



Netherlands Enterprise Agency



Transition Agenda Circular Building Economy

Hans Scherpenzeel, Advisor at
Netherlands Enterprise Agency

April 12th, 2018



Netherlands Enterprise Agency

Netherlands Enterprise Agency

encourages entrepreneurs in sustainable, agrarian, innovative and international business

- The aim is to improve opportunities for entrepreneurs and strengthen their position.
- We help with grants, finding business partners, know-how and compliance with laws and regulations.
- Netherlands Enterprise Agency is part of the Ministry of Economic Affairs and Climate Policy and works at the instigation of ministries and the European Union.
- The Agency works in The Netherlands and abroad with governments, knowledge centres, international organisations and countless other partners.



Framework for the circular economy program



Social Economic Council

June 2016



the Government-wide program "The Netherlands Circular in 2050".

September 2016



Raw Materials Agreement

January 2017



5 Agendas and a monitoring program

The Building sector: one of the five pillars in the Government-wide program "The Netherlands Circular in 2050".

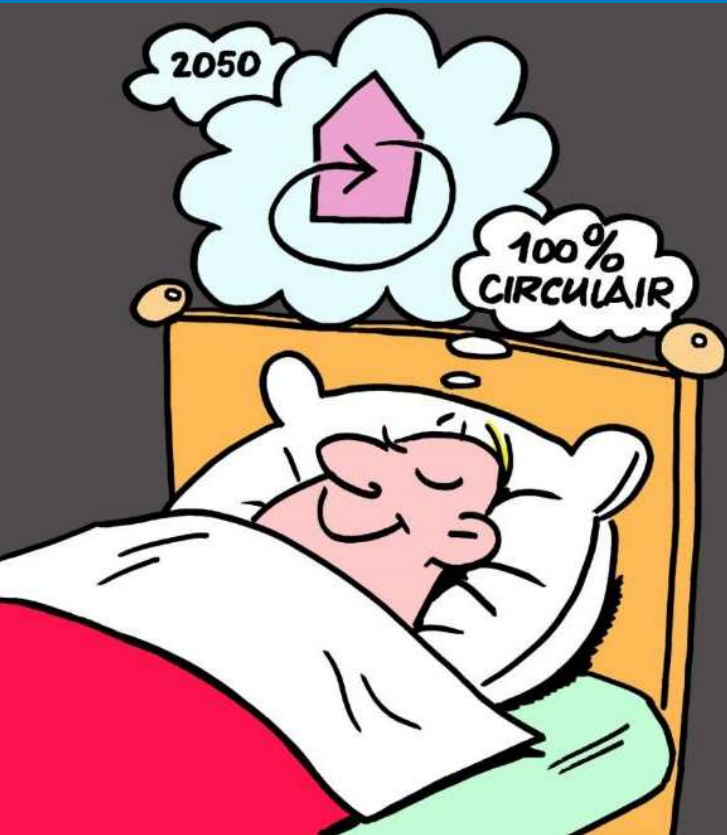


15 January 2018





Ambition: Complete Circular Building Economy in 2050



The Building sector: one of the five pillars in the Government-wide program

"The Netherlands Circular in 2050".

Responsible for:

