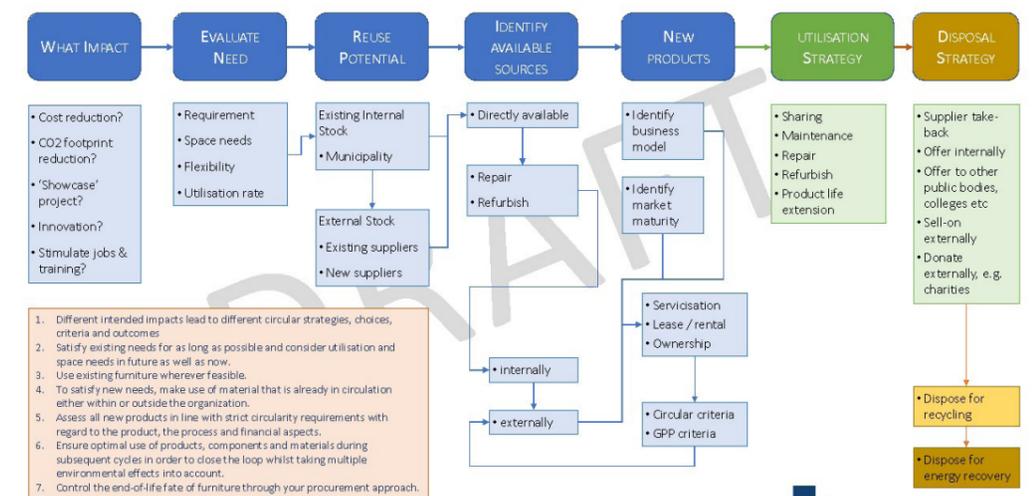
The biggest challenge for the procurement team of the municipality was checking the compliance of the required declarations and certificates (hazardous substances, proven legal origin of wood) and an LEIF expert helped in the evaluation process as part of the procurement team.

Challenges with market dialogues in small municipalities

Latvia has 119 municipalities. Only a few cities are considered as large municipalities and a large municipality in Latvia means that there are from 25-70 thousand inhabitants. The majority of municipalities have between 5000 to 15000 inhabitants. This means that municipalities are small, their budget is small and procurements are small from a financial perspective and this makes it problematic to put a lot of circular or sustainable requirements in a tender. Suppliers will not change their business because of small clients. That is usually why municipalities in Latvia are forced to buy what they can get, not always what they want and need. The ongoing administrative reform, aiming to merge smaller municipalities to achieve larger bodies could eliminate this barrier, although this reform faces many opponents. One more solution could also be joint tenders that are allowed by the EU and national law, however, is not practiced in Latvia at the moment.

The mentor proposed a decision tree for circular furniture procurements. LEIF also used this while discussing procurement options with Smiltene municipality. LEIF and Smiltene also discussed the development of circular procurement strategy, but this work was slowed down due to the COVID19 outbreak.

Circular procurement cycle - Furniture



Latvia: Lessons learnt and success factors about circular procurement

New furniture for dormitories in school school

Start small but look for joint tenders

It might be valuable to start with smaller pilots – there is a higher possibility for good results and smaller losses, and such good experiences could later encourage larger projects with larger impacts. Starting with very big projects with no prior experience might lead to discouragement to continue e.g. too high responsibility and too high stakes. The downside with a smaller size of the procurement is that the impact on the supplier will be lower and the suppliers might not want to change their business because of small clients. On the other hand, small pilots and in smaller municipalities means an easier path to decision makers to encourage co-operation and innovations. Joint tenders could be a solution for municipal procurements too small to develop innovations. Thus, such joint tender shall be encouraged at the regional level (at central level such tenders exist).

Get to know the buyer

In the Latvian dialogue with market players prior to tender, an activity such as “Get to know the buyer” is a new practice, and both suppliers and municipalities are hesitant to participate. Nevertheless, it is a valuable tool to understand both sides and develop better tenders and to procure higher quality goods and services.

