



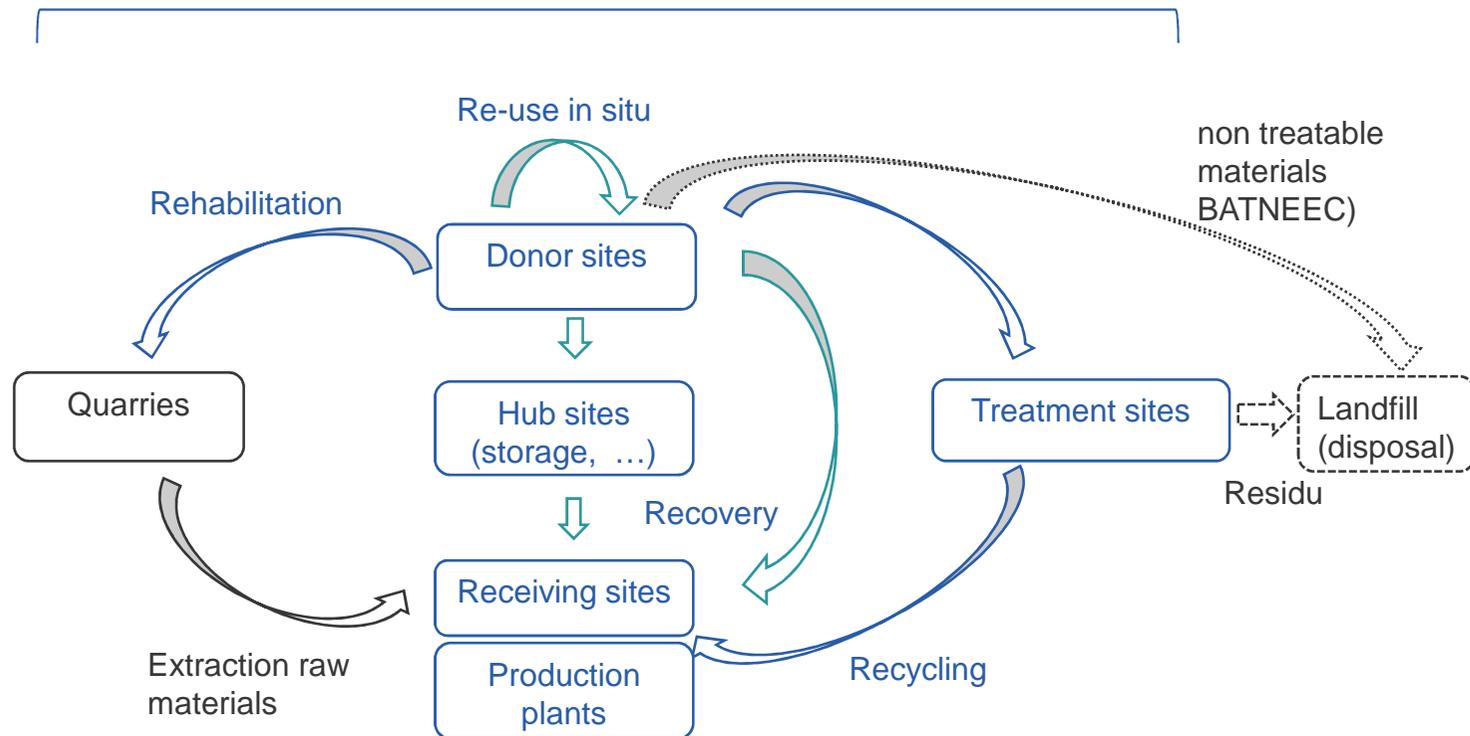
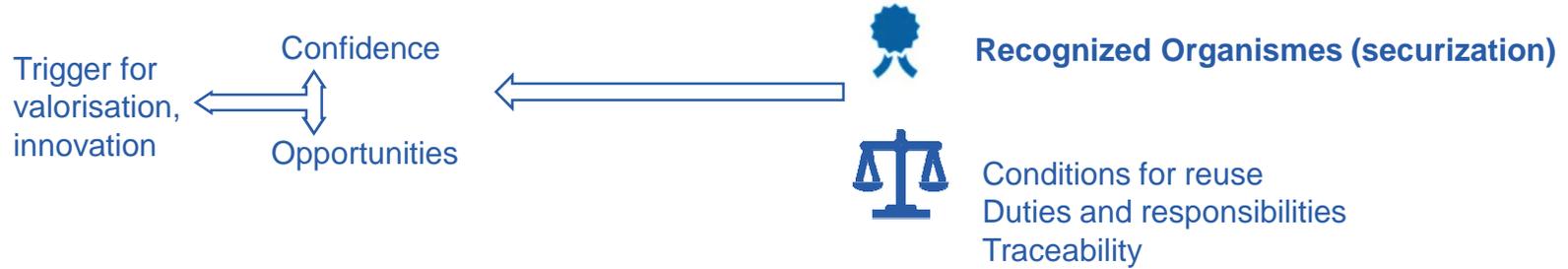
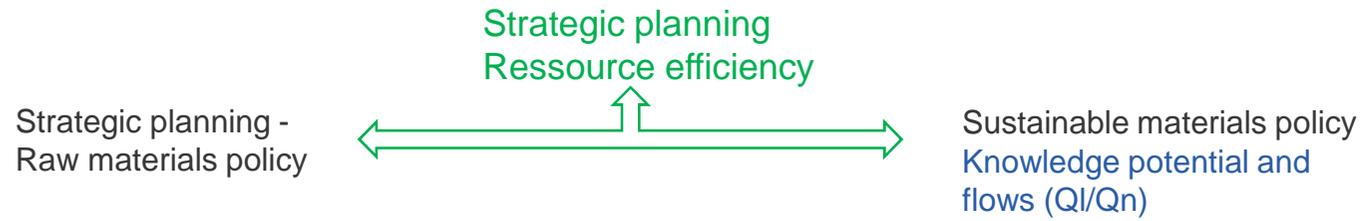
**5\_ CEC's on  
construction sites:  
policy challenges  
facing daily  
practices of re-use  
of excavated soil**



