



Circular Economy and procurement

Some examples from the Netherlands

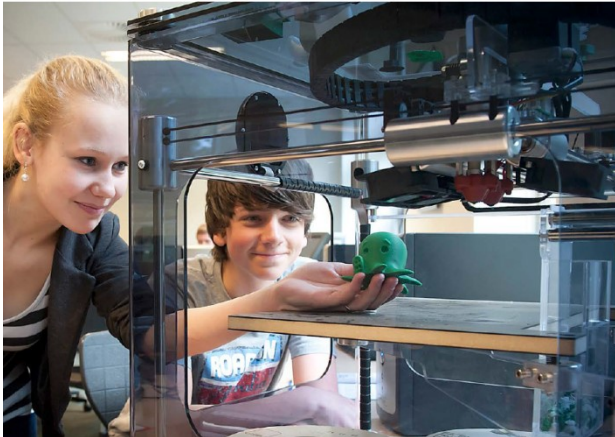
Emile Bruls, Rijkswaterstaat

St. Petersburg, 9 December 2020

Netherlands Circular by 2050



A Circular Economy
in the Netherlands
by 2050

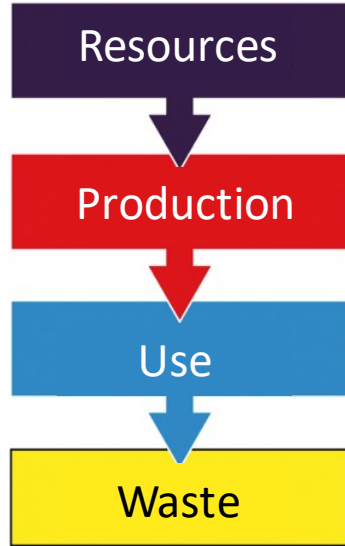


- **2050:** 100% circular economy
- **2030:** 50% reduction in use of virgin raw materials through:
 - Reduction
 - Recycling
 - Biobased
 - Sustainably sourced
 - Product life extension
- **Procurement** is one of the instruments

<https://www.government.nl/topics/circular-economy/documents/policy-notes/2016/09/14/a-circular-economy-in-the-netherlands-by-2050>

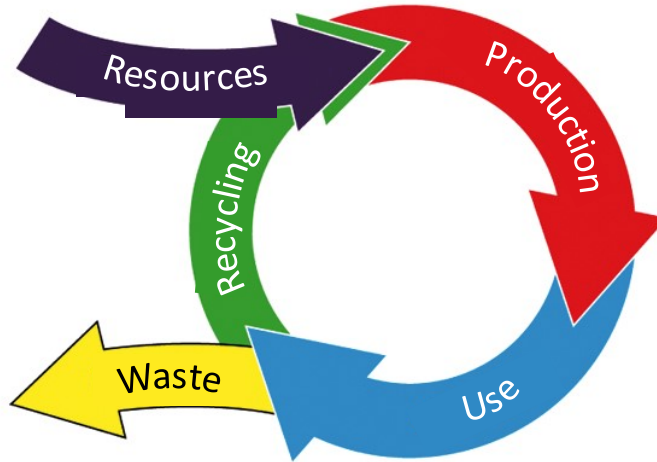
Past

Linear economy



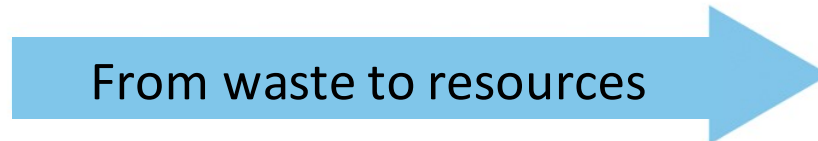
Work in progress

Chain economy with recycling



2050...

