



Circular Economy in the Region Genk

Veerle Labeeuw Vlaams Materialenprogramma / OVAM

Vlaams
Materialenprogramma

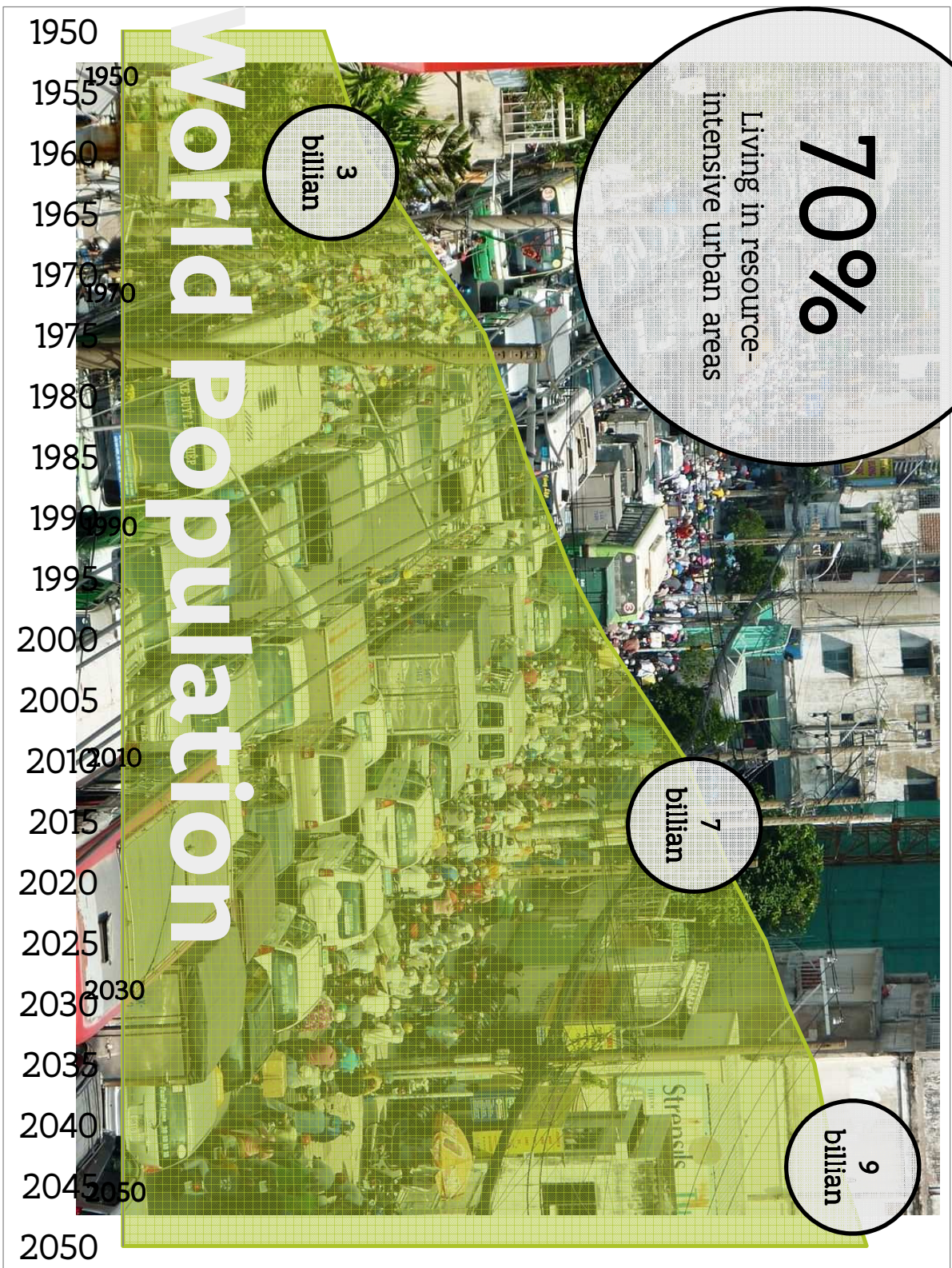


TOGETHER WE
MAKE TOMORROW
MORE BEAUTIFUL

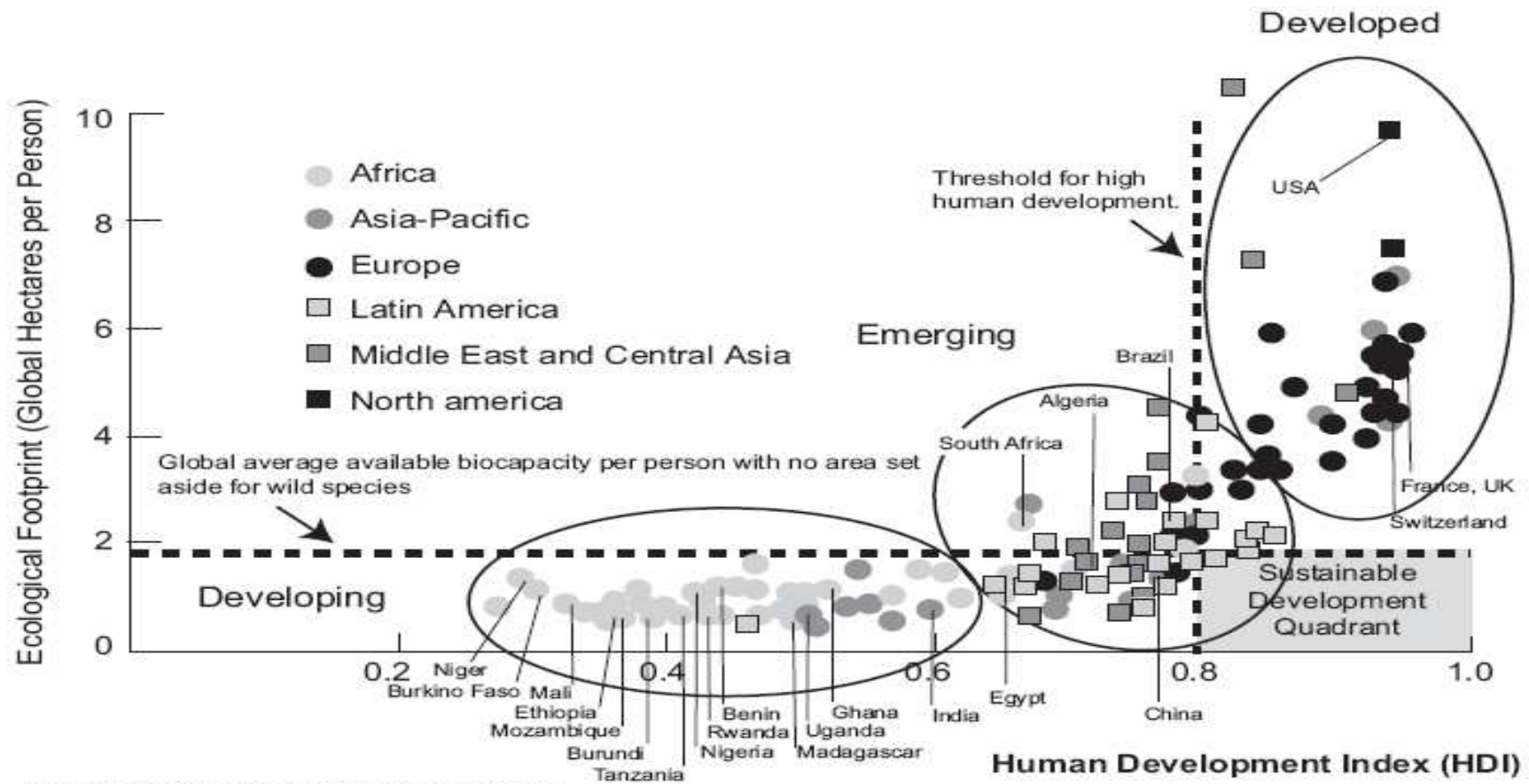
OVAM



Why focus on Circular Economy?



