

# Principles of a circular, bio-based society

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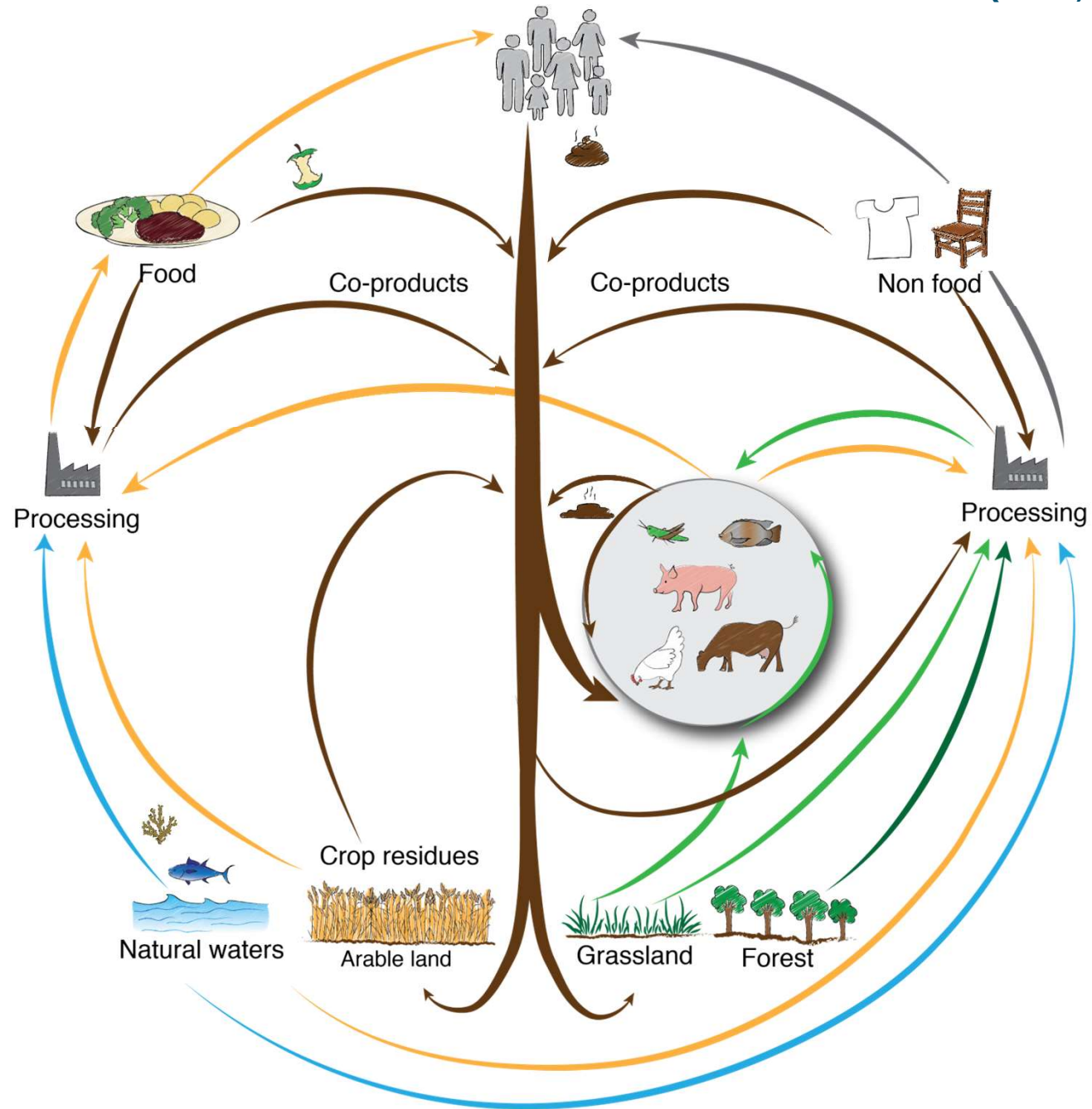


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# A healthy planet

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# Plant biomass is the basis

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# Key ecological principles

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1. **Safeguard** the health of our agroecosystems
2. **Avoid** non-essential products, losses & wastes of essential ones
3. **Use** biomass effectively
4. **Recycle** inevitable & unavoidable biomass streams
5. **Use renewable energy use & do it wisely**