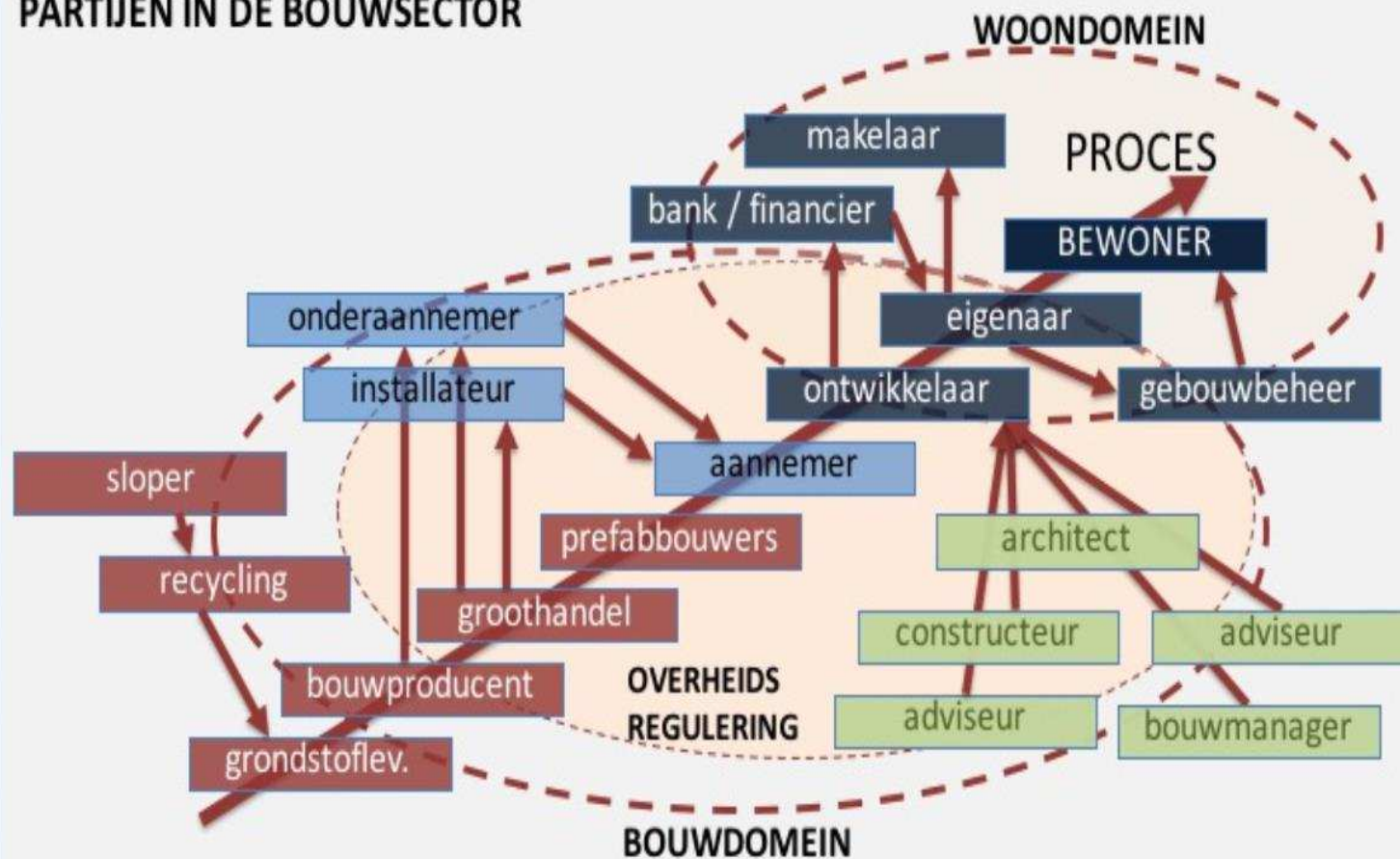
- 50% of the raw materials consumption
- 40% of energy consumption
- 30% of water consumption
- 35% of CO₂ emissions

Ambition in 2050:

100% circular building economy



PARTIJEN IN DE BOUWSECTOR



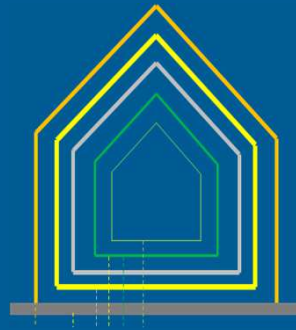
April - november 2017



Analysis of the Transition Team

1. Building materials: many and heavy but not globally scarce

2. Multiple (very) long cycles



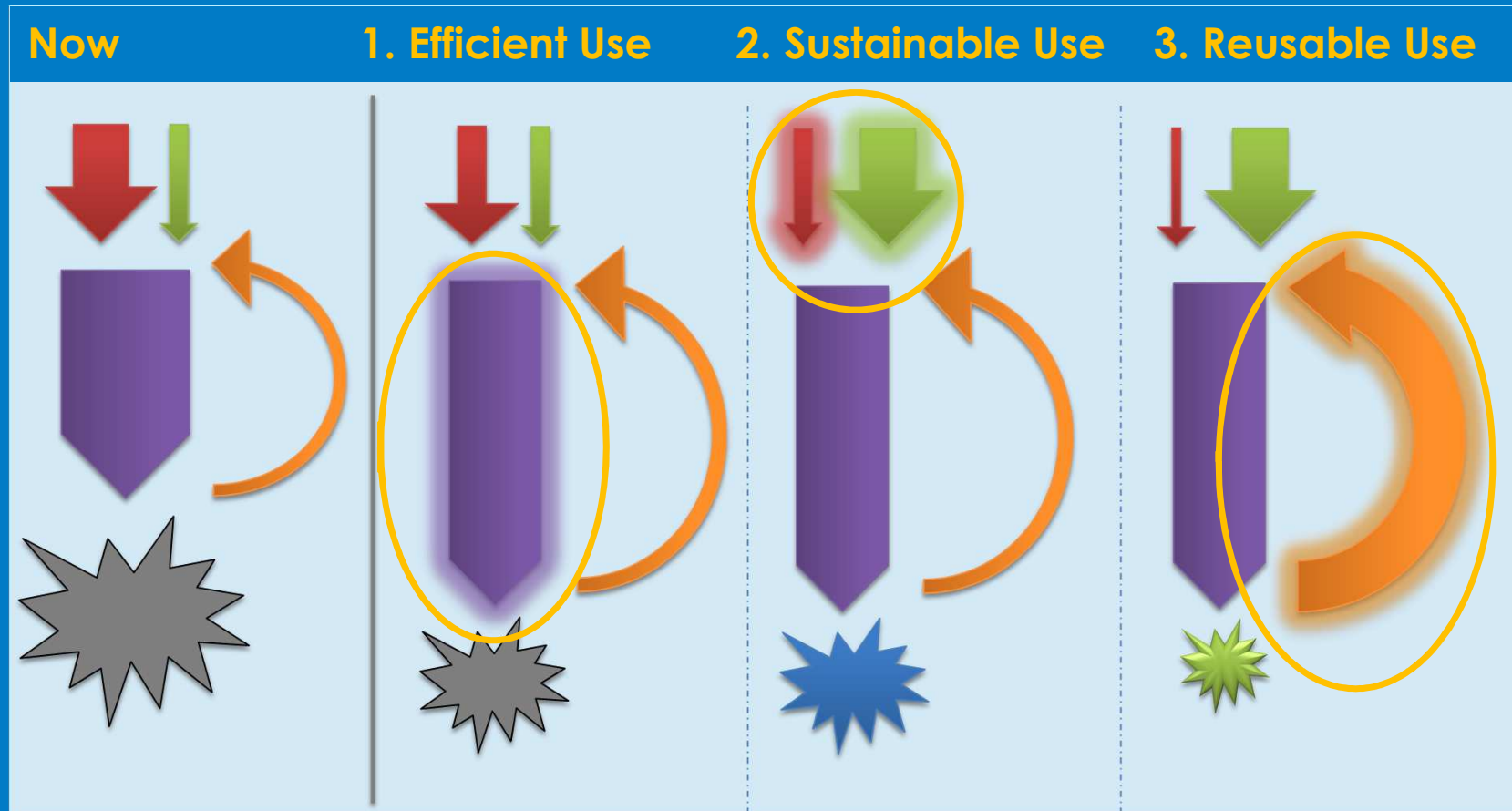
- | | |
|-----------------------|---------------|
| 1. energy and water: | a few days |
| 2. interior: | 3 -30 years |
| 3. installations: | 15 -50 years |
| 4. building envelope: | 10 -100 years |
| 5. construction: | 30 -300 years |
| 6. ground: | infinite |

3. Initiative and design phases are of crucial importance for the circular use of raw materials in the construction and use phase.