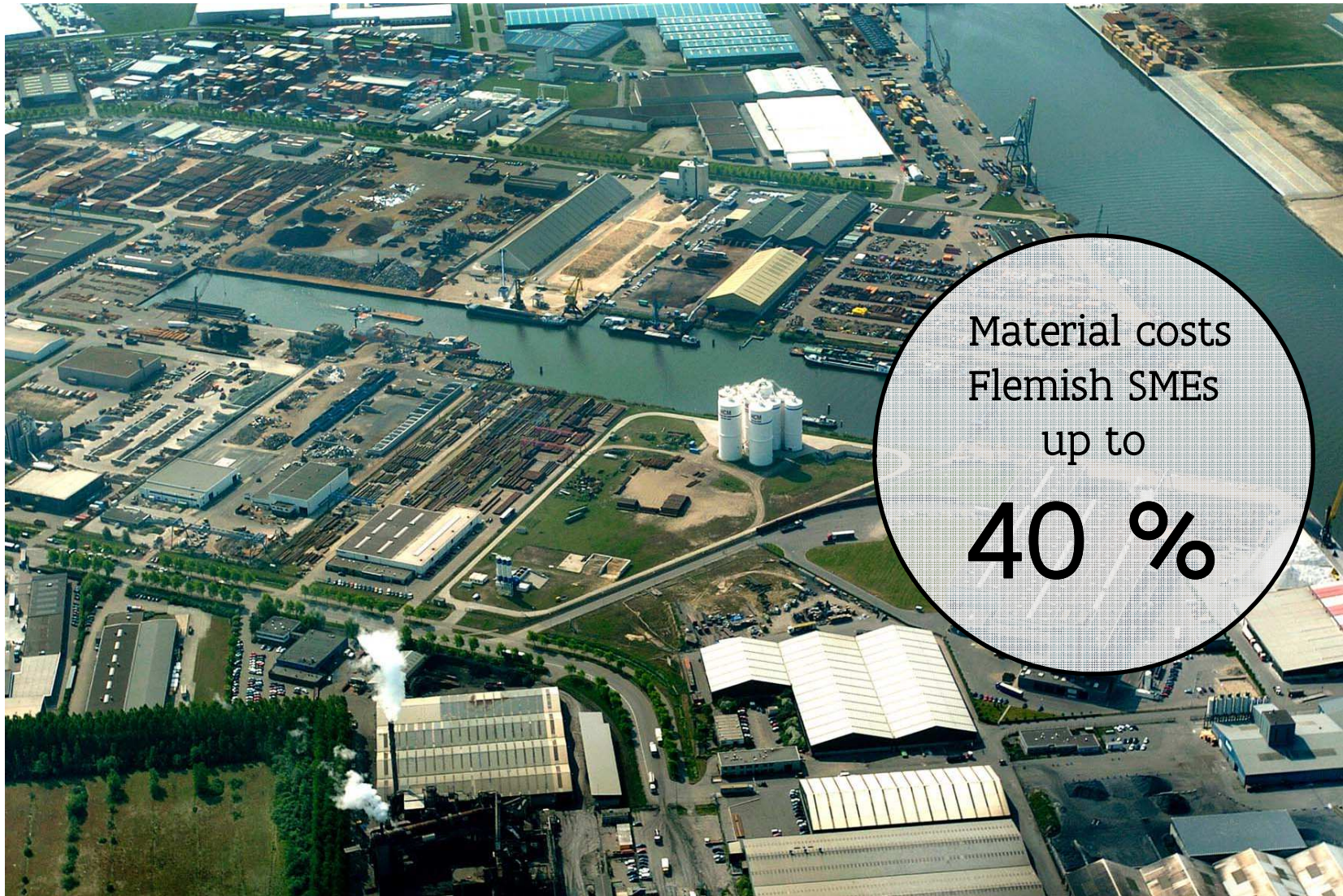
Development & ecological footprint



Source: Global Footprint Network and UNDP

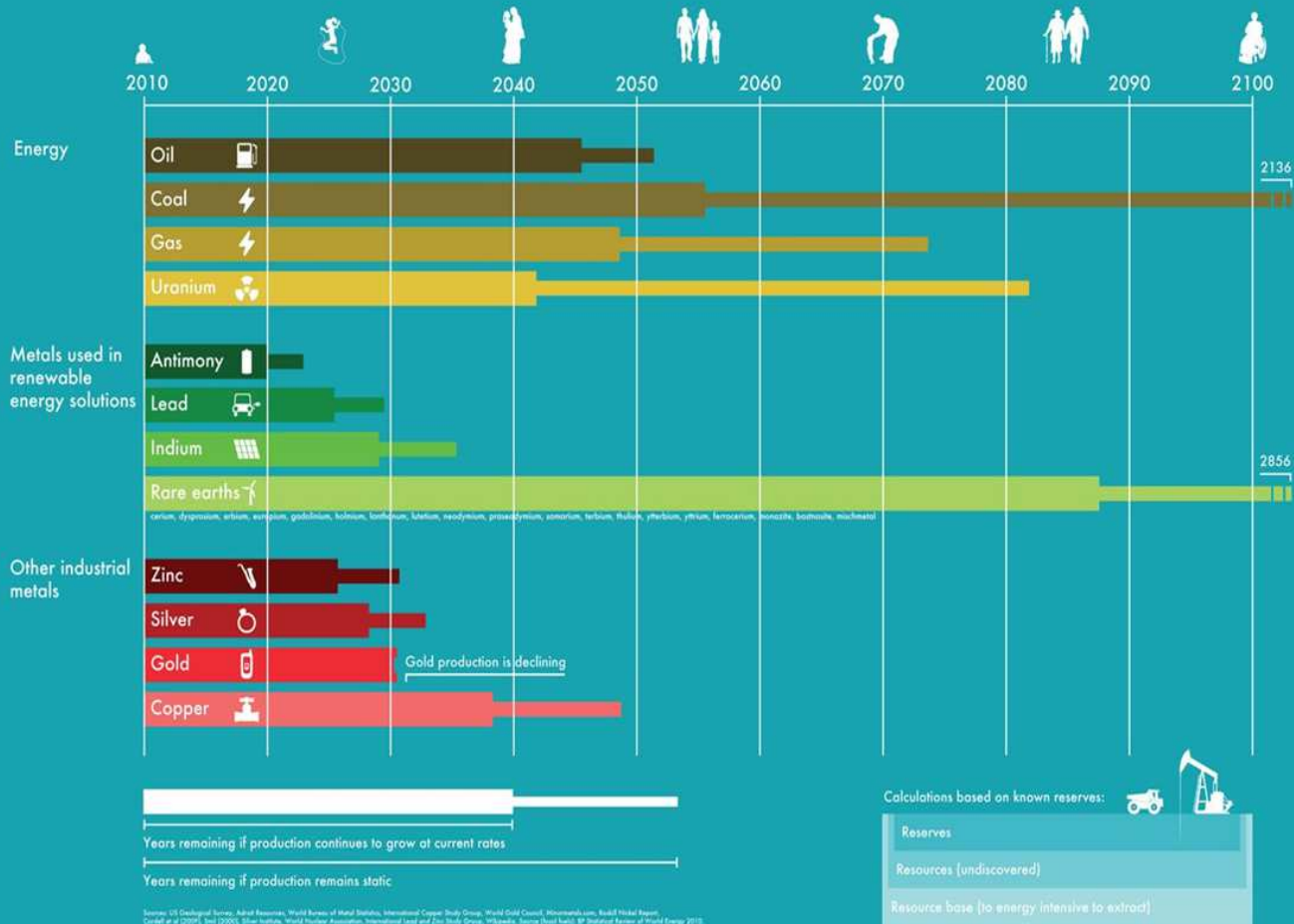


Resource