Anchoring

Look for support from the Mayor or upper management in the municipality and put a lot of effort into anchoring the project with other stakeholders. Don't be too dependent on one person, if the person moves on to another position or another workplace the opportunity might move with the person. Anchor the project and create a team of supporters so that the project will continue in case of changes in personnel.

Sustainable environment

Good to start with pilots in a place where there is already a sustainability context, as in the case for the Eco school. The eco school already had an understanding for sustainable development and the measures that need to be taken. It might also be easier to have sustainable procurement when it is affecting children, since it is easier for decision makers later to convince voters if creating a better environment for children causes a potential increase in costs.



Zane Bilzēna
Product Manager



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CONCLUSIONS AND JOINT LESSONS LEARNT

It takes time and engagement to do circular procurement. Organizations are on different levels and people are different in how they tackle new challenges and implement new behaviours. Below follow the most important lessons learnt as a summary and conclusion for the Lessons learnt for pilots in Circular PP.

Anchoring

Look for support from the Mayor or higher management in the municipality and put a lot of effort into anchoring the project with other stakeholders. Do not be too dependent on one person, if the person moves on to another position or another workplace the opportunity might move with the person. Anchor the project and create a team of supporters so that the project will continue in case of changes in personnel.

Preparations and pre-tender

Put a lot of energy into the pre-tender phase! It is crucial to understand the need of the organization and the buyers. If the pre-tender is done properly the coming phases will run more smoothly. In the pre-tender phase the sustainable and circular ambition will be set. Try to find carrots, like saved CO2 or saved costs that can persuade the project group or senior management to put more circularity into the procurement. Use the pre-tender phase to do benchmarking to learn from

other, usually there are people that can help you to develop your ideas.

Start with something likely to become a success

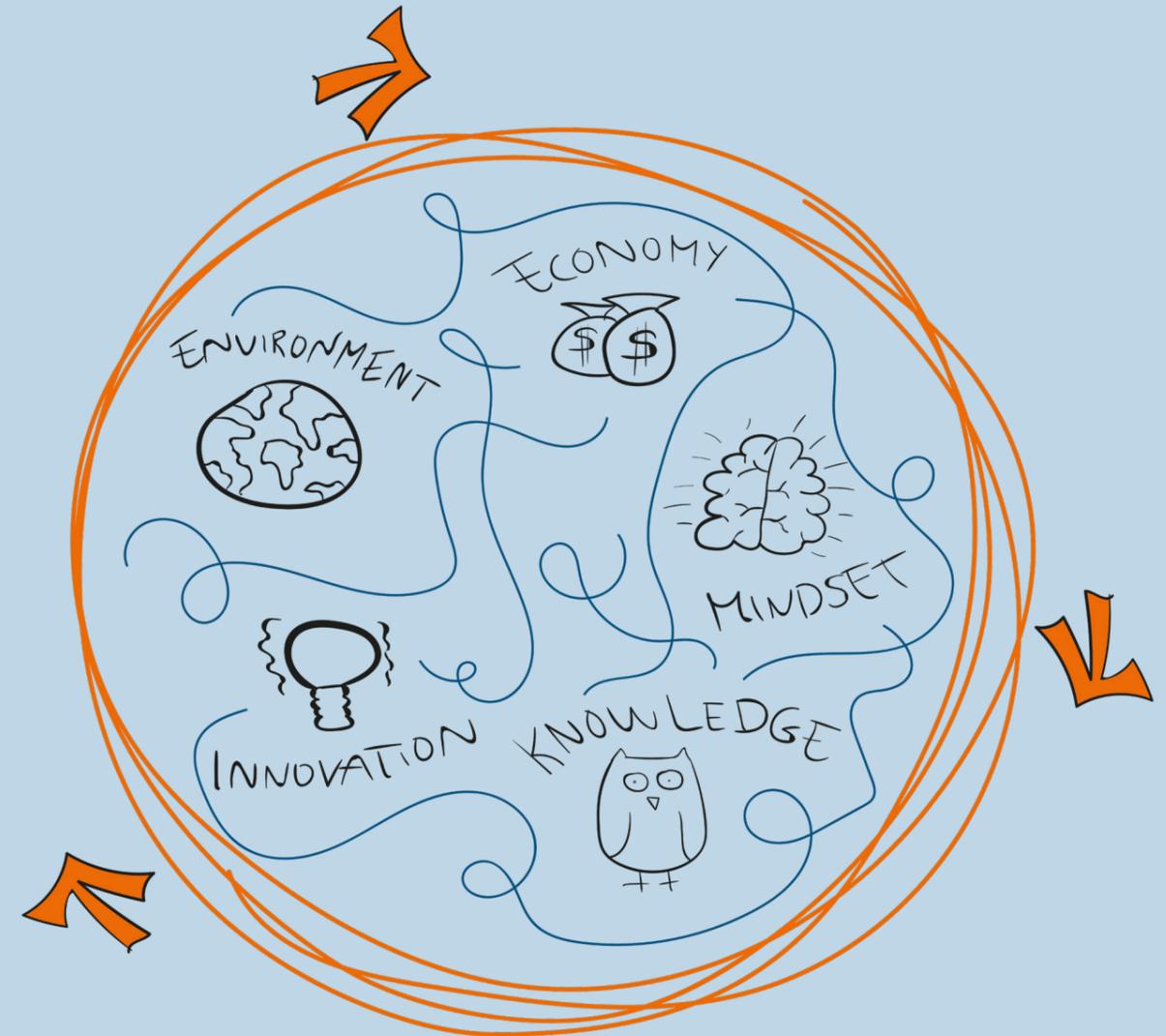
Circular procurement and circular economy are something quite new and often requires changing a system and maybe also an infrastructure and is a big task to take on. Therefore start with a procurement or project that seems likely to be a success. You will learn a lot from the tender that can be incorporated into coming tender.