# 1. Safeguard

## Conservation and regeneration of healthy ecosystems



Conservation  
e.g. zero deforestation



Regeneration  
e.g. polyculture



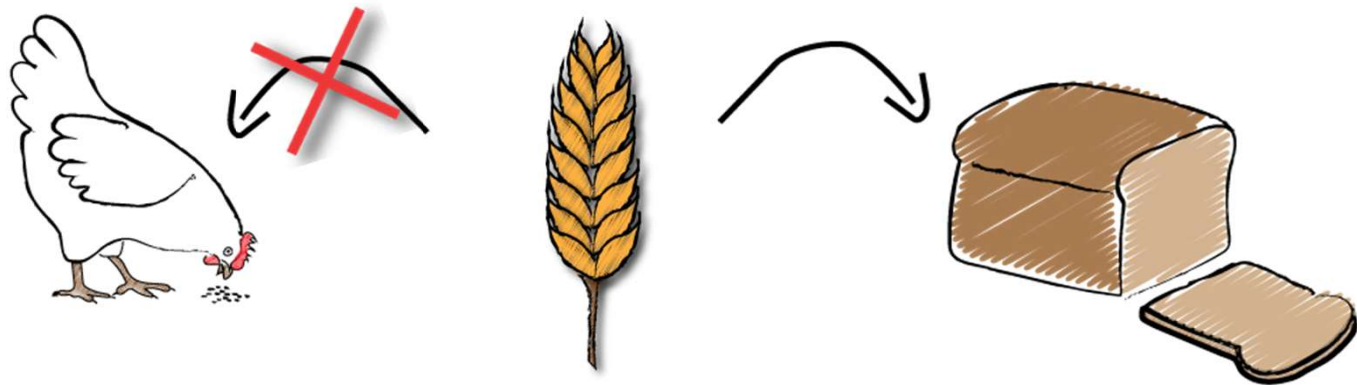
## 2. Avoid

Avoid comes before use/recycle to prevent upstream production processes and associated impacts

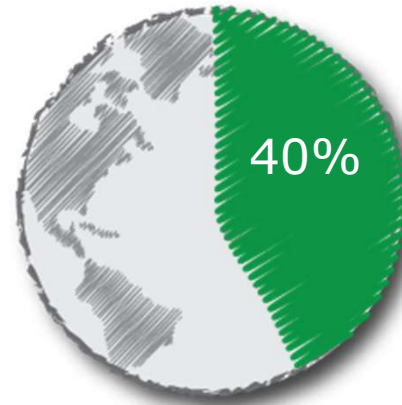


### 3. Use principle

Biomass and production resources should be used most effectively – human needs framework



Global cereal production



Global arable land



## 4. Recycle principle

By-products should be recycled back into the system if they are inevitable or unavoidable