4. Enthusiasm of parties can be used for cooperation in the chain.



3 steps strategy





Netherlands Enterprise Agency

The definition

The Circular Building Economy means the build, use and reuse of buildings, areas and infrastructure, without:

- to exhaust natural resources unnecessarily,
- to pollute the environment and
- to affect ecosystems,

in a way that is economically sound and contributes to human and animal welfare.

Here and there, now and later.



Three related topics

**Sustainable
Circular**

Energy Neutral



2018 - 2021

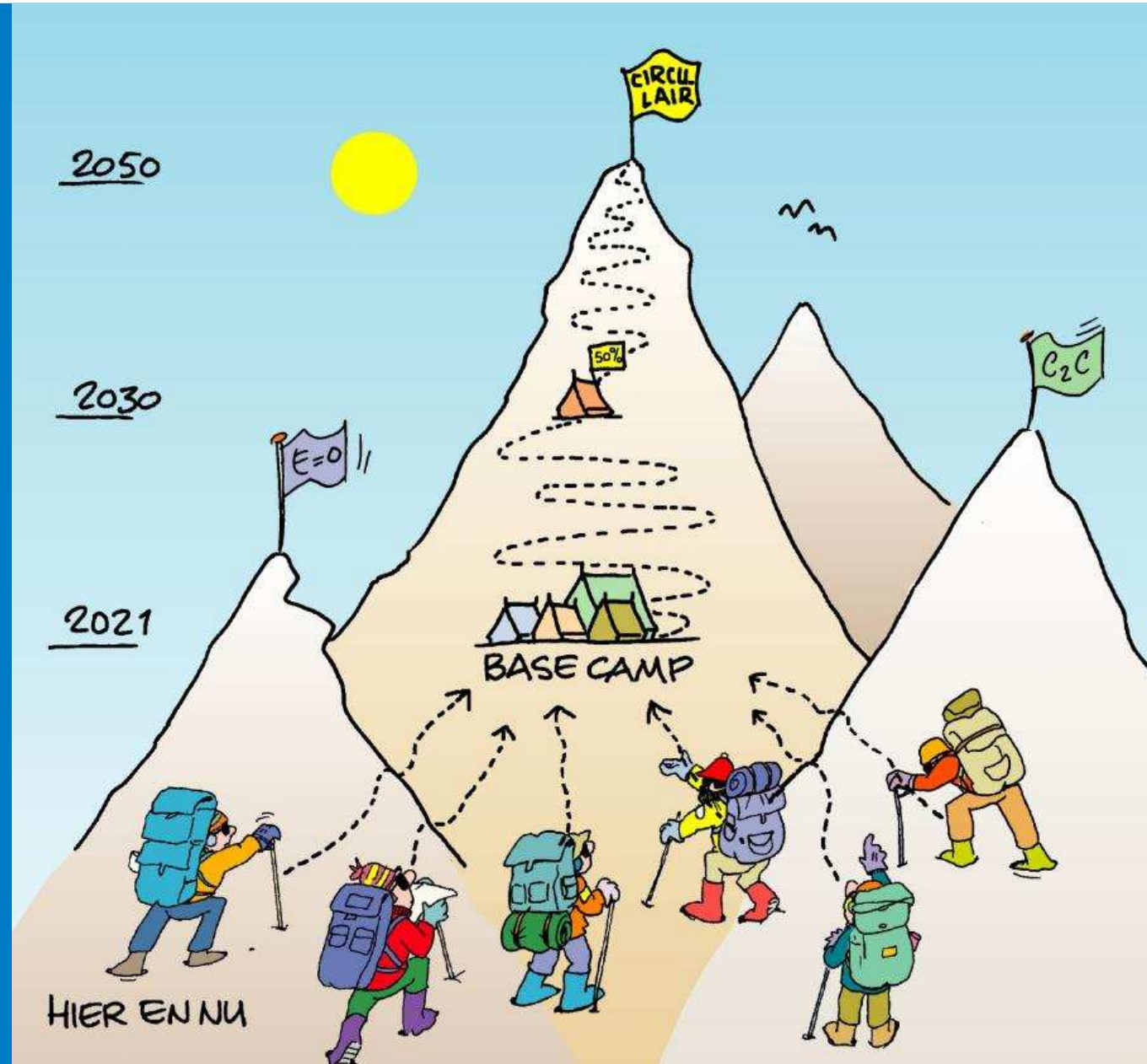
Set up base camp

2030

Halfway the top

2050

NL Circular achieved

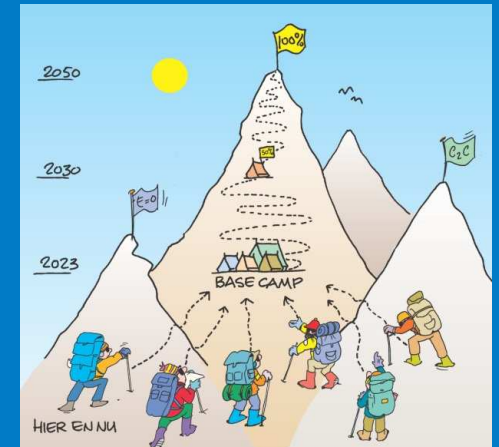




Four priorities

1. Development of demand, supply and market
2. How to measure circularity in concrete terms?
3. Policies, laws and regulations that do not pinch, do stimulate
4. Creating knowledge and awareness

Solutions for this are essential for the base camp





10 Deliverables for 2021

Market development

- A first series of innovative products and services
- A concrete demand for circular products and services, for example in public procurement
- Sufficient incentives for R & D, experiments, prototypes and concrete projects
- A concrete plan to tackle the sustainability of the housing stock and the assignment of one million extra homes in ten years.

