The background of the slide is a photograph of a modern, curved high-rise apartment building with many windows. In the foreground, there is a lush green lawn with some rocks and a small body of water reflecting the building and the sky. The sky is blue with some light clouds.

Realising the potential of 3R and resource efficiency through Sufficiency Economy Philosophy (SEP) ~ Implication for SDGs

Prof. Dr. Karl Vrancken
VITO & UAntwerp (Belgium)

FROM SCIENCE
TO APPLICATION

WORKING ON THE SUSTAINABLE DEVELOPMENT GOALS



VITO CONVERTS
IDEAS INTO REALITY

WE MAKE FLANDERS AND THE WORLD MORE SUSTAINABLE



ENERGY



CHEMISTRY



MATERIALS



HEALTH



LAND USE

SOME NUMBERS

HEADCOUNT : 842



35 NATIONALITIES

■ Belgian
■ International



JOB DESCRIPTION
PAYROLL



172.057 KEUR
REVENUES



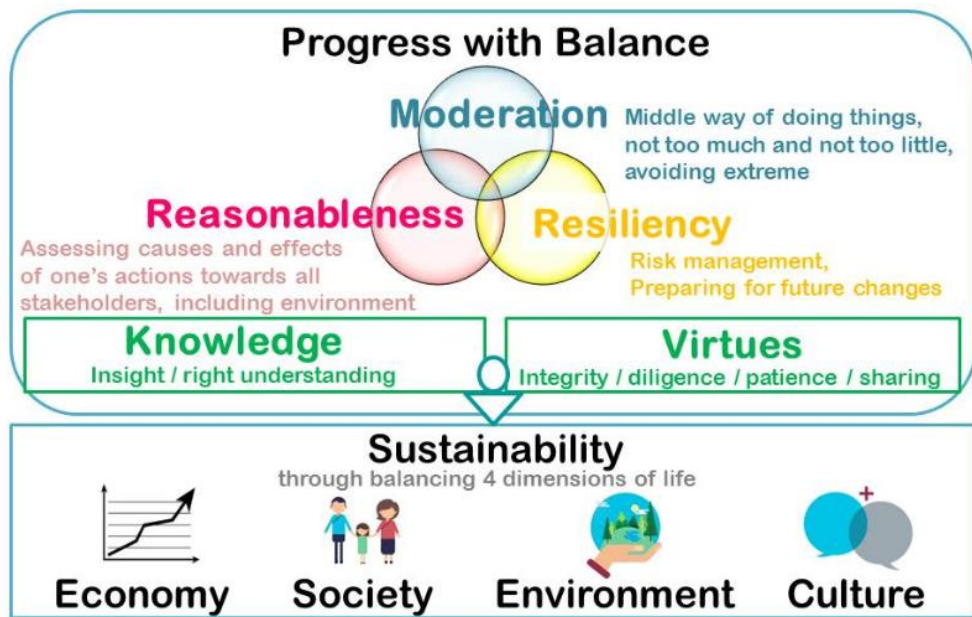
19
PATENT APPLICATIONS



239
PUBLICATIONS SCI

SUFFICIENCY ECONOMY PHILISOPHY

SEP is a Thinking Process



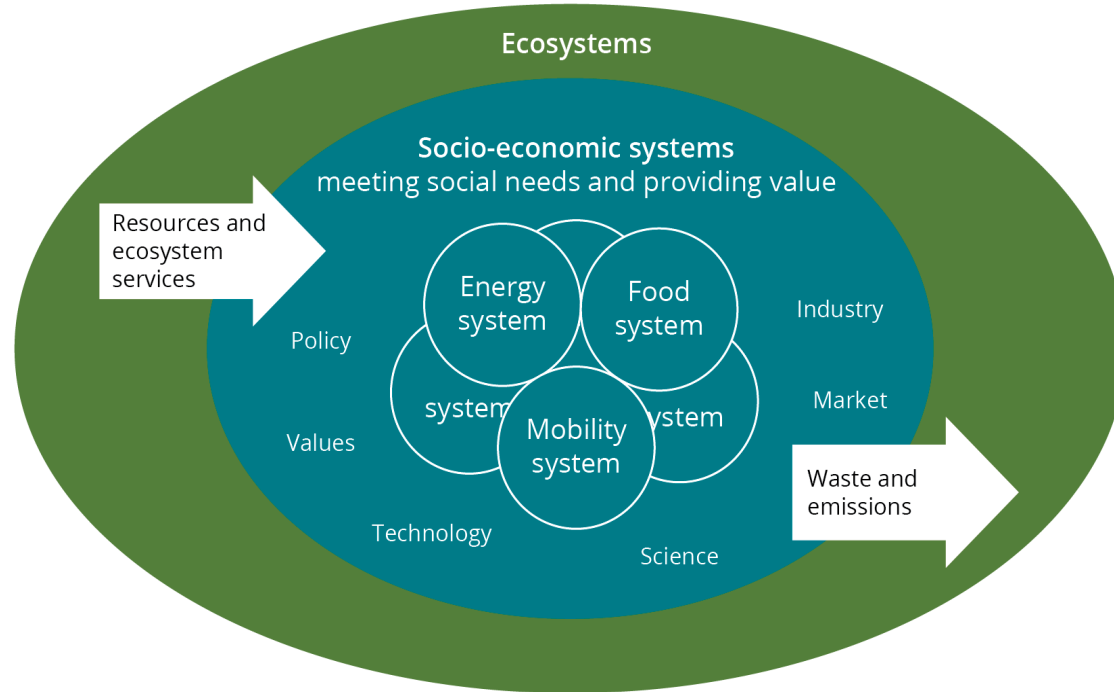
EU 7TH ENVIRONMENT ACTION PROGRAMME

'In 2050, we live well, within the planet's ecological limits.

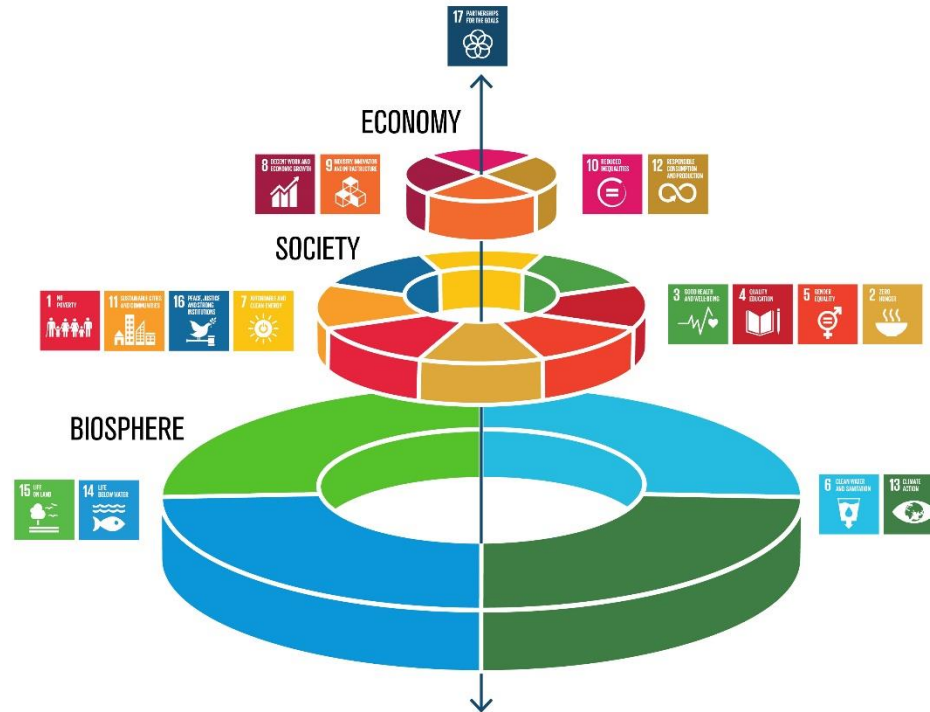
Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity** is protected, valued and restored in ways that enhance our society's **resilience**. Our **low-carbon** growth has long been decoupled from resource use, setting the pace for a global safe and sustainable society.'