Circular economy





Sustainable use of
natural resources



Focus in design and
production on closing
loops



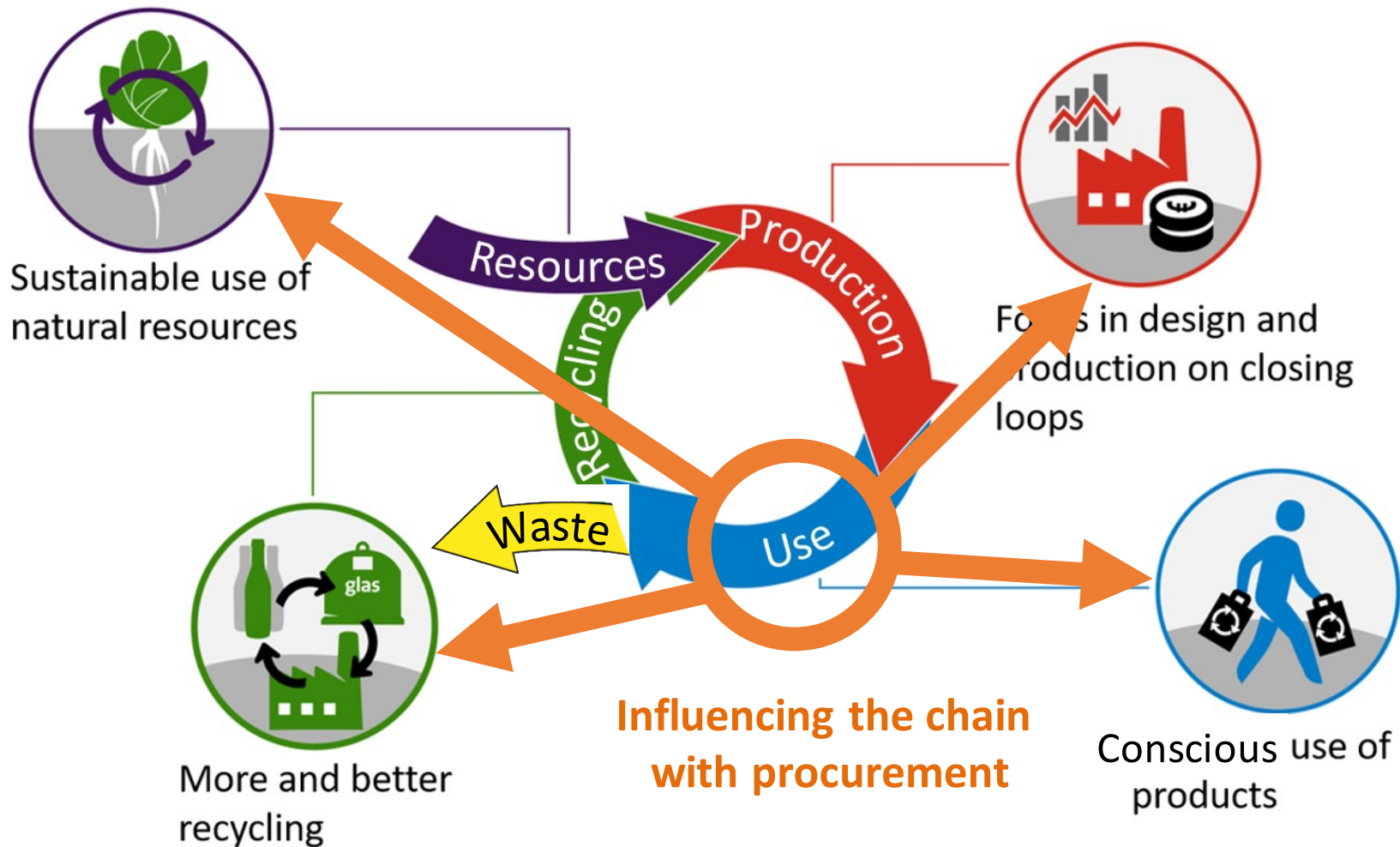
More and better
recycling



Conscious use of
products



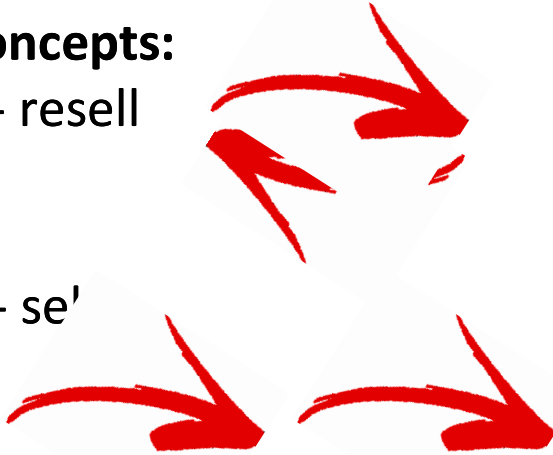
**Waste is an indicator
of circularity**



Procurement concepts

3 main concepts:

