



Rijkswaterstaat
*Ministry of Infrastructure
and Water Management*

PRIMO Sustainable and Green Procurement for Circular Economy

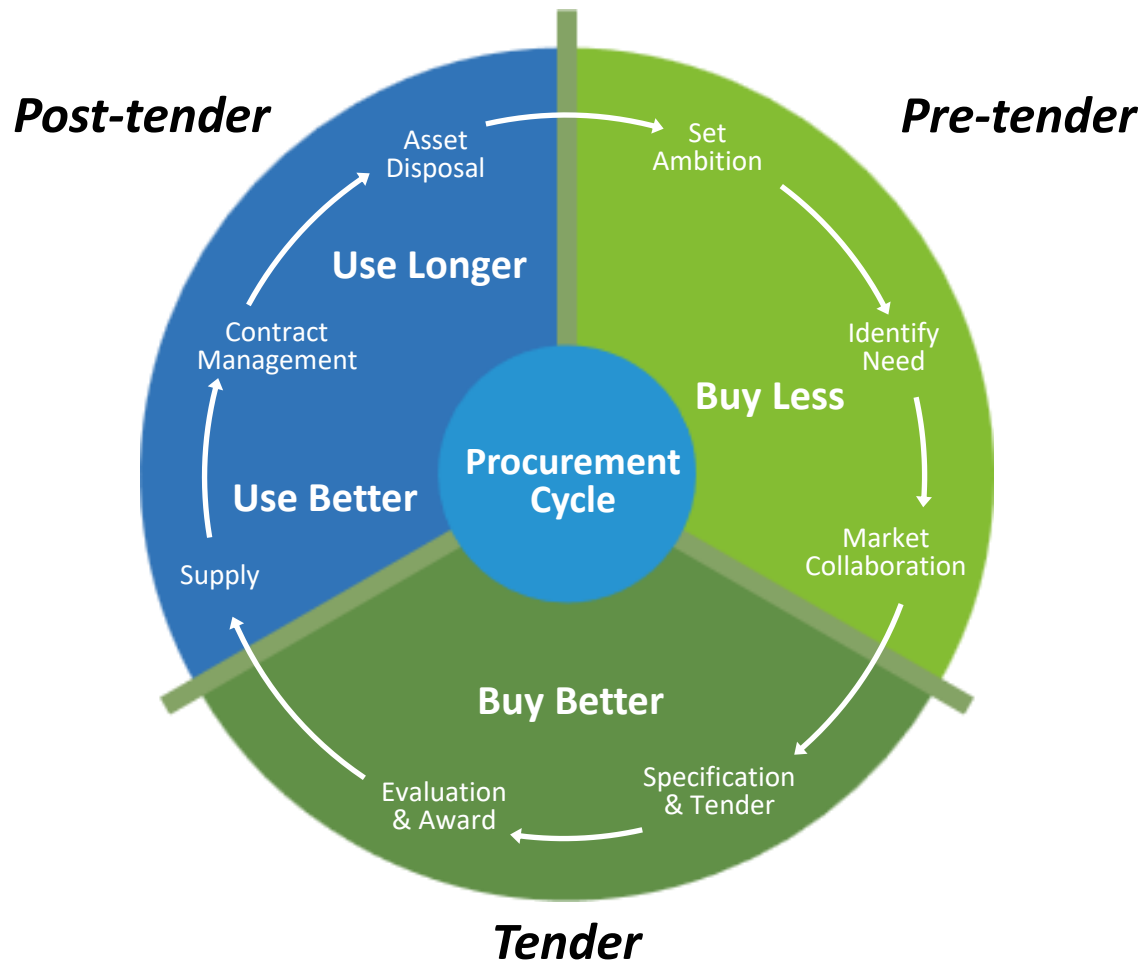
Session 1: Role of Public Procurement in Circular
Economy

Circular procurement examples

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Core strategies for circular procurement



- Impacts of procurement can be addressed across the whole procurement cycle – not just the tender phase.
- Our core strategies are:
 - Buy Less;
 - Buy Better;
 - Use Better; and,
 - Use Longer.



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BUY LESS

Buy less

London – Stratford regeneration

- 145 mixed industrial buildings - 9 buildings re-used
- 445,000 tonnes (98%) material reused or recycled
- 20,000 lorry movements avoided
- Over 80% of soil has been cleaned & re-used on the Olympic Park
- Foundations for Aquatic Centre, Handball Arena have used concrete with over 30% recycled materials.
- Substitution with GG Blast Slag and PFA; London Aquatics Centre
- Recycled content levels of 22% (170,000 tonnes)
- Reduced concrete design saved 65,000cu metres, 120,000 tonnes aggregate and 20 tonnes CO₂eq.