Flanders  
State of  
the Art

- ▶ **Grondbank vzw, Elisa Vermeulen**

WE MAKE  
TOMORROW  
BEAUTIFUL  
**OVAM**

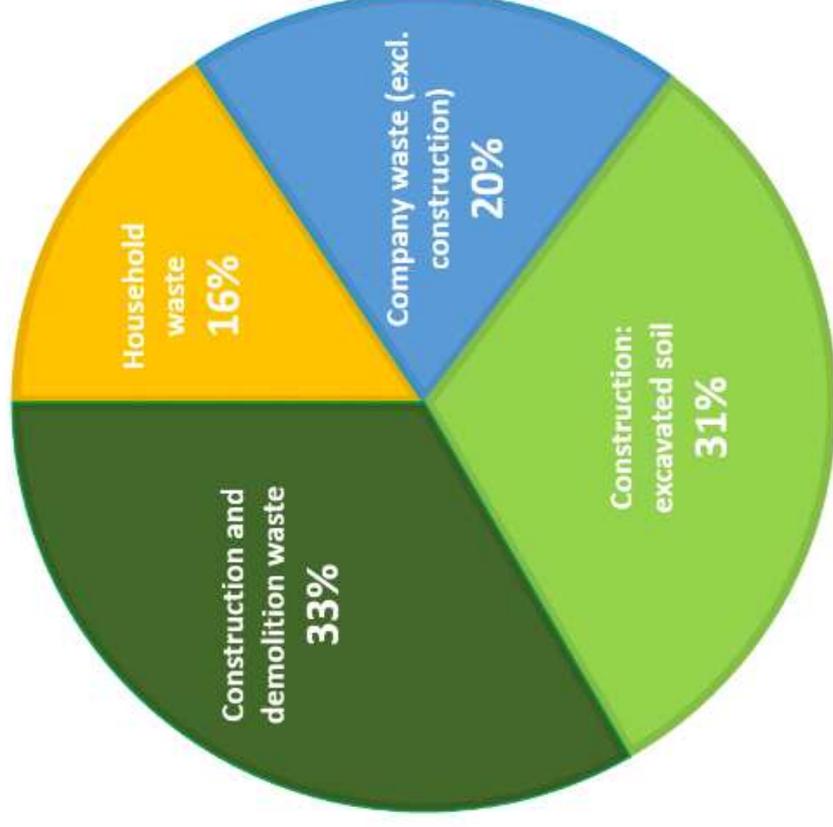


## 90% of construction and demolition waste reused



- Construction and demolition waste (recycled)
- Construction and demolition waste (not recycled)