consumption more
than **doubled**
between 1997 en 2007



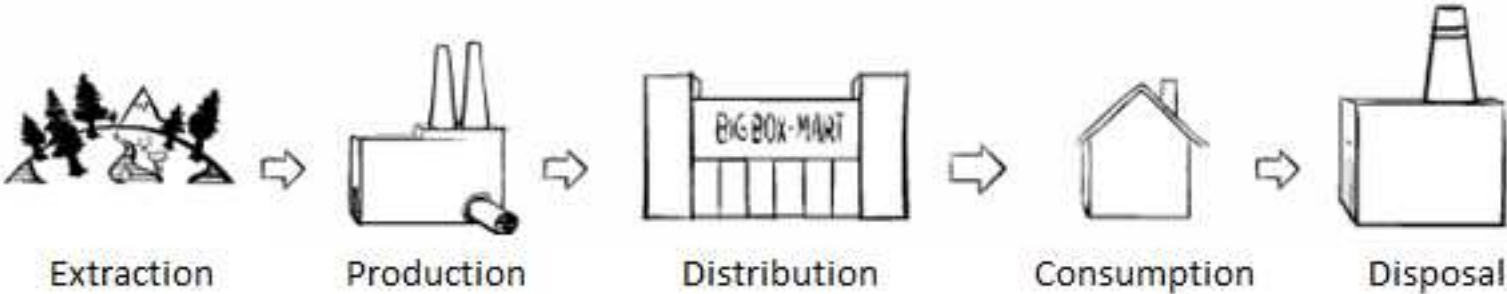
Material costs
Flemish SMEs
up to
40 %

Born in 2010: How much is left for me?