2006



2008



2012



2016



Temporary court building, Amsterdam NL

Step 3: Defining the need and formulating the right question:

1. Do we need a permanent building?
2. What will happen when we have finished with it?

2014 - temporary solution required so designed for

- flexibility
- deconstruction
- waste minimisation

2015 - courthouse completed

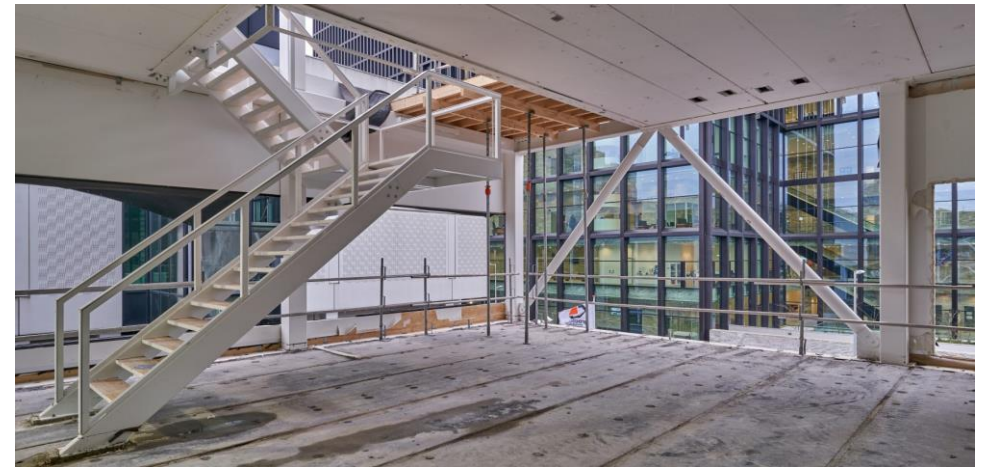
2020 - dismantled:

- ca 220 tonnes recycled materials
- 33 individual cells for sale – no takers!

2021 - reassembled in Enschede as new office



Construction



De-construction





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BUY BETTER

Triodos Bank, The Netherlands

Interreg
North Sea Region
ProCirc
European Regional Development Fund

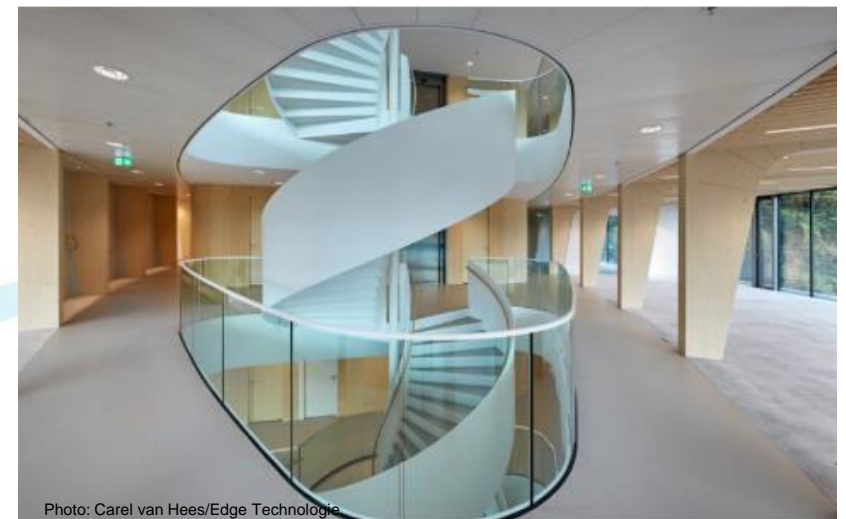


Procurement considerations

- maximum sustainability within the available budget
- performance requirements
- making the greatest possible use of knowledge in the market
- Temporary materials bank

Design for disassembly

- Area: 12,994 m²
- 165,312 screws so it can be disassembled
- Materials passports logged on Madaster along with value
- Built primarily from wood
- The floor can be demounted
- Flexible space - interior walls can be removed
- Each piece of the structure will be reused somewhere else
- Uses geothermal heating and cooling
- PV panels and reversible e-charging for vehicles



Example: Reusing materials by design - Les Canaux, Paris, France



When the City of Paris renovated Les Canaux, a building aimed at hosting social and solidarity companies, its goals were incorporating 100% reused materials, bio-geo-sourced and/or containing 15% recycled material.

It has involved over 40 local companies in handling and transforming the different materials in the metal structures, floors, sanitaryware, interior elements etc.



[Find out more here.](#)





