





# Circular tendering of waste treatment

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#### Introduction

Kolding Municipality aims to increase its capacity and experience with circular procurement, both as part of the Interreg NSR Procirc project as in general. With this pilot, Kolding Municipality aimed to get a better understanding of how waste treatment plants can become more circular, how this can become a more prominent factor in tenders, how this can be made more visible and possibly motivate the market to increase its focus on circularity.

In tenders for waste material there is a general circularity criterium, as most of the tenders aim to recycle collected materials at the best price possible. Even though there is great potential for improvement, waste recycling poses many problems. Some recycling plants can handle large quantities of materials, the quality of which

varies greatly. This generally results in low grade products that are only suitable for a limited number of uses. Other recycling plants focus on producing a high grade product that has far better application potential but requires equally high quality input material in the form of uniform and well sorted waste materials. How to get these materials is a different story; suffice to say that it requires a lot of effort to get one container of high quality material. In some cases just 0.05% pollution with an incompatible material can reduce the quality of the material from high to very poor. For this reason, it is extremely important to take waste sorting seriously. When people fail to do so, the ethos of recycling, where one product is reworked into a new and equally good product, is lost and the quality is actually downgraded to an inferior product with even less potential for recycling.



The collection of higher quality materials is one way to sort this problem, but better technology, handling and treatment are also possible solutions. The issue is that when cost is the only parameter in tenders and subsequent contracts, there is little incentive to improve these aspects of waste treatment.

On top of this, there are often relatively few waste treatment plants in the geographical area that are able to process each type of waste (waste fraction). The idea that the market will provide a solution if the tender is framed correctly does not apply in this context, as the number of possible recipients/contenders is often limited to two or three companies. For that reason some of the tenders must focus on further developing the existing treatment plants rather than hoping for the appearance of a 'perfect' third party, one whose existence was previously unknown.

A new approach to tenders might be a way to guide these innovations and help accelerate the development of the market.

#### **Procurement process**

#### 1. Internal clarification

The process began with an introductory meeting for internal clarification and agreement on a model that could be incorporated in upcoming tenders. At the beginning of the project, it was desired that all bidders were required to account for initiatives on sustainability, both in general and in connection with the bidding. If the tender sets requirements for a statement supporting the submission of the tender, it must be clear and be very specific about what this statement must contain. This could not be defined on the basis of knowledge at the time. Because of this the process was corrected so that winning bidders must report on circular "development projects, innovation and new technology" at the contract meeting, and subsequently send a written statement to Kolding Municipality.

### 2. Circular economy text inserted in tender material

The following wording was used in three tenders for a total of 19 waste fractions from the recycling sites; food waste, concrete and brick, soil, garden waste, large combustible waste, pressure impregnated wood, clean wood, windows and doors, household glass, cardboard, paper, books, hard plastic, soft plastic, PVC, garden furniture, insulation, plaster, ceramics and sanitation, and waste for sorting (landfill). The wording was also used in a food waste tender from the municipality's collection scheme. The tenders were based on price and included the general fixed criteria of the municipal waste tenders.

## Development projects, innovation and new technology

When entering into a contract the winning contractor must account for any circular development projects that are being worked on or projects that promote circularity in relation to the handling of the waste fraction in question, including circular partnerships with other companies locally, regionally or nationally.

The report must also describe the efforts made to extend the life of the contractor's own equipment used in the operation (e.g. vehicles, machines, buildings, tools, etc.), as well as any new technologies that promote the circular economy (e.g. in relation to extension of service life of equipment, increased recycling, increased maintenance to minimize reliance on new equipment, less use of chemicals, less CO<sub>2</sub> etc.)

On the basis of the incoming statements from these tenders, the intention was to make a template for use in future tenders; one that had to be filled in as part of the tender submission.

#### **Results**

#### 3. Presentation and receipt of statements

Seven statements were received in total. Each of the statements were of a very different nature, which was also expected.

Some indicated the company's overall intentions, while others were more factual, and



were more aimed at describing individual tasks.

#### 4. Evaluation of the process

On the basis of the statements received, the project group assessed that it remains difficult to create a template that can be used to support the submission of future tenders. However, the statements provided information that was very interesting, and the project group decided that the previous wording would be maintained in future tenders - possibly with minor corrections.

#### 5. Upcoming initiatives

When working with new waste tenders we will focus on providing opportunities for the treatment plants to come up with ideas and projects that can contribute to new and more circular economic initiatives during the market dialogue.

#### **Lessons learned**

- There is still great potential for the realisation of circular initiatives in Kolding Municipality's procurement practices. Part of this potential lies in their experience, knowledge and practice; another part lies in the quality and quantity of data that companies can provide them with.
- Statements on circular economic activities motivate the contenders to reflect on their practices, but it may be possible to develop this further with negotiation-based tenders.
- There may be potential for using tenders and contracts as a development tool for the company that is awarded the tender. For example, milestones with bonuses and fines can be set during the term of a contract that can motivate a company to work for the green agenda, or create a more circular process or improve data validity that can form a foundation for better supply, collaboration or treatment in the future.
- Kolding Municipality continues to focus on circular economy in all tenders and procurement, which will also be mandated in the upcoming Procurement and Resource Policy. In addition, it is important to keep developing experience and practical cases about circular tenders through education and exchange of experience with other municipalities and consultants.