- buy - resell
- buy - se'
- product service systems

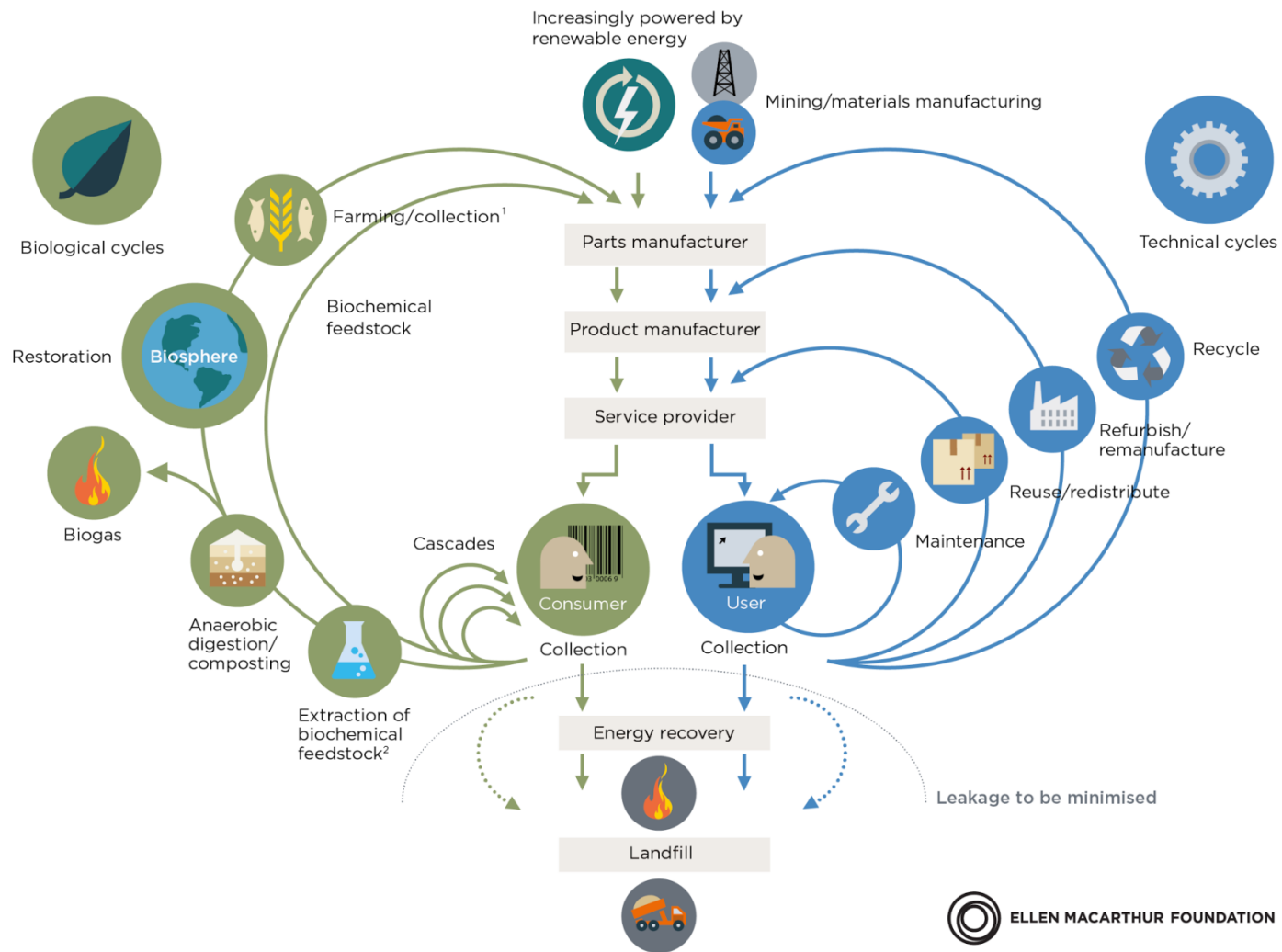







Business models

1. Product Service Systems
2. Product life optimisation
3. Resource recovery
4. Sharing platforms
5. Circular supply

Examples





| A  Reduce total amount of materials | B  Reduce amount of virgin inputs | C  Extend the useful life | D  Maximise the reusability of a product or component | E  Maximise the reusability or recyclability of materials |
|---|---|--|---|---|
| A 1 Internal sharing | B 1 Understanding the share of recycled, biobased and virgin materials present | C 1 Extending guarantees | D 1 Design for Disassembly | E 1 Design for recycling |
| A 2 Renting or peer to peer sharing | B 2 Increasing the amount of recycled content | C 2 Contractual arrangements for maintenance and repair | D 2 Modular design | E 2 Understanding materials |
| A 3 Reuse, refurbishing or upgrading | B 3 Increasing the amount of biobased content | C 3 Upgradable products | D 3 Standardised design | E 3 Contractual arrangements for take back and recycling |
| A 4 Minimal use of materials in design | | C 4 Design for longevity | D 4 Understanding the internal composition and connections | E 4 Reducing or banning toxicity |
| A 5 Less waste | | C 5 Repairability and maintainability | D 5 Contractual arrangements for take back and reuse | E 5 Biologically degradable / compostable |
| | | C 6 Modular/change oriented design | D 6 Stimulate circular business models | E 6 Stimulate circular business models |
| | | C 7 Contractual incentives for extension of useful life | | |
| | | C 8 Supplier guidance for use optimization | | |