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# Farm animals



- Food
- Manure
- Other ecosystem services



## 5. Energy Principle

Non-renewable energy sources, minimise energy use



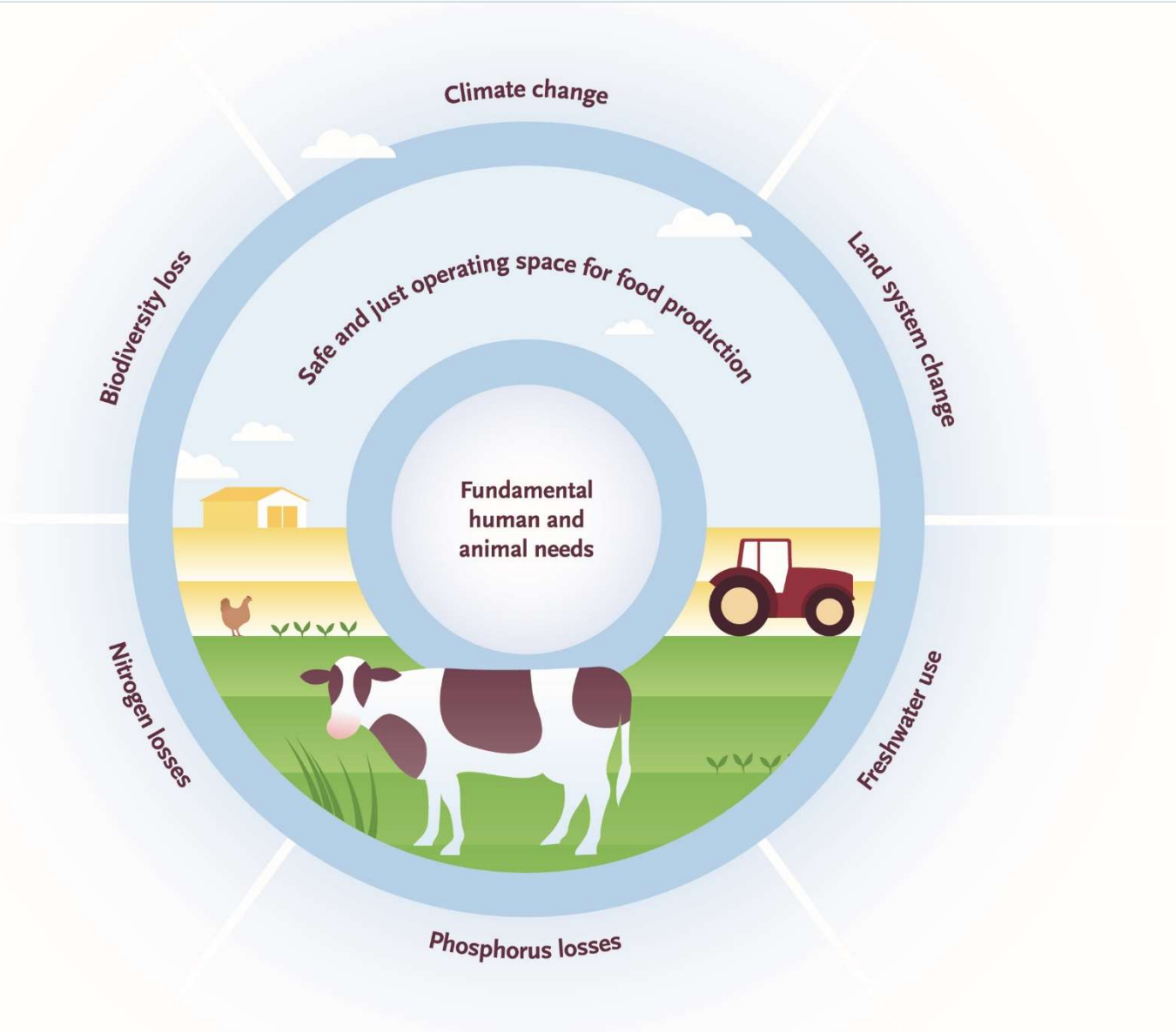


## 5. Energy Principle

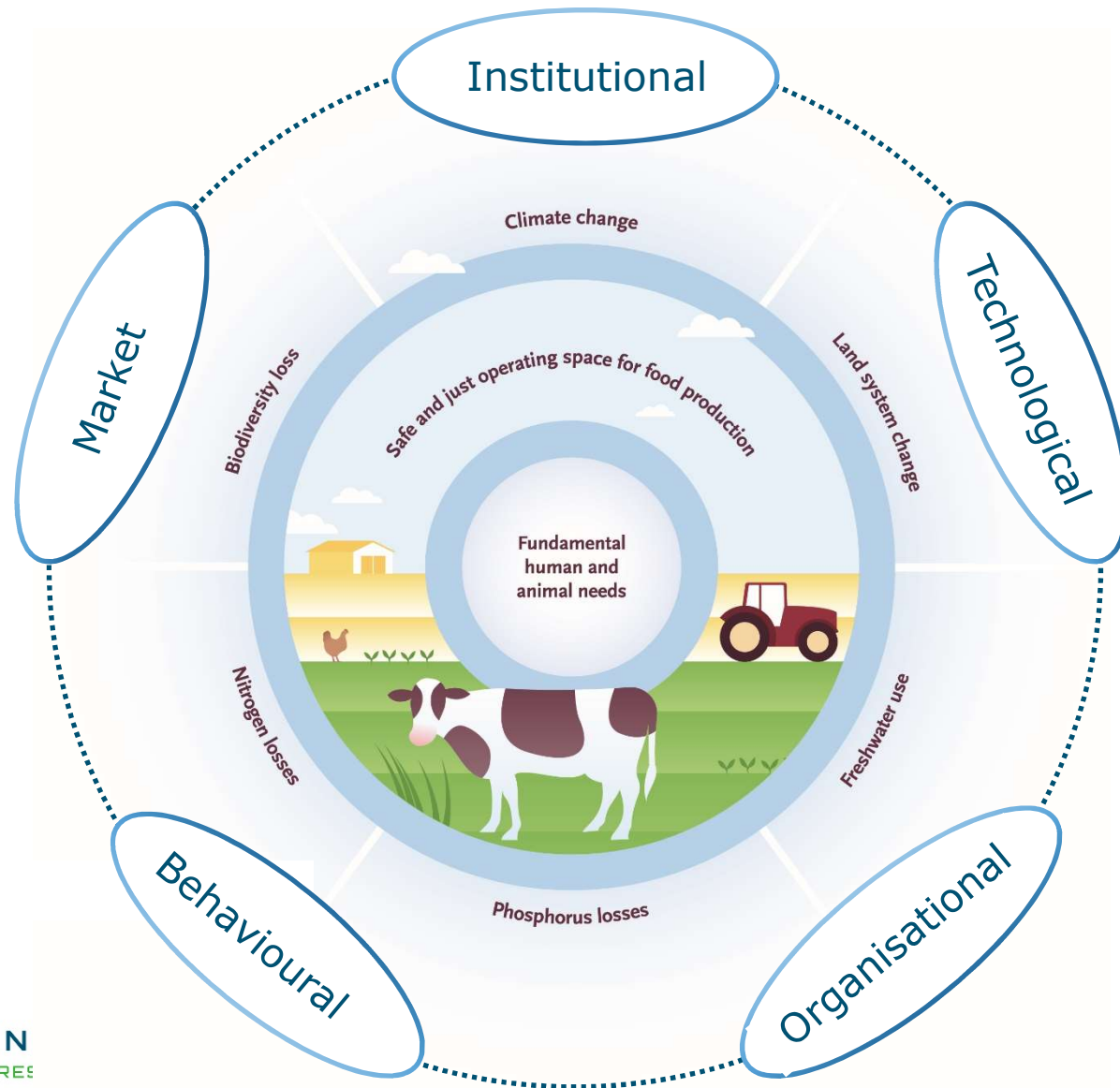
Non-renewable energy sources, minimise energy use



# Safe-and-just operating space



# Systems change





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# Thank you for your attention

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Re-rooting the Dutch Food System:  
from more to better

<https://media-openideo-rwd.oengine.com/attachments/daea677e-e90b-43de-a605-cf51b31d3293.pdf>