

## SHORT SUMMARY

**Organisation:** Municipality of Venlo, [www.venlo.nl](http://www.venlo.nl) | **Contact person:** Chris Janssen (Procurement Adviser),

**LinkedIn Product & sector:** municipal offices (Construction), furniture (Office furnishing) | **Country:** The Netherlands



# Municipal offices based on circular principles,



*The building produces over 60% of its own energy.*

A building that is not only sustainable but also contributes to people, the environment and economy. The Municipality of Venlo succeeded in this with its new municipal offices.

### Project description

The project comprised the building and design of the municipal offices in accordance with the circular principles of cradle-to-cradle (C2C). This means that the raw materials used will always continue to be used at the same level, will never lose their value and will remain available for new products, and that the building offers added value. The municipal offices purify outside air, generate energy and there is a closed-loop water recycling system. The municipality has used many C2C solutions, such as a green climate facade, heat and cold storage, a helophyte field for wastewater purification, solar chimney, greenhouse as green lung, triple glass and solar panels. The furniture was also procured according to circular economy principles.

### Approach

The project arose from the ambition for the city and region to function according to C2C principles. The municipality also wanted to inspire the region and attract innovative companies.

The architect was selected according to vision on C2C and sustainability. Market consultations were held for the design and systems. The municipality then conducted a pre-selection based on experience, knowledge with the chain and capacity. In the call for tenders for the furniture, information requested included the components of the products and the possibility for disassembly. The ceiling amount for the design amounted to € 2 million, in which a guaranteed residual value of 18% was agreed.



## FACTS & FIGURES

### Number of employees:

> 1000

### Tender volume:

> separate design approx. €1.4 million, permanent design approx. € 1 million

### Town hall offices surface area:

> 13,500 m<sup>2</sup>

## Results

The C2C profit is significant. By putting people first, the building offers added value to the user regarding acoustics, climate and atmosphere. Part of the ventilation system is a 2,000 m<sup>2</sup> green climate facade, which is connected to a greenhouse, open spaces and a solar chimney.

*“This is not a tree-hugger story. It’s simply a business model.”*

Chris Jansen, Municipality of Venlo Procurement Adviser

The building produces over 60% of its own energy and uses no gas, which makes it CO<sub>2</sub> neutral. The building is also triple-glazed, has a rainwater harvesting pump, waterless urinals, a helophyte filter (see infographic), solar panels, a solar collector, heat recovery system and LED lighting. Various solutions contribute to realising the city’s C2C

ambition. This ambition focuses on the use of clean energy, with the building as a raw material bank that purifies water and inside and outside air. The € 3.4 million investment in sustainability measures will deliver savings of € 16.9 million during the 40-year usage term. The business case results in a positive cash flow as early as after the first year. In new projects, the Municipality of Venlo will increasingly examine the possibilities of applying the C2C philosophy.

## Lessons learned

- Make sure there are ambassadors within the decision-making layers.
- Be realistic. Do not only look at C2C certified products. There are many more equivalent options. You do, however, need to check these in advance. The Municipality of Venlo asked C2C expert, Michael Braungart, to do this.
- Just do it! Start pioneering.
- With a good business case you can demonstrate that higher investments will pay for themselves in the longer term.

## About REBus and the Green Deal on Circular Procurement

The Green Deal on Circular Procurement (GDCP) is an initiative of MVO Nederland (CSR Netherlands), NEVI, Central government, Duurzame Leverancier, PIANOo, Kirkman Company and Circle Economy. Various pilots originating from GDCP are partly financed by the European REBus project, implemented in the Netherlands by Rijkswaterstaat (Directorate-General for Public Works and Water Management). They are working together to support businesses and government organisations in their circular procurement ambitions.

### Contact information

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**Partners (selected partners):** Kraaijenvanger | BBN | C2C ExpoLAB | WSM Engineering | Veldhoen & Company | Royal Haskoning DHV | Michael Braungart | Laudy / Ballast Nedam

**Relevant links & documents:** [Infographic Municipal Offices \(Dutch\)](#) | [Mini documentary construction of municipal offices](#)

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