From

to

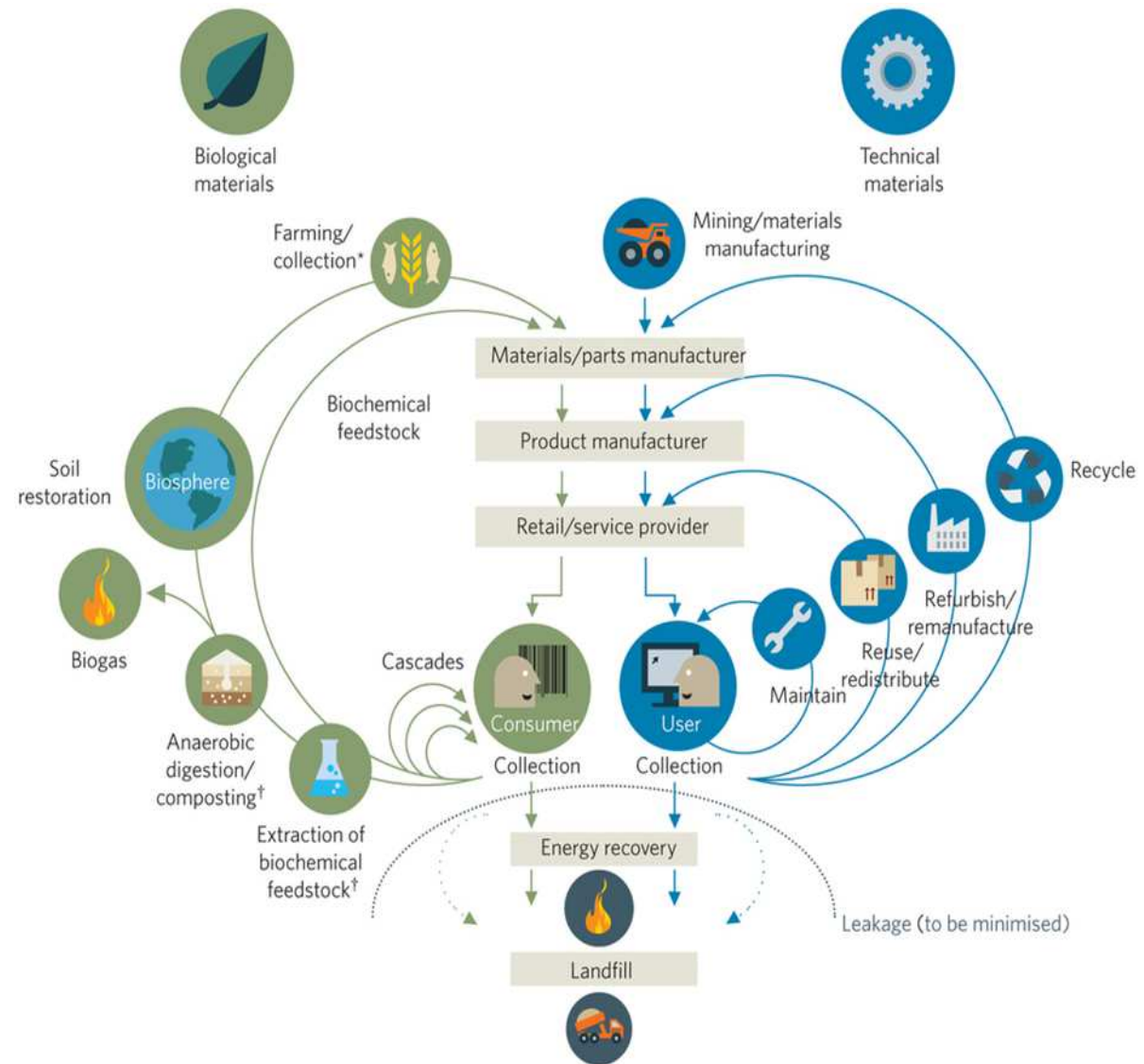




ELLEN
MACARTHUR
FOUNDATION
Rethink the future

Flanders' Materials Programme

Circular Region



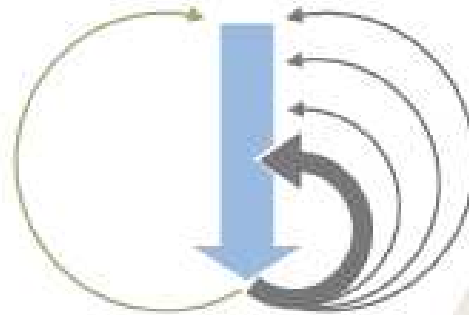


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Rethink the future

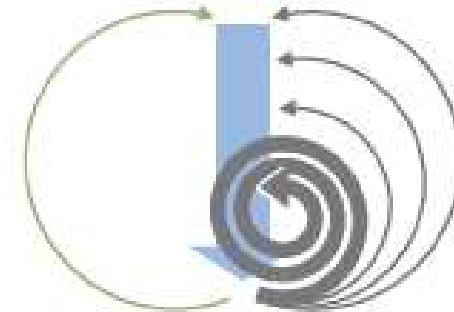
Flanders'
Materials
Programme

Circular
Region

... the inner circle

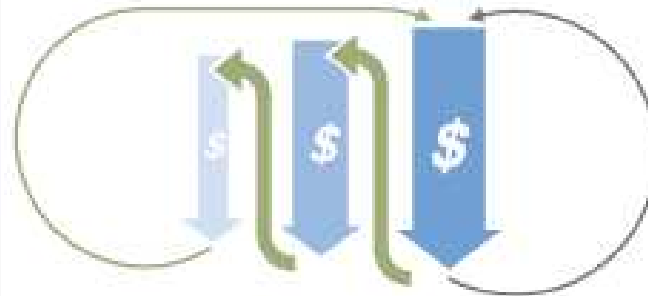


... circling longer



The
power of ...

... cascaded use across
industries



... pure/non-toxic/easier-to-
separate inputs and designs



Jobs today?



The waste management and recycling sector employs 12.000 people in Flanders. This is 0,5% of Flemish employment.

Every direct job creates 1,3 indirect jobs elsewhere in the economy.

The waste management and recycling sector has grown by more than 5% per year in recent decades.

Given the growth of the international market, this sector can continue to grow strongly in Flanders if policy continues to stimulate innovation.

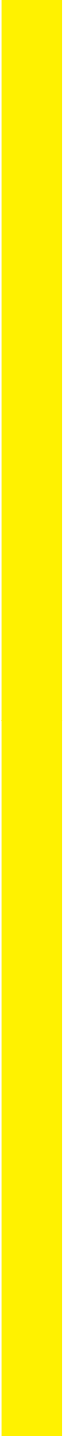
Jobs in Circular Economy

SuMMA has analysed the studies of the Ellen MacArthur Foundation (2012) and TNO (2013) with the Flemish Input-Output model.

New jobs in the CE in reuse of products and parts (smartphones, washing machines, cars, ...), product-service combinations, sharing economy, ...

In a transition scenario Flanders could save 3,4 billion euros on material costs by supporting the circular economy = 2 % of the Flemish BBP (gross domestic product)

Based on the results of the study of TNO SuMMA came to the conclusion that the circular economy could generate 2,3 billion euro added value for Flanders with a creation of 27.000 new jobs (= 1 % of the total employment in Flanders).

