**Circular procurement model of the province of Utrecht**

Circular procurement is the acquisition of works, supplies or services by means of a public contract, that is based as much as possible on the main principles of the circular economy, namely:

1. during production, use and processing of the product minimal environmental burden takes place;
2. maximized value retention of existing products ;
3. management of the loop

This model is based on ‘the ladder of Lansink tool’ named after a Dutch politician who submitted a motion to implement this tool in the seventies. Outside of the Netherlands people speak of the waste hierarchy. Waste hierarchy is a tool that ranks production processes alongside resource and energy consumption to most favourable to least favourable actions. Let’s look a bit more detailed at this model.

1. **During production, use and processing of the product minimal environmental burden takes place.**

The primary goal of the (raw) material chain management is to prevent or reduce raw material use, to not, or as little as absolutely necessary use toxic materials and to produce as little waste as possible. Raw material extraction, production, use and the processing after the use the product must be accompanied by minimal use, and emission, of harmful substances. What you do not or less need is less environmentally harmful. So RE-FUSE, RE-DUCE and RE-THINK.

1. **Maximized value retention of (existing) products**

The possibility to maximize value retention is guaranteed at various stages in the life cycle of the product:

1. Before the use of the product; new products are designed and manufactured in such a way

that the end of the use phase value destruction is avoided as much as possible (eg by making it easy to disassemble and/or to make it possible to separate different materials without a fuss and/or have a particulary long lifetime and/or are made of used material. So RE-DESIGN.

1. During and after the use of the product; the value of the product remains or the life of the product, or as many parts thereof as possible, are extended. in the literature a rough distinction is made between the following elements in decreasing order of material value retention:

1) RE-USE: use and lifetime of the existing product is extended for the same purpose. There are no changes to the product itself.

2) RE-PAIR: use and lifetime of the existing product is extended by means of repair;

3) RE-FURBISH: Refurbishing/renovating and / or modernizing the product;

4) RE-MANUFACTURING: New products are made from (parts of) old products, for example a copier that is made up of more than 90% used parts of discarded copiers ;

5) REPURPOSE: Reuse a product for a different purpose;

6) RE-CYCLING: Recovery and making materials and raw materials from discarded products and materials suitable for reuse. The province distinguishes:

a. Upcycling: Recycling where the inherent value of a material increases.

For example, new pieces of furniture from discarded materials such as scrap wood, old ones

machine parts or pallets;

b. Recycling: Recycling where the inherent value of the product remains the same; PET bottles are recycled into PET bottles.

c. Downcycling: Recycling that reduces the inherent value of a material. For example, recycled toilet paper made from used paper

1. **Management of the loop and contract forms**

One of the most important success factors for the circular economy is chain cooperation aimed at creating multiple value. Here not only increases the economic value of all companies in the chain, but also the ecological value and social value. Somebody has to keep the control on the circuit to be able to work together to organize. From ‘the contracting authorities, the emphasis is on working together in the chain in order to be able to do the close cycle. The contractor transforms his often short-lived - sales-based relationship to a partnership in which transparent interests and mutual trust is central, and the value retention of products and materials for all parties are important. Managing and controlling the cycle is therefore about the extent and manner of process design, assurance, registration, guarantee and organization, not only on the first recycling cycle, but also on the subsequent cycles. After all, it is not the intention that a product still ends up, after a second life, in the scrap heap.

In the case of circular procurement, tailor-made contract forms and / or contractual provisions are in order, whereby at the time of procurement agreements are made with regard to high-quality reuse at the end of the use phase and the accountability for this.

The contractor is the manager on the cycle. The contractor is going to realize cooperation and transparency within the chain. The contractor as manager also accounts for the retention of value within the chain. The resultant responsibilities and risks are find their place in a appropriate contract form and contract duration. New contract forms are ‘buy and buy back’ or ‘buy and ‘products as a service’, where, in the last example, producers remain the legal owner of their product.

**Flow chart circular procurement**

You have procured circular

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Have you drawn up minimum requirements or award criteria in view of the minimal environmental burden of the product or the work?

Have you drawn up minimum requirements or award criteria in view of the maximization of the value retention of the product or work?

 JA JA

NEE NEE

You have procured circular

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Have you drawn up minimum requirements or award criteria in relation to the management of the loop?

Have you drawn up minimum requirements or award criteria in view of the maximization of the value retention of the product or work?

 JA JA

 NEE NEE

You did not procure circular

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You did not procure circular

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