



CIRCULAR AMBITIONS OF THE MUNICIPALITY OF UTRECHT REFLECTED IN THE CONSTRUCTION OF NEW BUS LANE

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The Municipality of Utrecht has major ambitions with regard to sustainable and circular procurement. The municipality's action plan for Sustainable Procurement names the public space as a promising product group that warrants extra focus on the Sustainable Procurement objectives. For the Dichterswijk Bus Lane project this is reflected in a DuboCalc calculation and the award criterion 'circular opportunities'.



Facts and figures

Organisations: Municipality of Utrecht

Product: Dichterswijk High-Quality Public Transport lane

Size: € 20 million

Period: Construction of bus lane 2019-2020

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The project

The Dichterswijk bus lane follows the Transwijk bus lane project, where the municipality applied DuboCalc for the first time. At the time, this only resulted in a slight improvement of the environmental score in DuboCalc and not in any specific measures or improvements with regard to circularity. The Municipality of Utrecht therefore decided, in consultation with engineering and consultancy firm Witteveen+Bos, to calculate a base-case environmental score

(Milieukostenindicator / MKI) in DuboCalc and add the requirement that the outcome of this calculation should be improved by 10%. The choice of materials was to a large extent already fixed, with no real room for big improvements, hence the choice for 10%. In addition, the award criteria were used to explore circular opportunities (vision, lessons to be learned from the project, reduction of new raw materials and high-value reuse) and CO₂ ambition levels.

Sustainability policy of the Municipality of Utrecht

The Municipality of Utrecht is very actively involved in sustainable procurement. Over the years, they signed several covenants: the Professional Sustainable Procurement Manifesto (Manifest Professioneel Duurzaam Inkopen) in 2012, the Green Deal Circular Procurement in 2014 and the Sustainable Procurement Manifesto (Manifest Maatschappelijk Verantwoord Inkopen) in 2016. The Municipality of Utrecht also agreed with other municipalities, including Woerden and Amersfoort, to apply circular procurement to 10% of their procurement volume by 2020. In 2018, the new council tightened this target to 33% by 2022.

The municipality also has a detailed Sustainable Procurement action plan. For civil and hydraulic engineering projects the Municipality of Utrecht prescribes a weighting factor for sustainability of at least 20%. In addition, the following firm commitments were agreed:

- Any concrete products used must contain at least 15% recycled concrete.
- For contracts exceeding € 500,000 the CO₂ performance ladder is one of the award criteria.

Monitoring

The Municipality of Utrecht has three different levels of ambition for procurement projects. Performance reports are submitted annually. In addition, results are reported at project level and since 2018 it is also mandatory to report CO₂ reductions due to procurement of clean transport. The three ambition levels are:

- Ambition level 1: minimum level (for instance, the minimum requirements at www.mvicriteria.nl)
- Ambition level 2: award criterion (relative weight 5 – 15%) or increased requirement based on sustainability
- Ambition level 3: A strong award criterion (20% or higher) and/or application of circular procurement

The procurement process for the Dichterswijk High-Quality Public Transport lane

For the Dichterswijk High-Quality Public Transport lane the Municipality of Utrecht used a UAV-GC contract, a type of contract that puts the design responsibility with the construction company. Such a contract, in combination with circular economy as an award criterion, provides a positive incentive to actively embrace the principles of sustainability.

A market consultation was not deemed necessary, as a lot of knowledge about this topic and the market was already available. During the briefing stage, several questions were asked concerning the quantities that were used in the base-case environmental score (MKI) in DuboCalc. The protocol for the calculation did provide an answer to these questions, but the contractors still struggled with the unfamiliar quantities. This is understandable, because the Final Design had to include a reduction of at least 10% compared to the base-case

calculation. In the end, the market players properly understood and addressed the request.

The contract was awarded based on the price/quality ratio.

By providing quality values, tenderers could gain a fictive discount of 30% on the ceiling amount that had been set.

The following criteria were used to award the contract:

- Disturbance reduction (45% of the quality value)
- Sustainability (20% of the quality value: 13% circular economy and 7% CO₂)
- Risk management (35% of the quality value)

The room for innovative sustainable solutions was limited in this procurement process. Many aspects were already framed by the municipality's standard requirements, for instance regarding the development of public spaces. This means that the technical solution and scope may have kept parties from making full use of the available circular solutions. This was partly overcome by nonetheless imposing a reduction of 10% and by making an action plan for the circular economy a mandatory part of the contractor's offer. The submission guideline specified that the action plan would be assessed on the basis of the following aspects:

- Your vision on how this criterion can be met and the way you enable the Municipality of Utrecht to learn from this project;
- The extent to which you are able to reduce the use of new raw materials;
- The extent to which you show your commitment to ensure reuse with the highest possible quality, both for recycled and new materials;
- To what extent you share information with the Municipality of Utrecht about the origin and destination of materials.

The level of ambition for CO₂ emissions was also made an award criterion. As anticipated, this did not distinguish the parties from each other (all parties at level 5).