## WASTE IN FLANDERS

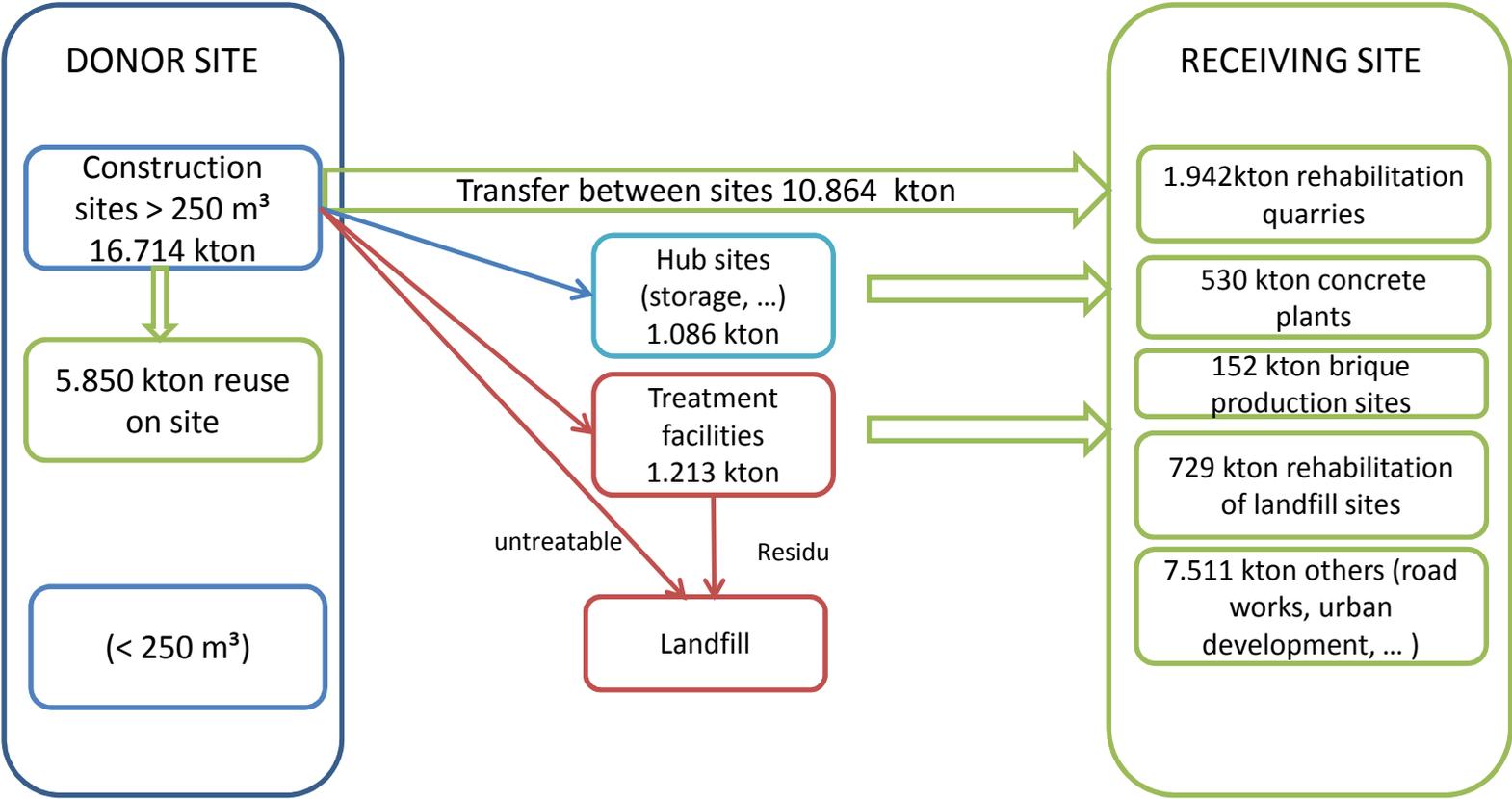


## 95% of excavated soil reused



- Construction: excavated soil (recycled)
- Construction: excavated soil (not recycled)

# Knowledge flows of excavated soil (2015)



# Preliminary soil survey (donor site)

- ▶ **Analysis of most common contaminants in the soil + specific contaminants due to activities or known diffuse pollution (f.ex. asbestos, PCB, ...)**
- ▶ **In absence of treshold values → calculated value (soil remediation expert), taken into account**
  - The justification behind treshold values (policy)
    - × Stand still = baseline / fit for *any* future use
    - × Absence of exposure risk
    - × Groundwater protection (leaching)
  - Characteristics of the contaminants (solvability, risks, ...)