Market engagement and dialogue

It is worthwhile to talk to the market! Market dialogue is crucial for this type of procurement. It is useful to discuss the challenges and possibilities with them, to be able to set realistic requirements. It is also an opportunity for them to get to know the buyer better. It's a possibility to talk to them about the goals for the tender and tenders to come.

Behavioural change

There is a need to create engagement and activities for behavioural change in the post procurement phase. Any procurement team should try to ensure they have the resources for these implementation and follow-up activities, or else there is a risk that the contact will not be used as planned.



CHALLENGES AND POSSIBILITIES FOR SMEs

engaging in Circular Procurement and how public entities can open to SMEs in circular procurement.

Many circular solutions and innovative ideas come from SMEs (small and medium enterprise) but our understanding is that many of those are reluctant to get into (circular) public procurement because they lack the time and knowledge to do so. But many SMEs are very innovative and might have come further in the green transition and offer more than the bigger companies and suppliers, and therefore might help the municipalities in their sustainable transition.

Many of the companies that bid for tenders in Circular PP are SMEs, which shows

that it is possible for SMEs to bid and get contracts, if the points, or some of the points, below are taken into consideration. In Latvia 16 SMEs bid for the furniture tender in Smiltene and Pļaviņas today has a local SME supplying the catering for the school. In Malmö, three of the suppliers for non-new furniture in Malmö are SMEs. In Aalborg, the supplier for ICT buy back system is an SME, and during the market dialogue for the outdoor learning/circular playground about twenty SMEs participated and will potentially bid for the tender.

There are many potential business models and strategies that a company can take towards being circular, for example:

Helping consumers reduce their absolute consumption of energy or materials.

Promoting sufficiency



Exploit the residual value in waste streams by incorporating them as raw material in production.

Waste-as-resource



Extend product life through interventions such as repair, refurbishment, remanufacturing or retrofitting of infrastructures.

Product life extension



Provide a physical or virtual arena where suppliers and consumers for secondary products or materials can interact.

Create markets



Collect and transform waste into a suitable raw material for production or into an input that can be used to restore natural capital.

Resource recovery



Do not sell products (retain ownership) instead offer the service they provide or guarantee results.

Performance model



The testimonies, from the pilots and research of Circular PP, from SMEs point towards several limitations for circular SMEs to participate in public procurement.