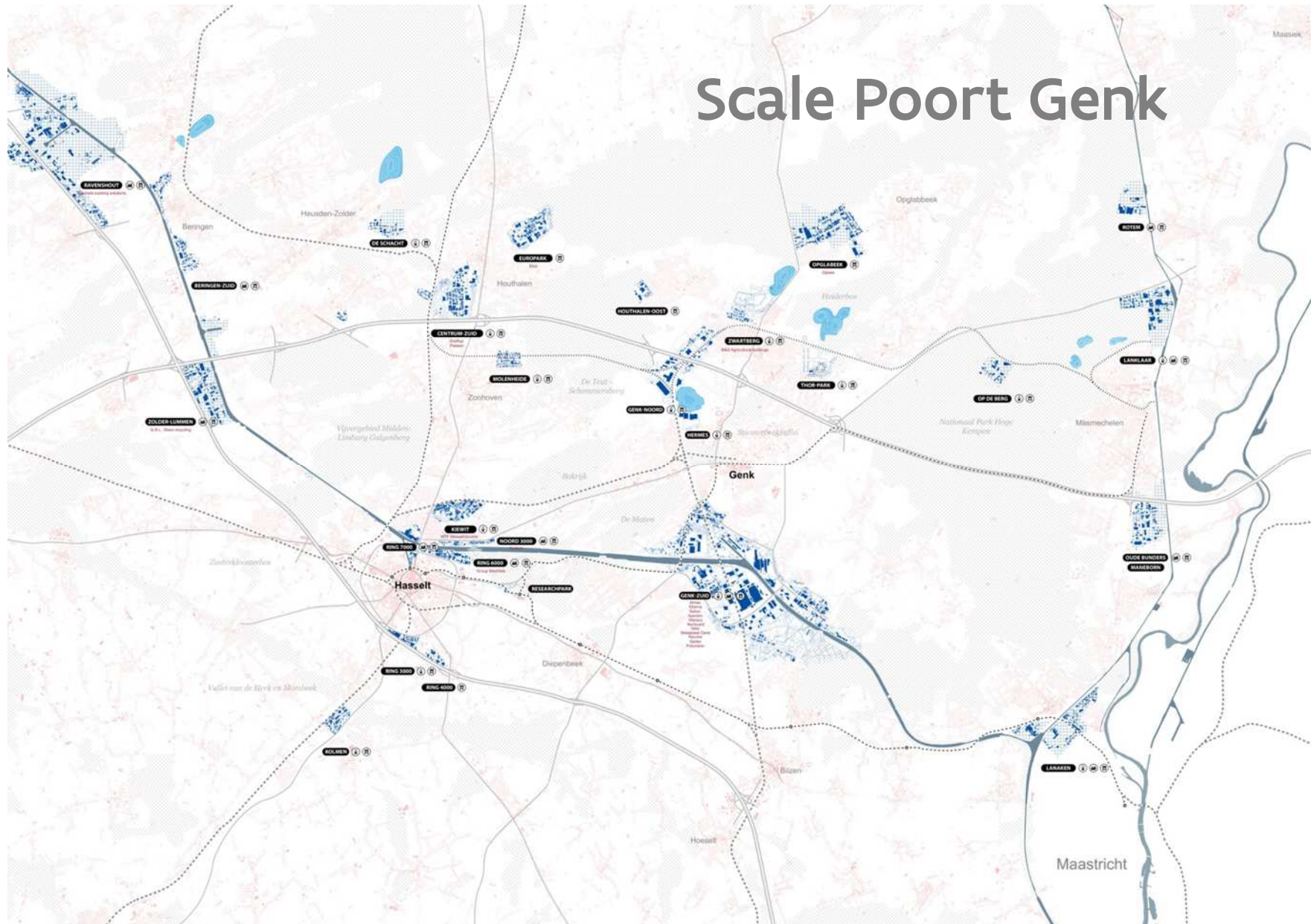


**Why focus on different
spatial scales in the
region of Genk?**

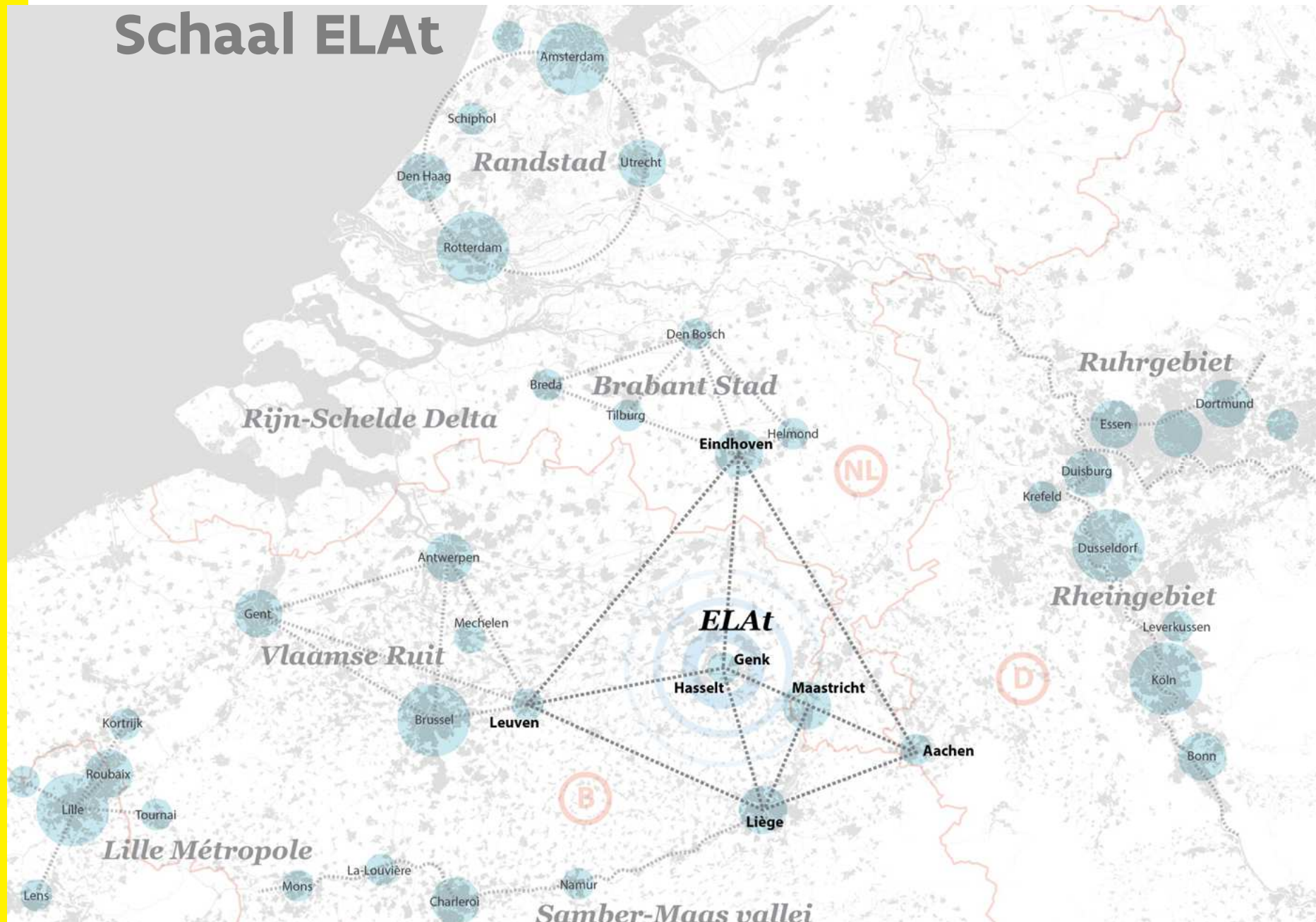
Scale business site



Scale Poort Genk



Schaal ELAt

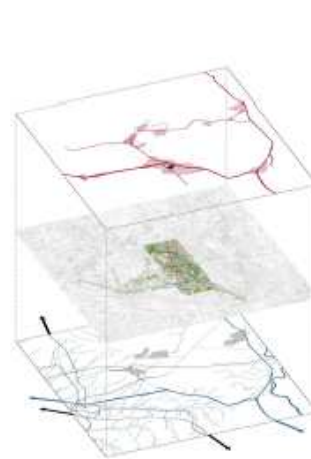


Territoriaal ontwikkelingsprogramma Limburg

2014

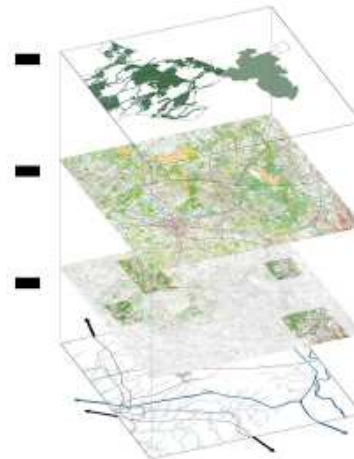
RE-MINE Hub Limburg

Samenwerking tussen OVAM, betrokken gemeenten, LRM, Agentschap Ondernemen, UHasselt, UAntwerpen, POM Limburg, ...



