

## Circular Procurement of Furniture for the City of Wageningen

City of Wageningen (the Netherlands)

### Background

Wageningen is a historic town situated in central Netherlands. With a population of about 37,000 citizens, the town hosts one of the biggest universities in the country.

The municipality has the ambition to pursue a sustainable way of living and using resources, without compromising the ability of future generations to meet their own needs in terms of raw materials or energy.

In 2015 Wageningen joined the [Dutch Green Deal initiative](#) and committed to implement 100% circular procurement in its municipal purchases. Furthermore, the municipality adopted its new [Public Procurement policy](#), which incorporates a detailed procurement manual and seeks to further improve the overall performance of all procurement procedures.

The policy encourages the consideration of circular and sustainable procurement aspects and guidance to foster the participation of SMEs in procurements.

### Procurement objectives

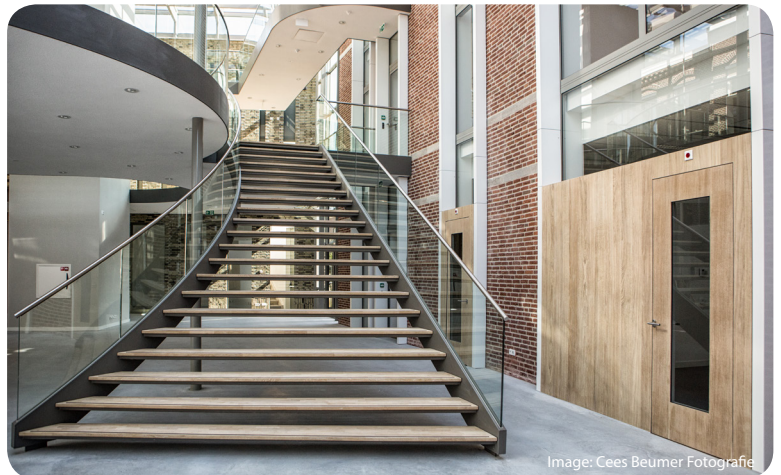
For the refurbishment works of the new City hall, the municipality decided to implement a circular procurement concept for their new furniture, seeking products that would deliver a healthy working environment while being truly 100% recyclable. Products included among others conference tables and chairs, cabinets, office chairs, canteen furniture, cupboards, etc.

In order to gain understanding of what the market was able to deliver, the municipality conducted several pre-procurement market consultation activities and it sent out a request for information to suppliers interested in delivering more circular products in January 2016.

The Dutch [PRP® system and e-procurement platform](#) was used, a platform that considers circular aspects and integrates criteria along the whole supply chain, from the design of products to the delivery and logistics and supports the procurement process. This system and the e-procurement platform facilitated the interaction between the suppliers and the procurement team during the whole procurement process, from market consultation to completion.

After evaluating the feedback from the market, the municipality decided to split the products in categories and to launch seven different calls for tenders, containing each a selection of different furniture products. The contracts were awarded in June 2016 to three different suppliers.

Throughout the procurement process, the municipality worked together with the [research team of the University of Wageningen](#) to develop a concept to boost circular economy in the market. In addition, the University will now use the lessons learned in this procurement for their own procurement of circular furniture.



## Criteria used

### Subject matter of the contract:

Procurement for the supply and installation of office furniture for the City Hall of Wageningen

### Procurement approach

The procurement approach taken by Wageningen was structured along the following steps:

- An interactive Request for Information (RFI) was sent to 17 suppliers, which consisted of a list containing furniture products, which the municipality was interested to buy. The list also outlined a selection of desired requirements, including that the furniture contains no hazardous substances, is made of easily demountable parts that could be replaced and would have a warranty of at least 10 years or include take-back systems. These requirements considered all steps of the supply chain and followed the PRP® system (Pre-returnable procurement system).
- The RFIs allowed for identification of potential solutions that the market was actually ready to deliver and after an evaluation period, it was decided that seven different calls for tenders, containing a selection of different products from the RFI, would need to be launched.