Source: 7th EU Environment Action Programme

LIVING WELL, WITHIN ENVIRONMENTAL LIMITS

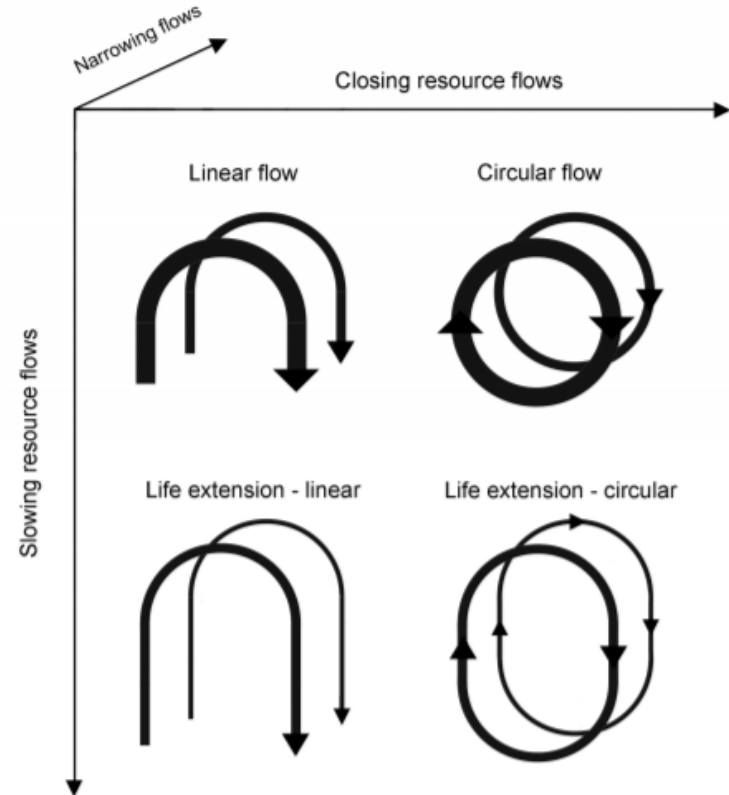


SDG IN A MULTILEVEL PERSPECTIVE

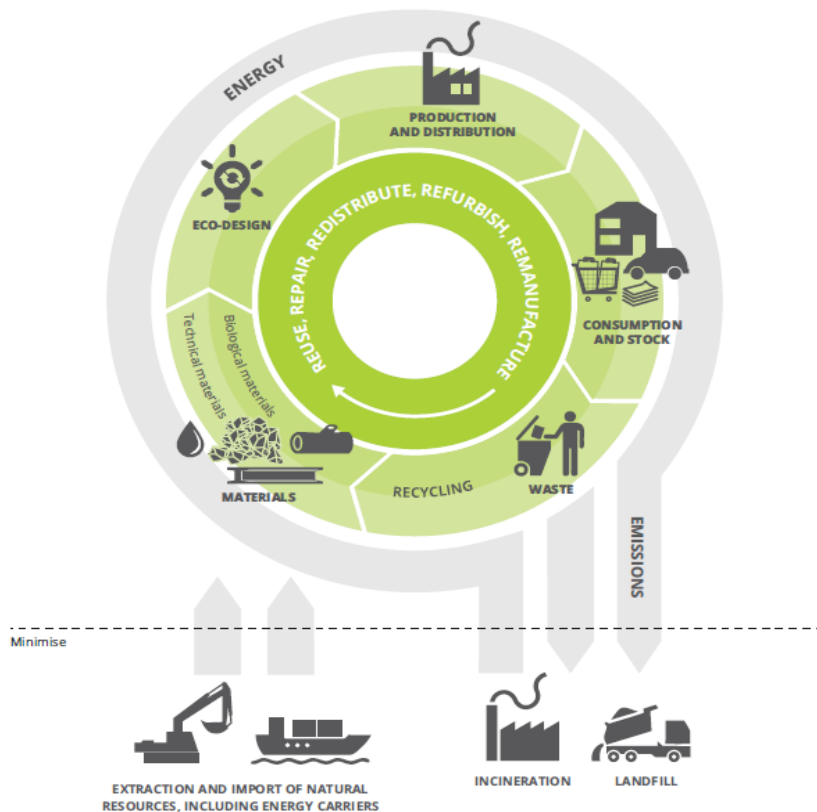


3R AND CIRCULAR ECONOMY

Reduce – Narrowing Loops
Reuse – Slowing Loops
Recycle – Closing Loops



EUROPEAN ENVIRONMENT AGENCY



POLICY PERSPECTIVE

- Mainly economic drivers : jobs, security of supply,
- Regulation and Action plan at international level initiates action
- Indicators – macro-economic : DMC/GDP
- Limited integration with energy and climate
- Need for systemic approach



WORLD RESOURCES FORUM

CLOSING LOOPS

TRANSITIONS
AT WORK

FEB 2019
24-27
ANTWERP
BELGIUM

FLANDERS MEETING
& CONVENTION
CENTER ANTWERP

WWW.WRF-ANTWERP2019.BE



WE MAKE
TOMORROW
BEAUTIFUL
OVAM



Flanders
State of the Art

Conclusions

1. **Circular Economy is an enabler for climate policy**
2. **Cities are the pioneers for circular change**
3. **Soil and land are in need of a supporting framework**
4. **Lifestyles have to change radically over the next decades**
5. **The transition to a circular economy needs coordinated action at a global level**


https://www.wrforum.org/wp-content/uploads/2019/02/WRF19_Draft_Conclusions.pdf



INTERNATIONAL DEBATE AND GLOBAL EXCHANGE



G·STIC

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