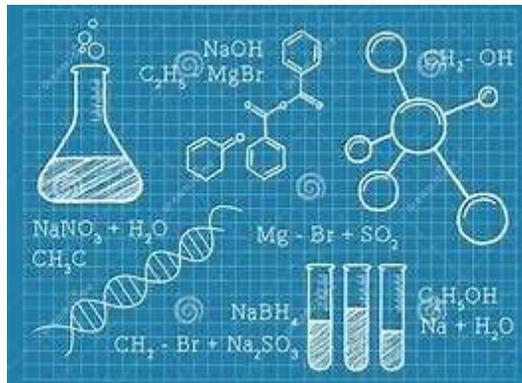
## Standard Contaminants

	A	B	A	B	A
laftaleen	0,64	0,18	0,64	0,18	0,79
benzo(a)pyreen	1	0	1	0	0,92
benzo(a)fluoranteen	0,26	0,37	0,26	0,37	0,15
fluoranteen	0,68	0,16	0,68	0,16	0,49
benzo(a)antraceneen	0,94	0,029	0,94	0,029	0,86
chryseen	1	0	1	0	1
benzo(b)fluoranteen	0,96	0,021	0,96	0,021	0,74
benzo(k)fluoranteen	1	0	1	0	1
benzo(ghi)peryleen	1	0	1	0	1
indeno(1,2,3-cd)pyreen	1	0	1	0	1
antraceneen	1	0	1	0	1
fluoreen	0,082	0,46	0,082	0,46	1
benz(a,h)antraceneen	1	0	1	0	0,91
acenafteen	1	0	1	0	0,72
fluorantheen	0,74	0,40	0,74	0,40	0,60



Transparant code  
'XYZ'

## Specific Contaminants



## Contaminants of Emerging concern



## Initiation phase

Location (+ acquisition),  
Financing, Risks,  
Pre-design

## Design phase

Project conception  
(feasibility, costs, ...)