Here are a few recommendations for municipalities in order to make public procurement more (circular) SME friendly:

Evaluate cost, not price

Purchasing circular products and services is likely to produce a lower cost for the municipality when considering all the life-cycle costs (purchase, maintenance, collection, recycling etc.), however it probably would involve a higher up-front price. Therefore, municipalities should avoid the expectation of circular = cheap, if only analysing the purchasing price.

Walk the sustainability talk

Municipalities talk about sustainability and discuss how their citizens can live more sustainably, but then, they turn around and award public contracts based only on price considerations. Municipalities should avoid awarding contracts only based on lowest price, and instead reward sustainability performance by considering a quality-cost ratio in the selection of the contract.

Tenders are not clear about their priorities

Finding opportunities for SMEs to participate in procurement is a resource intensive activity. Therefore, municipalities could help in this process by emphasizing their circular ambition upfront (in the title or subject matter of the tender) instead of hiding these ambitions in the middle of a 50-page document.

Measure the circularity benefits

Circular SMEs use extensive resources for measuring their positive impact (for example CO2 savings). However, if these are not considered in the awarding procedure, their efforts become wasted. Municipalities should consider the best way to measure and compare environmental benefits through standardized measurements.

Request solving problems and not specific products

For many SMEs, competing on the basis of who can supply the cheapest products is a disadvantage. One of their strengths is flexibility to adapt to unique contexts. Creating functional or result-oriented tenders instead of using strict specifications can highlight their innovation capacity and problem solving skills.

Circular tenders require more intensive market dialogues

When developing innovative circular solutions SMEs (and municipalities) might not have all the necessary information upfront. Therefore, multiple buyer-supplier dialogues might be required to identify what the necessary information is for a proper estimation of the contract. At times, a short term pilot case might be necessary to produce the information, if this is unavailable.

Strict regulations and labelling requirements can hinder the supply of refurbished products

Labelling requirements are, in essence, aimed towards improving environmental performance; however, they can become a hindrance towards circularity, particularly, when these labels are impossible to be awarded for refurbished products. Municipalities should strike a balance between

expecting full material transparency and encouraging refurbishment of products.

Consider dividing contracts into lots to encourage the participation of smaller (social) enterprises

This is particularly relevant for large municipalities, if they bundle all their departments into a single contract, it would automatically disqualify the potential to participate for smaller enterprises.

Suppliers might not consider their services relevant to the municipality or vice-versa

This can be a misconception from both the supplier and the buyer. Many circular business models might not appear relevant, just because they are different from what is traditionally procured. Therefore, municipalities can help in this regard by promoting arenas for interaction in which SMEs can showcase their services to buyers can help identify potential opportunities for procurement.

Make the tender documents as easy as possible and easy to access

Ensure that Public procurement processes and documents are not unnecessarily complex, and are simplified according to the value and risk of the procurement object. try to ensure that the use of information and communication technologies in public procurement improves SMEs' access to public procurement. Streamlining of the public procurement process between different municipalities would also be a good idea.

What can SMEs do if they want to engage in Circular Public Procurement?

- Cooperate with other SMEs to be able to make a stronger bid together. Look for help on how to bid in tenders. Network organizations, chamber of commerce, local business support

organizations, Enterprise Europe Network Organizations, industry bodies might help to assist to understand for example how to fill in procurement document and also give assistance to use and create filters for TED database.

- Talk to the public buyers that might be interested in the product or service the company sells. Usually local or regional networks arranges meetings where potential suppliers can meet buyers. Be active in communicate the green agenda in newspapers, LinkedIn etc.
- Highlight the benefits of using SME's like the saved CO2 emission due to potentially shorter distance of transportation and the potential of creating new local jobs (if a local SME).

Click **here** to read the full report Circular Business Models creating value through circularity.



Activities part of renovation recourse.
Photo: Alise Abele, Pavasara Mēbeles

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Abbreviations

CE - Circular Economy

Circular PP - the project Using innovation procurement and capacity building to promote Circular Economy

CP - Circular Procurement

CPP - Circular Public Procurement

ICT - Information and Communication Technology

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