Results

The main sustainability results for this project are:

- The winning bid achieves an environmental score (MKI) that is 20% below the base-case value.
- Together with the Municipality of Utrecht, a workshop themed 'Analysis of circular opportunities' was organised to explore additional opportunities that were out of scope.
- A materials passport will be created for this project.

The approach that led to the reduced environmental score, resulted in several interesting solutions, such as:

- Analysis of material flows for reuse within the project and possible application outside the project of raw materials released;
- Application of reused raw materials from outside the project;
- The asphalt used contains 68% recycled asphalt;
- At least 15% of the gravel used in the concrete is replaced by concrete granulates;
- Temporary facilities should become part of the final situation, i.e. no temporary lanes that need to be removed later on;
- Application of geopolymer concrete for paving.

The contract was awarded based on the bidders promise to reduce the base-case environmental score (MKI) by 20%. This will have to be demonstrated upon delivery. If the promised reduction is not achieved, a fine will be imposed. This provision creates an incentive to actually meet the target of 20%.

In addition, a number of circular opportunities have been identified that cannot be realised within the current specifications, but do merit further exploration, such as:

- Reuse of the existing embankment
- Recycled asphalt in top layer

Lessons learned

The Municipality of Utrecht has gained considerable experience with circular procurement and has identified a number of interesting lessons and focus areas:

- In order to embed the topic of sustainability firmly in its various projects, the municipality has created the role of sustainable procurement consultant. How this role is implemented may vary per project. In some cases the consultant is included in the project team, in other cases he/she plays a more peripheral role, depending on the project and the project management. For the Dichterswijk High-Quality Public Transport lane, the consultant and the project manager have cooperated closely to achieve the highest possible level of sustainability.
- Circular procurement is very much alive within the organisation, and purchasing officers and project managers increasingly come up with ideas to strengthen this approach. However, the role of sustainable procurement consultant provides added value regarding the content and assessment of circular projects.
- In practice, the use of the DuboCalc tool to determine the environmental score (MKI) still gives rise to differences in interpretation, and consequently to questions from the market.
- Today, the level of ambition for CO₂ emissions can be set as a requirement. For projects that attract well-known contractors, it is not possible to use this aspect to differentiate between parties.

- Before conducting a market consultation, you are advised to check with colleagues and comparable companies or authorities that have experience with circular procurement of the required product or service. This allows you to gather a lot of information about the market beforehand. If you already have experience with similar ambitions for a particular product group, a market consultation may not be necessary. In that case, it might be worthwhile to just ask some market players if there are recent developments or innovations that could be interesting.
- If you request to identify Value Added options, you must be aware of how each of these opportunities affects the budget and the sustainability score. You should clearly communicate to the market how these opportunities are related to other performance aspects. For the Dichterswijk High-Quality Public Transport lane, for instance, it was not clear whether or not the identified opportunities would have to contribute to further lowering the required 10% reduction of the environmental score. One way to deal with this is to ask the market to make a clear distinction between measures and opportunities, and to indicate the effect on the environmental score for each measure. Transparency is important here, because the opportunities often require the go-ahead of the manager and you cannot be sure whether you can actually capitalise on all of the opportunities.

“Employees of the Municipality of Utrecht are becoming more and more excited and proactive about getting started with circular procurement”

Sara Rademaker, Sustainable Procurement Consultant for the Municipality of Utrecht

Tips

- The role of sustainable procurement consultant helps both to stimulate circularity in projects and to actually embed the concept in those projects. By making the consultant part of the project team you ensure that circularity is included and firmly pursued.
- Ensure that the contract manager and the people responsible for executing the project really own the sustainability aspects, for instance by involving them early in the project and welcoming their contributions.
- It is a good idea to build a financial incentive into your contract to encourage suppliers to meet their sustainability objectives.
- If you decide to use a quantitative instrument, such as an environmental score (MKI), you must make sure there is little room for interpretation by the market.
- Ask the market to make a clear distinction between measures and opportunities, and to indicate the effect on the environmental score for each measure. Transparency is important here, because the opportunities often require the go-ahead of the manager and you cannot be sure whether you can actually capitalise on all of the opportunities.
- Hiring an external consultant for a specific area of expertise may help raise confidence in your request and create internal support. Also, an external consultant brings experience with multiple clients and often with multiple suppliers as well.

Multiple circular procurement projects within the Municipality of Utrecht

The municipality has gained experience from quite a number of circular procurement projects. For example, agreements on circularity are being made or have been made for the following projects:

- Workwear
- Personal protection equipment
- Bus and tram stops
- Paving materials
- Office supplies
- Circular replacement of dressing rooms for sports park Lunetten
- Construction and maintenance of sports floors in sports facilities

These projects, and the procurement of office supplies in particular, have also produced an interesting alternative revenue model. This involved a KPI to reduce the use of office supplies, which would appear to be contrary to be supplier's revenue model. To remove the incentive to use more, a fixed price was agreed. The supplier provides high-quality refillable pens, for instance, and pens and other basic items that are made from as much recycled material as possible.

