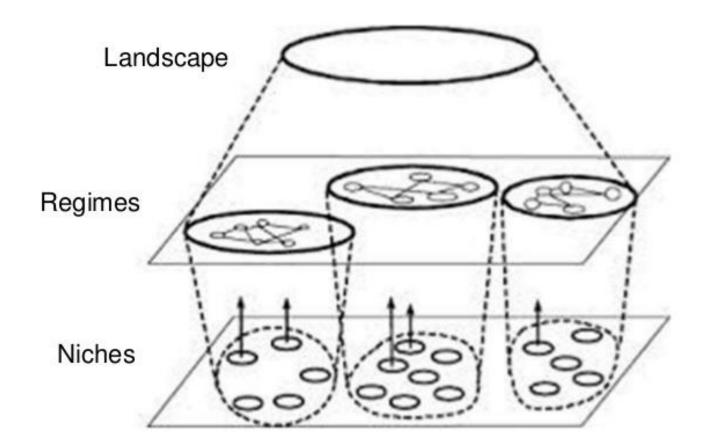
# The dynamics between business actors in transcending to a circular economy in the Amsterdam Metropolitan Area



# Transition management (Geels, 2002)

# Levels of transition management



#### Circular Economy Program in the Amsterdam Metropolitan Area

Order of priority: 10 R's

High

Refuse: prevent raw materials' use

Reduce: decrease raw materials' use

**Redesign:** reshape product in view of circularity

**Reuse:** use product again (second hand)

Repair: maintain and repair product

**Refurbish:** revive product

Remanufacture: make new product from second hand

**Re-purpose**: re-use product but with other function

Recycle: salvage material streams with highest possible value

**Recover:** incinerate waste with energy recovery

Low

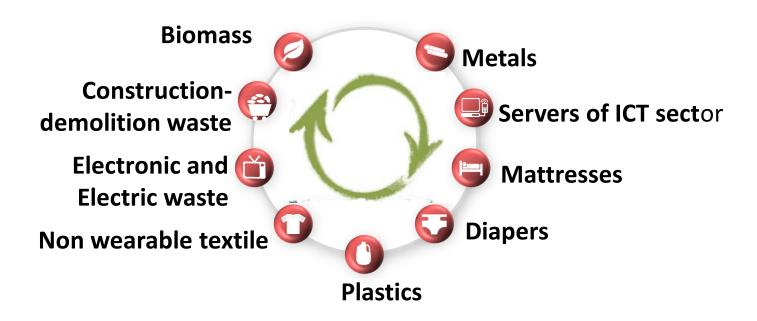
### 1. Circular procurement to stimulate circular products



#### **Targeted approach**

- Case dependent whether regime and niche actors interact
- When they need each other to win a bidding, they join forces
- Circular procurement
  often leads to innovative
  approaches in which
  niche actors get involved

2. Closing the loop of resource streams (9 priority resource streams: 2015-18)



Key-Results: High value recycling and productreuse/redesign of 20 sub-resource streams. In all but 5 consortia both regime and niche actors involved

# Dynamic interaction between regime and niche actors

Niche actors

Development of innovative product/ service but limited scaling opportunities

No dynamic interaction

Development of innovative product/service with the potential of scaling through support of regime actors

**Dynamic interaction** 

Regime actors

Tendency to focus on incremental improvement unless they are front runners

Willingness to become more innovative through niche actors' influence, unless market opportunities and/or societal pressure are lacking

## **Conclusions**

- 1. Practices of regime and niche actors reinforce each other if their activities are complementary
- 2. Niche actors are not operating in a protected space to overthrow the regime
- 3. Circular economy is foremost a shift in non-technical aspects (behavioral; economic; organisational; legal)
- 4. Circular economy is a complex multi-regime change covering numerous sectors and product-chains

# I amsterdam.

#### More information?



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