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USE BETTER
USE LONGER

Alliander Duiven office building, Netherlands

The need and the initial demand

Initial demand

- Build a new office that is more or less sustainable

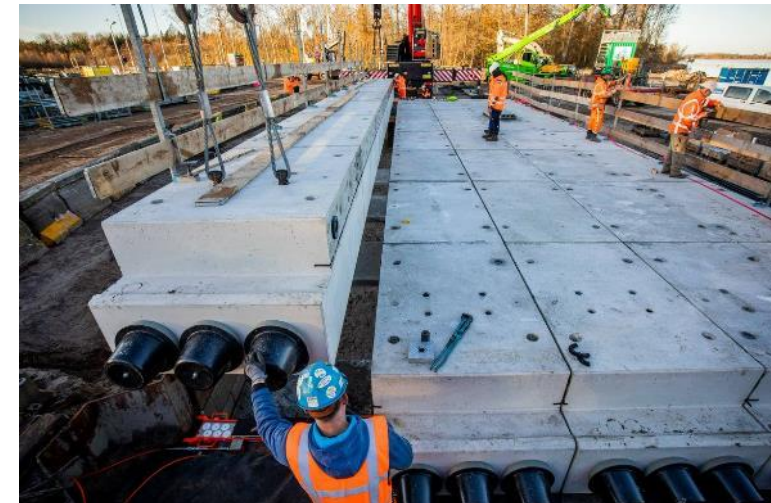
New demand

- Design and develop an office environment for 1500 people with maximum contribution to our ambitions:
 - Circular building and construction process – refurbished existing buildings and added floating roof
 - Energy positive
 - Pleasant and healthy working environment
 - In connection with surrounding area



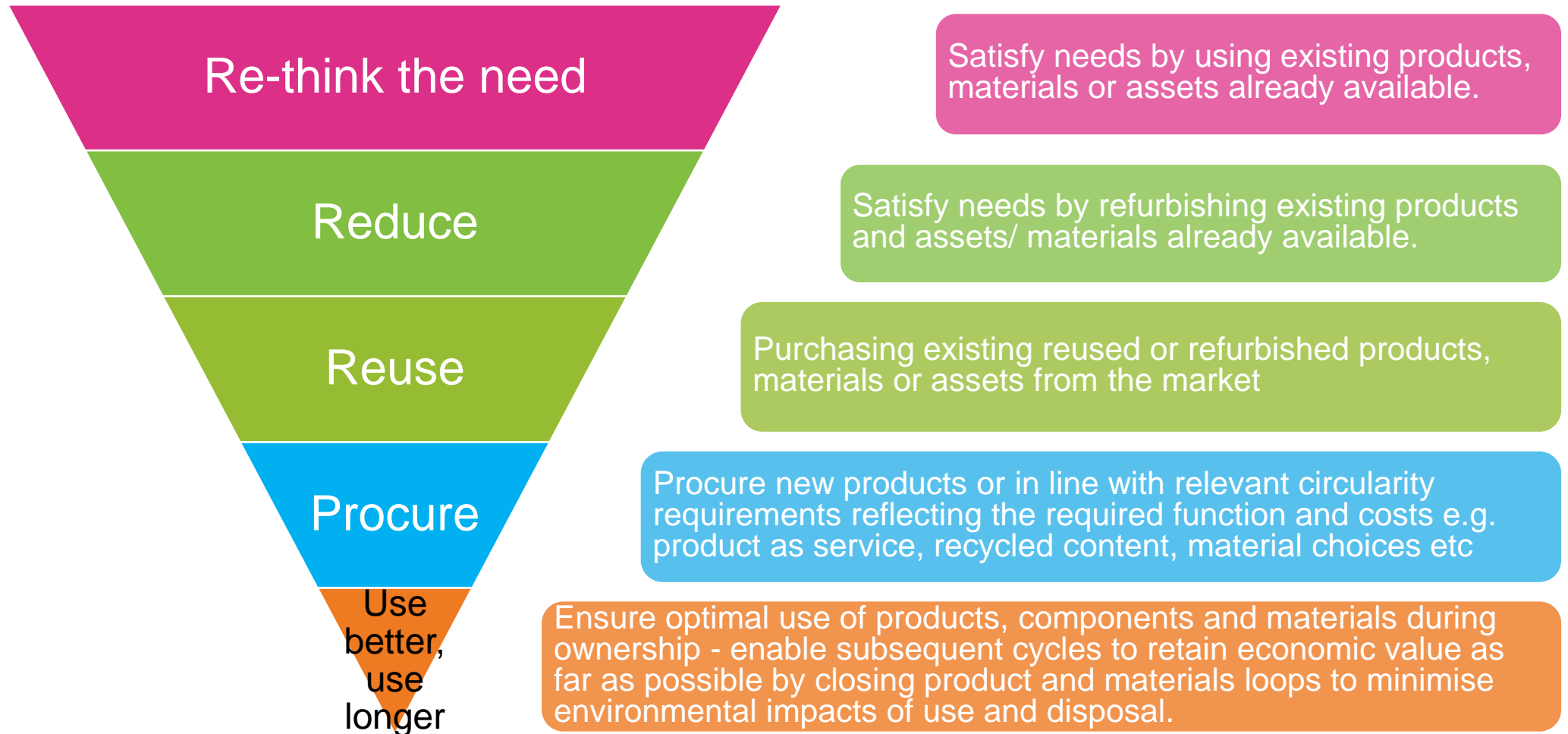
Vianen archbridge, Netherlands

- Existing bridge built 1963 over River Lek
- No longer capable of sustaining increase traffic and weight
- New circular bridge design tendered – modular and deconstructable
- Old bridge dismantled and reused elsewhere for lower density cyclepath bridge



A circular approach

The focus on extracting maximum value means considering key principles set out in the hierarchy below:



Change it one step at a time

Thank you



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