Measure

- Common language and tools to indicate and measure circularity in projects



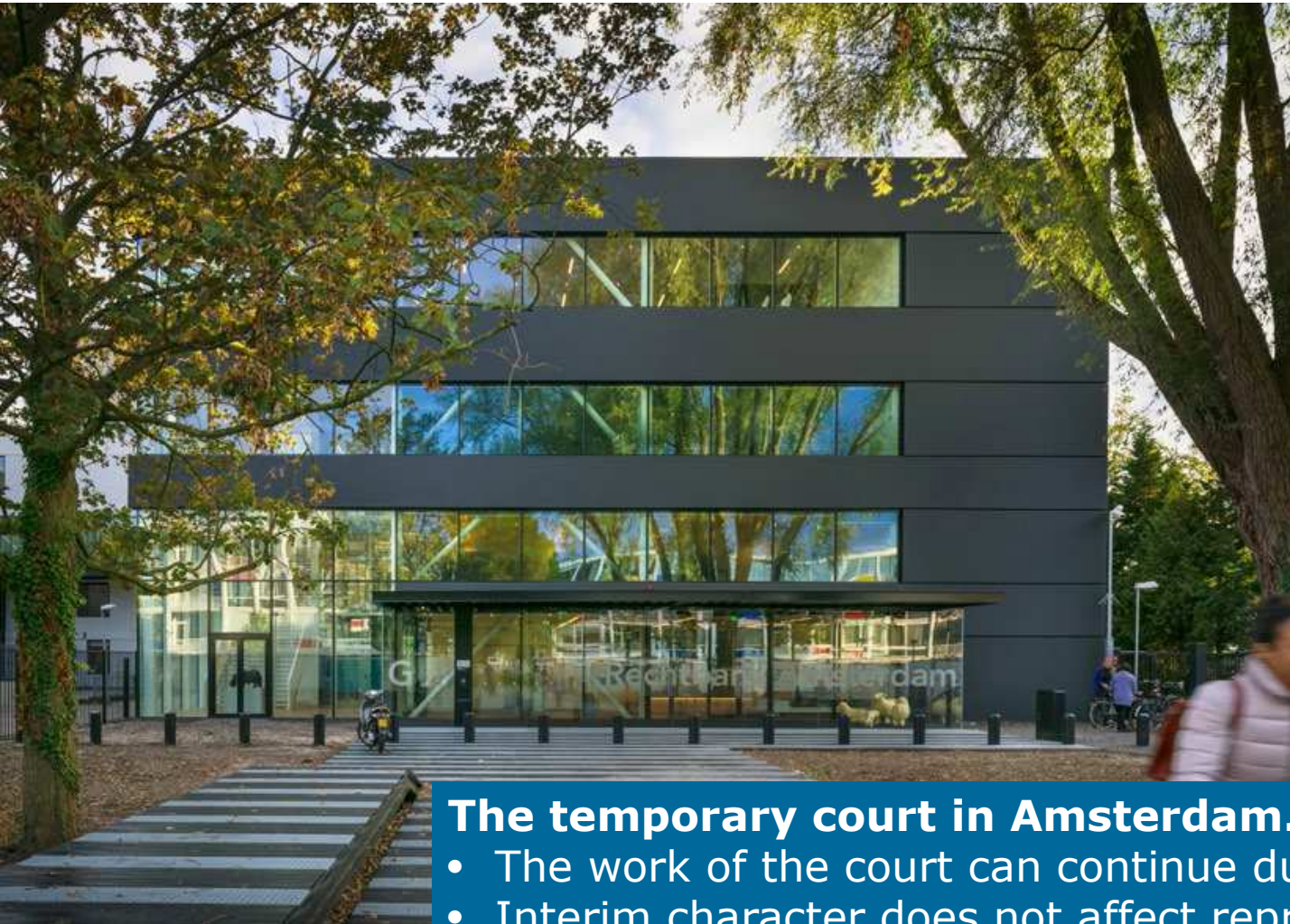
10 Deliverables for 2021

Policy, legislation and regulations

- No inhibiting, but stimulating laws and rules
- Accurate knowledge and a plan of approach to halve CO₂ emissions in construction in 2030 and eliminate it in 2050
- International positioning and cooperation

Knowledge & awareness

- Knowledge, experience and instruments with sufficient and the right people in the total building chain
- Understanding, support, recognizable benefits, awareness



The temporary court in Amsterdam.

- The work of the court can continue during the development.
- Interim character does not affect representativeness and quality.
- Prevention of waste and maximizing the residual value.
- The building is adaptable and allows possibilities for different use.
- At the end it can be completely disassembled and reused elsewhere.



Apartments Stadstuin Overtoom Amsterdam.

- Reuse of 98% of the demolition material, 30% in Stadstuin Overtoom.
- Demolition and new construction according to the Co-Green concept.
- They have to dismantle a building step by step.
- Old bricks are partly processed in new ones bricks, concrete is reused for the construction and sand-lime brick went back to the factory.
- Chain collaboration is one of the objectives. Clear agreements with suppliers for a guarantee on quality when re-used of old materials.



First circular viaduct in the Netherlands.

- A viaduct that can be fully disassemble and reuse.
- The circular viaduct can be recovered undamaged, in parts or up to the raw material level.
- Modular construction like lego.
- The work can be disassembled without waste and can be made in a new construction.





And now.....

The government comes with a list of concrete efforts and actions.

The partners of the raw materials agreement will also have a reaction and show their commitment.

Together they will complete the puzzle.





Questions



Thank you

