







Jacqueline Cramer Chairman Dutch Concrete Agreement

## Dutch Concrete Agreement

- Goals
- Approach
- Lessons learned

## **CONCRETE AGREEMENT: Start on 10th of July 2018**





## OBJECTIVES OF CONCRETE AGREEMENT

#### In 2030:

- $CO_2$  reduction of min. 30% but aim of 49%
- 100% circular concrete
- A net positive value of natural capital
- Increased social capital via improving and sharing knowledge, innovation and education

#### **National government**



Private/public commissioning parties

Unique collaboration

Demolition/ recycling companies



**Building sector** 

## **CONCRETE AGREEMENT**





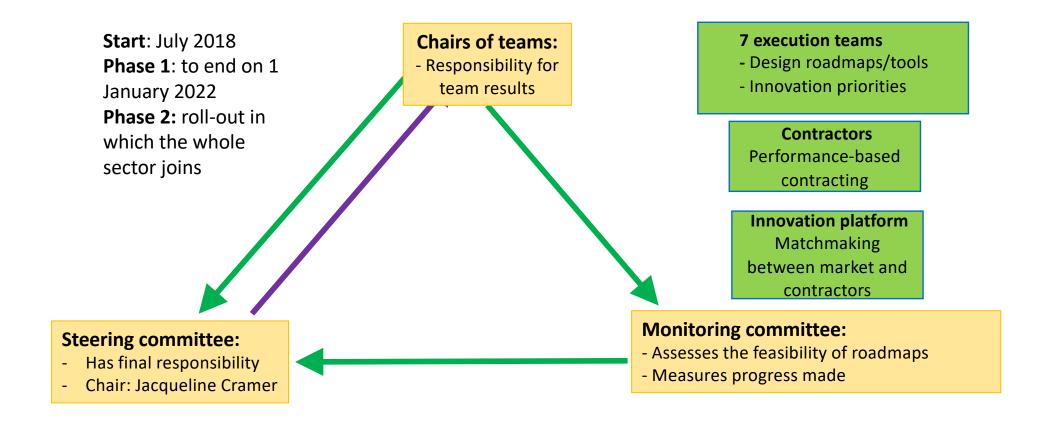
Suppliers of resources Suppliers of concrete Suppliers of binders



Supporters:
Branch-organizations and research-/educational institutes



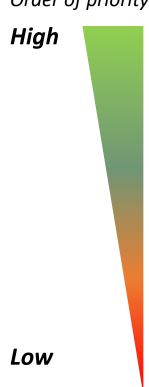
## Governance model of concrete agreement



### Lesson learned 1: innovations on all levels of circularity needed to reach goals in 2030

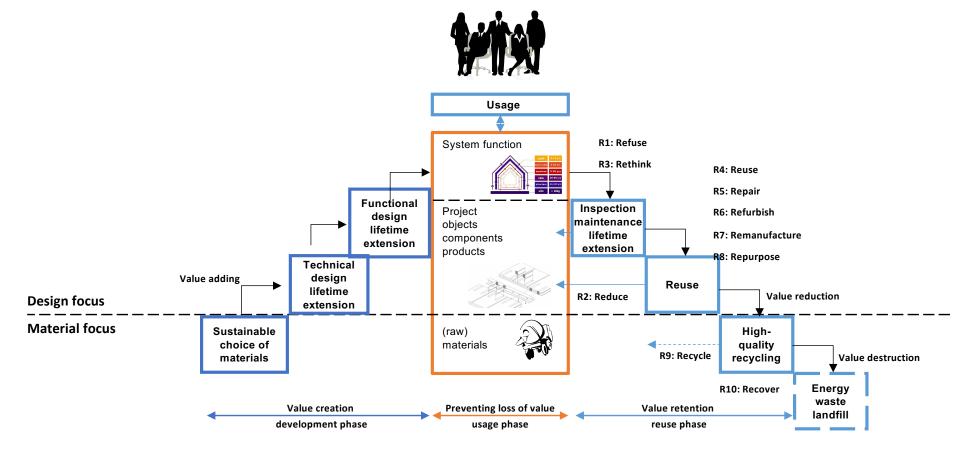
#### **Levels of circularity: 10 R's**

#### Order of priority



- Refuse: prevent raw materials' use
- Reduce: decrease raw materials' use
- *Redesign*: reshape product with a view to circularity principles
- Reuse: use product again (as second hand)
- *Repair*: maintain and repair product
- *Refurbish*: revive product
- Remanufacture: make new from second hand product
- *Re-purpose*: reuse product but with other function
- Recycle: salvage material streams with highest possible value
- *Recover*: incinerate waste with energy recovery

The Dutch construction value model based on the 10R ladder



Lesson learned 2: cooperation between contractors and concrete & building sector is crucial

# Thank you for Listening!