## Tendering

Technical specifications

## Construction works

Soil excavation



**Preliminary Soil Survey**  
= Inventory of the soil to  
be excavated  
(Ql/Qn/location)



Transparent code 'xyz'  
thanks to **threshold values**

**Soil Management  
Organisation**

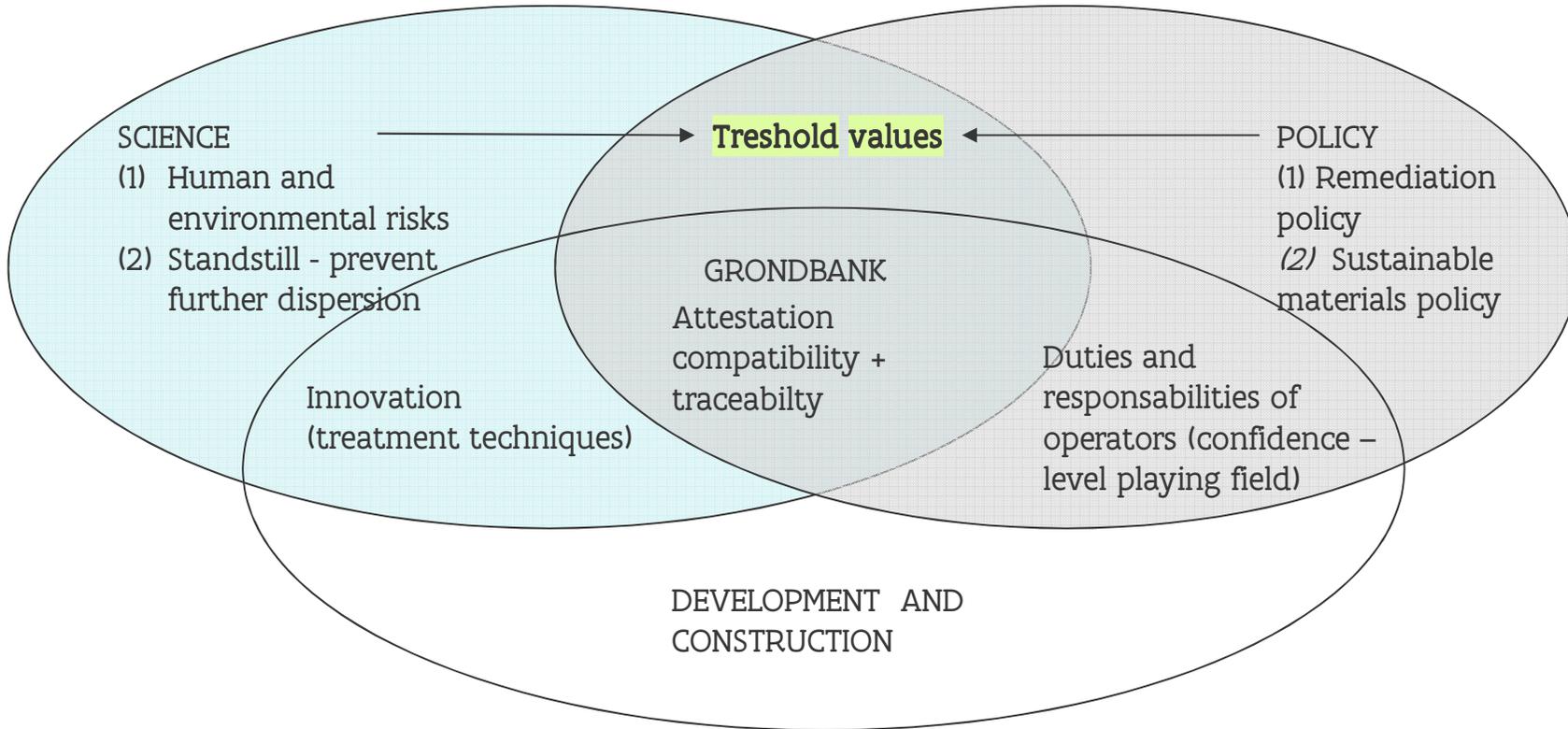
### Transfer of information

- Donor sites:  
possibilities re-use in  
situ / recovery
- Receiving sites:  
Intended use

**Soil Management Report =**  
attestation of compatibility  
Ql – intended use +  
traceability

Selective excavation

- Contaminated soil
- Possibilities for re-use /  
recovery



# Challenges

- ▶ **Urgent need for a framework for CEC's (diffuse pollution)**
- ▶ **Strenght of our model**
  - Opportunities of data gathering → lessons learned → policy instrument
  - Opportunities for controlled use and registration via soil management report (transfer / preservation of information for future soil excavation)
  - Managing uncontrolled spreading
- ▶ **Pay attention to: crossing border flow**