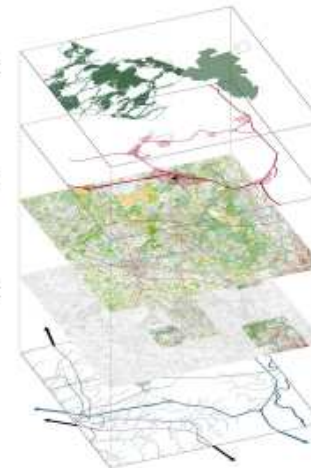
RE-MINE Park Limburg

Samenwerking tussen VLM, ANB, betrokken gemeenten, Toerisme Limburg, RLKM, LRM, KULeuven, ...



RE-MINE Stad Limburg

Samenwerking tussen betrokken gemeenten, Provincie Limburg, Woonbeleid, OVAM, ...



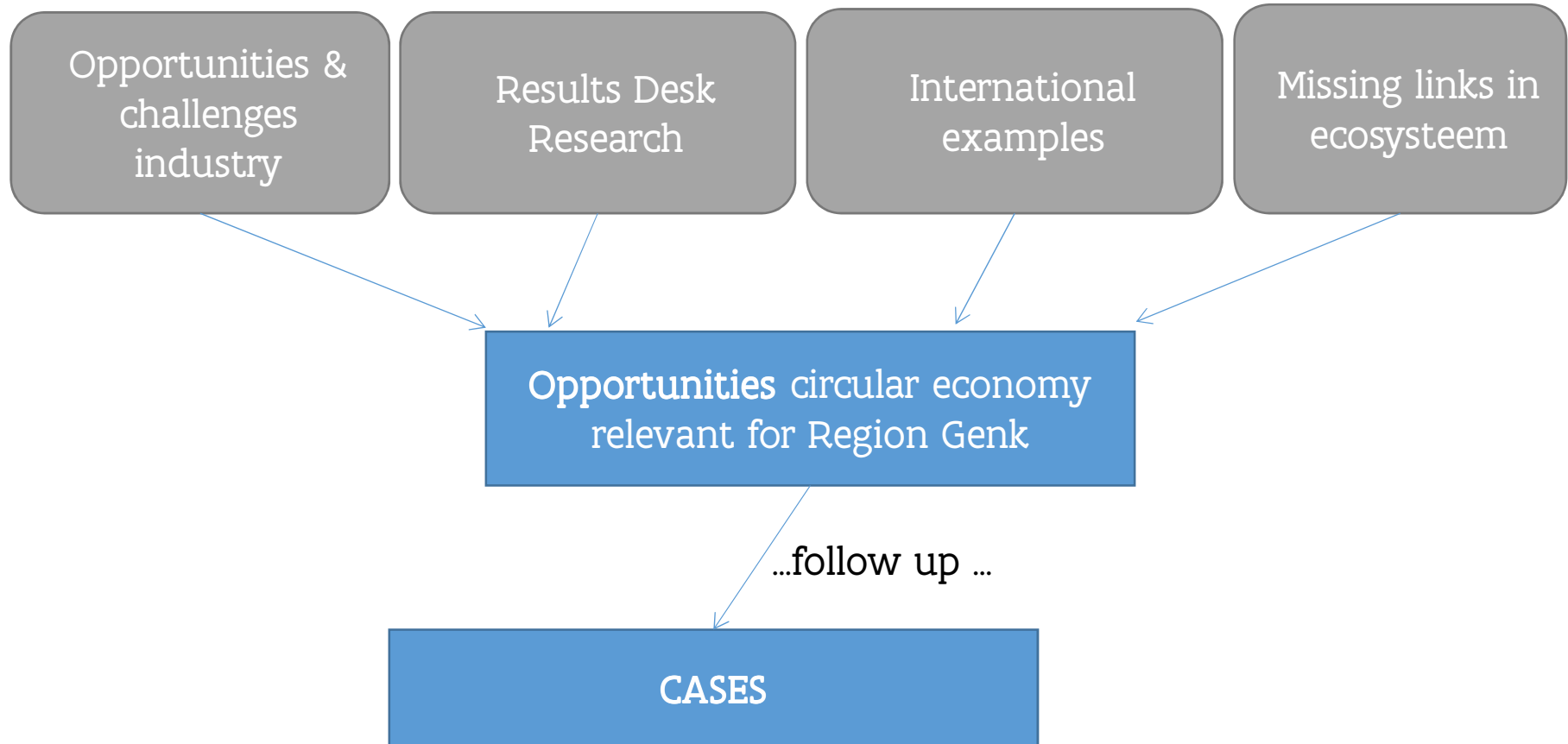
bron:
Ruimte
Vlaanderen

“Een platform voor samenwerking,
gedeelde visie & gedeelde actie”