GOALS AND STRATEGIES FOR CIRCULAR PURCHASERS





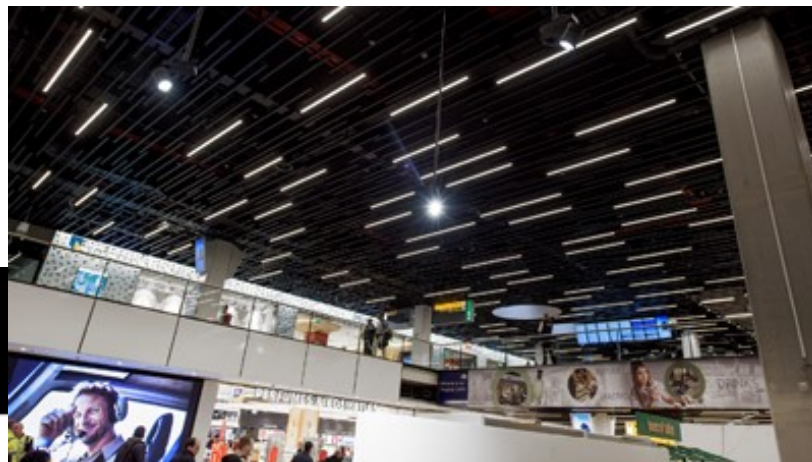
Reduce total amount of materials





Circular lighting solutions

Schiphol Amsterdam airport





Recycled fibres in new textiles





Collecting army clothes





Office furniture central government



- Focus on redeployment of existing furniture and prolonging the lifetime of furniture
- Expected annual savings: €8-11 million
- Also Circular PP pilot in Malmö



C2C Office chairs





City hall of Venlo



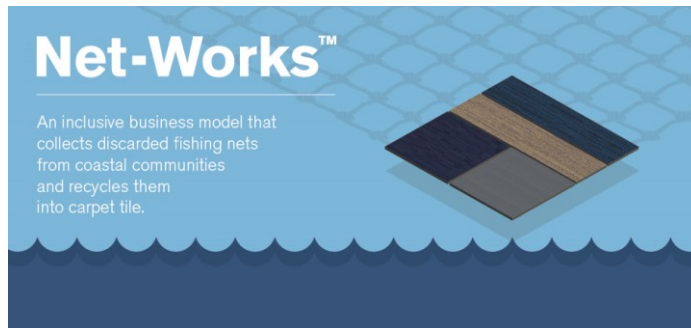


An old bridge becomes a new one





Office carpet tiles from fishing nets

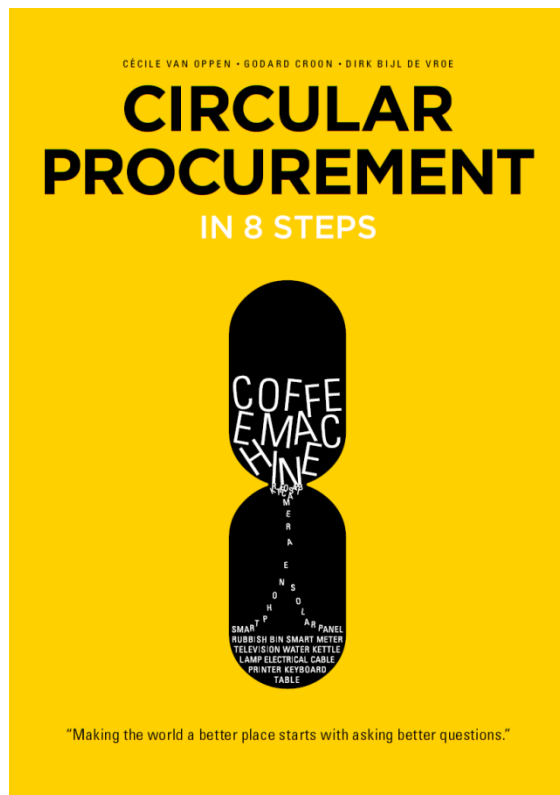




Maximise reusability and recyclability of materials



Circular Procurement in 8 steps



1. From definition to ambition
2. Internal organisation
3. Defining your need
4. Business models
5. Market collaboration
6. Tender procedure
7. Measuring and awarding
8. Contract management



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LINEAR ECONOMY



RECYCLING
ECONOMY



CIRCULAR
ECONOMY