### Technical specifications:

The minimum requirements asked in the procurements contained among others:

- **Toxicity:** products should not include chrome or PVC parts, as well as other compounds such as Bisphenol A (BPA), formaldehyde or other banned substances. Powder coatings should fulfill all requirements specified by the [Cradle to cradle](#) label.
- **Packaging and delivering:** delivery of products should take place wherever possible without using temporary packaging materials or adhesive tapes. In the case that plastics, cardboards or other packaging materials are necessary, they should fulfil the requirements given by the PRP® system.
- **Designation:** each of the product parts such have a “designation code”, which would allow an easy identification of damaged parts and facilitate repairs by the supplier.
- **PRP® ReNtry®:** suppliers should fulfil the requirements of the Dutch [ReNtry](#) programme, which obliges them to present the composition and origin of all elements and raw materials used in a product and describe how the reutilisation of the elements will be done and by whom after the product lifetime.

### Award criteria:

The total contract value of all seven procurements was 800,000€ and contracts were awarded to the most economically advantageous bids based on different set of quality and price criteria, which were adapted to every specific tender. For instance in the case of products with high maintenance requirements, proposed maintenance activities by suppliers were considered in the award criteria, as it was the case with packaging and delivering where those activities were more relevant. Two examples of the set of criteria used for two of the seven call for tenders were the following:

Category	Criteria	Weight
Quality	Quality of the Items offered	60%
	Warranty offered	10%
	Way of delivery	10%
Price	Price	10%
	Refund value offered after product lifetime	10%

Category	Criteria	Weight
Quality	Quality of the Items offered	60%
	Warranty offered	10%
	Maintenance activities proposed	20%
Price	Price and refund value offered after product lifetime	10%

Table 1: examples of two different set of criteria used and their weights.

### Contract performance clauses:

Winning suppliers should guarantee that the maintenance and end of life disposal mechanisms specified in the technical specifications are kept in place throughout the contract duration.

## Results

As a result to the RFI, the procurement team was able to identify the best way to approach the procurement process in a circular way and categorized products in seven different procurement procedures.

For every tender, between two and five bids were received and finally contracts were awarded in June 2016 to three different suppliers.

The total budget for these procedures had been previously fixed by the City council and the results proved that the prices of the purchased furniture were not higher than conventional products.

## Environmental Impacts

The main environmental impacts derived from the production of office furniture are the use of resources, including the risk of the uncontrolled harvest of timber and the use of chemical products of concern, which have severe impacts on the environment and on the indoor climate of buildings/offices impacting on human health.

Design for disassembly makes it easier to recycle and exchange worn-out parts of the product. Furthermore, on-site maintenance works have been procured in order to extend the lifetime of the furniture and ensure highest quality. A take-back system makes sure that old furniture are re-used or recycled.

By following this approach, the municipality has been able to purchase furniture products made in a different and more sustainable way. For instance wooden table tops and lockers were made from rubberwood without using glue or staples to fix parts, which resulted in 100% recyclable elements and saved over 10,000kg of CO<sub>2</sub>.

## Lessons learned

- Using the two-step approach to this procurement procedure allowed us to understand what the market could deliver and how it could be carried out in the best possible way.
- Suppliers were asked to provide a take-back system for their products and to offer a refund for taking back the furniture. The high refund prices offered prove that old furniture still presents a good value if properly refurbished or recycled and shows the commitment of suppliers to carry out these activities.
- The procurement team received support from our board of Mayors and Aldermen, which resulted key for the process to work out. This included assistance from external consultants to develop the criteria and a circular economy course, which was taken by the team members and involved stakeholders.
- Replicability of the procedure: the city is planning to build a new gymnastic hall and intends to apply circular criteria in the procurement. The valuable lessons learned from this recent procurement will be used during the new procedure.

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For related information, please see [European GPP criteria](#) for Furniture and the [Technical Background Report](#).