Approach



Regional cases



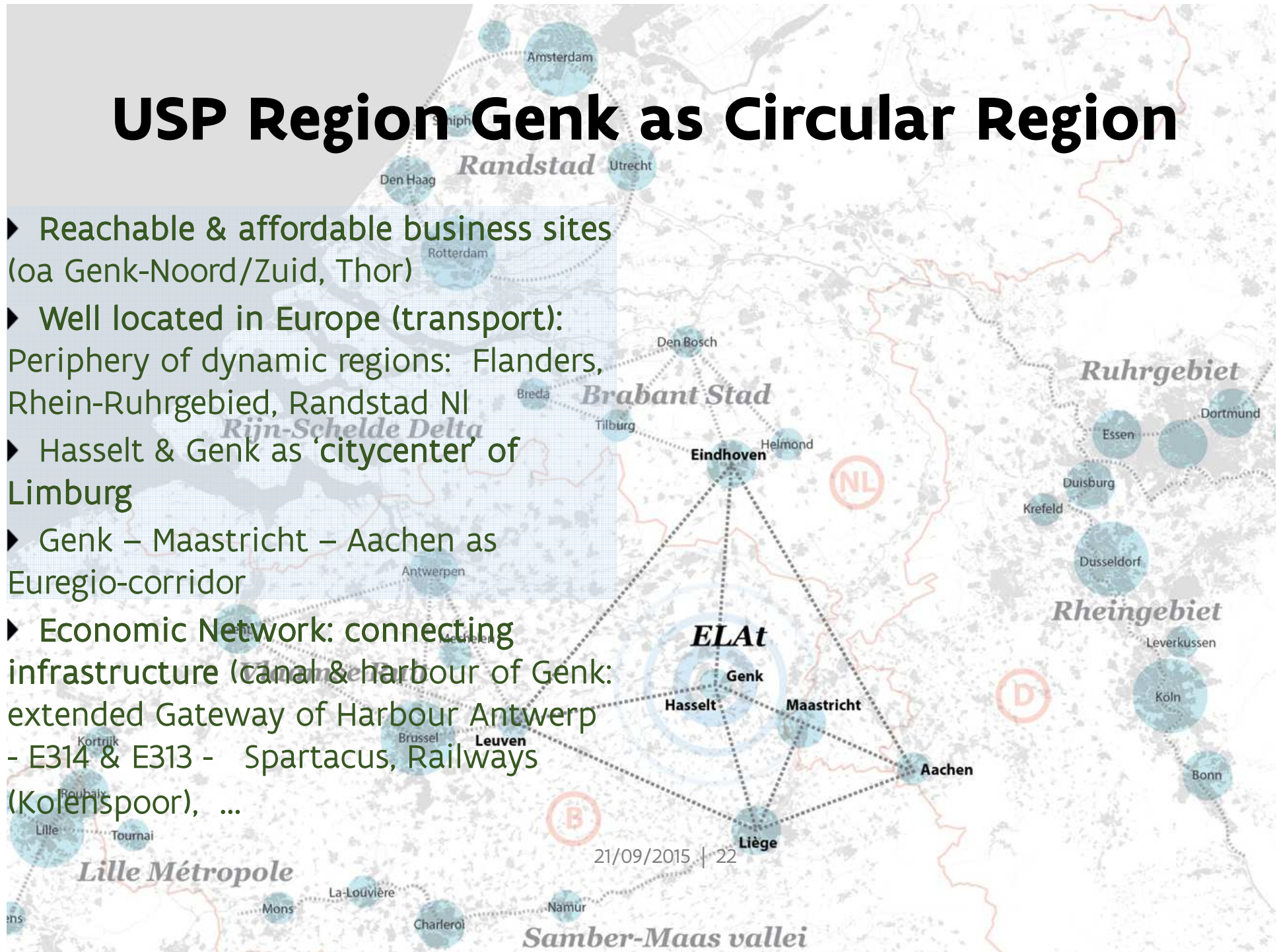
Challenges Region Genk

Atypical spatial structure (history – human impact)
Increase ribbon development and suburbanisation
Limited connection between different quarters
Isolated business sites seperated from city center and each other



USP Region Genk as Circular Region

- ▶ Reachable & affordable business sites (oa Genk-Noord/Zuid, Thor)
- ▶ Well located in Europe (transport): Periphery of dynamic regions: Flanders, Rhein-Ruhrgebiet, Randstad NI
- ▶ Hasselt & Genk as 'citycenter' of Limburg
- ▶ Genk – Maastricht – Aachen as Euregio-corridor
- ▶ Economic Network: connecting infrastructure (canal & harbour of Genk: extended Gateway of Harbour Antwerp - E314 & E313 - Spartacus, Railways (Kolenspoor), ...



Key expertise to build on

- ▶ Manufacturing Industry (mostly metal)
- ▶ Logistics
- ▶ Building Sector
- ▶ Cleantech & recycling
- ▶ Life sciences C
- ▶ Creative industry



Potential Circular Economy

- ▶ Natural Resources: water (Albertkanaal), sand (Kempisch Plateau), wood (Kempisch Plateau)
- ▶ Secondary Resources: building and demolition waste, glass, paper, wood and ferro/non-ferro
- ▶ Symbiose between companies (eg. 3 cases) in early stage
- ▶ Incubator: Greenville (cleantech), C-Mine (start-ups, design), Thor (knowledge&technology, eg. Energyville), Corda Campus (technology & high tech servicecompanies), ...
- ▶ Large availability of (technically skilled) laborers
- ▶ Knowledge institutes/universities
- ▶ Urban Mining

Vision Circular Economy in Region Genk

Brainstorm with local business managers, local policy makers, circular economy experts,.. Elements for a VISION on CE in Region Genk

- ▶ Factories of the Future – circular entrepreneurship
- ▶ Experiments in policy, innovation and production
- ▶ Cluster of expertise
- ▶ Flexible use of space
- ▶ Local energy providing
- ▶ Producing ecosystem
- ▶ We DO it together
- ▶ Hybrid network
- ▶ Logistic connection



Strategic Project Flanders' Materials Program

Policy

Entrepreneurial
discovery

Research

Joining forces through the Flanders' Materials Programme



Towards a circular economy with the Flanders Materials Programme

Materials Programme

Greater well-being and welfare through the efficient use of resources and materials

The demand for materials is increasing rapidly

On the one hand, Flanders is highly dependent on the import of raw materials, and therefore particularly vulnerable. On the other hand, Flanders is a frontrunner in the collection of waste that can be recycled into new materials.



Linear production:

too much leakage:



A circular economy will

strengthen Flanders



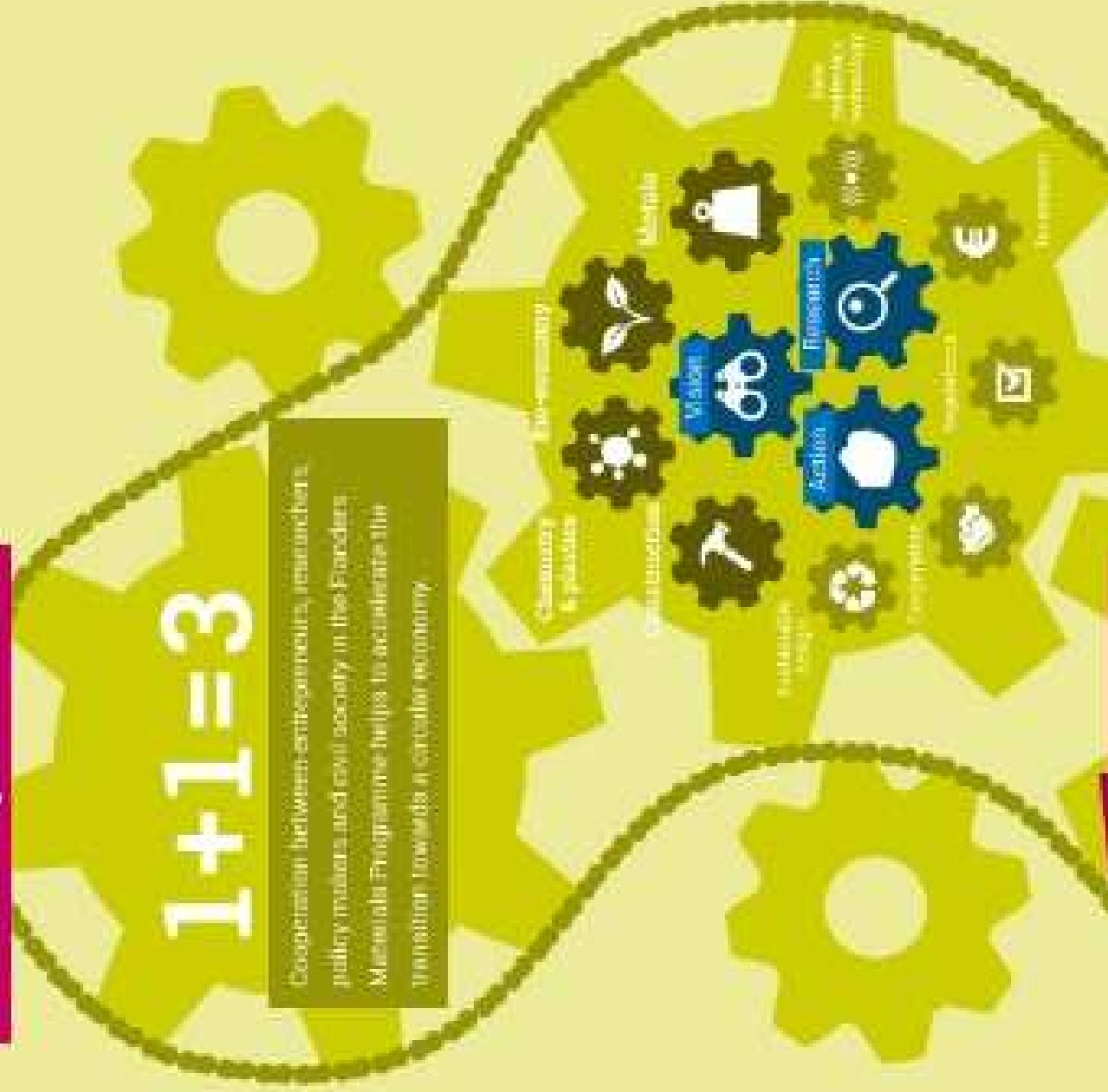
Closing material cycles will result in additional, social and economic benefits.

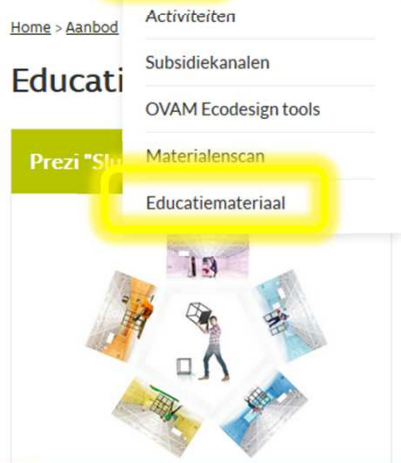
How does the Fluinders

Materials Programme work?

1+1=3

Cooperation between entrepreneurs, researchers,
policy makers and civil society in the Fluinders
Materials Programme helps to accelerate the
transition towards a circular economy





<https://prezi.com/kyithheus8q1/ovam/>

TRANSITIE NETWERK
DUURZAAM
MATERIALENBEHEER
VLAANDEREN

PLAN C

"De circulaire economie brengt een gouden tijd voor ondernemers."
- Herman Wijffels, econoom

Blog:

Levensduur verlengen? Kijk naar processen en procedures!

Op 20 februari organiseert Plan C samen met Sphery en iMADU het inspiratief Circular Aankopen in de aanpak van uw proces. De aanpak van uw proces is een voorwaarde tot het implementeren van de circulaire economie.

LED-licht leasen: "grote veranderingen doe je stap voor stap"

Verlichting huren in plaats van kopen? De stad Borjok is het uitgangspunt voor de gemeente van Borjok. Het is de eerste stap naar een duurzame toekomst. De stad wordt samen met iMADU en Sphery.

3D-printen: laten we de échte meerwaarde aantonen

De voorste dagen zijn nu over de 3D-printen. De Additive Design Challenge is een wedstrijd die wordt georganiseerd door iMADU en Sphery.

In de kijker:

Circular Aankopen
Sphery en iMADU

iMade
Download de publicatie

PLAN C IN BEELD
he Business Model

Circular Aankopen Publicatie: Lezen

PLAN C IN BEELD

THE BUSINESS MODEL INNOVATION GRID

8 STRATEGIES & 100 CASES
TO CAPTURE THE FULL POTENTIAL OF THE RESOURCE REVOLUTION

PLAN C

8 STRATEGIES & 100 CASES
TO CAPTURE THE FULL POTENTIAL OF THE RESOURCE REVOLUTION

TECHNOLOGICAL	SOCIAL			ORGANISATIONAL
Optimization	Functionality, not ownership	Stewardship	Co-creation	Social entrepreneurship
Circularity	Product-oriented PSS - maintenance, extended warranty	Radical transparency about eco or societal impacts	Collaborative approaches (sourcing, production, lobbying)	
Substitution with renewables	Use oriented PSS - rental, lease, shared	Resource stewardship	Incubators and entrepreneur support models	
Circular economy, closed loop	Result oriented - pay per use	Choice editing by retailers	Licensing, franchising	
Move from non-renewable to renewable sources	Blue economy			
Consumer education (models); communication and awareness	Slow fashion			
Responsible product distribution or promotion				
Localisation				

EXAMPLES

Increased functionality	Circular economy, closed loop	Product-oriented PSS - maintenance, extended warranty	Radical transparency about eco or societal impacts	Collaborative approaches (sourcing, production, lobbying)	Not for profit
Lean manufacturing	Cradle-to-cradle	Use oriented PSS - rental, lease, shared	Resource stewardship	Incubators and entrepreneur support models	Localisation
Additive manufacturing	Industrial symbiosis	Result oriented - pay per use	Choice editing by retailers	Licensing, franchising	Alternative ownership: cooperative, mutual, (farmers)

Thanks for your attention Are there any questions?

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Vlaams
Materialenprogramma



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Flanders
State of the Art



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MAKE TOMORROW
MORE BEAUTIFUL

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