







### **ECOMINICRY:** ecologie inspireert economie en samenleving

### Ecomimicry hanteert patronen en processen



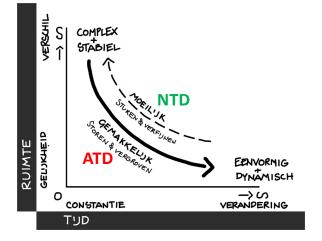


# Ecomimicry realiseert veerkracht

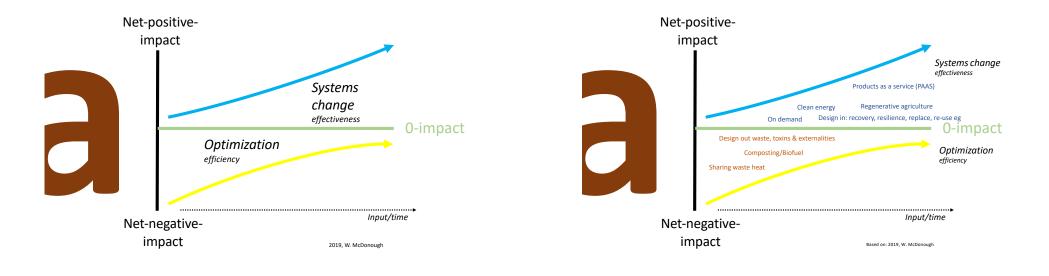
Het fundament van systemen, waarbij twee typen dynamiek spelen:

Natuurlijk Toegevoegde (systeem-eigen) Dynamiek NTD

Antropogene Toegevoegde (systeem-vreemde) Dynamiek ATD











Ecomimicry is de kunst van het begrijpen, gebruiken en leren van karakteristieken in system-ecologie voor economie en samenleving.

"Uiteindelijk heeft de natuur altijd gelijk" Wubbo Ockels, 2013

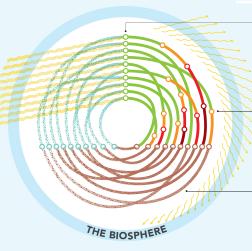


Enkele basis principes:

- 1 Resilience (veerkracht) afhankelijk van diversiteit
- 2 Diversiteit vraagt

variatie in ruimte (harde versus zachte grenzen) stabiliteit in de tijd (ofwel continuïteit)

- 3 Condities bepalen ontwikkeling
- 4 Afbraak gaat snel, opbouw is delicaat proces (en snel)
- 5 Balans entropie exergie
- 6 Tipping points vroegtijdig (h)erkennen



Natural cycles have three main parts:

- **Primary Producers**
- Photosynthetic plants and algae combine o free **solar energy** with disordered
- material building blocks from soil, air and water to create highly ordered, energy-dense structures.

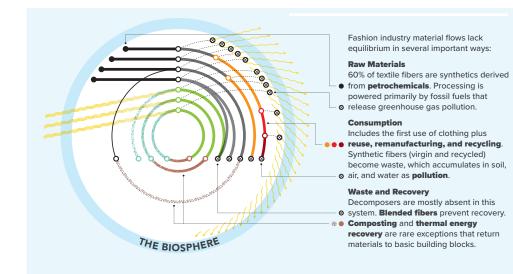
### Consumers

Includes all **herbivores** and **carnivores**, which break down energy-dense structures and use the stored energy and materials to construct their own tissues, creating physical waste and dissipating energy.

### Decomposers

Bacteria and fungi break down material to basic building blocks, using up remaining energy and making the physical building blocks available for use by primary producers.

The nature of fashion, Biomimicry Institute (2022)



Proteines Suikers/zetmeel Keratines Lignines Celluloses Lactoses Kalk Bouwstoffen hout e.d. We can design a biomimetic flow of energy and materials through industry:

### **Primary Production**

- Diverse feedstocks replace petroleum.
  Fibercrops combine with biosynthetics made via fermentation, all powered by
- renewable energy.

### Consumption

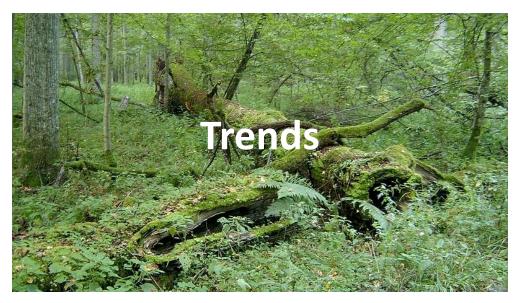
Materials are bio-available and recyclable. Reuse, remanufacturing and recycling capture the full value of materials and slow the outflows to avoid overloading local recovery infrastructure. Processing is powered by renewable energy.

### Decomposition

Recovery is distributed and scalable to match the global fashion economy, returning all textiles to their basic building blocks.

Robust compost systems are supported by
 chemical recycling and gasification.



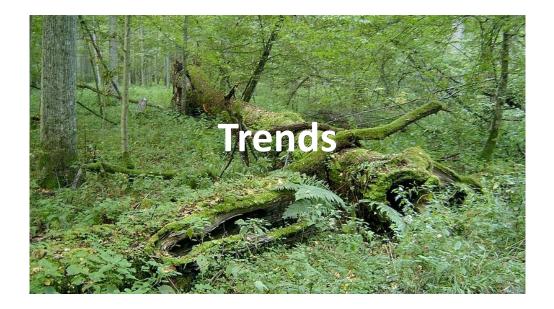












# **Regulering of Conditions for change**

### consument verandert?

(vs mechanism design)

# Ecomimicry helpt Douwe Jan Joustra Implementatie Circulaire Economie

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